

# Comment Record Report For Reopened Phase 2 Scoping Period

August 18, 2016





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## Comment on proposed bypass routes

1 message

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**AG Lambert** <aglambert@gmail.com>  
To: info@energizeeastsideeis.org

Sun, Jul 31, 2016 at 10:18 PM

Hello,

I would like to comment on the proposed bypass routes for Energize Eastside. Neither seems sensible to me, given the preferred route already has existing transmission lines, and the bypass routes would damage the sight-lines and recreation use of areas that currently don't have transmission lines.

Two key caveats to my feedback:

- 1) I didn't see any information about the height of new transmission towers. If they are taller than existing, that would have more impact on local residents. If they are taller, studies should be done evaluating the impact on houses above the ROW.
- 2) My opinion is not about the need o financial feasibility of Energize Eastside. I have not had enough information to have an opinion. Assuming it is justified, the existing ROW seems like lower cost, lower impact, and less impact on ratepayers.

Best,  
A.G. Lambert  
510 150th PI NE  
Bellevue, WA 98007



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## Energize Eastside EIS

1 message

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**Albert Ting** <albertt425@hotmail.com>

Mon, Aug 1, 2016 at 6:10 PM

To: info@energizeeastsideeis.org

Cc: albert425@hotmail.com

I am a Bellevue resident, and I am against Energize Eastside and the two new, last minute alternatives identified by PSE (Bypass Route 1 & 2). Energize Eastside requires new, huge power poles, cutting down many trees and causing more safety concerns. The alternatives do nothing to mitigate these issues, and exist only to manage permit risk. I request that we look at other alternatives first, including those proposed by CENSE.org, which was developed by industry experts.

I am disappointed that PSE has created artificial justification for a massive power system that can be used to send power to Canada, when there are safer, cheaper, and more reliable alternatives for local power. I have read the flyers that PSE has mailed me, and also researched this topic. I understand that PSE has a fiduciary responsibility to make money for its Australian and Canadian owners, but the cost of Energize Eastside will be placed on local ratepayers – billions of dollars over the lifetime of the project.

The East Bellevue Community Council had the courage to say “no” to Energize Eastside. I was further disappointed that PSE appealed the decision to King County Superior Court, but gratified that the judge dismissed all of PSE’s appeals.

I hope that our leadership will stand up to PSE and look at better alternatives to protect our citizens , save money, provide reliable power, and keep Bellevue beautiful with more trees and less power poles.

Thx,

Albert Ting

258 W Lake Sammamish Pkwy SE

Bellevue, WA 98008



## comment

1 message

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**James Dildine** <jadildine@comcast.net>  
To: info@energizeeastsideeis.org

Mon, Aug 1, 2016 at 5:10 PM

Hello:

I live in Olympus and am strongly against Energize Eastside. I am mostly concerned with the safety of upgrading the lines next to the oil pipeline. I also resent the fact that this project as proposed goes directly through the Olympus neighborhood. My view would be compromised of Mt. Rainier and that's part of why I decided to live in the neighborhood. I also am concerned about the height and power increase the new powerlines would carry. What about the health concerns of those living closest to the powerlines? Increased power means increased danger to our health. I worry that there would be a decreased value of 10-20% if I decide to sell my house! That hits me squarely in the pocket as well as the costs to me as a taxpayer for this project.

As a member of CENSE I don't believe that PSE truly has a need for increased power on the Eastside at this time. In addition, other alternatives have been suggested but cast aside without serious consideration. PLEASE don't put this in my backyard!

Alison Dildine

Olympus Homeowner



Energize Eastside EIS &lt;info@energizeeastsideeis.org&gt;

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## Energize Eastside Extended Comment

1 message

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**Andrew Pope** <apope@shannco.com>

Thu, Jun 30, 2016 at 10:26 AM

To: info@energizeeastsideeis.org

My name is Andrew Pope and my physical address is:

Andrew Pope  
13730 SE 23rd Ln  
Bellevue, WA 98005

I would like to become a party of record, please add my name to that list.

I am commenting on the email sent to the City of Bellevue Development Services Department, dated May 31st, 2016 with the subject line "Energize Eastside Phase 2 EIS Scoping Comments – Bypass Routes".

In reviewing the maps provided on pages 3 and 4 of the letter, I am concerned that the "Existing Route" is clearly mis-identified. The actual current (and as far as I am aware "Preferred Route" defined by PSE) is roughly 100 - 200 feet to the east of the location drawn on the map where it leaves the Richard's Creek Substation and heads north. The current power line route passes between SE 23rd Ln and SE 24th St, through neighborhood backyards, not along the natural gas pipeline easement as identified in these maps.

Please carefully review the actual current routes as well as the proposed alternate routing and re-draw the maps to correctly identify power line routing locations and not mislead property owners in these neighborhoods to believe that they will not be impacted by the proposed changes.

If the proposed routing as identified on the maps is accurate, please clearly identify the fact that it is different from the current and preferred proposed route as identified by PSE.

Thank you for reviewing my comments and adding me as a party of record for this EIS.

–Andrew Pope  
Property Owner  
13730 SE 23rd Ln  
Bellevue, WA 98005

Sent by any available means



Energize Eastside EIS &lt;info@energizeeastsideeis.org&gt;

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## PSE proposed bypass routes

1 message

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**Ann Osterberg** <asosterberg@gmail.com>  
To: council@bellevuewa.gov, info@energizeeastsideeis.org  
Cc: info@cense.org

Tue, Jul 19, 2016 at 3:02 PM

Dear members of the Bellevue City Council:

I am extremely disappointed that *any* route is being considered by PSE and the City for this dangerous, over-sized and overly-expensive project when there is a safe, green and cost-effective alternative. PSE freely admits that its bypass routes were designed to go around a jurisdiction which challenged a different PSE transmission project. Specifically I am concerned that:

1. PSE discounts the danger of constructing huge towers with high-voltage cables over aging, high-pressure pipelines that carry millions of gallons of jet fuel and gasoline each day. Safety experts warn there is a significant risk of a catastrophic fire caused by a construction mishap or accelerated corrosion in the pipelines.
2. CENSE advocates a scalable plan developed by industry experts that uses modern technology, already at work in other cities, to power Eastside growth while reducing per capita electricity demand and greenhouse gas emissions.
3. The CENSE Plan saves 8,000 mature trees that PSE would cut down or limb to clear the route for its transmission lines. PSE's plan would degrade the livability of 29 neighborhoods, a key to attracting businesses and residents to the Eastside.
4. The proposed bypass routes will have even more significant adverse impacts on the environment than any other alternative.



Energize Eastside EIS <info@energizeeastsideeis.org>

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## PSE Bypass Routes

1 message

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**Ann Osterberg** <asosterberg@gmail.com>

Tue, Jul 19, 2016 at 3:05 PM

To: info@energizeeastsideeis.org

Cc: info@cense.org, council@bellevuewa.gov

I wish to voice my concerns that PSE's proposed bypass routes will have even more significant adverse impacts on the environment and neighborhoods through which they will pass than the original proposal. The bypass route will add high capacity transmission lines where none exist now for no good reason except to avoid the neighborhood that refused to approve the original route, increase the total length of the new lines and remove significantly more trees and vegetation. The City of Bellevue should require that PSE analyze and adopt the technologically smarter alternative supported by CENSE that would reduce and manage demand through proven technology and obviate the need for the project as proposed by PSE.

I am dismayed that *any* route is being considered for this dangerous, over-sized and overly-expensive project when there is a safe, green and cost-effective alternative. PSE freely admits that its bypass routes were designed to go around a jurisdiction which challenged a different PSE transmission project. Specifically I am concerned that:

1. PSE discounts the danger of constructing huge towers with high-voltage cables over aging, high-pressure pipelines that carry millions of gallons of jet fuel and gasoline each day. Safety experts warn there is a significant risk of a catastrophic fire caused by a construction mishap or accelerated corrosion in the pipelines.
2. CENSE advocates a scalable plan developed by industry experts that uses modern technology, already at work in other cities, to power Eastside growth while reducing per capita electricity demand and greenhouse gas emissions.
3. The CENSE Plan saves 8,000 mature trees that PSE would cut down or limb to clear the route for its transmission lines. PSE's plan would degrade the livability of 29 neighborhoods, a key to attracting businesses and residents to the Eastside.
4. The proposed bypass routes will have significantly greater adverse impacts than any other alternative.



Energize Eastside EIS <info@energizeeastsideeis.org>

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## Energize Eastside Phase 2 Scoping comments

1 message

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**Zeemal** <zeemal@gmail.com>

Sun, Jul 31, 2016 at 11:12 PM

To: info@energizeeastsideeis.org

I have attached my comments for the re-opened scoping comment period on the Phase 2 EIS.

The original comment period produced inadequate responses and incomplete project definition. It is my sincere hope that this additional time permits all stakeholders to see a more complete and accurate set of comment responses, as well as a revised EE project definition that is consistent with PSE's load flow analysis that includes scope to ship power between Canada and California.

Barry Zimmerman



**PSE Environmental Impact Stmt Phase2 Scoping Input 31July2016.pdf**

653K

# **PSE Environmental Impact Statement Scoping Comments – 7/31/16**

## **Project File # 14-139122-LE “Energize Eastside”**

**Barry A Zimmerman 5007 Somerset Drive SE; Bellevue, WA 98006**

Comments are requested by August 1, 2016 in conformance with WAC 197-11-408 which includes the requirement:

(5) The lead agency shall revise the scope of an EIS if substantial changes are made later in the proposal, or if significant new circumstances or information arise that bear on the proposal and its significant impacts.

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## COMMENT 1 – Insufficient data on bypass routes

IF the applicant and SEPA Lead Agency were to provide sufficiently accurate and complete information for analysis of environmental impact with respect to tree removal, pipeline corridors (safety), and cumulative impact of the proposal to build oversized powerlines through residential neighborhoods, THEN impacted City councils would not have such a strong case to introduce “permitting risk” that would even require the bypass options. As with the rest of the so-called “Energize Eastside” proposal, PSE has not completed sufficient engineering the new bypass routes such that scoping (and an EIS) can be completed in compliance with the law.

The extended Phase 2 scoping comment period is set to expire August 1, 2016, yet as of July 31, 2016, the applicant (PSE) has not identified sufficient information to provide meaningful public comments on the proposed changes in scope. With no pole locations, pole height, pole type or other critical details, these new bypass routes are not sufficiently defined, much less detailed, to provide the SEPA analysis necessary to move further toward a permitting process. THE DEADLINE FOR PHASE 2 SCOPING OF THESE ALTERNATIVES MUST BE EXTENDED UNTIL 30 DAYS FOLLOWING AVAILABILITY OF SUFFICIENT INFORMATION (DETAILS OF POLE LOCATIONS, TREE REMOVALS, CO-LOCATED UTILITIES, ETC.) IS AVAILABLE TO THE PUBLIC.

A screen shot of the web site provided by Energize Eastside is shown below. (Source: <http://www.energizeeastsideeis.org/scoping.html> as of July 31, 2016 at 12:50 hours.)

### Bypass Route 1 Alignment

The existing 115 kV corridor at SR 520 to the intersection of the Lake Hills Connector with the existing 115 kV corridor, following: Northup Way, 132nd Ave NE, Bel-Red Rd, 120th Ave NE, the Eastside Rail Corridor, and the Lake Hills Connector.

Typical pole type and approximate height have not yet been identified by PSE. Once PSE provides that information, it will be posted to this website.

CORRECTION – Bypass map has been replaced to correct an error on the location of the existing transmission line corridor.



### Bypass Route 2 Alignment

The existing 115 kV corridor at Bel-Red Rd to the Richards Creek substation following: Bel-Red Rd, 120th Ave NE, the Eastside Rail Corridor, the Lake Hills Connector, Richards Rd, and SE 26th St.

Typical pole type and approximate height have not yet been identified by PSE. Once PSE provides that information, it will be posted to this website.

CORRECTION – Bypass map has been replaced to correct an error on the location of the existing transmission line corridor.



## COMMENT 2 – no permit application exists

IF there was an actual, complete and detailed permit application for the proposed regional/international powerlines being represented as “Energize Eastside” that included these subject bypass options, THEN the project description in the SEPA document and supporting information can be matched to the application for accuracy and completeness as required to complete the SEPA process. However, as of the expiration of a Phase 2

(represented by PSE as a “final”) scoping comment period extension on August 1, 2016, there is no application on file, and there is no accurate description of the project within the Phase 2 draft EIS to build a high-capacity transmission line to facilitate power transfer between Canada and California through King County residential neighborhoods. THEREFORE, it is pre-mature to close what is being represented as the “final” public scoping comment period and attempt to move closer to a permitting phase.

As the EIS is written, PSE as applicant is free to change a large number of details that are critical to analysis of safety concerns in a utility corridor that includes a 60 year old high-pressure petroleum pipeline, and impact to corridor widths, clearance from the pipelines and nearby private property, tree and vegetation removal, pole height, pole type, number of conductors etc. All representations presented by PSE to-date are asterisked with a “subject to change” notice, which at this purportedly final EIS phase, is totally un-acceptable.

The current system capacity for the impacted Eastside area is approximately 700 Mw, according to PSE’s own data. The proposal includes oversized transmission lines so that more than twice this capacity can be moved between Canada and California. Again, this 1500 Mw long-distance transmission capacity is part of all PSE load analysis models being used to justify a project that is incorrectly defined in the EIS and supporting materials as only for the “Eastside”.

Until the application and EIS reflect the true purpose and SCOPE of the project, the EIS cannot be completed and the project cannot move to a permitting process when in-fact, there are insufficient details as to exactly what is being permitted, or even an accurate representation of why the applicant suggests that a 5x increase in transmission capacity is warranted to address a small number of peak load days per year for the subject Eastside customer base.

### **COMMENT 3 – Insufficient data as to why PSE ratepayers and Eastside residents must pay for regional/international transmission capacity**

All PSE project justification materials submitted to-date give the impression that this project is focused on needs of the “Eastside”, a loosely defined area of electricity demand, yet all load analysis models include 1500 Mw minimum being shipped to/from Canada as necessary to serve the Eastside. This 1500 Mw is over twice the existing 700 Mw system capacity for the “Eastside”. It clearly represents considerable additional scope to the project beyond what is necessary to serve the needs of Seattle’s Eastside. Load models to justify Energize Eastside also include simultaneous failure of five out of six peaker generation facilities that serve the region.

**IF** the applicant, PSE, defined the Energize Eastside (EE) project consistent with their Load Analysis studies used to justify the proposed oversized transmission lines, **THEN** the Energize Eastside project definition would contain details such as:

- The international Columbia River treaty terms that PSE ratepayers are being asked to pay for,
- the terms under which amount of power to be shipped via the proposed 18-miles of oversized lines between Canada and California

- the terms negotiated with CAL ISO and BC Hydro for provision of power to be transmitted through the “Eastside” residential areas
- the reasons that a local utility is charging its customer base for an international transmission need that goes way beyond the scope and cost of the local utility’s needs to serve the Eastside.
- the reason that a utility which projects it cannot keep five of six of its peaker generation plants (83% of peak generation capacity) operational shouldn’t be spending this money on operating existing resources vs building new and un-necessary infrastructure. Yet the load models used to justify the project include PSE’s public admission that they anticipate they will have 83% of their peaker plants simultaneously out-of-service. As a result, PSE concludes that overspending for the proposed transmission lines is justified.

The entire premise presented by PSE for the proposed Energize Eastside project is disingenuous at best. The East Bellevue City Council (EBCC) has recognized this and to their credit, has sued the applicant to keep oversized and overpriced transmission lines out of the EBCC jurisdiction, thus introducing the “permitting risk” that the two bypass options carelessly presented in this second Phase 2 scoping comment period address.

There is a tremendous amount of incomplete and inaccurate information being used to justify the entire Energize Eastside project that will destroy Eastside residential neighborhoods and introduce safety risks for the next century. It is not acceptable for the public and five Eastside cities to accept all of the “permitting risk” for Energize Eastside based on the inconsistent, incomplete and inaccurate information provided by PSE to-date.

## **COMMENT 4 – Inadequate performance by SEPA Lead Agency**

### **The Purpose and Need statement in the current draft of the Energize Eastside EIS is incorrect.**

As noted in previous comments herein, the applicant, PSE, is attempting to foist an international/regional project cost on PSE ratepayers in Washington State. There is no evidence that the Bellevue Lead Agency staff is calling out PSE for this problem, because the EIS still contains language that this is an Eastside only project, despite repeated comments, statements, privately funded load studies and analysis, and indeed, PSE’s own load studies to the contrary. If PSE is going to assume in its load studies that over 2-times the current transmission capacity of the entire eastside is to be shipped to/from Canada, then that needs to be part of the project definition.

### **The EE EIS approval timing is pre-mature based on inadequate data**

The SEPA Lead Agency has taken on development and review of the Energize Eastside EIS prior to receiving sufficient details from the applicant on the true scope and rationale for the entire project. For example, the Lead Agency doesn’t even have empirical data on energy growth for the past 25 years from PSE, yet fails to challenge PSE on its sudden hockey-stick rise in the electricity demand growth curve being used to justify this project in forward (2014 and beyond) projections. Failure to require and use real data from the past in order to correlate Eastside population growth with electricity demand growth during the same period by using hard-actual-data is inexcusable. And it lies at the heart of the controversy over the need for the oversized and overpriced infrastructure proposed (ostensibly) for Eastside needs.

**IF** the SEPA Lead Agency was doing an adequate job, **THEN** all stakeholders (including the impacted city councils and their constituents) would know what the “Eastside” electricity demand growth rate was for the past 25 years by now, based on real empirical data. This would make it possible to mitigate PSE’s masking of the real reasons for the proposed 5x increase in transmission capacity, and failure to define the EE project correctly and completely in project documents and public meetings.

### Who is driving the schedule?

The SEPA lead agency in Bellevue appears to be driving the Energize Eastside EIS schedule through a flawed process to satisfy the applicant (PSE), and not the ratepayers, residents, and city jurisdictions impacted by the \$1.3 billion cost of the proposed oversized lines needed to serve regional and international requirements. The SEPA lead agency must recognize that the schedule for moving forward is **not** for the **applicant** to determine, it is the agency’s responsibility to require sufficient project details and the project application from the applicant prior to closure of public commenting opportunities on the project scope.

**IF** the SEPA lead agency in Bellevue was representing the interests of the impacted cities and residents who pay their salaries, **THEN** the lead agency would require that the applicant provide all missing details on historical Eastside load-growth since 1990, pole types, locations, sizes, colocation with other utilities, impact of new alternate routes on neighborhoods outside of the EBCC jurisdiction etc. for the proposed EE project.

There is this un-necessary rushing through a very complex EIS that gives the appearance of a railroad job on the part of the lead agency, led by the applicant. There is no application for permit from PSE, yet this “Phase 2” EIS comment period is being represented as the “final” EIS comment/response/revision cycle. **No “final” comment/response/revision cycle should be scheduled until all missing data is obtained from PSE.** We are expecting that a Phase 3 and possibly Phase 4 comment/response/revision cycle will be required before an acceptable EIS can be produced.

The current draft EIS contains dozens of applicant footnoted caveats for important details required for meaningful public comment. Particularly on pole types, pole heights, pole locations, foundation structures where any changes from a suggested or simulated scenario presented therein would be un-acceptable to impacted residents.

### Where is the missing Cost information?

Despite repeated public requests and comments in both written form and at public forums, there is no cost or cost-benefit information in the current draft EIS documentation for any of the alternatives considered. It is an egregious failure on the part of the lead agency to suggest that the EIS is ready for final approval before this information is completed, gone through a public review/response cycle, and updated with comments received.

## CONCLUSION

Based on the current draft EIS, Phase 2 is only that. Phase Two – of what will clearly need to be more phases in order to arrive at an acceptably complete Environmental Impact Statement for a proposal that will permanently degrade the character of the entire Eastside communities for at least 50 years.

The first priority is to have the lead agency recognize that the project definition section that includes the Purpose and Need of the Proposed Action is inaccurate and incomplete. The Purpose and Need is defined as an Eastside problem when in fact, PSE's own justifications confirm that this is a regional / international transmission line proposal to be built at PSE ratepayer expense, and through 18 miles of beautiful eastside residential neighborhoods.

The second priority is to have the lead agency take charge of the EIS completion criteria and schedule, and require the applicant to complete sufficient engineering and cost-benefit analysis to finish development and review of an acceptable EIS.

**From:** [Liv Benson](#)  
**To:** [Liv Benson](#)  
**Subject:** Energize Eastside Phase 2 Scoping comments  
**Date:** Thursday, August 04, 2016 11:54:48 AM  
**Attachments:** [PSE Environmental Impact Stmt Phase2 Scoping Input 31July2016.pdf](#)

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**From:** Zeemale [mailto:zeemale@gmail.com]  
**Sent:** Monday, August 01, 2016 10:43 AM  
**To:** info@energizeeastsideeis.org  
**Cc:** Jennifer Robertson; vslatter@bellevuewa.gov  
**Subject:** Fwd: Energize Eastside Phase 2 Scoping comments

Dear Ms. Bedwell -

I am re-sending this email and attachment as I have received no confirmation of receipt from the EnergizeEastsideEIS.org servers as in past submissions. It is important that City Planners hold PSE accountable for the lack of critical details necessary for the public to provide meaningful feedback and prevent the appearance of collusion between the City acting as Lead Agency and a private utility proposing to build an oversized international power transmission line through our neighborhoods at local ratepayer expense.

Thank you.

Barry Zimmerman



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## Re: Comment on Energize Eastside Bypass Routes

1 message

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**Bill Finkbeiner** <billfinkbeiner@msn.com>

Fri, Jul 15, 2016 at 4:21 PM

To: info@energizeeastsideeis.org

Cc: council@bellevuewa.gov

Bill Finkbeiner has shared a OneDrive file with you. To view it, click the link below.

 [keep the route.pptx](#)

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My name is Bill Finkbeiner. I've visited Bellevue pretty much every working day for the past 16 years. I am writing regarding the bypass routes that are being considered for Energize Eastside.

Moving away from a transmission route that has existed for 80 years to a new route that is not only more expensive, but also impacts significantly more people and has greater negative impact on the environment would clearly be horrible public policy.

In addition, it would have a huge negative impact on some of Bellevue's most important infrastructure investments. From the Grand Connection, to the 120<sup>th</sup> street improvements, to the Eastside Rail Corridor, all of these would suffer a negative impact.

While I am sure you know that already, what you may not know is that there are significantly more people who would be impacted by these proposed alternative routes. By my count there are 40% more addresses within 500' of the proposed routes than the existing routes. But, these addresses, because they are in a more urban area, also often times contain apartment buildings, retail outlets, and office buildings, where multiple people are using the same address, thus increasing the numbers even more (see attached power point).

Were this route to be chosen perhaps the most frustrating thing would be the perversion of the public process that PSE went through to determine the routes. This was a lengthy process with an enormous amount of input, for a community council to arbitrarily overturn the recommendations of this process would be a shame.

While I believe Energize Eastside is a worthwhile investment I respect that there should be a frank and honest discussion about its merits. What I think is wrong is if the opponents of Energize Eastside try to force an alternative route to build opposition to the project. I hope you will not let that happen.

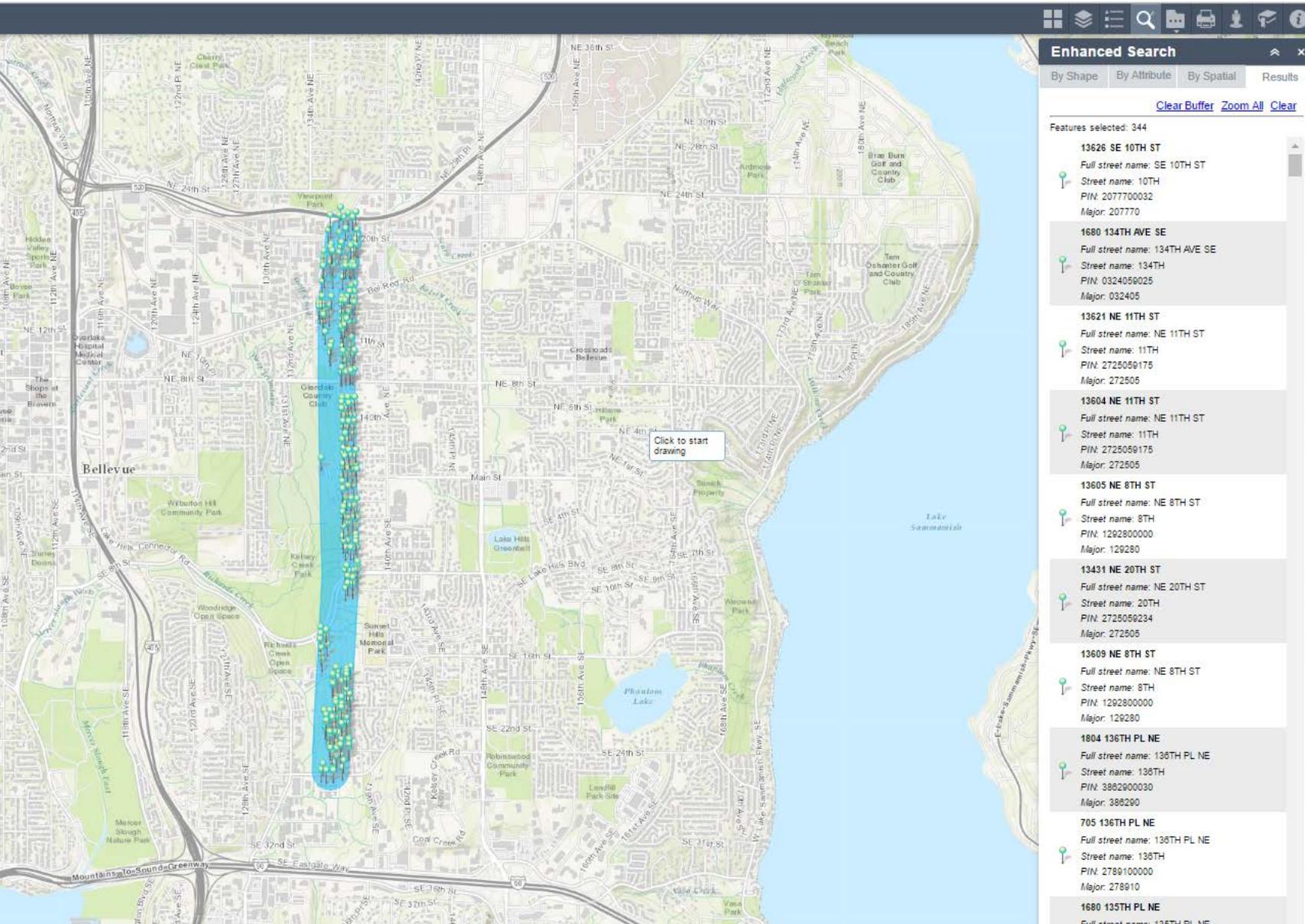
I have attached a short four slide power point with my email to share some of these thoughts in a visual format.

Thank you for considering my input.

Bill

Work address: 12011 Bel-Red Road, Suite 100, Bellevue

# Energize Eastside Proposed Route (Current Route)

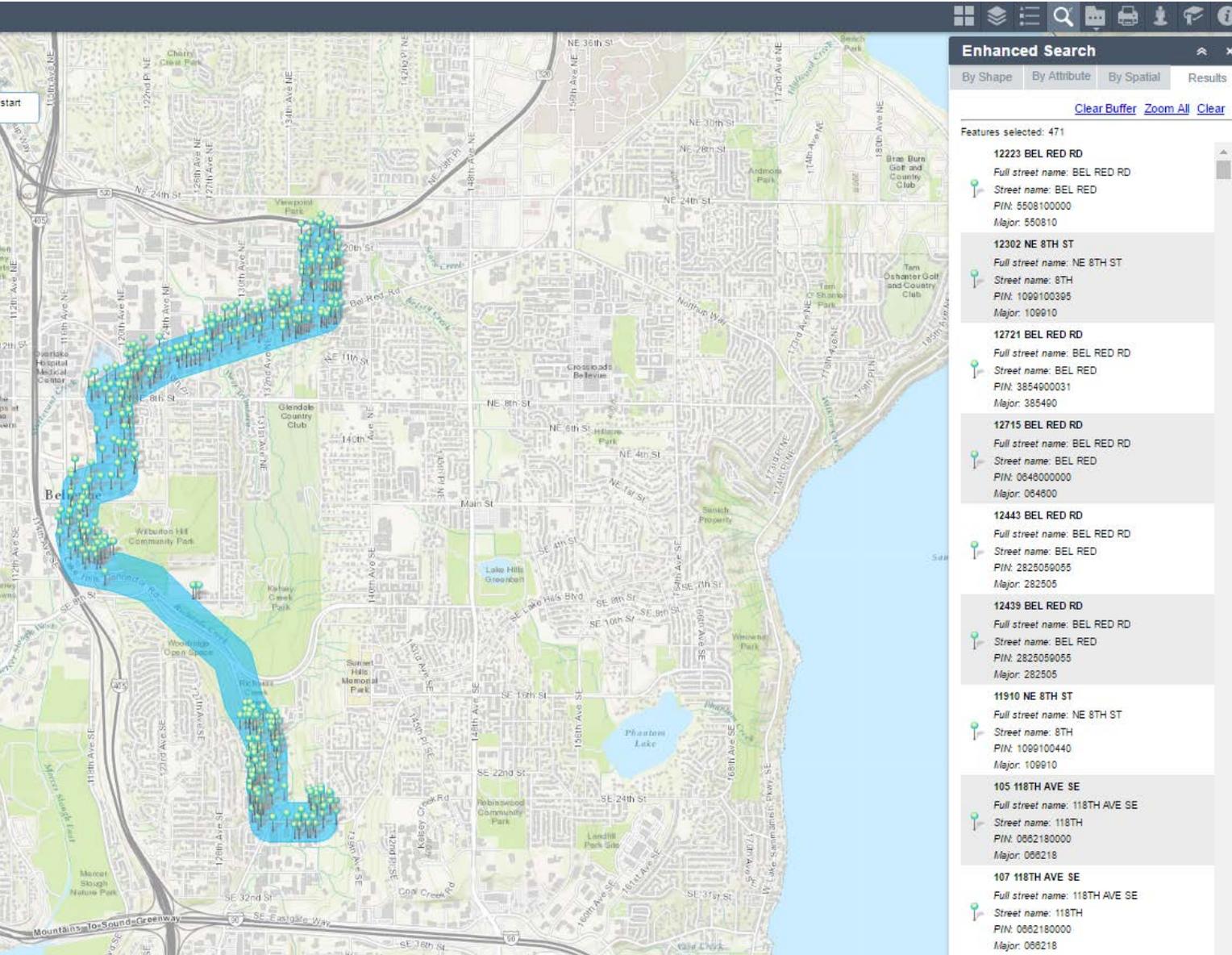


The blue line represents a 500' buffer around the route for the future infrastructure proposed by Energize Eastside.

This route was chosen after months of study by both unbiased representatives from the community who represented both ratepayers and neighborhoods along with engineers from PSE.

There are 333 addresses within 500' of this route with many of the addresses clustered near the North and South terminus where the impact is not really changed by the route location.

# Proposed Bypass Routes



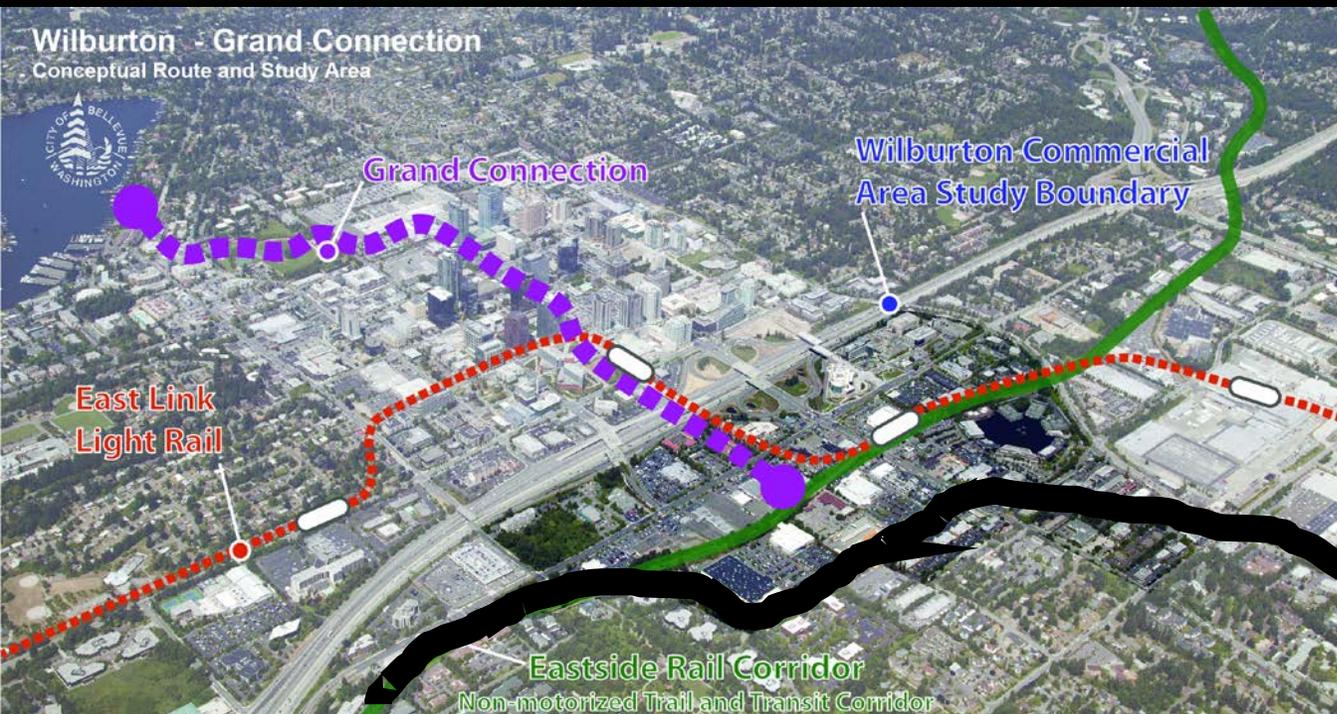
Contrast that with the Bypass Route 2 which with 470 addresses within the same 500' distance (40% more addresses).

But even these numbers severely undercount the impact of this route for two reasons:

- The majority of the addresses in the middle section are either apartments or office buildings and so house dramatically more people than addresses on the original route which are predominantly detached homes.
- The topography makes the Bypass Route directly visible to downtown residents looking West and members of the Wilburton and Woodridge neighborhoods looking North and East.



## GLENDALE COUNTRY CLUB



# Community Assets impacted

When you look at the community assets that would be impacted you can see why the original route was chosen.

## Proposed Route

- Nearly 40% of it's length is adjacent to a private golf club which has stated no opposition.
- Follows an existing route of transmission lines
- Runs through Kelsey Creek Park.

## Bypass Route 1&2

- Runs on the Eastside Rail Corridor, impacting the future trail, the East terminus of the Grand Connection and light rail infrastructure.
- It runs through Kelsey Creek Park, adjacent to the Wilburton Hill Community Park (including the Bellevue Botanical Garden), through the Woodridge Open Space, and through a the important wetlands along Richards Road.
- Through the recently completed 120<sup>th</sup> street improvements
- Adjacent to the Spring District, GIX and the future home of REI (and directly behind the new REI store and Trader Joes on 4th).

**This is where the transmission lines run now, this is where PSE wants to put them, and this is where the community representatives wanted them to go.**



**Why would we spend millions of dollars more to put them here?**



In addition to the reasons stated above each of these reasons alone would be a good reason not to allow a bypass route:

- There is an existing transmission line corridor with existing transmission lines in it. If we need to upgrade capacity this is where it should go.
- PSE spent years working with a community board made up of representatives from all parts of our community. This board spent countless hours listening to input and considering the facts. They chose the original route, why would our community want to overrule them?
- The bypass route would cost millions of dollars more to complete. This is millions of dollars in additional costs that will be born by all ratepayers.



Energize Eastside EIS &lt;info@energizeeastsideeis.org&gt;

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## Energize Eastside plan comment

1 message

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**Bob Wiley** <bob@5coyotes.com>

Tue, Jul 12, 2016 at 3:56 PM

To: info@energizeeastsideeis.org

Cc: council@bellevuewa.gov

Dear Sir/Madam:

We are opposed to Energize Eastside's plans to build additional electricity transmission lines. Their arguments that this is truly needed to supply future population and economic growth is unconvincing. It seems more likely that another agenda is at work. The behavior of Energize Eastside in trying to ram through this scheme is also disconcerting. There's no "emergency." That's what one gins up when trying to pull a fast one. The latest proposed rerouting around part of 148<sup>th</sup> Ave is nakedly political and compounds the defacing problem by routing power lines away from where they are now. This one doesn't pass the smell test.

Eastside elected officials must engage against this scheme and show the intestinal fortitude necessary to determine if this additional power is truly needed or if this is an economic play by the owners of PSE to capture a permanently higher rate of return due to discontinuity in financial markets. We believe this is effectively a "carry trade" for PSE's owners at the permanent expense of Eastside ratepayers that would likely not be pursued in a normalized interest rate environment. That makes it unjust on its face.

Bob Wiley  
5711 141st Place SE  
Bellevue, WA 98006  
[206 412 2533](tel:2064122533)  
[bob@5coyotes.com](mailto:bob@5coyotes.com)



Energize Eastside EIS <info@energizeeastsideeis.org>

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## PSE Bypass Routes

1 message

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**Brett Fidler** <brettfidler12@gmail.com>

Mon, Aug 1, 2016 at 3:50 PM

To: info@energizeeastsideeis.org, council@bellevuewa.gov, info@cense.org

Dear Decision Makers,

As Bellevue property owners for over 30 years, my wife and I are shocked and dismayed that PSE is considering new transmission corridor through the protected Kelsey Creek wetland area.

We are totally supportive of CENSE and their efforts to stop the Australian Hedge Fund owner of PSE from destroying the esthetics of our beautiful "Tree City".

Now is the time to step up to modern technology, already at work in other cities, as we move to a more green energy future.

Brett and Susan Fidler  
3417 122nd PL NE  
Bellevue, WA 98005



Energize Eastside EIS <info@energizeeastsideeis.org>

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## Phase 2 Scoping Comments

1 message

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**Brian** <br98799@comcast.net>  
To: info@energizeeastsideeis.org

Mon, Aug 1, 2016 at 9:25 PM

Please include the attached document with the Energize Eastside Phase 2 public comments



**City of Bellevue 160801.docx**  
621K

City of Bellevue,

PSE has made a number of unsubstantiated claims of need for the Energize Eastside (EE) project. Each one of PSE's claims has been thoroughly refuted as document in the public record of the EIS process. In the Phase 1 draft EIS, Bellevue has promoted similar unsubstantiated claims as fact. This has been brought to the attention of Bellevue giving ample time to revise the draft to address these errors. Errors of this type could be looked upon as an oversight in the expectation the errors would be expediently corrected. However, there has been no indication from Bellevue acknowledging the errors and addressing their correction. This is a deceitful situation. Why is Bellevue not admitting and correcting these errors in a timely fashion? Why has Bellevue not released a corrected Phase 1 draft EIS?

The U.S. Department of Energy (DOE) in its address to FERC on June 1, 2016 identified an extremely critical pitfall common to the Energize Eastside project, namely: *"Focusing narrowly on a low-probability worst case can lead to unduly-conservative decisions and misallocation of resources"*. PSE's contrived scenario is exactly the type of problem identified by the DOE.

Attachment 1 is the complete statement from Patricia Hoffman, Assistant Secretary for Electricity Delivery and Energy Reliability, U.S. Department of Energy to FERC on Electrical reliability. Another critical point addressed in the statement: *"The reliability metrics we use today will not be adequate for our future. For example:...We need to distinguish more clearly in our statistics and data between customer outages related to transmission-level events and those caused by distribution-level events. More than 90 percent of all interruptions are distribution-level events. We need to understand the latter category better in order to make them less frequent and reduce their impacts."*

Through intent or incompetence, PSE has made wildly varying and extremely unrealistic electrical power demand assessments. How much more evidence is needed to cause Bellevue to step up and 'do the right thing'? Does the DOE's concerns carry any weight with Bellevue?

Safety is still a major concern of the residents along the collocated electrical transmission line and hazardous liquid pipeline corridor. This issue seems to get a lot of whitewashing but nothing of substance to address the real safety issues. As found in attachment 2, PSE has made several very alarming statements in an attempt to dismiss or divert safety issues. On February 2, 2016 PSE stated to the Newcastle City Council and Planning Commission: *"So you get sort of a double down when you actually collocate which is one of the reasons many states mandate that we put facilities together."* Double down is gamblers term which means double the risk to double the profit. Eastside resident risk, PSE's profit. PSE also stated: *"...they say that if you are more than 50 feet from a lattice tower or more than 25 feet from a single monopole which is what's being contemplated here, you don't need to do any engineering studies that's far enough that you can just be laissez-faire and let it go."* Oxford dictionary defines laissez-faire as: A policy or attitude of letting things take their own course. This is clearly an alarming statement and shows safety is, at best, an afterthought. PSE states they comply with strict Federal safety guidelines and will work with Olympic pipeline to ensure safety. But there's a major flaw in that proposed safety net. Even the Federal government which is chronically slow to respond to safety issues has raised serious concerns regarding hazardous liquid pipeline safety. In response to mandates from the US Congress and the National Transportation Safety Board (NTSB), the Department Of

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Newcastle, WA  
August 1, 2016

Transportation (DOT) Pipeline and Hazardous Materials Safety Administration (PHMSA) issued the proposed rule change in attachment 3 for pipeline safety: *“PHMSA is proposing these changes to improve protection of the public, property, and the environment by closing regulatory gaps where appropriate, and ensuring that operators are increasing the detection and remediation of unsafe conditions, and mitigating the adverse effects of pipeline failures.”* The aged pipeline collocated with the PSE’s EE project is in substandard condition as measured by PHMSA’s proposed safety standards. Based on PHMSA’s best available technology is should be clear that the pipeline must be brought up to prudent safety standards prior to approval of any collocation of the EE project.

Brian Elworth

#### Attachment 1



FERC  
20160601081755-Hc

#### Attachment 2



Mark Williamson Feb  
2 2016 Newcastle City

#### Attachment 3



PHMSA  
80\_FR\_61610.pdf

**FEDERAL ENERGY REGULATORY COMMISSION**

**2016 State of Reliability**                    )  
  )     **Docket No. AD16-15-000**  
  )

**RELIABILITY TECHNICAL CONFERENCE**

**WRITTEN STATEMENT BY PATRICIA HOFFMAN  
ASSISTANT SECRETARY FOR ELECTRICITY DELIVERY AND  
ENERGY RELIABILITY, U.S. DEPARTMENT OF ENERGY**

**JUNE 1, 2016**

Thank you for the opportunity to express the views of the Department of Energy (DOE) on a range of important issues related to electric reliability – today and tomorrow. I note that you have divided today’s agenda into three broad areas: 1) the state of reliability in 2016; 2) emerging issues, both internationally and domestically; and 3) grid security. In this written statement, I will address topics of particular interest or concern to DOE in all three areas, with particular attention to the first area.

**I. 2016 State of Reliability**

Reliability has become more important than ever before – major parts of our economy are now totally dependent on reliable electricity. Even momentary disruptions in power quality can result in major economic losses. Further, we are in the early stages of a grand transformation of our electricity supply system, and this process of change is likely to continue for many years, with no stable end-state in view. Keeping the lights on

during this transformation will require unprecedented coordination and collaboration among many parties.

Success in managing this transformation will not be achievable without relevant metrics. One of the most important of the “foundational” projects in DOE’s current 88-project Grid Modernization Lab Consortium (GMLC) portfolio is aimed at developing metrics for six key attributes a modern grid must have. Reliability is one of those attributes, and it is often the first one mentioned.<sup>1</sup>

The reliability metrics we use today will not be adequate for our future. For example:

- 1) We need to distinguish more clearly in our statistics and data between customer outages related to transmission-level events and those caused by distribution-level events. More than 90 percent of all interruptions are distribution-level events. We need to understand the latter category better in order to make them less frequent and reduce their impacts.
- 2) For any given utility, long-term trends in SAIDI and SAIFI<sup>2</sup> can vary significantly depending on whether “major events” (e.g., hurricanes and other

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<sup>1</sup> The six attributes, in no particular order, are reliability, affordability, resilience, flexibility, sustainability, and security.

<sup>2</sup> SAIDI: System Average Interruption Duration Index, calculated as total duration of sustained customer interruptions ( $\geq 5$  minutes each)/number of customers served; SAIFI: System Average Interruption Frequency Index, calculated as frequency of sustained customer interruptions ( $\geq 5$  minutes each)/number of customers served.

large-scale storms, tsunamis, etc.) are included. Exclusion of major events from the data can mask declines in reliability, particularly if – as now appears to be the case – both the frequency and severity of major events are increasing.

- 3) As presently defined, SAIDI and SAIFI do not distinguish among affected customers. Yet according to Lawrence Berkeley National Laboratory (LBNL) research, a 1-hour interruption costs an average residential customer \$5, an average commercial customer \$866, and an average industrial customer \$7,688.<sup>3</sup> This lack of granularity makes it difficult, for example, for state regulators to decide how well their utilities are allocating reliability investment dollars.

In the GMLC project mentioned above, DOE will develop “event-based” reliability metrics, drawing on real-time interruption information posted on some utilities’ websites. Events will be characterized by

- 1) Magnitude (number of customers interrupted)
- 2) Customer type
- 3) Geographic scope (zip codes, counties)
- 4) Affected critical facilities and infrastructures.

A number of utilities are now estimating the costs of power outages using a tool developed by LBNL called the Interruption Cost Estimate Calculator (“ICE Calculator”).

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<sup>3</sup> These averages were generated using the Interruption Cost Estimate (ICE) Calculator available at <http://icecalculator.com/>. ICE is an electric reliability planning tool developed by Nexant and Lawrence Berkeley National Laboratory. The ICE Calculator was funded by the Office of Electricity Delivery and Energy Reliability at the U.S. Department of Energy.

The ICE Calculator is based on utility-sponsored statistical surveys of the costs customers incur due to power interruptions. DOE is now mapping out plans to improve the survey data upon which the calculator is based, which will enable more accurate estimates of the costs of outages.

We also need better metrics at the transmission level for reliability planning. Current planning practices usually evaluate a limited number of scenarios, including a postulated “worst case.” Focusing narrowly on a low-probability worst case can lead to unduly-conservative decisions and misallocation of resources. New methods and metrics are needed that take a probabilistic approach to the assessment of a wide range of possible contingencies or even combinations of them.

At the same time we develop concepts and proposals for new or refinements of existing metrics, we will need to take appropriate actions to ensure the availability of the relevant data. The Department of Energy looks forward to working with FERC, NERC, utilities, state regulators, and others to develop, test, and refine these reliability metrics (and any metrics that others may propose), and to work with the same organizations to ensure the availability of the pertinent data.

In DOE’s 88-project GMLC portfolio, we are addressing a wide range of other important topics related to reliability at the bulk power level, including:

- 1) Improvements in system modeling that will enhance our ability to forecast load patterns and the availability of weather-dependent generation, and to design advanced protection schemes where appropriate.
- 2) Tools to accelerate the speed at which grid operators will be able to identify, analyze, and respond to unusual conditions or events –which will be made necessary by the likelihood of much more dynamic market conditions, as the mix of load-side and generation technologies changes.

## **II. Emerging Issues**

It is no secret that we face a growing list of new issues in the electricity subsector, many of which have reliability implications, associated with the massive transformation of our electric supply system mentioned earlier. Here I want to add that the *entire* system is being affected, not just the bulk power facilities and markets, including distribution systems and important new system components that are being added on the customer's side of the meter.

In this section I want to give particular attention to several challenges. One is that the need for new metrics, new kinds of data, and new data-sharing protocols is just as important at the distribution level as at the bulk power level. In fact, this need is probably more challenging than at the bulk-power level, if only because we are starting from a less developed base. That is, with respect to bulk power reliability, we are able to build on decades of experience with the design and operation of these systems and with the development of pertinent reliability standards. By comparison, at the distribution

level we are in the early stages of creating a cadre of professional distribution planners and a body of distribution-level reliability standards, metrics, and mechanisms for sharing data.

Further, with the continuing penetration of distributed energy resources (DERs), many of the reliability problems that we have dealt with in earlier times at the bulk power level are now appearing at the distribution level, such as the need to manage voltage fluctuations and control, frequency control, and provide VAR support. Dealing with the reliability aspects of these concerns will raise significant federal/state jurisdictional issues, but I think that it is important to first gain an understanding of the technical problems and the potential solutions; that understanding will then inform and assist the resolution of the jurisdictional questions. The Department is supporting several projects related to these distribution-level challenges, too numerous to mention in detail here, as part of our 88-project Grid Modernization Lab Consortium portfolio.

Other important “emerging issues” are related to the continuing growth in the interdependence of our generation capacity and the natural gas supply system. The significance of this interdependence was amply demonstrated over two years ago in the massive eastern cold weather event known as the Polar Vortex, when protracted cold weather rendered much coal-fired generation inoperable, increased electricity demand, and strained our ability to deliver timely and adequate amounts of natural gas to gas-fired generation plants. Despite that experience, we are still faced with difficulties in ensuring the timely development of additional gas pipeline capacity, coordination of the “market

day” timing of the two industries, and determining in advance how available gas supplies would be allocated among wholesale customers in emergency situations. At the same time, our weather experts caution us not to remember the 2014 Polar Vortex as a one-time experience. I congratulate the Commission for its past and ongoing activities to explore concerns related to gas-electric interdependency, but I note that much work remains to be done.

Further, the significance of our growing gas-electric interdependence has been underscored recently in another way by the Aliso Canyon accident near Los Angeles and its continuing effects. The gas leak at Aliso Canyon has been closed, but the massive gas storage facility there is also shut down and is not likely to reopen for months, despite the dependence of much of the generation capacity that previously served Los Angeles on natural gas fuel drawn from that storage system. California’s regulatory agencies and utilities have projected that without that storage capacity, rolling blackouts could be needed for up to 14 days during the summer of 2016, given conditions of extreme hot weather. Further, reliability problems could persist into the winter of 2016-17 if Aliso Canyon’s storage system remains closed.<sup>4</sup>

In response to this accident, the Department of Energy and the Department of Transportation are co-leading the Administration’s Interagency Task Force on Natural Gas Storage Safety. To support the Task Force, the Department has tasked analysts at Argonne National Laboratory to review safety conditions at the nation’s 400 natural gas

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<sup>4</sup> California Public Utilities Commission, California Energy Commission, the California Independent System Operator, and the Los Angeles Department of Water and Power. *Aliso Canyon Action Plan to Preserve Gas and Electric Reliability for the Los Angeles Basin* [April 2016]

storage facilities, and to gauge the strategic significance of these facilities for the regional or local electric industry or other important industrial sectors.

In further recognition of the growing importance of gas-electric interdependence, another project in our 88-project Grid Modernization Lab Consortium portfolio will address how to model in an integrated manner the dynamics of regional electricity markets and regional gas markets. These markets operate at very different time scales – electricity moves at near the speed of light, and natural gas moves through pipelines at about 30 mph. (This helps explain why gas storage facilities, located close to generation facilities and load centers, can be strategically important; and, if bulk storage is not an option in a given region for geologic reasons, as in New England, why ample pipeline capacity becomes important.) Improved understanding of the interaction of the two markets on a dynamic basis is essential to uncovering areas for potential improvement in their joint operations, and to identifying potential adverse contingencies and preparing for them before they arise in real time.

### **III. Grid Security**

In this section, I will respond to the Commission's questions about implementation of the Fixing America's Surface Transportation (FAST) Act, DOE actions to increase the resilience of the grid, and matters related to the development of a transformer reserve.

## **FAST Act**

Congress enacted several important new energy security measures in the FAST Act. The Secretary of Energy was provided new authority, upon declaration of a “Grid Security Emergency” by the President, to issue emergency orders to protect or restore critical electric infrastructure or defense-critical electric infrastructure. This authority will enable DOE to respond as needed to threats or cyber and physical attacks on the grid. DOE is developing proposed rules of procedure regarding this new authority and will continue its partnership with the energy sector to maximize the effectiveness of this authority.

The FAST Act requires DOE to submit a plan to Congress evaluating the feasibility of establishing a Strategic Transformer Reserve for the storage, in strategically-located facilities, of spare large power transformers in sufficient numbers to temporarily replace critically damaged large power transformers. In January 2016 DOE-OE assigned the technical component of this important analysis to a team led by the Oak Ridge National Laboratory. The project team is very strong, and includes researchers from the University of Tennessee-Knoxville, Sandia National Laboratory, the Electric Power Research Institute, and Dominion Virginia Power. The results, when available, will be subject to rigorous peer review.

The FAST Act also codifies DOE’s role as the lead Sector-Specific Agency (SSA) for energy sector cyber incident coordination. This will facilitate a coordinated response to such incidents and expedite recovery from them. The FAST Act’s

protections regarding critical electric infrastructure information provide essential information-sharing tools to enhance the Federal Government's situational awareness, while ensuring the private sector that sensitive information on vulnerabilities will be safeguarded.

## **Cyber Security**

Intentional, malicious challenges to our energy systems continue to increase in numbers and sophistication. In response, we have made cyber security one of our highest priorities at DOE. We work continually and closely with the energy sector to share cyber threat information. Since 2010, DOE's Office of Electricity Delivery and Energy Reliability (OE) has invested more than \$210 million in cyber-security research, development and demonstration projects led by industry, universities and our national labs. More than 20 new technologies that our investments helped support are now being used to advance the resilience of the nation's energy delivery systems. For example, SecureSmart is a capability to identify bad actors on networks, and Hyperion is a capability to evaluate and expose malicious content and third-party software.

All of OE's cyber security research initiatives are based upon industry involvement, joint funding through matching funds, and development with practical application of the results as an end goal. For example, the Cyber-security Risk Information Sharing Program (CRISP) is a public-private partnership, co-funded by DOE-OE and industry. The purpose of CRISP is to collaborate with energy sector partners to facilitate the timely bi-directional sharing of unclassified and classified threat

information and to develop situational awareness tools that enhance the sector's ability to identify, prioritize, and coordinate the protection of critical infrastructure and key resources. CRISP leverages advanced sensors and threat analysis techniques developed by DOE along with DOE's expertise as part of the National Intelligence Community to better inform the energy sector of the high-level cyber risks. Current CRISP participants provide power to over 50 percent of the total number of continental U.S. electricity subsector customers.

As part of the Administration's efforts to improve electricity subsector cyber security capabilities, DOE-OE and industry partners developed the Electricity Subsector Cyber-security Capability Maturity Model (C2M2) to improve cyber security capabilities and to help private sector owners and operators better assess their own cyber security posture. The C2M2 provides a self-evaluation tool that helps organizations evaluate, prioritize and improve their cyber security capabilities. Since the C2M2 program's inception in June 2012, more than 750 organizations have requested and received the C2M2 toolkit, including more than 400 electricity subsector organizations, and the number of participants continues to grow. Further, this is a comprehensive and credible approach that all energy sector companies can use to improve their cyber-security posture. DOE-OE has also released versions of the C2M2 for the oil and natural gas subsector and for industry at large.

## **Resilience and Preparedness**

We believe it is important to be proactive and cultivate an “ecosystem of resilience” -- a network of producers, distributors, regulators, vendors, and public partners, acting together to strengthen our combined ability to prepare, respond, and recover. We partner with industry, other Federal agencies, local governments, and other stakeholders to quickly identify threats, develop in-depth strategies to mitigate those threats, and rapidly respond to any disruptions.

Our model is partnerships first. We are all in this together. It is through working together that we continue to strengthen our ability to bounce back following an event. Toward this end, DOE leads preparedness exercises at the local, state, and national levels. In November 2015, for example, DOE led the federal participation in the North American Electric Reliability Corporation’s Grid Ex III, the largest electricity subsector crisis response exercise ever. More than 350 government and industry organizations, as well as 4,500 participants played a role in testing and shaping the national response plan.

In April, DOE led Clear Path IV in Portland, Oregon and Washington, DC, an interagency exercise to test and evaluate energy sector roles and responsibilities in response plans developed for a Cascadia Subduction Zone (CSZ) 9.0 earthquake and tsunami. Clear Path IV included representation from 10 Federal agencies (including FERC), seven states, five local governments, 15 oil and natural gas companies, 18 electric utilities, six trade associations, and four state associations with more than 175 participants.

## **Concluding Statement**

Threats to our electric infrastructure will continue to evolve, and DOE is working diligently to stay ahead of the curve. We must build and maintain an “ecosystem of resilience” that works in partnership with local, state and industry stakeholders to help provide the methods, strategies, and tools needed to help protect local communities through increased resilience and flexibility. We must determine whether a transformer reserve is needed, and if so, how it should be created and managed. We must also accelerate information sharing to inform better local investment decisions, encourage innovation and the use of best practices to help raise the sector’s cyber security maturity, and strengthen local incident response and recovery capabilities, especially through participation in training programs and disaster and threat exercises.

Sustaining an ecosystem of resilience is – by definition – a shared endeavor, and focusing on local communities is an imperative. Because DOE has spent decades building and supporting partnerships at the local level, and investing in technologies to enhance resilience, the grid is better able to withstand and recover quickly from a disaster or attack.

February 2 2016 Newcastle City Council and Planning Commission meeting.

Council members, commissioners, staff thank you good evening my name is mark Williamson I'm a utility consultant for Madison Wisconsin and I represent Puget Sound energy. I'm working on their energized Eastside Project, before I retired and went into consulting I was executive vice president of Madison Gas & Electric Company a company not much different than Puget Sound in the Wisconsin area where I ran generation transmission gas operations, for a little over thirty years. So I have a little perspective on what I'd like to talk about tonight which is pipeline safety and high voltage transmission lines. You heard a little bit at the planning commission last week, my perspective is quite a bit different based on this is my 89th high voltage transmission project and like I say 30 years in the industry. First of all we should all remember that there are significant Federal standards that guide us both on pipeline work and on high voltage electric work. Those standards specify how pipelines have to operate with great detail including their safety procedures testing their pipes to make sure aging has worn them so that they're safe, solid, and secure for all of us. They also guide different regulations guide how we do high voltage electric transmission. Those regulations also are very strict and require that we make sure that we can keep the lights on a very safe and secure way. A final set of regulations guides the interaction and those interactions are common in the United States. I myself have collocated several 100 miles of extra high voltage transmission with pipelines. You've experienced it here actually in Newcastle around a corridor that shared between high pressure petroleum pipelines and high voltage electric the corridor that the 115 KV lines in the Olympic now BP pipeline runs through. So you've all experienced that and the interaction because of the diligence of the companies. Both utilities safety is a high priority that's common across the country. You've had a safe and decent interaction for almost 50 years on what's going on. So it's not unusual to see these facilities put in the same place. In fact, it's a policy matter many communities and in fact many states required the collocation of utility facilities both gas and electric. The key is the companies have to work together to maintain safety. There's a strong interaction between pipelines and Electric Utilities both as a physical matter and as an operating matter and the fact that you manage to get through 50 years without a problem is not unusual. That's the norm in North America. We don't have a lot of accidents and especially in collocated facilities because you have to two set of people from different companies keeping an eye on those facilities. So you get sort of a double down when you actually collocate which is one of the reasons many states mandate that we put facilities together. The next thing that we ought to think about is that those regulations and how some of that interacts have been set pretty in in pretty good detail in a lot of depth in the draft EIS you all commissioned for the energize project. There's a chapter dedicated to the safe interaction of pipelines and high voltage transmission lines. And the reason is because people take those responsibilities seriously and that's why it's been working for so long. Um the thing that you need to do to make this work is to actually have good engineering studies that make sure that the pipeline is protected and transmission facilities are protected. Now I saw on the transcript that you heard some things last week that there are some prohibitions about locating facilities within several feet of each other. I think somebody quoted the Bonneville power standards that you need 50 feet between a pipeline and transmission line. If you actually read the standard which is available online, they say that if you are more than 50 feet from a lattice

tower or more than 25 feet from a single monopole which is what's being contemplated here, you don't need to do any engineering studies that's far enough that you can just be laissez-faire and let it go. Everything else that's closer and most facilities in this country are much closer require good coordination and studies between the utility company that has electricity and the one that runs the pipeline so you're sure those interactions don't adversely affect either facility. We all do this commonly and as I say you had experience with its been working here quite well for many many decades. On the last thing I think I want to point out is the draft EIS also talks about this new construction is actually more rigidly control than old construction. So any new facilities that are built in that corridor will actually be built to higher safety standards than what you have existing. And that's going to give you an improvement. I heard some things from the transcript that people are concerned about construction methods which is legitimate. They should be concerned. But we do this every day in this country by specialists who make sure we know where the pipe is. We know where the hole is. We know what kind of soil we have. We know what kind of weight that can bear. These these things are done routinely and I understand that it's new for people but but it's very interesting to me, coming from the outside. Most of these discussions occur in new corridors. You guys have actually had this with much older equipment that's been carefully maintained for 50 years and every indication is that new construction actually gives you benefits. So those were the seeds I wanted to plant. ... told me to take a minute and a half. I think I took two so I'd be happy to answer any questions otherwise that's it. ...

... Washington doesn't have a lot of collocation requirements. You guys have a very unusual regulatory system here. Your state system's much looser which is why community councils get to make decisions on infrastructure location. Most states have a statewide system. Washington doesn't have a strong collocation policy. But it's a little unusual that way. ....

(...how many states require collocation?...)

I'm not precise in this but I know I've work in about half the states as in this country and most of the Canadian Provinces for for that happens about 2/3 yes, 1/3



# FEDERAL REGISTER

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Part III

Department of Transportation

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Pipeline and Hazardous Materials Safety Administration

49 CFR Part 195

Pipeline Safety: Safety of Hazardous Liquid Pipelines; Proposed Rule

**DEPARTMENT OF TRANSPORTATION****Pipeline and Hazardous Materials Safety Administration****49 CFR Part 195****[Docket No. PHMSA–2010–0229]****RIN 2137–AE66****Pipeline Safety: Safety of Hazardous Liquid Pipelines**

**AGENCY:** Pipeline and Hazardous Materials Safety Administration (PHMSA), Department of Transportation (DOT).

**ACTION:** Notice of proposed rulemaking.

**SUMMARY:** In recent years, there have been significant hazardous liquid pipeline accidents, most notably the 2010 crude oil spill near Marshall, Michigan, during which almost one million gallons of crude oil were spilled into the Kalamazoo River. In response to accident investigation findings, incident report data and trends, and stakeholder input, PHMSA published an Advance Notice of Proposed Rulemaking (ANPRM) in the **Federal Register** on October 18, 2010. The ANPRM solicited stakeholder and public input and comments on several aspects of hazardous liquid pipeline regulations being considered for revision or updating in order to address the lessons learned from the Marshall, Michigan accident and other pipeline safety issues. Subsequently, Congress enacted the Pipeline Safety, Regulatory Certainty, and Job Creation Act that included several provisions that are relevant to the regulation of hazardous liquid pipelines. Shortly after the Pipeline Safety, Regulatory Certainty, and Job Creation Act was passed, the National Transportation Safety Board (NTSB) issued its accident investigation report on the Marshall, Michigan accident. In it, NTSB made additional recommendations regarding the need to revise and update hazardous liquid pipeline regulations.

In response to these mandates, recommendations, lessons learned, and public input, PHMSA is proposing to make changes to the hazardous liquid pipeline safety regulations. PHMSA is proposing these changes to improve protection of the public, property, and the environment by closing regulatory gaps where appropriate, and ensuring that operators are increasing the detection and remediation of unsafe conditions, and mitigating the adverse effects of pipeline failures.

**DATES:** Persons interested in submitting written comments on this NPRM must

do so by January 8, 2016. PHMSA will consider late filed comments so far as practicable.

**ADDRESSES:** You may submit comments identified by the docket number PHMSA–2010–0229 by any of the following methods:

*Federal eRulemaking Portal:* <http://www.regulations.gov>. Follow the online instructions for submitting comments. Fax: 1–202–493–2251.

*Mail:* Hand Delivery: U.S. DOT Docket Management System, West Building Ground Floor, Room W12–140, 1200 New Jersey Avenue SE., Washington, DC 20590–0001, between 9 a.m. and 5 p.m., Monday through Friday, except federal holidays.

*Instructions:* If you submit your comments by mail, submit two copies. To receive confirmation that PHMSA received your comments, include a self-addressed stamped postcard.

**Note:** Comments are posted without changes or edits to <http://www.regulations.gov>, including any personal information provided. There is a privacy statement published on <http://www.regulations.gov>.

**FOR FURTHER INFORMATION CONTACT:** Mike Israni, by telephone at 202–366–4571, by fax at 202–366–4566, or by mail at U.S. DOT, PHMSA, 1200 New Jersey Avenue SE., PHP–30, Washington, DC 20590–0001.

**SUPPLEMENTARY INFORMATION:**

Outline of this document:

- I. Executive Summary
- II. Background and NPRM Proposals
- III. Analysis of Advance Notice of Proposed Rulemaking
  - A. Scope of Part 195 and Existing Regulatory Exceptions
  - B. Definition of High Consequence Area
  - C. Leak Detection Equipment and Emergency Flow Restricting Devices
  - D. Valve Spacing
  - E. Repair Criteria Outside of High Consequence Areas
  - F. Stress Corrosion Cracking
- IV. Section by Section Analysis
- V. Regulatory Notices and Proposed Changes to Regulatory Text

**I. Executive Summary**

In recent years, there have been significant hazardous liquid pipeline accidents, most notably the 2010 crude oil spill near Marshall, Michigan, during which almost one million gallons of crude oil were spilled into the Kalamazoo River. In response to accident investigation findings, incident report data and trends, and stakeholder input, PHMSA published an ANPRM in the **Federal Register** on October 18, 2010, (75 FR 63774). The ANPRM solicited stakeholder and public input and comments on several aspects of

hazardous liquid pipeline regulations being considered for revision or updating in order to address the lessons learned from the Marshall, Michigan accident and other pipeline safety issues.

Subsequently, Congress enacted the Pipeline Safety, Regulatory Certainty, and Job Creation Act of 2011 (Pub. L. 112–90) (The Act). That legislation included several provisions that are relevant to the regulation of hazardous liquid pipelines. Shortly after the Act was passed, NTSB issued its accident investigation report on the Marshall, Michigan accident. In it, NTSB made additional recommendations regarding the need to revise and update hazardous liquid pipeline regulations. Specifically, the NTSB issued recommendations P–12–03 and P–12–04 respectively, which addressed detection of pipeline cracks and “discovery of condition”. The “discovery of condition” recommendation would require, in cases where a determination about pipeline threats has not been obtained within 180 days following the date of inspection, that pipeline operators notify the Pipeline and Hazardous Materials Safety Administration and provide an expected date when adequate information will become available.

The Government Accounting Office (GAO) also issued a recommendation in 2012 concerning hazardous liquid and gas gathering pipelines. Recommendation GAO–12–388, dated March 22, 2012, states “To enhance the safety of unregulated onshore hazardous liquid and gas gathering pipelines, the Secretary of Transportation should direct the PHMSA Administrator to collect data from operators of federally unregulated onshore hazardous liquid and gas gathering pipelines, subsequent to an analysis of the benefits and industry burdens associated with such data collection”.

In response to these mandates, recommendations, lessons learned, and public input, PHMSA is proposing to make certain changes to the Hazardous Liquid Pipeline Safety Regulations. The first and second proposals are to extend reporting requirements to all hazardous liquid gravity and gathering lines. The collection of information about these lines is authorized under the Pipeline Safety Laws, and the resulting data will assist in determining whether the existing federal and state regulations for these lines are adequate.

The third proposal is to require inspections of pipelines in areas affected by extreme weather, natural disasters, and other similar events. Such inspections will ensure that pipelines

are still capable of being safely operated after these events. The fourth proposal is to require periodic inline integrity assessments of hazardous liquid pipelines that are located outside of HCAs. HCA's are already covered under the IM program requirements. These assessments will provide critical information about the condition of these pipelines, including the existence of internal and external corrosion and deformation anomalies.

The fifth proposal is to require the use of leak detection systems on hazardous liquid pipelines in all locations. The use of such systems will help to mitigate the effects of hazardous liquid pipeline failures that occur outside of HCAs. The sixth proposal is to modify the provisions for making pipeline repairs. Additional conservatism will be incorporated into the existing repair criteria and an adjusted schedule will be established to provide greater uniformity. These criteria will also be made applicable to all hazardous liquid pipelines, with an extended timeframe for making repairs outside of HCAs.

The seventh proposal is to require that all pipelines subject to the IM requirements be capable of accommodating inline inspection tools within 20 years, unless the basic construction of a pipeline cannot be modified to permit that accommodation. Inline inspection tools are an effective means of assessing the integrity of a pipeline and broadening their use will improve the detection of anomalies and prevent or mitigate future accidents in high-risk areas. Finally, other regulations will be clarified to improve certainty and compliance. PHMSA estimates that 421 hazardous liquid operators may incur costs to comply with the proposed rule. The estimated annual costs for the different requirements range from approximately \$1,000 to \$16.7 million, with aggregate costs of approximately \$22.4 million. These wide ranges exist because the requirements vary widely. For example, some requirements apply only to pipelines within HCAs, some only to those outside HCAs, and some to both; other requirements apply only to onshore pipelines, and others to both on- and offshore; the length of pipeline, and the number of operators affected both vary for the different requirements. These proposals are designed to mitigate or prevent some number of hazardous liquid pipeline incidents resulting in annualized benefits estimated between approximately \$3.5 and \$17.7 million, depending on the requirement. Factors such as increased safety, public confidence that all pipelines are regulated, quicker discovery of leaks

and mitigation of environmental damages, and better risk management are considered in this analysis. The dollar value of fatalities, injuries, and property damages due to pipeline incidents are societal costs and their prevention represents potential benefits. The changes proposed in this Notice of Proposed Rulemaking (NPRM) are expected to enhance overall pipeline safety and protection of the environment.

## II. Background and NPRM Proposals

Congress established the current framework for regulating the safety of hazardous liquid pipelines in the Hazardous Liquid Pipeline Safety Act (HLPESA) of 1979 (Pub. L. 96–129). Like its predecessor, the Natural Gas Pipeline Safety Act (NGPSA) of 1968 (Pub. L. 90–481), the HLPESA provides the Secretary of Transportation (Secretary) with the authority to prescribe minimum federal safety standards for hazardous liquid pipeline facilities. That authority, as amended in subsequent reauthorizations, is currently codified in the Pipeline Safety Laws (49 U.S.C. 60101 *et seq.*).

PHMSA is the agency within DOT that administers the Pipeline Safety Laws. PHMSA has issued a set of comprehensive safety standards for the design, construction, testing, operation, and maintenance of hazardous liquid pipelines. Those standards are codified in the Hazardous Liquid Pipeline Safety Regulations (49 CFR part 195).

Part 195 applies broadly to the transportation of hazardous liquids or carbon dioxide by pipeline, including on the Outer Continental Shelf, with certain exceptions set forth by statute or regulation. Performance-based safety standards are generally favored (*i.e.*, a particular objective is specified, but the method of achieving that objective is not). Risk management principles play a critical role in the IM requirements for HCA's.

PHMSA exercises primary regulatory authority over interstate hazardous liquid pipelines, and the owners and operators of those facilities must comply with safety standards in part 195. The states may submit a certification to regulate the safety standards and practices for intrastate pipelines. States certified to regulate their intrastate lines can also enter into agreements with PHMSA to serve as an agent for inspecting interstate facilities.

Most state pipeline safety programs are administered by public utility commissions. These state authorities must adopt the Pipeline Safety Regulations as part of a certification or agreement, but can establish more

stringent safety standards for those intrastate pipeline facilities that they have responsibility to regulate. PHMSA cannot regulate the safety standards or practices for an intrastate pipeline facility if a state has a current certification to regulate such facilities.

Congress recently enacted the Pipeline Safety, Regulatory Certainty, and Job Creation Act of 2011 (Pub. L. 112–90) (The Act). That legislation included several provisions that are relevant to the regulation of hazardous liquid pipelines. As part of the rulemaking process, PHMSA presented proposed changes in response to this Act in an ANPRM published in the **Federal Register** on October 18, 2010, (75 FR 63774). This NPRM will, in the paragraphs that follow, describe each of the proposals PHMSA will make along with a statement of need for each and an explanation of how each of these proposals improve the pipeline safety regulations.

### *Extend Certain Reporting Requirements to All Gravity and Rural Hazardous Liquid Gathering Lines*

Gravity lines; pipelines that carry product by means of gravity, are currently exempt from PHMSA regulations. Many gravity lines are short and within tank farms or other pipeline facilities; however, some gravity lines are longer and are capable of building up large amounts of pressure. PHMSA is aware of gravity lines that traverse long distances with significant elevation changes which could have significant consequences in the event of a release.

In order for PHMSA to effectively analyze safety performance and pipeline risk of gravity lines, PHMSA needs basic data about those pipelines. The agency has the statutory authority to gather data for all gravity lines (49 U.S.C. 60117(b)), and that authority was not affected by any of the provisions in the Pipeline Safety Act of 2011. Accordingly, PHMSA is proposing to add 49 CFR 195.1(a)(5) to require that the operators of all gravity lines comply with requirements for submitting annual, safety-related condition, and incident reports. PHMSA estimates that, at most, five hazardous liquid pipeline operators will be affected. Based on comments from API–AOPL to the ANPRM, 3 operators have approximately 17 miles of gravity fed pipelines. PHMSA estimated that proportionally 5 operators would have 28 miles of gravity-fed pipelines.

PHMSA is also proposing to extend the reporting requirements of part 195 to all hazardous liquid gathering lines. According to the legislative history, Congress originally opposed any

regulation of rural gathering lines in the Hazardous Liquid Pipeline Safety Act of 1979 (Pub. L. 96–129) for policy reasons (*i.e.*, those lines did not present a significant risk to public safety to justify federal regulation based on the data available at that time). See S. REP. NO. 96–182 (May 15, 1979), reprinted in 1979 U.S.C.C.A.N. 1971, 1972. However, Congress eventually relaxed that prohibition in the Pipeline Safety Act of 1992 (Pub. L. 102–508) and authorized the issuance of safety standards for regulated rural gathering lines based on a consideration of certain factors and subject to certain exclusions. When PHMSA adopted the current requirements for regulated rural gathering lines, the agency made certain policy judgments in implementing those statutory provisions based on the information available at that time.

Recent data indicates, however, that PHMSA regulates less than 4,000 miles of the approximately 30,000 to 40,000 miles of onshore hazardous liquid gathering lines in the United States. That means that as much as 90 percent of the onshore gathering line mileage is not currently subject to any minimum federal pipeline safety standards. The NTSB has also raised concerns about the safety of hazardous liquid gathering lines in the Gulf of Mexico and its inlets, which are only subject to certain inspection and reburial requirements.<sup>1</sup>

Congress also ordered the review of existing state and federal regulations for hazardous liquid gathering lines in the Pipeline Safety Act of 2011, to prepare a report on whether any of the existing exceptions for these lines should be modified or repealed, and to determine whether hazardous liquid gathering lines located offshore or in the inlets of the Gulf of Mexico should be subjected to the same safety standards as all other hazardous liquid gathering lines. Based on the study titled “Review of Existing Federal and State Regulations for Gas and Hazardous Liquid Gathering Lines,”<sup>2</sup> that was performed by the Oak Ridge National Laboratory and published on May 8, 2015, PHMSA is proposing additional regulations to ensure the safety of hazardous liquid gathering lines.

In order for PHMSA to effectively analyze safety performance and pipeline risk of gathering lines, we need basic data about those pipelines. PHMSA has statutory authority to gather data for all gathering lines (49 U.S.C. 60117(b)), and

that authority was not affected by any of the provisions in the Pipeline Safety Act of 2011. Accordingly, PHMSA is proposing to add § 195.1(a)(5) to require that the operators of all gathering lines (whether onshore, offshore, regulated, or unregulated) comply with requirements for submitting annual, safety-related condition, and incident reports.

In the ANPRM, PHMSA asked whether the agency should repeal or modify any of the exceptions for hazardous liquid gathering lines. Section 195.1(a)(4)(ii) states that part 195 applies to a “regulated rural gathering line as provided in § 195.11.” PHMSA adopted a regulation in a June 2008 final rule (73 FR 31634) that prescribed certain safety requirements for regulated rural gathering lines (*i.e.*, the filing of accident, safety-related condition and annual reports; establishing the maximum operating pressure according to § 195.406; installing line markers; and establishing programs for public awareness, damage prevention, corrosion control, and operator qualification of personnel).

The June 2008 final rule did not establish safety standards for all rural hazardous liquid gathering lines. Some of those lines cannot be regulated by statute (*i.e.*, 49 U.S.C. 60101(b)(2)(B) states that “the definition of ‘regulated gathering line’ for hazardous liquid may not include a crude oil gathering line that has a nominal diameter of not more than 6 inches, is operated at low pressure, and is located in a rural area that is not unusually sensitive to environmental damage.”) and Congress did not remove this exemption in the 2011 Act. However, the 2011 Act did require that PHMSA review whether currently unregulated gathering lines should be made subject to the same regulations as other pipelines.

#### *Require Inspections of Pipelines in Areas Affected by Extreme Weather, Natural Disasters, and Other Similar Events*

In July 2011 a pipeline failure occurred near Laurel, Montana, causing the release of an estimated 1,000 barrels of crude oil into the Yellowstone River. That area had experienced extensive flooding in the weeks leading up to the failure, and the operator has estimated the cleanup costs at approximately \$135 million. An instance of flooding also occurred in 1994 in the State of Texas, leading to the failure of eight pipelines and the release of more than 35,000 barrels of hazardous liquids into the San Jacinto River. Some of that released product also ignited, causing minor burns and other injuries to nearly 550 people according to the NTSB. As the

agency has noted in a series of advisory bulletins, hurricanes are capable of causing extensive damage to both offshore and inland pipelines (*e.g.*, Hurricane Ivan, September 23, 2004 (69 FR 57135); Hurricane Katrina, September 7, 2004 (70 FR 53272); Hurricane Rita, September 1, 2011 (76 FR 54531)).

These events demonstrate the importance of ensuring that our nation’s waterways are adequately protected in the event of a natural disaster or extreme weather. PHMSA is aware that responsible operators might do such inspections; however, because it is not a requirement, some operators do not. Therefore, PHMSA is proposing to require that operators perform an additional inspection within 72 hours after the cessation of an extreme weather event such as a hurricane or flood, an earthquake, a natural disaster, or other similar event.

Specifically, under this proposal an operator must inspect all potentially affected pipeline facilities post extreme weather event to ensure that no conditions exist that could adversely affect the safe operation of that pipeline. The operator would be required to consider the nature of the event and the physical characteristics, operating conditions, location, and prior history of the affected pipeline in determining the appropriate method for performing the inspection required. The inspection must occur within 72 hours after the cessation of the event, or as soon as the affected area can be safely accessed by the personnel and equipment required to perform the inspection. PHMSA has found that 72 hours is reasonable and achievable in most cases. If an adverse condition is found, the operator must take appropriate remedial action to ensure the safe operation of a pipeline based on the information obtained as a result of performing the inspection. Such actions might include, but are not limited to:

- Reducing the operating pressure or shutting down the pipeline;
- Modifying, repairing, or replacing any damaged pipeline facilities;
- Preventing, mitigating, or eliminating any unsafe conditions in the pipeline right-of-ways (ROWS);
- Performing additional patrols, surveys, tests, or inspections;
- Implementing emergency response activities with federal, state, or local personnel; and
- Notifying affected communities of the steps that can be taken to ensure public safety.

This proposal is based on the experience of PHMSA and is expected to increase the likelihood that safety

<sup>1</sup> <https://app.nts.gov/news/2010/100624b.html>.

<sup>2</sup> [http://www.phmsa.dot.gov/pv\\_obj\\_cache/pv\\_obj\\_id\\_7B2B80704EBC3EBABDB5B9F701F184E0854F3600/filename/report\\_to\\_congress\\_on\\_gathering\\_lines.pdf](http://www.phmsa.dot.gov/pv_obj_cache/pv_obj_id_7B2B80704EBC3EBABDB5B9F701F184E0854F3600/filename/report_to_congress_on_gathering_lines.pdf).

conditions will be found earlier and responded to more quickly. PHMSA invites comment on this and other proposals in this NPRM. In regard to this proposal, PHMSA has particular interest in additional comments concerning how operators currently respond to these events, what type of events are encountered and if a 72 hour response time is reasonable.

*Require Periodic Assessments of Pipelines That Are Not Already Covered Under the IM Program Requirements*

PHMSA is proposing to require assessments for pipeline segments in non-HCAs. PHMSA believes that expanded assessment of non-HCA pipeline segments areas will provide operators with valuable information they may not have collected if regulations were not in place such a requirement would ensure prompt detection and remediation of corrosion and other deformation anomalies in all locations, not just HCAs. Specifically, the proposed § 195.416 would require operators to assess non-HCA (non-IM) pipeline segments with an inline inspection (ILI) tool at least once every 10 years. PHMSA needs operators to complete assessments in HCAs followed by assessments in non-HCAs. Other assessment methods could be used if an operator provides the Office of Pipeline Safety (OPS) with prior written notice that a pipeline is not capable of accommodating an ILI tool. The written notice provided to PHMSA must include a technical demonstration of why the pipeline is not capable of accommodating an ILI tool and what alternative technology the operator proposes to use. The operator must also detail how the alternative technology would provide a substantially equivalent understanding of the pipeline's condition in light of the threats that could affect its safe operation. Such alternative technologies would include hydrostatic pressure testing or appropriate forms of direct assessment.

The individuals who review the results of these periodic assessments would need to be qualified by knowledge, training, and experience and would be required to consider any uncertainty in the results obtained, including ILI tool tolerance, when determining whether any conditions could adversely affect the safe operation of a pipeline. Such determinations would have to be made promptly, but no later than 180 days after an inspection, unless the operator demonstrates that the 180-day deadline is impracticable.

Operators would be required to comply with the other provisions in part 195 in implementing the requirements in § 195.416. That includes having appropriate provisions for performing these periodic assessments and any resulting repairs in an operator's procedural manual (see § 195.402), adhering to the recordkeeping provisions for inspections, test, and repairs (see § 195.404), and taking appropriate remedial action under § 195.422, as discussed below. Section 195.11 would also be amended to subject regulated onshore gathering lines to the periodic assessment requirement.

PHMSA believes by proposing the above amendment to the existing pipeline safety regulations, safety will be increased for all pipelines both in and out of HCAs. Such a requirement would ensure operators obtain information necessary for prompt detection and remediation of corrosion and other deformation anomalies in all locations, not just HCAs. Currently, operators have indicated that they are performing ILI assessments on a large majority of their pipelines even though no regulation requires them to do so outside of HCAs. PHMSA wants to ensure that current assessment rates continue and expand to those areas not voluntarily assessed. Of the many methods to assess, PHMSA has found that ILI in many cases is the most efficient and effective. PHMSA considered alternatives to its proposal that would likely have lower overall costs and benefits, but potentially higher net benefits. For instance, PHMSA considered limiting the proposed expansion of certain IM requirements to those pipelines where a spill could affect a building or occupied site such as a playground, or highway. Under this alternative, pipelines in a location where a spill could not affect a building, occupied site, or highway would not be subject to these new requirements. However, this alternative would offer less protection to the natural environment, including sensitive and protected habitats and species. PHMSA also considered alternative assessment intervals to the proposed 10 year interval, such as a 15- or 20-year interval. However, substantial changes to pipeline integrity can occur in a short timeframe. PHMSA declined to propose these alternatives because they would provide fewer benefits than the proposed approach. More specifically, liquid spills, even in remote areas, can result in environmental damage necessitating clean up and incurring restoration costs

and lost use and nonuse values. If pipe is not assessed and repaired in accordance with this proposal, liquid spills are likely to occur.

Also, a longer interval between assessments would increase risks of integrity-related failure compared to PHMSA's proposal. PHMSA was unable to quantify the benefits and costs of these alternatives due to limitations in available information, such as the amount of unassessed pipe where a spill could not affect a building, occupied site, or highway; the environmental impact of spills from such pipe; and the incremental reduction in benefit between 10-year and alternative interval periods. PHMSA seeks public comments on these alternatives, and the regulatory impact analysis contains specific questions for public comment on quantifying these alternatives.

*Modify the IM Repair Criteria and Apply Those Same Criteria to Any Pipeline Where the Operator Has Identified Repair Conditions*

Inspection experience indicates a weakness in current repair criteria. Specifically, the current repair criteria in non-HCAs (immediate and reasonable time) does not specify anomaly or repair time frames. It is left entirely at the operator's discretion. Therefore, PHMSA is proposing to modify the IM pipeline repair criteria and to apply the criteria to non-IM pipeline repairs. Specifically, the criteria in § 195.452(h) for IM repairs would be modified to:

- Categorize bottom-side dents with stress risers as immediate repair conditions;
- Require immediate repairs whenever the calculated burst pressure is less than 1.1 times maximum operating pressure;
- Eliminate the 60-day and 180-day repair categories; and
- Establish a new, consolidated 270-day repair category.

PHMSA is also proposing to amend the requirements in § 195.422 for performing non-IM repairs by:

- Applying the criteria in the immediate repair category in § 195.452(h); and
- Establishing an 18-month repair category for hazardous liquid pipelines that are not subject to IM requirements.

PHMSA believes that these changes will ensure that immediate action is taken to remediate anomalies that present an imminent threat to the integrity of hazardous liquid pipelines in all locations. Moreover, many anomalies that would not qualify as immediate repairs under the current criteria will meet that requirement as a result of the additional conservatism

that will be incorporated into the burst pressure calculations. The new time frames for performing non-immediate repairs will also allow operators to remediate those conditions in a timely manner while allocating resources to those areas that present a higher risk of harm to the public, property, and the environment. The existing requirements in § 195.422 would also be modified to include a general requirement for performing all other repairs within a reasonable time. A proposed amendment to § 195.11 would extend these new pipeline remediation requirements to regulated onshore gathering lines.

As a result of these changes, PHMSA would modify the existing general requirements for pipeline repairs in § 195.401(b). Paragraph (b)(1) would be modified to reference the new timeframes in § 195.422(d) and (e) for remediating conditions that could adversely affect the safe operation of a pipeline segment not subject to the IM requirements in § 195.452. The requirements in paragraph (b)(2) for IM repairs under § 195.452(h) will be retained without change. A new paragraph (b)(3) will be added, however, to require operators to consider the risk to people, property, and the environment in prioritizing the remediation of any condition that could adversely affect the safe operation of a pipeline system, including those covered by the timeframes specified in §§ 195.422(d) and (e) and 195.452(h).

#### *Expand the Use of Leak Detection Systems for All Hazardous Liquid Pipelines*

PHMSA is proposing to amend § 195.134 to require that all new hazardous liquid pipelines be designed to include leak detection systems. Recent pipeline accidents, including a pair of related failures that occurred in 2010 on a crude oil pipeline in Salt Lake City, Utah, corroborate the significance of having an adequate means for identifying leaks in all locations. PHMSA, aware of the significance of leak detection, held two recent workshops in Rockville, Maryland on March 27–28 of 2012. These workshops sought comment from the public concerning many of the issues raised in the 2010 ANPRM, including leak detection expansion. Both workshops were well attended and PHMSA received valuable input from stakeholders.

Currently, part 195 contains mandatory leak detection requirements for hazardous liquid pipelines that could affect an HCA.

Congress included additional requirements for leak detection systems in section 8 of the Pipeline Safety Act of 2011. That legislation requires the Secretary to submit a report to Congress, within 1-year of the enactment date, on the use of leak detection systems, including an analysis of the technical limitations and the practicability, safety benefits, and adverse consequence of establishing additional standards for the use of those systems. To provide Congress with an opportunity to review that report, the Secretary is prohibited from issuing any final leak detection regulations for a specified time period (*i.e.*, 2 years from the date of the enactment of the Pipeline Safety Act of 2011, or 1-year after the submission of the leak detection report to Congress, whichever is earlier), unless a condition exists that poses a risk to public safety, property, or the environment, or is an imminent hazard, and the issuance of such regulations would address that risk or hazard. Other provisions in part 195 help to detect and mitigate the effects of pipeline leaks, including the Right of Way (ROW).

In addition to modifying § 195.444 to require a means for detecting leaks on all portions of a hazardous liquid pipeline system, PHMSA is proposing that operators be required to have an evaluation performed to determine what kinds of systems must be installed to adequately protect the public, property, and the environment. The factors that must be considered in performing that evaluation would include the characteristics and history of the affected pipeline, the capabilities of the available leak detection systems, and the location of emergency response personnel. A proposed amendment to § 195.11 would extend these new leak detection requirements to regulated onshore gathering lines. PHMSA is retaining and is not proposing any modification to the requirement in §§ 195.134 and 195.444 that each new computational leak detection system comply with the applicable requirements in the API RP 1130 standard.

PHMSA does not propose to make any additional changes to the regulations concerning specific leak detection requirements at this time. PHMSA will be studying this issue further and may make proposals concerning this topic in a later rulemaking. PHMSA recently publicly provided the results of the 2012 Keifner and Associates study of leak detection systems in the pipeline industry, including the current state of technology.

#### *Increase the Use of Inline Inspection Tools*

PHMSA is proposing to require that all hazardous liquid pipelines in HCA's and areas that could affect an HCA be made capable of accommodating ILI tools within 20 years, unless the basic construction of a pipeline will not accommodate the passage of such a device.

The current requirements for the passage of ILI devices in hazardous liquid pipelines are prescribed in § 195.120, which require that new and replaced pipelines are designed to accommodate inline inspection tools. The basis for these requirements was a 1988 law that addressed the Secretary's authority with regard to requiring the accommodation of ILI tools. This law required the Secretary to establish minimum federal safety standards for the use of ILI tools, but only in newly constructed and replaced hazardous liquid pipelines (Pub. L. 100–561).

In 1996, Congress passed another law further expanding the Secretary's authority to require pipeline operators to have systems that can accommodate ILI tools. In particular, Congress provided additional authority for the Secretary to require the modification of existing pipelines whose basic construction would accommodate an ILI tool to accommodate such a tool and permit internal inspection (Pub. L. 104–304).

As the Research and Special Programs Administration (RSPA), (a predecessor agency of PHMSA) explained in the final rule April 12, 1994 (59 FR 17275) that promulgated § 195.120, “[t]he clear intent of th[at] congressional mandate [wa]s to improve an existing pipeline's piggability,” and to “require[] the gradual elimination of restrictions in existing hazardous liquid and carbon dioxide lines in a manner that will eventually make the lines piggable.” April 2, 1994, (59 FR 17279). RSPA also noted that Congress amended the 1988 law in the Pipeline Safety Act of 1992 (Pub. L. 102–508) to require the periodic internal inspection of hazardous liquid pipelines, including with ILI tools in appropriate circumstances April 2, 1994, (59 FR 17275). RSPA established requirements for the use of ILI tools in pipelines that could affect HCAs in the December 2000 IM final rule December 1, 2000, (65 FR 75378).

Section 60102(f)(1)(B) of the Pipeline Safety Laws allows the requirements for the passage of ILI tools to be extended to existing hazardous liquid pipeline facilities, provided the basic construction of those facilities can be modified to permit the use of smart pigs.

The current requirements apply only to new hazardous liquid pipelines and to line sections where the line pipe, valves, fittings, or other components are replaced. Exceptions are also provided for certain kinds of pipeline facilities, including manifolds, piping at stations and storage facilities, piping of a size that cannot be inspected with a commercially available ILI tool, and smaller diameter offshore pipelines.

PHMSA is proposing to use the authority provided in section 60102(f)(1)(B) to further facilitate the "gradual elimination" of pipelines that are not capable of accommodating smart pigs. PHMSA would limit the circumstances where a pipeline can be constructed without being able to accommodate a smart pig. Under the current regulation, an operator can petition the PHMSA Administrator for such an allowance for reasons of impracticability, emergencies, construction time constraints, and other unforeseen construction problems. PHMSA believes that an exception should still be available for emergencies and where the basic construction of a pipeline makes that accommodation impracticable, but that the other, less urgent circumstances listed in the regulation are no longer appropriate. Accordingly, the allowances for construction-related time constraints and problems would be repealed.

Modern ILI tools are capable of providing a relatively complete examination of the entire length of a pipeline, including information about threats that cannot always be identified using other assessment methods. ILI tools also provide superior information about incipient flaws (*i.e.*, flaws that are not yet a threat to pipeline integrity, but that could become so in the future), thereby allowing these conditions to be monitored over consecutive inspections and remediated before a pipeline failure occurs. Hydrostatic pressure testing, another well-recognized method, reveals flaws (such as wall loss and cracking flaws) that cause pipe failures at pressures that exceed actual operating conditions. Similarly, external corrosion direct assessment (ECDA) can identify instances where coating damage may be affecting pipeline integrity, but additional activities, including follow-up excavations and direct examinations, must be performed to verify the extent of that threat. ECDA also provides less information about the internal condition of a pipe than ILI tools.

As with new pipelines, operators will be allowed to petition the PHMSA Administrator for a finding that the basic construction, (*i.e.*, terrain or location, of a pipeline or an emergency)

will not permit the accommodation of a smart pig.

#### *Clarify Other Requirements*

PHMSA is also proposing several other clarifying changes to the regulations that are intended to improve compliance and enforcement. First, PHMSA is proposing to revise paragraph (b)(1) of § 195.452 to correct an inconsistency in the current regulations. Currently, § 195.452(b)(2) requires that segments of new pipelines that could affect HCAs be identified before the pipeline begins operations and § 195.452(d)(1) requires that baseline assessments for covered segments of new pipelines be completed by the date the pipeline begins operation. However, § 195.452(b)(1) does not require an operator to draft its IM program for a new pipeline until one-year after the pipeline begins operation. These provisions are inconsistent as the identification could affect segments, and performance of baseline assessments are elements of the written IM program. PHMSA would amend the table in (b)(1) to resolve this inconsistency by eliminating the one-year compliance deadline for Category 3 pipelines. An operator of a new pipeline would be required to develop its written IM program before the pipeline begins operation.

A decade's worth of IM inspection experience has shown that many operators are performing inadequate information analyses (*e.g.*, they are collecting information, but not affording it sufficient consideration). Integration is one of the most important aspects of the IM program because it is used in identifying interactions between threats or conditions affecting the pipeline and in setting priorities for dealing with identified issues. For example, evidence of potential corrosion in an area with foreign line crossings and recent aerial patrol indications of excavation activity could indicate a priority need for further investigation. Consideration of each of these factors individually would not reveal any need for priority attention. PHMSA is concerned that a major benefit to pipeline safety intended in the initial rule is not being realized because of inadequate information analyses.

For this reason, PHMSA is proposing to add additional specificity to paragraph (g) by establishing a number of pipeline attributes that must be included in these analyses and to require explicitly that operators integrate analyzed information. PHMSA is also proposing that operators consider explicitly any spatial relationships among anomalous information. PHMSA

supports the use of computer-based geographic information systems (GIS) to record this information. GIS systems can be beneficial in identifying spatial relationships, but analysis is required to identify where these relationships could result in situations adverse to pipeline integrity.

Second, PHMSA is proposing that operators verify their segment identification annually by determining whether factors considered in their analysis have changed. Section 195.452(b) currently requires that operators identify each segment of their pipeline that could affect an HCA in the event of a release but there is no explicit requirement that operators assure that their identification of covered segments remains current. As time goes by, the likelihood increases that factors considered in the original identification of covered segments may have changed. PHMSA believes that operators should periodically re-visit their initial analyses to determine whether they need to be updated. New HCAs may be identified. Construction activities or erosion near the pipeline could change local topography in a way that could cause product released in an accident to travel further than initially analyzed. Changes in agricultural land use could also affect an operator's analysis of the distance released product could be expected to travel. Changes in the deployment of emergency response personnel could increase the time required to respond to a release and result in a larger area being affected by a potential release if the original segment identification relied on emergency response to limit the transport of released product.

The change that PHMSA is proposing would not require that operators re-perform their segment analyses. Rather, it would require operators to identify the factors considered in their original analyses, determine whether those factors have changed, and consider whether any such change would be likely to affect the results of the original segment identification. If so, the operator would be required to perform a new analysis to validate or change the endpoints of the segments affected by the change.

Third, PHMSA is proposing to clarify, through the use of an explicit reference that the IM requirements apply to portions of "pipelines" other than line pipe. Unlike integrity assessments for line pipe, § 195.452 does not include explicit deadlines for completing the analyses of other facilities within the definition of "pipeline" or for implementing actions in response to those analyses. Through IM inspections,

PHMSA has learned that some operators have not completed analyses of their non-pipe facilities such as pump stations and breakout tanks and have not implemented appropriate protective and mitigative measures.

Section 29 of the Pipeline Safety, Regulatory Certainty, and Job Creation Act of 2011 states that “[i]n identifying and evaluating all potential threats to each pipeline segment pursuant to parts 192 and 195 of title 49, Code of Federal Regulations, an operator of a pipeline facility shall consider the seismicity of the area.” While seismicity is already mentioned at several points in the IM program guidance provided in Appendix C of part 195, PHMSA is proposing to further comply with Congress’s directive by including an explicit reference to seismicity in the list of risk factors that must be considered in establishing assessment schedules (§ 195.452(e)), performing information analyses (§ 195.452(g)), and implementing preventive and mitigative measures (§ 195.452(i)) under the IM requirements.

### III. Analysis of Advance Notice of Proposed Rulemaking

On October 18, 2010, (75 FR 63774), PHMSA published an ANPRM asking the public to comment on several proposed changes to part 195. The ANPRM sought comments on:

- Scope of part 195 and existing regulatory exceptions;
- Criteria for designation of HCAs;
- Leak detection and emergency flow restricting devices;
- Valve spacing;
- Repair criteria outside of HCAs; and
- Stress corrosion cracking.

The ANPRM may be viewed at <http://www.regulations.gov> by searching for Docket ID PHMSA–2010–0229.

Twenty-one organizations and individuals submitted comments in response to the ANPRM. The individual docket item numbers are listed for each comment.

- Associations representing pipeline operators (trade associations)
  - American Petroleum Institute—Association of Oil Pipelines (API–AOPL) (PHMSA–2010–0229–0030)
  - Independent Petroleum Association of America (IPAA) (PHMSA–2010–0229–0024)
  - Canadian Energy Pipeline Association (CEPA) (PHMSA–2010–0229–0008)
  - Oklahoma Independent Petroleum Association (OIPA) (PHMSA–2010–0229–0018)
  - Texas Pipeline Association (TPA) (PHMSA–2010–0229–0011)

- Louisiana Midcontinent Oil & Gas Association (LMOGA) (PHMSA–2010–0229–0018)
- Texas Oil & Gas Association (TxOGA) (PHMSA–2010–0229–0022)
- Transmission and Distribution Pipeline Companies
  - TransCanada Keystone (PHMSA–2010–0229–0027)
- Government/Municipalities
  - Defense Logistics Agency (DLA) (PHMSA–2010–0229–0016)
  - Metro Area Water Utility Commission (MAWUC) (PHMSA–2010–0229–0031)
  - North Slope Borough (NSB) (PHMSA–2010–0229–0012)
- Pipeline Safety Regulators
  - National Association of Pipeline Safety Representatives (NAPSR) (PHMSA–2010–0229–0032)
- Citizens’ Groups
  - Pipeline Safety Trust (PST) (PHMSA–2010–0229–0014)
  - Cook Inlet Regional Citizens Advisory Council (CRAC) (PHMSA–2010–0229–0019)
  - The Wilderness Society (TWS) (PHMSA–2010–0229–0025)
  - National Resources Defense Council et al. (NRDC) (PHMSA–2010–0229–0021)
  - Alaska Wilderness League et al. (AKW) (PHMSA–2010–0229–0026)
- Citizens
  - Patrick Coyle (PHMSA–2010–0229–0002)
  - Marian J. Stec (PHMSA–2010–0229–0007)
  - Pamela A. Miller (PHMSA–2010–0229–0013)
  - Anonymous (PHMSA–2010–0229–0005) (The anonymous comment dealt with quality of drinking water and release permits under the Clean Water Act.

These topics are beyond the scope of PHMSA’s jurisdiction and are not discussed further).

Comments are reviewed in the order the ANPRM presented questions for comment. PHMSA responses to the comments follow.

#### A. Scope of Part 195 and Existing Regulatory Exceptions

##### Comments

API–AOPL, LMOGA, TxOGA, and TransCanada Keystone expressed support for the gravity line exception. These commenters stated that gravity lines are short, pose little risk, and are usually located within other regulated facilities, such as tank farms. NAPSR did not support a complete repeal of this exception, suggesting there was no data to support such an action. NAPSR

did suggest that the exception should not apply to ethanol pipelines, which are very susceptible to internal corrosion.

MAWUC indicated that gravity lines in HCAs should be regulated because of the sensitivity of these areas. MAWUC further stated that these lines (and other rural onshore gathering lines) contain contaminants that are not present in products carried by other pipelines, that these contaminants are dangerous to pipeline workers, and that the impact of releases from these pipelines on the environment is the same as releases from regulated pipelines.

##### Response

PHMSA does not, at this time, intend to repeal the exemption for gravity lines, but does propose to extend reporting requirements to all hazardous liquid gravity lines. The collection of information about these lines is authorized under the Pipeline Safety Laws, and the resulting data will assist in determining whether the existing federal and state regulations for these lines are adequate.

##### Rural Gathering Lines

##### Comments

PHMSA received a number of comments on whether to modify or repeal the requirements in § 195.1(a)(4). API–AOPL, LMOG, IPAA, OIPA, and TxOGA stated that the regulatory exception for rural gathering lines is appropriate and should not be repealed or modified. They indicated that these lines are the source of a small percentage of spills, and that gathering lines in populated areas and near navigable waterways are already subject to PHMSA regulation.

Among citizens’ groups, TWS suggested that PHMSA should examine federal and state release data from all excepted pipelines and regulate those with release rates similar to currently regulated pipelines. PST supported expansion of the definition of gathering line to the extent statutorily possible to capture all lines. Similarly, CRAC, TWS, and AKW indicated the exception should be removed and regulation expanded to include produced water lines and production lines. TWS and AKW also stated that flow lines, which are currently defined by regulation as production facilities, should be reclassified and regulated as gathering lines.

The government/municipalities NSB and MAWUC also commented concerning the rural gathering line exception. NSB requested PHMSA place a high priority on removing the

exception for gathering lines. MAWUC supported no gathering line exceptions in HCAs.

Citizen Miller commented that PHMSA should regulate production and produced water lines on Alaska's North Slope, because this area is very sensitive and includes pristine wetlands and fish and wildlife habitats of national and international importance. She further commented that river and coastline pipeline routes and crossings in the Arctic and subarctic Alaska are particularly of concern due to the rapid change in permafrost, as well as high rates of coastal erosion which greatly increases the environmental and human impacts of spills.

#### Response

PHMSA believes that the requirements of the Pipeline Safety Act of 2011 and concerns for adequate regulatory oversight can only be addressed if PHMSA obtains additional information about gathering lines. PHMSA has the statutory authority to gather data for all gathering lines (49 U.S.C. 60117(b)), and that authority was not affected by any of the provisions in the Pipeline Safety Act of 2011. Accordingly, PHMSA is proposing to amend 49 CFR 195.1(a)(5) to require that the operators of all gathering lines (whether onshore, offshore, regulated, or unregulated) comply with requirements for submitting annual, safety-related condition, and incident reports.

#### Carbon Dioxide Lines

In the ANPRM, PHMSA asked whether the agency should repeal or modify the regulatory exception for carbon dioxide pipelines used in the well injection and recovery production process. Section 195.1(b)(10) states that part 195 does not apply to the transportation of carbon dioxide downstream from the applicable following point:

(i) The inlet of a compressor used in the injection of carbon dioxide for oil recovery operations, or the point where recycled carbon dioxide enters the injection system, whichever is farther upstream; or

(ii) The connection of the first branch pipeline in the production field where the pipeline transports carbon dioxide to an injection well or to a header or manifold from which a pipeline branches to an injection well.

#### Comments

The trade associations, LMOGA, API-AOPL, OIPA, TxOGA, and IPAA, commented that PHMSA should not repeal the exception for carbon dioxide lines used in the well injection and

recovery production process. They indicated the potential risk from a production facility carbon dioxide pipeline failure is low due to factors of low potential release volumes, rapid dispersion, and low potential for human exposure. NAPSRS suggested the current exception is appropriate and noted that there is no data indicating the need for a repeal.

#### Response

The regulatory history shows that the exception in § 195.1(b)(10) is limited in scope and only applies to carbon dioxide pipelines that are directly used in the production of hazardous liquids. See June 12, 1994, (56 FR 26923) (stating in preamble to 1991 final rule that “the exception is limited to lines downstream of where carbon dioxide is delivered to a production facility in the vicinity of a well site, rather than excepting all the CO<sub>2</sub> lines in the broad expanses of a production field.”); January 21, 1994, (59 FR 3390) (stating in preamble to June 1994 that agency adopted amendment “to clarify that the exception covers pipelines used in the injection of carbon dioxide for oil recovery operations.”). Congress has indicated that such facilities should not be subject to federal regulation, and none of the commenters supported a repeal or modification of this exception. Accordingly, PHMSA is not proposing to repeal or modify § 195.1(b)(10).

#### Offshore Lines in State Waters

In the ANPRM, PHMSA asked whether the agency should repeal or modify any of the exceptions for offshore pipelines in state waters.

#### Comments

TransCanada Keystone, an industry commenter, and the trade associations, API-AOPL, LMOGA and TxOGA, stated the current exception should not be changed. API-AOPL pointed out that PHMSA's jurisdiction lies only with the transportation of hazardous liquids, not hydrocarbon production areas of offshore operations. API-AOPL further stated that changing the state waters exception would unnecessarily add a duplicative layer of federal regulation.

The citizens' groups, TWS and AKW, supported removal of this exemption and increased enforcement in state waters. Likewise, among the government/municipality comments, NSB indicated that the regulations need to be expanded to include lines in offshore state waters. NSB expressed concerns with lack of state enforcement, high corrosion potential, and the sensitivity of the location of the offshore

lines, such as those in the Beaufort and Chukchi Seas.

The prohibitions of the Pipeline Safety Act of 2011 do not affect PHMSA's authority to ensure the safety of offshore gathering lines under other statutory provisions, including if such a line is hazardous to life, property, or the environment (49 U.S.C. 60112)). PHMSA also notes that the generally-applicable limitation in section 60101(a)(22) of the Pipeline Safety Laws only applies to “onshore production . . . facilities,” and that the states may regulate such intrastate facilities (see e.g., Tex. Admin. Code Title. 16, sec. 8.1(a)(1)(D)).

#### Response

Congress has indicated that additional federal safety standards may be warranted for offshore gathering lines. First, we would note that this does not include offshore production pipelines. Section 195.1(b)(5) states that part 195 does not apply to the: Transportation of hazardous liquid or carbon dioxide in an offshore pipeline in state waters where the pipeline is located upstream from the outlet flange of the following farthest downstream facility; the facility where hydrocarbons or carbon dioxide are produced; or the facility where produced hydrocarbons or carbon dioxide are first separated, dehydrated, or otherwise processed.

RSPA, a predecessor agency of PHMSA, adopted § 195.1(b)(5) in a June 1994 final rule June 28, 1994, (59 FR 33388). Before that time, part 195 only included an explicit exception for offshore production pipelines located on the Outer Continental Shelf. However, as explained in the preamble to the June 1994 final rule, RSPA believed that the same exception should be applied to all offshore production pipelines, including those located in state waters. Under the federal pipeline safety laws, the agency does not regulate production facilities at all. Section 21 of the Pipeline Safety Act of 2011 requires the Secretary to review the existing federal and state regulations for gathering lines and to submit a report to Congress with the results of that review. A study on these regulations, titled “Review of Existing Federal and State Regulations for Gas and Hazardous Liquid Lines,” was performed by the Oak Ridge National Laboratory and was published on May 8, 2015. The Secretary is also required, if appropriate, to issue regulations subjecting hazardous liquid gathering lines located offshore and in the inlets of the Gulf of Mexico to the same safety standards that apply to all other hazardous gathering lines. Section 21

states that any such regulations cannot be applied to production pipelines or flow lines.

Congress also included a provision authorizing the collection of geospatial or technical data on transportation-related flow lines in section 12 of the Pipeline Safety Act of 2011. A transportation-related flow line is defined for purposes of that provision as “a pipeline transporting oil off of the grounds of the well where it originated and across areas not owned by the producer, regardless of the extent to which the oil has been processed, if at all.” Section 12 also states that nothing in that provision “authorizes the Secretary to prescribe standards for the movement of oil through production, refining, or manufacturing facilities or through oil production flow lines located on the grounds of wells.”

#### Producer-Operated Pipelines on Outer Continental Shelf

In the ANPRM, PHMSA asked whether the agency should repeal or modify any of the exceptions for pipelines on the OCS.

#### Comments

TransCanada Keystone, an industry commenter, and the trade associations, API-AOPL, LMOGA, and TxOGA, stated that the current exceptions for pipelines on the OCS should remain unchanged. API-AOPL requested that PHMSA indicate what impact the Bureau of Ocean Energy Management, Regulation and Enforcement’s (BOEMRE) recent publication regarding Safety and Environmental Management Systems (SEMS) has on transportation operators. API-AOPL expressed concern that joint jurisdiction, if created by the recent BOEMRE publication, would result in regulatory uncertainty.

NAPSRS responded that the exceptions for pipelines on the OCS should not be changed as these lines are already regulated by the Department of Interior.

#### Response

Section 195.1(b)(6) states that part 195 does not apply to the transportation of hazardous liquid or carbon dioxide in a pipeline on the OCS where the pipeline is located upstream of the point at which operating responsibility transfers from a producing operator to a transporting operator. Section 195.1(b)(7) further provides that part 195 does not apply to a pipeline segment upstream (generally seaward) of the last valve on the last production facility on the OCS where a pipeline on the OCS is producer-operated and crosses into state waters without first connecting to a transporting operator’s

facility on the OCS. Safety equipment protecting PHMSA-regulated pipeline segments is not excluded. A producing operator of a segment falling within this exception may petition the Administrator, under § 190.9 of this chapter, for approval to operate under PHMSA regulations governing pipeline design, construction, operation, and maintenance. These exceptions are designed to ensure that a single federal agency is responsible for regulating the safety of any given pipeline segment on the OCS (*i.e.*, the Department of Interior for producer-operated pipelines and PHMSA for transporter-operated pipelines). See final rule codifying 1976 Memorandum of Understanding (MOU) between the Departments of Transportation and Interior on the regulation of offshore pipelines in § 195.1 August 12, 1976 (41 FR 34040); direct final rule codifying 1996 MOU between the Departments of Transportation and Interior on the regulation of offshore pipelines in § 195.1 November 19, 1997 (62 FR 61692); and final rule clarifying regulation of producer-operated pipelines that cross the federal-state boundary in offshore waters without first connecting to a transporting-operator’s facility on the OCS) August 5, 2003 (68 FR 46109).

None of the commenters supported the repeal or modification of § 195.1(b)(6) or (7). Accordingly, PHMSA is not proposing to take any further action with respect to these two provisions. It should also be noted that PHMSA is not responsible for administering another federal agency’s statutes or regulations.

#### Breakout Tanks Not Used for Reinjection or Continued Transportation

In the ANPRM, PHMSA asked for comment on whether the agency should expand the extent to which part 195 applies to breakout tanks.

#### Comments

PHMSA received several comments on whether the agency should expand the extent to which part 195 applies to breakout tanks. API-AOPL, supported by the industry commenter, TransCanada Keystone, and the trade associations, LMOGA and TxOGA, stated that the current definition is appropriate, and that PHMSA should review its current MOU with the Environmental Protection Agency (EPA) before making any changes to avoid duplicative regulation of these facilities. DLA, a governmental/municipal entity, echoed the comments of API-AOPL.

Conversely, NAPSRS stated that if PHMSA is referring to the large number

of small tanks that are technically under PHMSA’s authority, but currently not regulated, then this exception should be removed.

#### Response

The Pipeline Safety Laws provide PHMSA with broad authority to regulate “the storage of hazardous liquid incidental to the movement of hazardous liquid by pipeline” (49 U.S.C. 60101(a)(22)(A)). The term “breakout tank” is defined in § 195.2 to designate which aboveground tanks are regulated as breakout under part 195. See *Exxon Corporation v. U.S. Department of Transportation*, 978 F.Supp. 946, 949–54 (E.D. Wash. 1997).

As some of the commenters noted, PHMSA has an MOU with EPA on the treatment of breakout tanks and bulk storage tanks under the requirements of the Oil Pollution Act of 1990. Such agreements can ensure the effective regulation of facilities that are subject to regulation by more than one federal agency. As in the case of offshore pipeline facilities, those agreements can also serve as a guideline on whether a tank is transportation related or non-transportation related.

Accordingly, PHMSA will review its agreements with EPA to determine whether any modifications are necessary, but is not proposing to change the definition of a “breakout tank” in part 195 at this time.

#### Other Exceptions or Limitations in Part 195

In the ANPRM, PHMSA asked for comment on whether the agency should repeal or modify any of the other exceptions in part 195. API-AOPL, supported by several other trade associations, including LMOGA, TxOGA, OIPA, and IPAA, commented that the exception in § 195.1(b)(8) for transportation of hazardous liquid or carbon dioxide through onshore production (including flow lines), refining, or manufacturing facilities or storage or in-plant pipeline systems associated with such facilities should not be changed. API-AOPL commented that these facilities are not within the scope of the Pipeline Safety Laws, because they are not typically operated by midstream oil and gas pipeline companies operating in the pipeline transportation system. These facilities are already covered under a 1972 MOU with EPA and do not require further duplicative regulation.

#### Comments

API-AOPL commented that the exception in § 195.1(b)(9) for piping located on the grounds of a materials

transportation terminal used exclusively to transfer products between non-pipeline modes of transportation should not be changed. This piping is typically isolated from pipeline pressure by devices that control pressure in the pipeline under § 195.406(b).

TransCanada Keystone, an industry commenter, supported API-AOPL's comments.

The citizens' groups NRDC and PST indicated that PHMSA should establish additional standards for diluted bitumen. Both groups suggested PHMSA establish additional regulations for that commodity due to the high temperatures and pressures at which the lines that carry it operate.

Both regulatory associations, NAPS and MAWUC, commented on other exemptions or limitations of the pipeline safety regulations. NAPS indicated that the exemptions for pipelines under 1-mile long that serve refining, manufacturing, or terminal facilities should be eliminated for ethanol pipelines. NAPS also requested that PHMSA verify that intrastate lines carrying other hazardous liquids, such as sulfuric acid, are regulated by the states. MAWUC indicated that there should be no regulatory exceptions in HCA segments, because these areas must be treated with the highest degree of both prevention and emergency remediation measures.

Among government and municipality commenters, NSB stated that § 195.1 should be amended to include regulation of all onshore pipelines and offshore pipelines in areas of the North Slope. NSB suggests regulation should occur where the consequences of a hazardous liquid pipeline failure could adversely impact: (1) An endangered, threatened or depleted species; (2) subsistence resources and subsistence use areas; (3) a drinking water supply; (4) cultural, archeological, and historical resources; (5) navigable waterways (including waterways navigated by rural residents for the purposes of recreation, commerce, and subsistence use); (6) recreational use areas; or (7) the functioning of other regulated facilities. Regulation of all high pressure, large diameter (6-inch and greater) onshore pipelines and all offshore pipelines should start at the wellhead.

One citizen commented that the river and coastline routes in the Arctic and sub-Arctic are particularly of concern because of the rapid change in permafrost, as well as high rate of coastal erosion, which greatly increase the environmental and human impacts of hazardous liquid spills.

## Response

Section 195.1(b)(8) states that part 195 does not apply to the transportation of hazardous liquid or carbon dioxide through onshore production (including flow lines), refining, or manufacturing facilities or storage or in-plant piping systems associated with such facilities. That exception is based on section 60101(a)(22) of the Pipeline Safety Laws, which exempts the movement of hazardous liquid through onshore production, refining, or manufacturing facilities; or storage or in-plant piping systems associated with onshore production, refining, or manufacturing facilities. Accordingly, PHMSA agrees with the commenters that the exception in § 195.1(b)(8) should not be changed.

With respect to the terminal exemption in § 195.1(b)(9)(ii), it should first be noted that the term "Pipeline or pipeline system" is defined in § 195.2 as "all parts of a pipeline facility through which a hazardous liquid or carbon dioxide moves in transportation, including, but not limited to, line pipe, valves, and other appurtenances connected to line pipe, pumping units, fabricated assemblies associated with pumping units, metering and delivery stations and fabricated assemblies therein, and breakout tanks." The term "Pipeline facility" is defined in § 195.2 as "new and existing pipe, rights-of-way and any equipment, facility, or building used in the transportation of hazardous liquids or carbon dioxide." Under 49 U.S.C. 60101(a)(22), "transporting hazardous liquid" includes "the storage of hazardous liquid incidental to the movement of hazardous liquid by pipeline."

Section 195.1(b)(9) states that part 195 does not apply to the transportation of hazardous liquid or carbon dioxide by vessel, aircraft, tank truck, tank car, or other non-pipeline mode of transportation or through facilities located on the grounds of a materials transportation terminal if the facilities are used exclusively to transfer hazardous liquid or carbon dioxide between non-pipeline modes of transportation or between a non-pipeline mode and a pipeline. These facilities do not include any device and associated piping that are necessary to control pressure in the pipeline under § 195.406(b).

One of PHMSA's predecessors, the Materials Transportation Bureau (MTB), adopted the original version of that exception in a July 1981 final rule July 27, 1981, (46 FR 38357). In excepting the "[t]ransportation of a hazardous liquid by vessel, aircraft, tank truck, tank car, or other vehicle or terminal

facilities used exclusively to transfer hazardous liquids between such modes of transportation," MTB stated that: [Its] authority to establish minimum Federal hazardous liquid pipeline safety standards under the [Hazardous Liquid Pipeline Safety Act (HLPSA) of 1979] extends to "the movement of hazardous liquids by pipeline, or their storage incidental to such movement." The Senate report that accompanied the HLPSA states that, "It is not intended that authority over storage facilities extend to storage in marine vessels or storage other than those which are incidental to pipeline transportation." (Sen. Rpt. 96-182, 1st Sess., 96th Cong. (1979), p. 18.) Earlier laws had vested DOT with extensive authority to prescribe safety standards governing the movement of hazardous liquids in seagoing vessels, barges, rail cars, trucks or aircraft and storage incidental to those forms of transportation. From the words of the new HLPSA and the related Senate report language, it is clear that Congress did not want to duplicate or overlap any of those earlier laws. Thus, HLPSA regulatory authority over storage does not extend to any form of transportation other than pipeline or to any storage or terminal facilities that are used exclusively for transfer of hazardous liquids in or between any of the other forms of transportation unless that storage or terminal facility is also "incidental" to a pipeline which is subject to the HLPSA. These storage and terminal facilities are expressly excluded from the coverage of part 195 July 27, 1981, (46 FR 38358). RSPA modified that exception in the final rule June 28, 1994, (59 FR 33388).

RSPA, however, continued to maintain the exclusion for the transportation of hazardous liquids or carbon dioxide by non-pipeline modes, and added a more detailed exclusion for transfer piping located on the grounds of a materials transportation terminal.

The regulatory history demonstrates that the exception in § 195.1(b)(9) is designed to exclude piping used in transfers to non-pipeline modes of transportation and the facilities and piping at terminals that are used exclusively for such transfers. The provision is drafted to ensure that any piping that is not used exclusively to transfer product between non-pipeline modes or transportation between a non-pipeline mode and a pipeline and facilities are subject to regulation by PHMSA. None of the commenters argued in favor of changing the exception, and there is no information to suggest that such action is necessary at this time. Accordingly, PHMSA is not

proposing to modify or repeal § 195.1(b)(9).

With regard to the remaining comments, section 16 of the Pipeline Safety Act of 2011 requires the Secretary to perform a comprehensive review of whether the requirements in part 195 are sufficient to ensure the safety of pipelines that transport diluted bitumen (dilbit) and to provide Congress with a report on the results of that review. That review, titled “Effects of Diluted Bitumen on Crude Oil Transmission Pipelines,” was performed by the National Academy of Sciences and was published in 2013. The review found there were no causes of pipeline failure unique to the transportation of diluted bitumen, or evidence of chemical or physical properties of diluted bitumen shipments that are outside the range of other crude oil shipments, or any other aspect of diluted bitumen’s transportation by pipeline that would make it more likely than other crude oils to cause releases.<sup>3</sup> However, the safety proposals in this rulemaking address all hazardous liquid pipelines, which include pipelines that transport diluted bitumen.

Multiproduct petroleum pipelines transporting ethanol blends of up to 95% are currently regulated by PHMSA under part 195 and no major ethanol spills have occurred on these pipelines. PHMSA is performing additional research into the technical issues associated with the transportation of ethanol by pipeline and will use that information to determine whether such transportation should be subject to any additional safety requirements in the future. This NPRM proposes to conform part 195 with 49 U.S.C. 60101(a)(4) making the transportation by pipeline of any biofuel that is flammable, toxic, corrosive, or would be harmful to the environment if released in significant quantities, subject to part 195.

The requirements for HCA’s are addressed in another portion of this document. As noted above, PHMSA is proposing to extend the federal reporting requirements to all hazardous liquid gathering lines (whether onshore, offshore, regulated, or unregulated).

In conclusion, PHMSA will not be proposing to change or eliminate any other regulatory exceptions at this time. The exception for carbon dioxide pipelines is limited in scope and only applies to production facilities. Although breakout tanks are defined in a way that limits the application of part 195, these certain storage tanks may also

be subject to regulation by EPA. PHMSA continues to study the scope of the gathering line exemptions, but is not proposing to modify these or any other exemption. At present, nothing indicates that any of the other exceptions should be modified as part of this rulemaking proceeding, or that the issuance of regulations for underground storage facilities is necessary.

#### Additional Safety Standards for Underground Hazardous Liquid Storage Facilities

The definition of a pipeline facility in part 195 includes “any equipment, facility, or building used in the transportation of hazardous liquids . . .” and, as already noted above, includes storage terminals. While surface piping in storage fields located at midstream terminal facilities falls within this definition, part 195 does not contain comprehensive safety standards for the “downhole” underground hazardous liquid storage caverns. In addition, surface piping at storage fields located either at the production facility where a pipeline originates or a destination/consumption facility where a pipeline terminates would generally not be considered part of the transportation and, therefore, not be regulated by PHMSA in the manner that such piping located on the grounds of the midstream terminal would. RSPA provided an explanation in a July 1997 advisory bulletin June 2, 1997, (62 FR 37118) which the agency issued in response to a NTSB recommendation on the regulation of underground storage caverns (P-93-9). RSPA noted in that advisory bulletin that a recent report indicated that state regulations applied in some form to significant percentages of these facilities, and that API had developed a set of comprehensive guidelines for the underground storage of liquid hydrocarbons. As result of these state regulations, the API guidelines, and “the varying and diverse geology and hydrology of the many sites” RSPA stated that agency had “decided that generally applicable federal standards may not be appropriate for underground storage facilities.” June 2, 1997, (62 FR 37118) RSPA further stated it would be “encouraging state action and voluntary industry action as a way to assure underground storage safety instead of proposing additional federal regulations.” *Id.* PHMSA understands that Court decisions preempting state from regulating interstate facilities appears to be a concern for state regulators.

#### Comments

PHMSA requested comment on the promulgation of new or additional safety standards for underground hazardous liquid storage. The industry commenter, TransCanada Keystone, supported the comments of API-AOPL, as did the trade associations LMOGA and TxOGA. API-AOPL stated that the current exclusion of the underground cavern is appropriate as they are already regulated by the states. API-AOPL indicated that the states are better suited to regulate these facilities because of their knowledge of these facilities and locations.

One government/municipality, DLA, commented that there was no need for new regulations for underground hazardous liquid storage facilities. DLA maintains that these facilities are currently regulated for purposes of the Clean Air Act under both 40 CFR parts 112 and 280 by the EPA.

#### Response

None of the commenters supported the issuance of additional regulations for underground hazardous liquid storage caverns, and there is no information suggesting that such action is necessary at this time. Therefore, PHMSA is not proposing to issue any new regulations for underground storage of hazardous liquids in this proceeding.

#### Order in Which Regulatory Changes Should Be Made in to Best Protect the Public, Property, or the Environment

#### Comments

PHMSA received comments from industry, trade associations, one government/municipality, and one regulatory association responding to the question on the order of the actions PHMSA should take to best protect the public, property, or the environment. API-AOPL, supported by TransCanada Keystone and the trade associations, OIPA, TxOGA, and LMOGA, indicated that PHMSA’s actions should be risk-based. Similarly, NAPS had no recommendation on the order, but suggested that it be based on risk.

The government/municipality NSB requested that PHMSA place a high priority on the repeal of regulatory exceptions for gathering of hazardous liquids in rural areas, offshore pipelines in state waters, and producer-operated lines on the OCS. NSB stated that unregulated rural pipelines are located in Unusually Sensitive Areas (USAs) of the NSB. These pipelines cross sensitive arctic tundra vegetation and impact areas used by endangered species. As North Slope development continues to expand to the west, east, and south,

<sup>3</sup> [http://phmsa.dot.gov/staticfiles/PHMSA/DownloadableFiles/Files/Pipeline/Dilbit\\_1\\_Transmittal\\_to\\_Congress.pdf](http://phmsa.dot.gov/staticfiles/PHMSA/DownloadableFiles/Files/Pipeline/Dilbit_1_Transmittal_to_Congress.pdf).

impacts to NSB communities and USAs will increase.

#### Response

PHMSA is proposing to repeal the exception for gravity lines and to apply the reporting requirements in part 195 to all gathering lines.

#### *B. Definition of High Consequence Area*

In the ANPRM, PHMSA asked for public comment on whether to modify the requirements in part 195 for HCAs. Specifically, PHMSA asked whether:

- The criteria for identifying HCAs should be changed to incorporate additional pipeline mileage or better reflect risk;
- All navigable waterways should be included within the definition of an HCA;
- The process for making HCA determinations on pipeline ROWs can be improved;
- The public and state and local governments should be more involved in making HCA determinations;
- Additional safety requirements should be developed for areas outside of HCAs; and
- Major road and railway crossings should be included within the definition of an HCA.

As discussed in detail later in the Background and NPRM Proposals section, PHMSA is proposing to adopt additional safety standards for pipelines that are located outside of areas that could affect an HCA. These measures will increase the safety of all of the nation's pipelines without necessitating any change to the HCA definition; therefore, PHMSA is not taking any further action on that proposal at this time.

#### Expanding the Definition of HCA To Include Additional Pipeline Mileage

In the ANPRM, PHMSA asked whether the current criteria for identifying HCAs should be modified to incorporate additional pipeline mileage.

#### Comments

TransCanada Keystone recommended that PHMSA further define the meaning of an HCA, and that the agency provide greater clarity with respect to the HCA classification, including the magnitude of impacts that differentiate HCAs from other areas.

API-AOPL, supported by the trade associations, TxOGA and LMOGA, and an industry commenter, TransCanada Keystone, stated that the current criteria should not be changed. API-AOPL stated that PHMSA should serve a clearinghouse function by displaying HCA information on the NPMS, with

updates every 10 years based on census information. API-AOPL further noted that "other populated areas" includes Census-delineated areas, like Metropolitan Statistical Areas (MSA) and Consolidated Metropolitan Statistical Areas, which are not densely populated, and that the current HCA criteria are thus conservative. API-AOPL also stated that the current ability of operators to demonstrate why segments of pipeline could not affect an HCA should be retained.

The trade associations, OIPA and TPA, suggested that more data is needed to make a decision on HCA definition expansion, and that any changes would likely impact small operators.

Among citizens' groups, PST favored expanding the IM requirements to all hazardous liquid lines, with initial inspections required within 5 years of identification. PST stated that using census data to designate high population and other population areas is arbitrary and not necessarily a predictor of risk. Noting that the public could not fully comment because HCA boundaries are not publicly available (for security reasons); PST stated that the definition of HCA should be expanded to include national parks, monuments, recreation areas, and national forests. PST also pointed to the recent trend in extreme accidents in HCAs.

Two other citizens' groups, AKW and NRDC, commented. AKW requested that the criteria be changed. NRDC indicated that PHMSA should have a broader definition of HCAs, particularly with respect to ecological resources and drinking water criterion.

NAPSR commented that the current criteria are generally adequate, but that other threats and risks could be considered, including petroleum product supply loss, leaks that could affect private wells, and impacts to major infrastructure.

NSB favored an expansion of HCAs to include pipelines located in subsistence areas, cultural resources, archeological, historical, and recreational areas of significance and offshore.

#### Response

Congress recently directed the Secretary to prepare a report on whether the IM requirements should be extended to pipelines outside of areas that could affect HCAs. The Secretary is prohibited from issuing any final regulations that would expand those requirements during a subsequent Congressional review period, unless those regulations are necessary to address a condition posing a risk to public safety, property, or the environment, or an imminent

hazard. PHMSA is preparing the Secretary's report to Congress on the need to expand the IM requirements and is not proposing to change the definition of an HCA to incorporate additional pipeline mileage at this time.

PHMSA is, however, proposing to adopt additional safety standards for pipelines that are not covered under the IM program requirements. The proposals are detailed later in this NPRM under the Background and NPRM proposals section.

PHMSA is aware of its obligation to consider other locations near pipeline ROWs in defining USAs, including "critical wetlands, riverine or estuarine systems, national parks, wilderness areas, wildlife preservation areas or refuges, wild and scenic rivers, or critical habitat areas for threatened and endangered species." However, PHMSA is not proposing to make any of these areas USAs in light of the new requirements that are being proposed for non-IM pipelines. PHMSA will be considering whether to include these locations in the HCA definition in performing the evaluation required under section 5 of the Pipeline Safety Act of 2011 and will comply with the applicable provisions of that legislation before taking any final regulatory action to adopt the proposed requirements for non-IM pipelines.

#### Modifying the Definition of HCA to Better Reflect Risk

PHMSA asked whether the criteria for identifying HCAs should be changed to better reflect risk.

#### Comments

TransCanada Keystone's comment focused specifically on the classification of groundwater USAs in § 195.6, stating that groundwater HCA buffers should not be expanded, and that the existing criteria, which identify community water intakes where contamination has the potential to cause greater impacts compared to other areas, are sufficient.

API-AOPL stated that there are various risk factors applicable to HCA classifications and that the current definition should not be changed. API-AOPL recommended that buffer zones be used as an acceptable alternative to the more detailed "could affect" analysis for new, expanded, or modified HCAs. API-AOPL also suggested that operators should retain the ability, with technical justification, to determine whether a pipeline can actually impact an HCA. TransCanada Keystone, LMOGA, and TxOGA endorsed API-AOPL's comments. TPA, the other trade association commenter, mentioned that

more data was needed to make a final decision on this matter.

A number of citizens' groups commented on this issue. NRDC, AKW, and TWS indicated the HCA definition needs to be broadened to reflect risk and to include entire pipelines in some cases. NRDC stated that the threshold for a populated area should be lowered, and that the definition of populated areas and USA should be improved. NRDC commented that the current HCA definition provides limited protection to threatened or endangered species. NRDC also recommended strengthening the USA definition to protect more migratory bird areas and national landmarks, including national parks, wild and scenic rivers, estuaries, wilderness areas, wildlife refuges, and drinking water sources, including private wells and open source aquifers. TWS and AKW proposed to revise the HCA criteria to include all transportation infrastructure, public lands, waterways, wetlands, and cultural, historic, archeological, and recreation sites, including subsistence areas.

NAPSR stated that the current HCA definition should not be changed, but that PHMSA should consider incorporating others threats and risks, including supply interruptions and small leaks that could affect private wells.

NSB favored changing the existing HCA definition. NSB stated that USAs should include subsistence, cultural, archeological, historical, and recreational areas of significance within the NSB and offshore waters of the Beaufort and Chukchi Seas. NSB suggested a formal process for nominating areas that should be afforded HCA status, and that the NPMS data should be updated.

Both MAWUC and DLA indicated the definition could be modified to better reflect risk. MAWUC suggested a tiered, prioritized system with enforceable criteria that are appropriate for the risk to water supplies. DLA stated that higher risk locations should be protected instead of simply creating more HCAs.

#### Response

PHMSA is not proposing to make any changes to the criteria for identifying HCAs at this time. The existing Census-based approach for determining high population and other populated areas ensures uniformity and provides an adequate margin of safety by including some less densely populated areas. None of the commenters offered a more effective alternative.

PHMSA recognizes that other areas of ecological, cultural, or national significance could be designated as USAs. However, PHMSA is not proposing to add any of these areas in light of the new safety standards that are being proposed for hazardous liquid pipelines that are not subject to the IM program requirements.

PHMSA does not support any of the suggested alternative approaches for identifying HCAs. The widespread use of the buffer method is not justified based on the available information, and the use of a more lenient standard in making HCA determinations would not provide adequate protection for these sensitive areas. PHMSA will revisit these conclusions in preparing the Secretary's report to Congress on expanding the IM program for hazardous liquid pipelines.

#### Commercial Limitation on Navigable Waterways

The ANPRM posed the question of expansion of the definition of HCAs beyond commercially navigable waterways.

#### Comments

Several trade associations, API-AOPL, OIPA, and IPAA, and one industry representative, TransCanada Keystone, opposed expanding the HCA definition beyond commercially navigable waterways. These commenters stated that the vast majority of surface waters are already covered under the present criteria. TPA stated that adopting a navigable waters standard would make every creek an HCA, resulting in a significant increase in the burden associated with implementing IM requirements.

Two citizens' groups commented on the phrase "commercially navigable." PST also recommended defining HCA to include all "waters of the United States," provided PHMSA did not adopt its suggestion to apply IM requirements to all regulated pipelines. NRDC proposed to amend the term "commercially navigable waterways" to include other bodies of water that are not necessarily navigable, such as lakes, streams, and wetlands.

Two government/municipalities commented on the commercial limitation on navigable waterways. DLA, a government/municipality, echoed the comments of the trade associations and TransCanada Keystone previously mentioned. NSB requested PHMSA change commercially navigable to "navigable waters" or "waters of the U.S." to encompass more environmentally-sensitive areas.

#### Response

Section 195.450 states that an HCA includes any "waterway where a substantial likelihood of commercial navigation exists." RSPA first proposed to include commercially navigable waterways as HCAs in the April 2000 NPRM that contained the original IM requirements for hazardous liquid pipelines April 24, 2000, (65 FR 21695). RSPA stated that it "[wa]s including commercially navigable waterways in the proposed [HCA] definition[,] [b]ecause these waterways are critical to interstate and foreign commerce and supply vital resources to many American communities, are a major means of commercial transportation, and are a part of a national defense system, a pipeline release in these areas could have significant impacts." April 24, 2000, (65 FR 21700).

RSPA adopted the HCA definition as proposed in the NPRM in the final rule December 1, 2000, (65 FR 75378). In the preamble to that final rule, RSPA stated that it had received the following comments on its proposal to include commercially navigable waterways in the HCA definition:

API and liquid operators questioned the inclusion of commercially navigable waterways into the HCA's definition. API pointed out that Congress required OPS to identify hazardous liquid pipelines that cross waters where a substantial likelihood of commercial navigation exists and once identified, issue standards, if necessary, requiring periodic inspection of the pipelines in these areas. API said that OPS had not determined the necessity for including these waterways in areas that trigger additional integrity protections. BP Amoco said the rule should be limited to protection of public safety, rather than commercial interests. Enbridge and Lakehead also questioned why waterways that are not otherwise environmentally sensitive should be included for protection.

EPA Region III said that we should also consider recreational and waterways other than those for commercial use. Environmental Defense, Batten, City of Austin and other[s] commented that we should consider all navigable waterways as HCA's, because of the environmental consequences a hazardous liquid release could have on such waters. December 1, 2000, (65 FR 75390).

RSPA provided the following response to those comments:

"Our inclusion of commercially navigable waterways for public safety and secondary reasons is not based on the ecological sensitivity of these

waterways. Parts of waterways sensitive for ecological purposes are covered in the proposed USA definition, to the extent that they contain occurrences of a threatened and endangered species, critically imperiled or imperiled species, depleted marine mammal, depleted multi-species area, Western Hemispheric Shorebird Reserve Network or Ramsar site. We are including commercially navigable waterways as HCAs because these waterways are a major means of commercial transportation, are critical to interstate and foreign commerce, supply vital resources to many American communities, and are part of a national defense system. A pipeline release could have significant consequences on such vital areas by interrupting supply operations due to potentially long response and recovery operations that occur with hazardous liquid spills. December 1, 2000, (65 FR 75391–2).

For these reasons, RSPA defined HCAs in § 195.450 to include commercially navigable waterways.

Thus, the Pipeline Safety Laws do not necessarily limit the definition of an HCA to commercially navigable waterways. RSPA relied on several statutes in promulgating the IM requirements for hazardous liquid pipelines, including the mandates that required the Secretary to establish criteria for identifying pipelines in high density population and environmentally sensitive areas (49 U.S.C. 60109(a)(1)) and to promulgate standards for ensuring the periodic inspection of these lines (49 U.S.C. 60102(f)(2)). Nothing in these provisions or the Pipeline Safety Act of 2011 prohibits PHMSA from using its general rulemaking authority to apply the hazardous liquid pipeline IM regulations to waterways that are not used for commercial navigation. Other kinds of waterways are also referenced in the statutory criteria that must be considered in defining USAs.

PHMSA will be considering the expansion of current HCA or the extension of critical IM requirements to non-HCAs when completing the Secretary's report to Congress on the need to expand the IM requirement under section 5 of the Pipeline Safety Act of 2011. In the meantime, PHMSA is not proposing to include any additional waterways in the HCA definition.

PHMSA is, however, proposing to adopt other regulations that will increase the safety of our nation's waterways. One such proposal is to require leak detection systems for pipelines in all locations, that operators

perform periodic assessments of pipelines not already covered under the IM program requirements, and that new pipeline repair criteria be applied to anomalous conditions discovered in all areas. Another proposal is to require operators to inspect their pipelines in areas affected by extreme weather, natural disasters, and other similar events (e.g., flooding, hurricanes, tornados, earthquakes, landslides, etc.). Following a disaster event, operators will be required to determine whether any conditions exist that could adversely affect the safe operation of a pipeline and to take appropriate remedial actions, such as reductions in operating pressures and repairs of any damaged facilities or equipment.

In regard to seismic events and earthquakes, in determining whether a pipeline has potentially been affected and needs inspection, operators should consider relevant factors such as magnitude of the earthquake, distance from the epicenter, and pipeline characteristics and history. PHMSA recognizes that after considering these factors, operators may determine that smaller seismic events do not have the potential to affect their pipelines. Based on available studies, however, earthquakes over 6.0 in magnitude can potentially damage pipelines and operators would be required to inspect these pipelines.

#### Operator Process and Public Participation in Making HCA Determinations

PHMSA requested comment on whether the operator's process for making HCA determinations should be modified, including by having greater involvement by the public and state and local governments.

#### Comments

PHMSA received comments from industry, trade associations, and one regulatory association. API–AOPL supported the existing process for identifying HCAs and suggested that any input from local communities should be through the regulating agency, rather than pipeline operators. OPIA and IPAA noted that a consistent and reliable approach is needed to prevent variations that would result in unnecessary confusion.

The trade associations, TxOGA, LMOGA, API–AOPL, supported by TransCanada Keystone, indicated that operators perform geographic overlay of their pipeline systems with PHMSA-determined HCAs. Operators also utilize the “could affect” analysis, which typically considers technical assessments using dispersion models.

Through the process of HCA evaluation, operators are sometimes able to determine, with technical justification, that their assets are not capable of impacting an HCA.

NAPSR indicated that PHMSA could consider adding minimum time intervals for operators to review HCA identifications, including a shorter time interval if a pipeline is routed through high population areas. NAPSR also stated that there are areas where private wells have been extremely affected by small leaks that go undetected for years, that this is especially true in areas of sandy soil where leaks do not necessarily bubble up to the surface, and that there should be some consideration to address these “seepers” that have very large total leak volume over time.

On the matter of greater public participation, TransCanada Keystone suggested that PHMSA collect data from the states and provide updated HCA information for operator use. The trade associations, LMOGA, TxOGA and API–AOPL, supported by TransCanada Keystone, recommended that additional local involvement be routed through the regulating agency, such as PHMSA. TPA, in contrast, stated that there should be no requirement for public involvement. OIPA and IPAA held that a consistent and reliable approach is needed for the issue of public involvement.

Among the citizens' groups, NRDC supported additional public involvement. Several commenters, including NRDC, PST, and TWS, recommended that the NPMS be revised to display all HCAs so that the public can be better informed.

One regulatory association, NAPSR, suggested that the public be allowed to comment. NAPSR recognized that PHMSA has a process in place for HCA selection that can be enhanced if the public is allowed to provide input. NAPSR stated that the general public and local communities often recognize changes in areas near pipelines before operators.

Government and municipal commenters supported local involvement in the HCA determination process. MAWUC commented that it is important that local communities and water suppliers play a role in preventing and minimizing pipeline failures, including HCA identification. DLA also supported additional public involvement. NSB recommended that state and local governments, as well as local tribes, villages, and the Alaskan Eskimo Whaling Commission, have a role in making HCA determinations.

## Response

Congress included new requirements for promoting public education and awareness in section 6 of the Pipeline Safety Act of 2011. Specifically, that provision requires PHMSA (1) to maintain, and update on a biennial basis, a map of designated HCAs in the NPMS; (2) to establish a program that promotes greater awareness of the existence of the NPMS to state and local emergency responders and other interested parties, to include the issuance of guidance on using the NPMS to locate pipelines in communities and local jurisdictions; and (3) to issue additional guidance to owners and operators of pipeline facilities on the importance of providing system-specific information to emergency response agencies. PHMSA believes that such actions will address many of the concerns raised by the commenters.

## Additional Safety Requirements for Non-HCA Areas

PHMSA inquired as to whether additional safety measures should be developed for areas outside of HCAs.

## Comments

PHMSA received comments from three trade associations and one regulatory association. TransCanada Keystone, TxOGA, API-AOPL, and LMOGA indicated that no new requirements are necessary for areas outside of HCAs. The regulatory association, NAPSRS, remarked that operators should be precluded from turning off in-line inspection sensors outside of an HCA when performing an integrity assessment under the IM regulations.

## Response

PHMSA agrees with the NAPSRS comment and has likewise found that some operators do turn off inspection tools outside of HCAs. Therefore, PHMSA is proposing to require that operators perform periodic assessments of pipelines that are not already covered under the IM program requirements in § 195.452. Promulgation of such a requirement will ensure that pipeline operators obtain the information necessary for the prompt detection and remediation of corrosion and other deformation anomalies (e.g., dents, gouges, and grooves) in all locations, not just in areas that could affect HCAs.

## Inclusion of Major Road and Railway Crossings as HCAs

PHMSA requested comment on the need to include major road and railway crossings as HCAs.

## Comments

Industry, three trade associations, three citizens' groups, one regulatory association, one government/municipality, and one citizen commented on this question.

TransCanada Keystone, supported by the trade associations, API-AOPL, TPA, TxOGA, and LMOGA, opposed including major roads and railway crossings as HCAs. The commenters offered several reasons to support that position (e.g., such a change would draw resources from other more high risk areas, non-HCA areas are already assessed and remediated, and there is no data to support such an action).

Among the citizens' groups, PST stated that rail and major road crossings should be included. TWS and AKW stated that all transportation infrastructure, public lands, wetlands under the Clean Water Act (CWA), cultural, historical, archeological and recreation areas used for subsistence be included in HCAs.

NAPSRS also suggested that rail and major road crossings should be included. NAPSRS urged PHMSA to consider the effect of a release on electric transmission facilities, gas pipelines, and railroads if major road and rail crossings were not to be included in HCAs. NAPSRS would consider the effect of a release on electric transmission facilities, gas pipelines, railroads, etc., and would treat major road and rail crossings as HCAs for highly volatile liquids (HVLs) pipelines.

The only government/municipality to comment on this question was DLA. DLA indicated that these structures should be included in HCAs.

Citizen Coyle commented that major roadways should be HCAs because these areas could be affected by pipelines carrying HVLs that would produce poisonous clouds if released.

## Response

PHMSA is not proposing to designate major road and railway crossings as HCAs, but will consider whether the pipeline IM requirements should be applied to these areas when completing the study that Congress mandated under section 5 of the Pipeline Safety Act of 2011. PHMSA notes that the pipelines at such crossings would be afforded additional protections under the other proposals made in this proceeding, including the requirements for the performance of periodic internal inspections and the use of leak detection systems.

*C. Leak Detection Equipment and Emergency Flow Restricting Devices*

In the ANPRM, PHMSA asked for comment on whether to modify the current requirements part 195 for leak detection equipment and emergency flow restricting devices (EFRDs). Specifically, PHMSA asked whether

- The use of leak detection equipment should be required for hazardous liquid pipelines;
- The pipeline industry has developed any practices, standards, or leak detection technologies that should be incorporated by reference;
- Any industry practices or standards adequately address the relevant safety considerations;
- State regulations for leak detection should be adopted by regulation;
- Any new leak detection requirements should vary based on the sensitivity of the affected areas;
- The pipeline industry has developed standards or practices for the performance and location of EFRDs;
- The location of EFRDs should be specified by regulation; and
- Additional research and development is needed to demonstrate the suitability of any new leak detection technologies.

As discussed below, PHMSA is considering requiring that all hazardous liquid pipelines have a system for detecting leaks and expand the use of EFRDs.

## Expansion of Leak Detection Requirements

In the ANPRM, PHMSA asked for comment on whether the agency should expand the leak detection requirements.

## Comments

Industry and trade associations generally supported expansion of the existing requirement in § 195.452(i)(3) to most pipelines, but opposed including more-specific requirements in the regulations. API-AOPL, TxOGA, TransCanada Keystone, and LMOGA supported extending leak detection requirements to all PHMSA-regulated pipelines, except for rural gathering lines.

Citizens' groups supported enhanced leak detection requirements. TWS and PST opposed additional reliance on the current requirements in § 195.452(i)(3), stating that this regulation includes no acceptance criteria and is virtually unenforceable. TWS further supported expanding leak detection requirements to all pipelines under PHMSA jurisdiction. NRDC indicated that leak detection requirements should be expanded to include a requirement that

worst-case-discharge-pumping times be based on historical shutdown times, rather than expected times. NRDC also said that operators should immediately contact first responders at the first sign of an issue. One citizen, Stec, suggested requiring use of “smart coating” with embedded conductors that would break to indicate coating damage and which could then trigger automatic response actions.

The regulatory associations, DLA and MAWUC, supported expanded leak detection requirements. MAWUC suggested PHMSA require the use of leak detection equipment in all HCAs. DLA indicated that any new requirements should be delayed until better technology is available.

The government/municipality, NSB, recommended leak detection requirements be expanded to all pipelines under PHMSA regulation. NSB encouraged adoption of more stringent leak detection requirements for sensitive offshore areas of the Beaufort and Chukchi seas.

#### Response

As discussed earlier in this NPRM under the Background and Proposals section, PHMSA will propose to expand the leak detection requirements for HCA and non-HCA areas.

#### Consideration of New Industry Standards or Practices in Leak Detection

PHMSA asked for public comment on whether any new industry standards or practices should be considered for adoption in part 195.

#### Comments

API-AOPL, TxOGA, LMOGA, and TransCanada Keystone all indicated that the API-AOPL standard RP1165 (SCADA), RP 1167 (Pipeline Alarm Management), and RP1168 (Control Room Management) are good standards to utilize for leak detection systems. API-AOPL also pointed out that many new technologies are being developed and existing methodologies are continuously being improved for better leak detection capability; however, many of these new technologies have not been proven in service on cross-country pipelines.

One citizens' group, NRDC, commented that new leak detection standards should address the additional demands posed by hazardous liquids. In particular, NRDC mentioned some hazardous liquids, such as diluted bitumen, have multiphase properties that can cause false alarms.

The regulatory associations, NAPS and DLA, both commented on new industry standards and practices in leak

detection. NAPS mentioned the new technology forward-looking infrared radar (FLIR) and encouraged PHMSA to consider using such new technologies. NAPS reported that FLIR can detect changes in temperature near a pipeline from a winter leak, even under snow, and that it can be used from aerial patrols.

DLA indicated that any leak detection standards should be third-party validated and listed by the National Work Group on Leak Detection Evaluations (NWGLDE) and that leak detection in general for large volume pipelines is not very effective at this time.

#### Response

The commenters only offered three specific industry standards or practices for consideration, and two of those standards, API RP1165 (SCADA) and RP1168 (Control Room Management), are already incorporated into part 195 (see 49 CFR 195.3). PHMSA has concerns about the adequacy and enforceability of the third standard, API RP 1167 (Pipeline Alarm Management), and does not believe that it should be incorporated by reference at this time.

As previously discussed, PHMSA is proposing to require that operators have a means for detecting leaks on all portions of a hazardous liquid pipeline system. Consideration of FLIR and any other emerging technologies would be required in evaluating what kinds of leak detection systems are appropriate for a particular pipeline. PHMSA will also be considering whether the use of specific leak detection technologies should be required in preparing the Secretary's report to Congress on that issue.

PHMSA does not agree that third-party validation is a prerequisite to issuing new leak detection requirements for hazardous liquid pipelines. That limitation is not included in the Pipeline Safety Laws, and PHMSA does not believe that such action is necessary as a matter of administrative discretion.

#### Adequacy of Existing Industry Standards or Practices for Leak Detection

PHMSA asked for public comment on whether any existing industry standards or practices for leak detection are adequate for adoption into part 195.

#### Comments

TransCanada Keystone, TxOGA, LMOGA and API-AOPL submitted comments indicating that the current leak detection evaluations performed as a requirement of the IM program encompass many important factors for

proper leak detection. PHMSA should allow for the implementation of recent regulatory changes, including the new Control Room Management (CRM) rule, before making any changes. NAPS commented that all pipeline operators should, at a minimum, perform a tank balance periodically to detect leakage.

NSB recommended that PHMSA adopt improved leak detection system standards and implement more stringent leak detection requirements for the sensitive offshore areas of the Beaufort and Chukchi seas. NSB stated that PHMSA should require: (1) Redundant leak detection systems for offshore pipelines; (2) All offshore pipeline leak detection systems to have the continuous capability to detect a daily discharge equal to not more than 0.5% of daily throughput within 15 minutes, and detect a pinhole leak within less than 24 hours; (3) All onshore pipeline leak detection systems to have the continuous capability to detect a daily discharge equal to not more than 1% of daily throughput within 15 minutes, and detect a pinhole leak within less than 24 hours; and (4) An initial performance test to verify leak detection accuracy upon installation and at regular intervals thereafter.

#### Response

PHMSA agrees that the factors listed in § 195.452(i)(3) are an appropriate basis for determining whether hazardous liquid pipelines have an adequate leak detection system and is proposing to use those factors as the basis for the requirements that would apply in all other locations. However, a December 31, 2007, report that PHMSA prepared in response to a mandate in the Pipeline Inspection, Protection, Enforcement, and Safety Act (PIPES Act) of 2006 (Pub. L. 109-468), confirmed that some operators had IM procedures that did not require the performance of a leak detection evaluation, and others had adopted an inadequate process for performing those evaluations. Operators are reminded that any failure to comply with part 195, including the leak detection requirements in § 195.452(i)(3) and the proposed modifications to §§ 195.134 and 195.444, increases both the likelihood and severity of pipeline accidents.

PHMSA agrees that the new CRM requirements will improve the detection and mitigation of leaks on hazardous liquid pipeline systems, but does not agree that the implementation of improved leak detection requirements should be delayed solely on account of the recent issuance of those regulations. PHMSA will be monitoring the use of

leak detection systems by operators in complying with those requirements in determining if additional safety standards are needed.

#### Consideration of State Requirements/Regulations for Leak Detection

Some states have established leak detection requirements for hazardous liquid pipeline systems. For example, the Alaska Department of Environmental Conservation (ADEC) has promulgated a regulation (18 AAC 75.055) that states:

(a) A crude oil transmission pipeline must be equipped with a leak detection system capable of promptly detecting a leak, including

(1) if technically feasible, the continuous capability to detect a daily discharge equal to not more than one percent of daily throughput;

(2) flow verification through an accounting method, at least once every 24 hours; and

(3) for a remote pipeline not otherwise directly accessible, weekly aerial surveillance, unless precluded by safety or weather conditions.

(b) The owner or operator of a crude oil transmission pipeline shall ensure that the incoming flow of oil can be completely stopped within one hour after detection of a discharge.

(c) If above ground oil storage tanks are present at the crude oil transmission pipeline facility, the owner or operator shall meet the applicable requirements of 18 AAC 75.065, 18 AAC 75.066, and 18 AAC 75.075.

(d) For facility oil piping connected to or associated with the main crude oil transmission pipeline the owner or operator shall meet the requirements of 18 AAC 75.080.

Operators who install online leak detection systems can also receive a reduction in the volume of crude oil that must be used in complying with Alaska's oil spill response planning requirements (18 AAC 75.436(c)(3)).

The State of Washington has also prescribed leak detection requirements for hazardous liquid pipelines (WAC 480-75-300). Those requirements, which are administered by the Washington Utilities and Transportation Commission (WUTC), state:

(1) Pipeline companies must rapidly locate leaks from their pipeline. Pipeline companies must provide leak detection under flow and no flow conditions.

(2) Leak detection systems must be capable of detecting an eight percent of maximum flow leak within fifteen minutes or less.

(3) Pipeline companies must have a leak detection procedure and a

procedure for responding to alarms. The pipeline company must maintain leak detection maintenance and alarm records.

#### Comments

PHMSA received comments from several trade associations and one citizens' group on state requirements for leak detection systems. API-AOPL indicated that pipeline configuration and operational factors vary by geographic location, and that other variability exists, including fluid or product differences, batching, and other operational conditions. Due to these factors, any type of prescriptive approach to standards for leak detection is difficult to achieve and would be better served using a performance standard. CRAC noted that multi-phase lines are more susceptible to internal corrosion, and that state regulations do not require IM or leak detection.

NAPSR and DLA also commented. NAPSR encouraged PHMSA to allow the states to set minimum leak detection criteria for intrastate pipelines. DLA opposed development of criteria based on state requirements and suggested that new requirements be third-party validated and listed by NWGLDE.

#### Response

PHMSA favors the use of performance-based safety standards and believes that the regulations adopted by ADEC and WUTC show that certain minimum threshold requirements can be established for leak detection systems. PHMSA will be considering these and other similar regulations in an evaluation of leak detection systems.

With regard to NAPSR's comment, section 60104(c) of the Pipeline Safety Laws allows states that have submitted a current certification to adopt additional or more stringent safety standards for intrastate hazardous liquid pipeline facilities, so long as those requirements are compatible with the minimum federal safety standards. PHMSA has prescribed mandatory leak detection requirements for hazardous liquid pipelines that could affect HCAs and is proposing to make those requirements applicable to all pipelines subject to part 195. States that have submitted a current certification can establish additional or more stringent leak detection standards for intrastate hazardous liquid pipeline facilities, subject to the statutory compatibility requirement.

PHMSA does not agree that third-party validation is a prerequisite to issuing new leak detection requirements for hazardous liquid pipelines. That limitation is not included in the

Pipeline Safety Laws, and PHMSA does not believe that such action is necessary as a matter of administrative discretion.

#### Different Leak Detection Requirements for Sensitive Areas

Section 195.452(i)(3) contains a mandatory leak detection requirement for hazardous liquid pipelines that could affect an HCA. That regulation requires operators to consider several factors (*i.e.*, the length and size of the pipeline, type of product carried, proximity to the HCA, the swiftness of leak detection, location of nearest response personnel, leak history, and risk assessment results) in selecting an appropriate leak detection system.

#### Comments

PHMSA received many comments in response to whether there should be different leak detection requirements for sensitive areas. The trade associations, TxOGA and LMOGA, supported API-AOPL's comments that most leak detection methods cannot target specific areas. API-AOPL further stated that leak detection for sensitive areas can be achieved through comprehensive risk-based evaluation, but that external monitoring is too invasive and is not yet proven or cost effective.

The regulatory associations, government/municipalities, and citizens all supported increased leak detection requirements for sensitive areas. The regulatory association, NAPSR, mentioned the use of FLIR for sensitive areas and stated that special actions beyond patrols should be required for sensitive areas. DLA indicated leak detection standards should be third-party validated. MAWUC and a citizen, Coyle, recommended requiring external leak detectors in HCAs. Coyle would also require external leak detectors for above-ground pipelines transporting highly volatile liquids. NSB encouraged PHMSA to adopt improved leak detection standards and implement more stringent requirements for sensitive areas.

#### Response

PHMSA believes that the leak detection requirements in § 195.452(i)(3) can provide adequate protection for sensitive areas and is proposing to use those requirements as the basis for establishing requirements that would apply to hazardous liquid pipelines in all other locations. Under the current and proposed regulations, operators are required to consider several factors in selecting an appropriate leak detection system, including the characteristics and history of the affected pipeline, the capabilities of the available leak

detection systems, and the location of emergency response personnel. PHMSA commissioned Kiefner and Associates, Inc., to perform a study on leak detection systems used by hazardous liquid operators. That study, titled "Leak Detection Study,"<sup>4</sup> was completed on December 10, 2012, and was submitted to Congress on December 27, 2012. PHMSA is considering, in a different rulemaking activity, whether to adopt additional or more stringent requirements for sensitive areas in response to this study.

#### Key Issues for New Leak Detection Standards

##### Comments

The trade associations, TxOGA, LMOGA, and API-AOPL, supported by an industry commenter, TransCanada Keystone, stated that PHMSA should identify issues that might adversely affect response times, including limiting the consequences for first responder deployment and allowing for the withdrawal of erroneous leak notifications. NAPSAR, the only regulatory association to comment, found that any new standards should consider detection of small leaks in HCAs, maintenance, accuracy, transient conditions, system capabilities, and alarm management.

Three government/municipalities commented on this issue. DLA stated that any standards should address sensitivity, probability of false alarms, minimum leak detection capabilities, frequency, and be based on leak detection technology. MAWUC supported more stringent reporting and repair requirements. NSB indicated that PHMSA should require redundant leak detection systems for offshore lines. NSB also indicated the technology available for leak detection systems is vastly improved and industry should bear the burden to utilize these systems.

##### Response

The Pipeline Safety Laws contain a number of general factors that must be considered in prescribing new safety standards, including the reasonableness of the standard, the estimated benefits and costs, and the views and recommendations of the Technical Hazardous Liquid Pipeline Safety Standards Committee (49 U.S.C. 60102(b)). The Pipeline Safety Laws also contain specific factors that must be considered in prescribing certain safety standards, such as for smart pigs (49

U.S.C. 60102(f)) or low-stress hazardous liquid pipelines (49 U.S.C. 60102(k)).

In the case of leak detection, Congress has enacted prior statutory mandates that required the Secretary to survey and assess the need for additional safety standards. PHMSA and its predecessor agency, RSPA, complied with those mandates by producing two reports and promulgating additional safety standards for leak detection systems. Congress enacted a similar provision in section 8 of the Pipeline Safety Act of 2011, including a requirement that the Secretary submit a report to Congress that provides an analysis of the technical limitations of current leak detection systems and the practicability, safety benefits, and adverse consequence of establishing additional standards for the use of such systems.

The commenters identified several issues that should be considered in establishing new leak detection standards, including the need to minimize false alarms, to set appropriate volumetric thresholds, and to encourage the use of best available technologies.

##### Statistical Analyses of Leak Detection Requirements

PHMSA asked the public to comment on the availability of statistics on whether existing practices or standards on leak detection have contributed to reduced spill volumes and consequences.

##### Comments

One response submitted by API-AOPL, supported by TransCanada Keystone, LMOGA, and TxOGA, stated that the association was unaware of any recent statistics in regard to this topic. API-AOPL further indicated that PHMSA should allow time for recent regulatory changes to take effect on the regulated population.

##### Response

PHMSA's December 2007 report on leak detection systems noted that from 1997 to 2007 "the median volume lost from hazardous liquid pipeline accidents dropped by more than half, from 200 to less than 100 barrels," and that "the number of accidents declined by over a third." The report attributed that positive trend to the implementation of the pipeline IM requirements in § 195.452. However, the report also indicated that all of the available leak detection technologies have strengths and weakness, that some are only suitable for use on particular pipeline systems, and that establishing safety standards would require consideration of a number of factors.

##### Consideration of Industry Practices or Standards for Location of EFRDs

Part 195 requires that EFRDs be considered as potential mitigation measure on pipeline segments that could affect HCAs. In terms of §§ 195.450 and 195.452 the definition for check valve means a valve that permits fluid to flow freely in one direction and contains a mechanism to automatically prevent flow in the other direction. Likewise, remote control valve or RCV means any valve that is operated from a location remote from where the valve is installed. The RCV is usually operated by the supervisory control and data acquisition (SCADA) system. The linkage between the pipeline control center and the RCV may be by fiber optics, microwave, telephone lines, or satellite.

Section 195.452(i)(4) further states that if an operator determines that an EFRD is needed on a pipeline segment to protect a high consequence area in the event of a hazardous liquid pipeline release, an operator must install the EFRD. In making this determination, an operator must, at least, consider the following factors—the swiftness of leak detection and pipeline shutdown capabilities, the type of commodity carried, the rate of potential leakage, the volume that can be released, topography or pipeline profile, the potential for ignition, proximity to power sources, location of nearest response personnel, specific terrain between the pipeline segment and the high consequence area, and benefits expected by reducing the spill size.

RSPA adopted the EFRD requirements in §§ 195.450 and 195.452 in a December 2000 final rule December 1, 2000, (65 FR 75378). Part 195 does not require that EFRDs be used on pipelines outside of HCAs, but § 195.260 does require that valves be installed at certain locations.

Congress included additional requirements for the use of automatic and remote-controlled shut-off valves in section 4 of the Pipeline Safety Act of 2011. That provision requires the Secretary, if appropriate and where economically, technically, and operationally feasible, to issue regulations for the use of automatic and remote-controlled shut-off valves on transmission lines that are newly constructed or entirely replaced. The Comptroller General is also required to perform a study on the effectiveness of these valves and to provide a report to Congress within one year of the date of the enactment of that legislation. PHMSA commissioned a study titled "Studies for the Requirements of

<sup>4</sup> [http://www.phmsa.dot.gov/pv\\_obj\\_cache/pv\\_obj\\_id\\_4A77C7A89CAA18E285898295888E3DB9C5924400/filename/Leak%20Detection%20Study.pdf](http://www.phmsa.dot.gov/pv_obj_cache/pv_obj_id_4A77C7A89CAA18E285898295888E3DB9C5924400/filename/Leak%20Detection%20Study.pdf)

Automatic and Remotely Controlled Shutoff Valves on Hazardous Liquids and Natural Gas Pipelines With Respect to Public and Environmental Safety,”<sup>5</sup> to help provide input on regulatory considerations regarding the feasibility and effectiveness of automatic and remote-control shutoff valves on hazardous liquid and natural gas transmission lines. The study was completed by the Oak Ridge National Laboratory on October 31, 2012, and it was submitted to Congress on December 27, 2012. PHMSA is using considerations from this study as it drafts a rulemaking titled “Amendments to Parts 192 and 195 to require Valve Installation and Minimum Rupture Detection Standards.”

#### Comments

PHMSA received comment on this issue from industry and trade associations. API–AOPL, TxOGA, LMOGA, and TransCanada Keystone reported that no industry standards currently address EFRD use, although ASME B31.4, “Pipeline Transportation Systems for Liquid Hydrocarbons and Other Liquids” (2009), addresses mainline valves and requires remote operation and/or check valves in some instances. ASME B31.4 (2009) also has guidelines for mainline valves and requires remote and check valves, but is not currently incorporated by reference into part 195. Section 195.452 does require that operators identify the need for additional preventive and mitigation measures.

#### Response

PHMSA is studying issues concerning the development of additional safety standards for the use of EFRDs. PHMSA will consider the industry standards mentioned by the commenters, as well as the results of the September 1996 Volpe Report, the December 2007 Leak Detection Study, and the 2012 Oak Ridge National Laboratory study, for the purposes of any future rulemaking on the topic.

#### Adequacy of Existing Industry Practices or Standards for EFRDs

PHMSA asked for comment on the adequacy of existing industry practices or standards for EFRDs.

#### Comments

API–AOPL, TxOGA, LMOGA, and TransCanada Keystone stated that there is no current industry standard that sets a maximum spill volume or activation

timing due to the widespread variation in pipeline dynamics; therefore, it would be difficult to establish a one-size-fits-all maximum spill volume requirement. API–AOPL suggests PHMSA should focus on prevention and response rather than spill size reduction through EFRDs.

#### Response

Section 195.452(i)(4) contains a requirement for the use of EFRDs on hazardous liquid pipelines that could affect an HCA. PHMSA agrees with the commenters that oil spill prevention and response are important to ensuring the safety of hazardous liquid pipelines, and believes that the appropriate use of EFRDs could be complementary to these efforts.

#### Consideration of Additional Standards Specifying the Location of EFRDs

Part 195 requires that EFRDs be considered as potential mitigation measure on pipeline segments that could affect HCAs, but it does not specify any particular location for the use of those devices. Operators must perform a risk analysis in determining whether and where to install EFRDs for such lines. Part 195 does not require that EFRDs be used on pipelines outside of HCAs. In the ANPRM, PHMSA asked for comment on whether additional standards should be developed to specify the location for EFRDs.

#### Comments

PHMSA received comments from four trade associations, one industry operator, and one regulatory association regarding prescriptive location of EFRDs. API–AOPL, TransCanada Keystone, LMOGA, and TxOGA indicated PHMSA should not specify location of EFRD placement for the reasons provided in response to previous questions. TPA agreed that no general criteria beyond those in existing regulations are appropriate because decisions on EFRD placement are driven by local factors. NAPSRS supported the comments of the trade associations.

#### Response

PHMSA recognizes the commenters’ concerns about mandating the installation of EFRDs in particular locations, but notes that other provisions in part 195 require that valves and other safety devices be installed in certain areas.

#### Mandated Use of EFRDs in All Locations

PHMSA requested comment on mandated use of EFRDs in all locations under PHMSA jurisdiction.

#### Comments

API–AOPL, TransCanada Keystone, LMOGA, and TxOGA indicated that a requirement to place EFRDs at predetermined locations or fixed intervals would be arbitrary, costly, and potentially counterproductive to pipeline safety. They noted that not all valves are mainline valves, and that a requirement for all valves to be remote would cause confusion. Many valves are at manned facilities. Some EFRDs are check valves, which are not amenable to remote control. API–AOPL noted that costs related to providing remote operation would vary based on proximity to power and communications, but that a December 2010 study by the Congressional Research Service estimated retrofit costs of \$40K to \$1.5M per valve. NAPSRS agreed with the comments supplied by the trade associations and TransCanada Keystone. Finally, NSB stated EFRDs should be required on all pipelines PHMSA regulates with specific instruction on when and where EFRDs need to be utilized.

#### Response

PHMSA recognizes the commenters’ concerns about mandating the installation of EFRDs in all locations and plans on continuing to study this issue.

#### Additional Research for Leak Detection

PHMSA requested comment regarding what leak detection technologies or methods require further research and development to demonstrate their efficacy.

#### Comments

PHMSA received no comments in response to this question.

#### D. Valve Spacing

##### Valve Spacing

The ANPRM asked whether PHMSA should repeal or modify the valve spacing requirements in part 195. Specifically, the ANPRM asked:

- For information on the average distance between valves;
- Whether valves are manually operated or remotely controlled;
- Whether additional standards should be adopted for evaluating valve spacing and location;
- Whether the maximum permissible distance between valves should be specified by regulation;
- Whether to adopt additional valve spacing requirements for hazardous liquid pipelines near HCAs;
- Whether additional valve spacing requirements should be adopted to protect narrower bodies of water;

<sup>5</sup> [http://www.phmsa.dot.gov/pv\\_obj\\_cache/pv\\_obj\\_id\\_2C1A725B08C5F72F305689E943053A96232AB200/filename/Final%20Valve\\_Study.pdf](http://www.phmsa.dot.gov/pv_obj_cache/pv_obj_id_2C1A725B08C5F72F305689E943053A96232AB200/filename/Final%20Valve_Study.pdf)

- Whether all valves should be remotely controlled; and
- What the cost impact would be from requiring the installation of certain types of valves.

As discussed below, PHMSA is not proposing to adopt any additional standards for valve spacing, but will be considering that issue in complying with the various mandates in the Pipeline Safety Act of 2011.

Part 195 contains general construction requirements for valves. Specifically, § 195.258 provides that each valve must be installed in a location that is accessible to authorized employees and protected from damage or tampering. This section further states that submerged valves located offshore or in inland navigable waters must be marked, or located by conventional survey techniques, to facilitate quick location when operation of the valve is required.

PHMSA pipeline safety regulations found in section 195.260 indicate that a valve must be installed at certain locations. The locations named include on the suction end and the discharge end of a pump station or a breakout storage tank area in a manner that permits isolation of the tank area from other facilities and on each mainline at locations along the pipeline system that will minimize damage or pollution from accidental hazardous liquid discharge, as appropriate for the terrain in open country, for offshore areas, or for populated areas. Three additional requirements for valve location in section 195.260 include each lateral takeoff from a trunk line, on each side of a water crossing that is more than 100 feet (30 meters) wide from high-water mark to high-water mark and on each side of a reservoir holding water for human consumption. The Department adopted these regulations in an October 1969 final rule October 4, 1969, (34 FR 15475).

As discussed in section 3, part 195 requires the use of EFRDs as a potential mitigation measure on pipeline segments that could affect HCAs. As also discussed in section 3, Congress included new provisions for the use of automatic and remote-controlled shut-off valves and leak detection systems in the Pipeline Safety Act of 2011.

#### Information on Average Distance Between Valves and Manual or Remote Operation

PHMSA asked the public to provide information on the average distance between valves and whether such valves are manually operated or remotely controlled.

#### Comments

The commenters did not provide any data on the average distance between valves, but did provide general information on valve spacing, location, and type. The commenters further noted that ASME B31.4, a consensus industry standard, includes a minimum valve spacing requirement of 7.5 miles for liquefied petroleum gas (LPG) and anhydrous ammonia pipelines in populated areas.

Specifically, API-AOPL, LMOGA, TxOGA, and TransCanada Keystone stated that valve spacing varies, that most mainline valves are manually operated, that check valves are used in certain cases, and that some remotely controlled valves had been added as a result of the IM requirements. API-AOPL also commented that ASME B31.4 provides additional requirements for LPG and anhydrous ammonia in populated areas, including a 7.5-mile spacing requirement for valves, but noted that PHMSA had not incorporated this version of B31.4 into part 195. NAPSRR stated that proper valve location is more important than distance placement.

#### Response

Part 195 requires the installation of valves at certain locations, including pump stations, breakout tanks, mainlines, lateral lines, water crossings, and reservoirs. These requirements are generally directed toward achieving a particular result (e.g., isolation of a facility, minimization of damage or pollution, etc.) and do not mandate that valves be installed at specific distances.

Part 195 does not prescribe whether manual or remotely controlled valves must be installed at particular locations, but does require consideration of check valves and remotely controlled valves under the EFRD requirements for pipelines that could affect an HCA. Section 4 of the Pipeline Safety Act of 2011 includes new requirements for evaluating and issuing additional regulations for the use of the automatic and remote-controlled shut-off valves.

PHMSA is not proposing to make any changes to the current valve spacing requirements at this time. A coordinated analysis will ensure that these issues are addressed in a way that maximizes the potential benefits and minimizes the potential burdens imposed by any new leak detection and valve spacing standards.

#### Adoption of Additional Standards for Valve Spacing and Location

PHMSA asked for comment on the adoption of additional standards for valve spacing and location.

#### Comments

TransCanada Keystone, API-AOPL, TxOGA, and LMOGA stated that the standards in §§ 195.260 and 195.452 are satisfactory. NAPSRR supported the comments of API-AOPL. NSB recommended that DOT adopt standards for pipeline operators to use in evaluating valve spacing and location and identifying the maximum distance between valves.

#### Response

PHMSA is not proposing to adopt any additional standards for valve spacing and locations, but will be considering that issue in complying with the various mandates in the Pipeline Safety Act of 2011. PHMSA held a public meeting/workshop on valve spacing and locations on March 28, 2012. Information from this workshop was used in Oak Ridge National Laboratory's study, completed October 31, 2012, titled: "Studies for the Requirements of Automatic and Remotely Controlled Shutoff Valves on Hazardous Liquids and Natural Gas Pipelines with Respect to Public and Environmental Safety"<sup>6</sup> to help determine the need for additional valve and location standards.

#### Additional Standards for Specifying the Maximum Distance Between Valves

PHMSA asked for public comment on whether part 195 should specify the maximum permissible distance between valves.

#### Comment

API-AOPL, TxOGA, LMOGA, TransCanada Keystone, and TPA opposed such a requirement and stated that valve spacing should be based on conditions and terrain. NAPSRR also supported this position. NSB and MAWUC recommended the DOT adopt specific valve spacing standards. MAWUC stated that the criteria for valve spacing should be developed, but that the precise location of valves should not be made publicly available.

#### Response

Similarly, PHMSA is not proposing to adopt any additional standards for valve spacing at this time. PHMSA will be studying this issue and may make proposals concerning this topic in a later rulemaking.

<sup>6</sup> [http://www.phmsa.dot.gov/pv\\_obj\\_cache/pv\\_obj\\_id/2C1A725B08C5F72F305689E943053A96232AB200/file/fileName/Final%20Valve\\_Study.pdf](http://www.phmsa.dot.gov/pv_obj_cache/pv_obj_id/2C1A725B08C5F72F305689E943053A96232AB200/file/fileName/Final%20Valve_Study.pdf)

### Additional Requirements for Valve Spacing Near HCAs Beyond Those Required for EFRDs

PHMSA asked for public comment on whether part 195 should contain additional requirements for valve spacing in areas near HCAs beyond what is already required in § 195.452(i)(4) for EFRDs.

#### Comments

NSB encouraged PHMSA to adopt additional requirements for these areas. Taking a contrary position, API-AOPL, LMOGA, TxOGA, NAPSRS, and TransCanada Keystone indicated that the current requirements adequately address the need for EFRDs and allow operators to assess the specific risks on each individual pipeline that could affect an HCA.

#### Response

PHMSA does not propose to make any changes to the regulations concerning the valve spacing at this time. PHMSA will be studying this issue and may make proposals concerning this topic in a later rulemaking.

### Modifying the Scope of 49 CFR 195.260(e) To Include Narrower Bodies of Water

Section 195.260(e) requires the installation of a valve “[o]n each side of a water crossing that is more than 100 feet (30 meters) wide from high-water mark to high-water mark unless the Administrator finds in a particular case that valves are not justified.” The Department adopted that requirement in an October 1969 final rule October 4, 1969, (34 FR 15475) after adding the provision that allows the Administrator to find that the installation of a valve is not justified in specific cases. Such a finding requires the filing of a petition with the Administrator under 49 CFR 190.9.

#### Comments

API-AOPL, TxOGA, LMOGA, and TransCanada Keystone indicated that the current water crossing requirements are adequate, but that PHMSA could improve the regulation by allowing a risk-based approach for valve placement at water crossings and adding an exclusion for carbon dioxide pipelines.

TWS stated that PHMSA should require valves for waterways that are at least 25-feet in width and all feeder streams and creeks leading to such waterways. NSB supported the view of TWS and indicated the current 100-foot threshold for waterways should be reduced to 25 feet.

#### Response

As mentioned previously, PHMSA is proposing that all pipelines be inspected after extreme weather events or natural disasters. This is a natural extension of IM and ensures continued safe operations of the pipeline after abnormal operating conditions. Past events have strongly demonstrated that inspections after these events do prevent pipeline incidents from occurring. PHMSA is also proposing to require that all hazardous liquid pipelines have leak detection systems; that pipelines in areas that could affect HCAs be capable of accommodating ILLs within 20 years, unless the basic construction of the pipeline will not permit such an accommodation; that periodic assessments be performed of pipelines that are not already receiving such assessments under the IM program requirements; and that modified repair criteria be applied to pipelines in all locations. PHMSA will comply with the applicable provisions in the Pipeline Safety Act of 2011 before adopting any of these proposals in a final rule.

### Adopting Safety Standards That Require All Valves To Be Remotely Controlled

PHMSA asked the public to comment on whether part 195 should include a requirement mandating the use of remotely-controlled valves in all cases.

#### Comments

API-AOPL, LMOGA, and TxOGA stated that PHMSA should not require remotely controlled valves in all cases. API-AOPL indicated that such a requirement would cause confusion as to which valves need to be operated manually, burden the industry with additional costs, and provide minimal safety benefits. API-AOPL submitted that the costs of retrofitting a valve to be remotely controlled varies widely from \$40,000 to \$1.5 million per valve as indicated in a recent report issued by the Congressional Research Service on pipeline safety and security. TPA further stated that the benefits of such requirements are dependent on local factors, and that additional requirements would add to pipeline system complexity and increase the probability of failure. Similarly, NAPSRS stated that remote control valves should not be required, but that PHMSA should consider performance language for maximum response time to operate manual valves.

MAWUC indicated that PHMSA should consider requiring all valves to be remotely controlled, but that its decision should be based on an analysis of benefits and risks. NSB supported the

use of remotely controlled valves in all instances. Coyle, a citizen, commented that PHMSA should promulgate regulatory language requiring remotely controlled valves for poison inhalation hazard pipelines.

#### Response

PHMSA notes that a risk-assessment must be performed in developing any new safety standards for the use of remotely controlled valves, and that any such standards will only be proposed upon a reasoned determination that the benefits justify the costs.

### Requiring Installation of EFRDs To Protect HCAs

Section 195.452(i)(4) does not require the installation of an EFRD on all pipeline segments that could affect HCAs. Rather, it states that “[i]f an operator determines that an EFRD is needed on a pipeline segment to protect a high consequence area in the event of a hazardous liquid pipeline release, an operator must install the EFRD.” It also states that an operator must at least consider a list of factors in making that determination.

#### Comments

API-AOPL, LMOGA, TxOGA and TransCanada Keystone stated that § 192.452 already requires EFRDs to be installed to protect a HCA if the operator finds, through a risk assessment, that an HCA is threatened. MAWUC commented that EFRDs should be required if they can limit a spill. Likewise, NSB supported the use of EFRDs for HCAs.

#### Response

PHMSA does not propose to make any changes to the regulations concerning the use of EFRDs at this time. PHMSA will be studying this issue and may make proposals concerning this topic in a later rulemaking.

### Determining the Applicability of New Valve Location Requirements

In the ANPRM, PHMSA asked for public comment on how the agency should apply any new valve location requirements that are developed for hazardous liquid pipelines.

#### Comments

The trade association, API-AOPL, supported by TransCanada Keystone, LMOGA, and TxOGA, indicated that valve spacing requirements should not be changed, and that delineating new construction for any type of grandfathering purpose would be difficult and confusing. Requiring retrofitting of existing lines to meet any

type of new requirement would be expensive for industry, create environmental impacts, potential construction accidents, and may cause interruption of service.

The regulatory association, NAPSR, suggested that exemptions to new valve location requirements should be based on the consequence of failure. Particular attention should be paid to spills into water as even a small spill can create a large problem.

Two government/municipalities commented. MAWUC indicated that there should be no waivers for valve spacing in HCAs due to the importance and interconnectivity of water supplies. NSB recommended that any new valve locations or remote actuation regulation be applied to new pipelines or existing pipelines that are repaired.

#### Response

PHMSA will continue to study valve spacing and automatic valve placement and may address these issues in a future rulemaking.

#### *E. Repair Criteria Outside of HCAs*

##### Repair Criteria

The ANPRM asked for public comment on whether to extend the IM repair criteria in § 195.452(h) to pipeline segments that are not located in HCAs. Specifically, the ANPRM asked “Whether the IM repair criteria should apply to anomalous conditions discovered in areas outside of HCAs; whether the application of the IM repair criteria to non-HCA areas should be tiered on the basis of risk; what schedule should be applied to the repair of anomalous conditions discovered in non-HCA areas; whether standards should be specified for the accuracy and tolerance of inline inspection (ILI) tools; and whether additional standards should be established for performing ILI inspections with “smart pigs”.

As discussed below, PHMSA is proposing to modify the provisions for making pipeline repairs. Additional conservatism will be incorporated into the existing IM repair criteria and an adjusted schedule for making immediate and non-immediate repairs will be established to provide greater uniformity. These criteria will also be made applicable to all pipelines, with an extended timeframe for making repairs outside of HCAs.

##### Application of IM Repair Criteria to Anomalous Conditions Discovered Outside of HCAs

In the ANPRM, PHMSA asked for comment on whether the IM repair criteria should apply to anomalous

conditions discovered in areas outside of HCAs.

#### Comments

API—AOPL, supported by TransCanada Keystone, LMOGA, and TxOGA, stated that the repair criteria in or outside of HCAs should be the same. Likewise, the citizens’ groups TWS and AKW echoed the comments of API—AOPL and further recommended that a phased-in time period should be utilized. NSB commented that anomalous conditions found during inspection in non-HCA areas should trigger expedited repair times.

#### Response

Section 195.452(h) specifies the actions that an operator must take to address integrity issues on hazardous liquid pipelines that could affect an HCA in the event of a leak or failure. Those actions include initiating temporary and long-term pressure reductions and evaluating and remediating certain anomalous conditions (e.g., metal loss, dents, corrosion, cracks, gouges, grooves, and other any condition that could impair the integrity of the pipelines). Depending on the severity of the condition, such actions must be taken immediately, within 60 days, or within 180 days of the date of discovery.

Section 5 of the Pipeline Safety Act of 2011 requires the Secretary to perform an evaluation to determine if the IM requirements should be extended outside of and to submit a report to Congress with the result of that review. The Secretary is authorized to collect data for purposes of completing the evaluation and report to Congress. Section 5 also prohibits the issuance of any final regulations that would expand the IM requirements during a subsequent Congressional review period, subject to a savings clause that permits such action if a condition poses a risk to public safety, property, or the environment or is an imminent hazard and the regulations in question will address that risk or imminent hazard.

PHMSA is proposing to make certain modifications to the IM repair criteria and to establish similar repair criteria for pipeline segments that are not located in HCAs. Specifically, the repair criteria in § 195.452(h) would be amended to:

- Categorize bottom-side dents with stress risers as immediate repair conditions;
- Require immediate repairs whenever the calculated burst pressure is less than 1.1 times MOP;
- Eliminate the 60-day and 180-day repair categories; and

- Establish a new, consolidated 270-day repair category.

PHMSA is also proposing to adopt new requirements in § 195.422 that would: Apply the criteria in the immediate repair category in § 195.452(h) and Establish an 18-month repair category for hazardous liquid pipelines that are not subject to the IM requirements.

These changes will ensure that immediate action is taken to remediate anomalies that present an imminent threat to the integrity of hazardous liquid pipelines in all locations. Many anomalies that would not qualify as immediate repairs under the current criteria will meet that requirement as a result of the additional conservatism that will be incorporated into the burst pressure calculations. The new timeframes for performing other repairs will allow operators to remediate those conditions in a timely manner while allocating resources to those areas that present a higher risk of harm to the public, property, and the environment.

##### Use of a Tiered, Risk-Based Approach for Repairing Anomalous Conditions Discovered Outside of HCAs

In the ANPRM, PHMSA asked for comment on whether the application of the IM repair criteria to non-HCA areas should be tiered on the basis of risk.

#### Comments

API—AOPL, LMOGA, TPA, TxOGA, and TransCanada Keystone commented that PHMSA should not impose any sort of tiering to repair criteria because that is already inherent to the IM program. Scheduling flexibility would minimize disruption to the affected public, as well as the overall environmental impact, by preventing multiple excavation work on a given property. Requiring additional risk tiering of anomalies would not reduce safety risks to the public.

NAPSR, in contrast, commented that tiering should be utilized for repair criteria inside or outside of HCAs. NSB also indicated that risk tiering should be used. MAWUC supported risk tiering based on preselected criteria for HCAs.

#### Response

As previously discussed, PHMSA is proposing to apply new repair criteria for anomalous conditions discovered on hazardous liquid pipelines that are not located in HCAs. PHMSA is also proposing to establish two timeframes for performing those repairs: immediate repair conditions and 18-month repair conditions. If adopted as proposed, these changes will ensure the prompt remediation of anomalous conditions on all hazardous liquid pipeline segments, while allowing operators to allocate

their resources to those areas that present a higher risk of harm to the public, property, and the environment.

#### Updating of Dent With Metal Loss Repair Criteria

Section 195.452(h) contains the criteria for repairing dents with metal loss on hazardous liquid pipeline segments that could affect an HCA in the event of a leak or failure. PHMSA asked for comment on whether advances in ILI tool capability justified an update in the dent-with-metal-loss repair criteria.

#### Comments

API-AOPL, LMOGA, TxOGA, and TransCanada Keystone indicated that the anticipated update to API 1160 will contain proposals to update the dent-with-metal-loss repair criterion. API-AOPL intends to support these proposals with data resulting from analyses of member company's experience measuring and characterizing metal loss in dents.

NAPSRS encouraged PHMSA not to make the current standards less stringent even for dents without metal loss, citing a recent bottom side dent less than 6 inches that failed. NAPSRS recommended strengthening the repair criteria for bottom-side dents in areas of heavy traffic or near swamps/bogs or in clay soils.

#### Response

As previously discussed, PHMSA is proposing to categorize bottom-side dents with stress risers as an immediate repair condition and to require immediate repairs when calculated burst pressure is less than 1.1 times MOP. These changes should ensure the prompt and effective remediation of anomalous conditions on all pipeline segments. With respect to API 1160, PHMSA will consider incorporating the 2013 edition in a future rulemaking.

#### Adoption of Explicit Standards To Account for Accuracy of ILI Tools

PHMSA requested comment on whether to adopt an explicit standard to account for the accuracy of ILI tools when comparing ILI data with repair criteria.

#### Comments

API-AOPL supports PHMSA's adoption of API 1163, the "In-Line Inspection Systems Qualification Standard". That standard includes a System Results Verification section, which describes methods to verify that the reported inspection results meet, or are within, the performance specification for the pipeline being

inspected. That standard also requires that inconsistencies uncovered during the process validation be evaluated and resolved.

NAPSRS supports the adoption of a standard because the IM process already is considering tool accuracy during the selection process and suggests revising the regulations to provide minimum standards of expected accuracy.

#### Response

In reviewing IM inspection data, PHMSA discovered that some operators were not considering the accuracy (*i.e.*, tolerance) of ILI tools when evaluating the results of the tool assessments. As a result, random variation within the recorded data led to both overcalls (*i.e.*, an anomaly was identified to be more extreme than it actually was) and under calls. Over calls are conservative, resulting in repair of some anomalies that might not actually meet repair criteria. Under calls are not and can result in anomalies that exceed specified repair criteria going unremediated. Based on our review of inspection data, PHMSA has concluded that operators should be explicitly required to consider the accuracy of their ILI tools.

Specifically, under the proposed amendment to § 195.452(c)(1)(i) and the new provisions in § 195.416, operators will be required to consider tool tolerance and other uncertainties in evaluating ILI results for all hazardous liquid pipeline segments. Tool accuracy should include excavation findings and usage of unity plots of inline tool and excavation findings. When combined with the proposed changes to the repair criteria, the proposed tool tolerance requirement will ensure the prompt detection and remediation of anomalous conditions on all hazardous liquid pipelines. With respect to API 1163, as of January 2013, PHMSA is required by section 24 of the Pipeline Safety, Regulatory Certainty, and Job Creation Act of 2011 not to incorporate any consensus standards that are not available to the public, for free, on an internet Web site. PHMSA has sought a solution to this issue and as a result, all incorporated by reference standards in the pipeline safety regulations would be available for viewing to the public for free.

#### Additional Quality Control Standards for ILI Tools, Assessments, and Data Review

In the ANPRM, PHMSA asked if additional quality control standards are needed for conducting ILIs using smart pigs, the qualification of persons interpreting ILI data, the review of ILI

results, and the quality and accuracy of ILI tool performance.

#### Comments

API-AOPL, LMOGA, TxOGA, and TransCanada Keystone commented that PHMSA should adopt API 1163 and American Society of Nondestructive Testing ILI PQ. These commenters stated that a certification program for analyzing ILI data would not add value to pipeline operators' IM programs, as operator experience has shown that these types of programs do not adequately reflect the highly technical nature of, and the intimate knowledge and experience of personnel practicing, IM programs. According to the commenters, there is no evidence that the current requirements and industry standards are leaving the public or environment at risk.

NAPSRS indicated that if there is data to show this is an issue, PHMSA should adopt a standard. Additionally, a state could impose a more stringent standard based on prior experience. Both the NSB and MAWUC supported adoption of standards for ILI use.

#### Response

As noted in the response to the previous question, PHMSA is proposing to require operators to consider tool tolerance and other uncertainties in evaluating ILI results in complying with the IM requirements of § 195.452 and the proposed assessment requirement in § 195.416. PHMSA believes that this requirement and the proposed changes to the repair criteria will ensure the prompt detection and remediation of anomalous conditions (*e.g.*, metal loss, dents, corrosion, cracks, gouges, grooves) that could adversely affect the safe operation of a pipeline. PHMSA is proposing by a separate rulemaking via incorporation by reference available industry consensus standards for performing assessments of pipelines using ILI tools, internal corrosion direct assessment, and stress corrosion cracking direct assessment.

#### F. Stress Corrosion Cracking

In the October 2010 ANPRM, PHMSA asked for public comment on whether to adopt additional safety standards for stress corrosion cracking (SCC). SCC is cracking induced from the combined influence of tensile stress and a corrosive medium. Sections 195.553 and 195.588 and Appendix C of the Hazardous Liquid Pipeline Safety Standards contain provisions for the direct assessment of SCC, but do not include comprehensive requirements for preventing, detecting, and remediating that condition.

Specifically, PHMSA asked in the ANPRM whether:

- Any existing industry standards for preventing, detecting, and remediating SCC should be incorporated by reference;
- Any data or statistics are available on the effectiveness of these industry standards;
- Any data or statistics are available on the effectiveness of SCC detection tools and methodologies;
- Any tools or methods are available for detecting SCC associated with longitudinal pipe seams;
- An SCC threat analysis should be conducted for all pipeline segments;
- Any particular integrity assessment methods should be used when SCC is a credible threat; and
- Operators should be required to perform a periodic analysis of the effectiveness of their corrosion management programs.

#### Adoption of NACE Standard for Stress Corrosion Cracking Direct Assessment Methodology or Other Industry Standards

In the ANPRM, PHMSA asked for comment on whether the agency should incorporate any consensus industry standards for assessing SCC, including the NACE International (NACE) SP0204–2008 (formerly RP0204), Stress Corrosion Cracking (SCC) Direct Assessment Methodology. <http://www.nace.org/uploadedFiles/Committees/SP020408.pdf> (last accessed December 12, 2013) (stating that SP0204–2008 “provides guidance for managing SCC by selecting potential pipeline segments, selecting dig sites within those segments, inspecting the pipe and collecting and analyzing data during the dig, establishing a mitigation program, defining the reevaluation interval, and evaluating the effectiveness of the SCC [direct assessment] process.”).

#### Comments

API–AOPL, TransCanada Keystone, TxOGA, and LMOGA stated that NACE SP0204–2008 provides an effective framework for the application of direct assessment, but does not sufficiently address other assessment methods, including ILI and hydrostatic testing. These commenters were also not aware of any industry statistics that directly correlate the application of that standard to the SCC detection or failure rate. These commenters stated the most appropriate standard for SCC assessment of hazardous liquid pipelines is the soon-to-be-released version of API Standard 1160, Managing

System Integrity for Hazardous Liquid Pipelines.

Another trade association, TPA, stated that “because [the NACE Standard] was just finished in 2008, PHMSA should wait at least 2–3 years more before attempting to assess the desirability of incorporating that standard into the regulations.”

One regulatory association, MAWUC, commented that PHMSA should adopt standards that address direct assessment, prevention, and remediation of SCC. The municipality/government entity, NSB, offered a similar comment.

#### Response

The commenters did not indicate that NACE SP0204–2008 would address the full lifecycle of SCC safety issues. Moreover, none of the commenters identified any other industry standards that would be appropriate for adoption at this time.

PHMSA recognizes that SCC is an important safety concern, but does not believe that further action can be taken based on the information available in this proceeding. PHMSA is establishing a team of experts to study this issue and will be holding a public forum on the development of SCC standards. Once that process is complete, PHMSA will consider whether to establish new safety standards for SCC. With respect to NACE SP0204–2008 PHMSA is proposing this standard by a separate rulemaking via incorporation by reference.

#### Identification of Standards and Practices for Prevention, Detection, Assessment and Remediation of SCC

PHMSA asked the public to identify any other standards and practices for the prevention, detection, assessment, and remediation of SCC.

#### Comments

API–AOPL, LMOGA, and TxOGA indicated that there are several good standards that address SCC, including API 1160, ASME STP–PT–011, Integrity Management of Stress Corrosion Cracking in Gas Pipeline High Consequence Areas, and the Canadian Energy Pipeline Association (CEPA) Stress Corrosion Cracking Recommended Practices (CEPA SCC RP), but acknowledged that all of these standards have weaknesses.

The trade association, CEPA, also stated that the 2008 ASME STP–PT–011 should be considered. While written for gas pipelines, CEPA stated that this standard could be adapted to hazardous liquids.

#### Response

PHMSA appreciates the information provided by the commenters. PHMSA will be studying the SCC issue and will consider incorporating by reference suggested standards in future rulemakings.

#### Implementation of Canadian Energy Pipeline Association RP on SCC

CEPA is an organization that represents Canada’s transmission pipeline companies. In 1997, CEPA developed its SCC Recommended Practice (RP) in response to a public inquiry by National Energy Board of Canada. In 2007, CEPA released an updated version of its SCC RP, <http://www.cepa.com/wp-content/uploads/2011/06/Stress-Corrosion-Cracking-Recommended-Practices-2007.pdf>. In the ANPRM, PHMSA asked for comment on the experience of operators in implementing CEPA’s SCC RP.

#### Comments

API–AOPL, LMOGA, TxOGA, and TransCanada Keystone commented that the CEPA SCC RP provides the most thorough overview of the various assessment techniques, but is limited to near neutral SCC in terms of causal considerations. These commenters also stated that there are no industry statistics on the application of the CEPA RP SCC. CEPA and API–AOPL both indicated that companies continue to use the CEPA SCC RP as a guideline, but that there are no statistics on its use.

#### Response

PHMSA appreciates the comments provided on the use of the CEPA SCC RP and will consider that standard in its study of comprehensive safety requirements for SCC and in future rulemakings.

#### Effectiveness of SCC Detection Tools and Methods

PHMSA requested comment as to the effectiveness of current SCC detection tools and methods.

#### Comments

API–AOPL, supported by LMOGA, TxOGA, and TransCanada Keystone, stated that there are no industry statistics that directly correlate the application of the CEPA RP to the SCC detection or failure rate, but that the National Energy Board of Canada has noted the effectiveness of the CEPA RP for managing SCC. API–AOPL also stated the planned revisions of API 1160 and 1163 will address the current gaps regarding SCC in the standards and recommended practices relevant to liquid pipelines. One citizens’ group,

TWS, mentioned that gathering lines do not require corrosion prevention and that this should be required.

#### Response

PHMSA appreciates the comments provided on the effectiveness of SCC detection tools and methods and will be considering that information in evaluating comprehensive safety requirements for SCC and consider incorporating in future rulemakings.

#### IV. Section-by-Section Analysis

##### *§ 195.1 Which pipelines are covered by this part?*

Section 195.1(a) lists the pipelines that are subject to the requirements in part 195, including gathering lines that cross waterways used for commercial navigation as well as certain onshore gathering lines (*i.e.*, those that are located in a non-rural area, that meet the definition of a regulated onshore gathering line, or that are located in an inlet of the Gulf of Mexico). PHMSA has determined that additional information about unregulated gathering lines is needed to fulfill its statutory obligations. Accordingly, the NPRM extend the reporting requirements in subpart B of part 195 to all gathering lines (whether regulated, unregulated, onshore, or offshore) by adding a new paragraph (a)(5) to § 195.1.

##### *§ 195.2 Definitions*

Section 195.2 provides definitions for various terms used throughout part 195. On August 10, 2007, (72 FR 45002; Docket number PHMSA–2007–28136) PHMSA published a policy statement and request for comment on the transportation of ethanol, ethanol blends, and other biofuels by pipeline. PHMSA noted in the policy statement that the demand for biofuels was projected to increase in the future as a result of several federal energy policy initiatives, and that the predominant modes for transporting such commodities (*i.e.*, truck, rail, or barge) would expand over time to include greater use of pipelines. PHMSA also stated that ethanol and other biofuels are substances that “may pose an unreasonable risk to life or property” within the meaning of 49 U.S.C. 60101(a)(4)(B) and accordingly these materials constitute “hazardous liquids” for purposes of the pipeline safety laws and regulations.

PHMSA is now proposing to modify its definition of hazardous liquid in § 195.2. Such a change would make clear that the transportation of biofuel by pipeline is subject to the requirements of 49 CFR part 195.

PHMSA is also proposing to add a new definition of “Significant Stress Corrosion Cracking.” This new definition will provide criteria for determining when a probable crack defect in a pipeline segment must be excavated and repaired.

##### *§ 195.11 What is a regulated rural gathering line and what requirements apply?*

Section 195.11 defines and establishes the requirements that are applicable to regulated rural gathering lines. PHMSA has determined that these lines should be subject to the new requirements in the NPRM for the performance of periodic pipeline assessments and pipeline remediation and for establishing leak detection systems. Consequently, the NPRM would amend § 195.11 by adding paragraphs (b)(12) and (13) to ensure that these requirements are applicable to regulated rural gathering lines.

##### *§ 195.13 What requirements apply to pipelines transporting hazardous liquids by gravity?*

Section 195.13 will be added which subjects gravity lines to the same reporting requirements in subpart B of part 195 as other hazardous liquid pipelines. PHMSA has determined that additional information about gravity lines is needed to fulfill its statutory obligations.

##### *§ 195.120 Passage of Internal Inspection Devices*

Section 195.120 contains the requirements for accommodating the passage of internal inspection devices in the design and construction of new or replaced pipelines. PHMSA has decided that, in the absence of an emergency or where the basic construction makes that accommodation impracticable, a pipeline should be designed and constructed to permit the use of ILIs. Accordingly, the NPRM would repeal the provisions in the regulation that allow operators to petition the Administrator for a finding that the ILI compatibility requirement should not apply as a result of construction-related time constraints and problems. The other provisions in § 195.120 would be re-organized without altering the existing substantive requirements.

##### *§ 195.134 Leak Detection*

Section 195.134 contains the design requirements for computational pipeline monitoring leak detection systems. The NPRM would restructure the existing requirements into paragraphs (a) and (b) and add a new provision in paragraph (c) to ensure that all newly constructed

pipelines are designed to include leak detection systems based upon standards in section 4.2 of API 1130 or other applicable design criteria in the standard.

##### *§ 195.401 General Requirements*

Section 195.401 prescribes general requirements for the operation and maintenance of hazardous liquid pipelines. PHMSA is proposing to modify the pipeline repair requirements in § 195.401(b). Paragraph (b)(1) will be modified to reference the new timeframes in § 195.422 for performing non-IM repairs. The requirements in paragraph (b)(2) for IM repairs will be retained without change. A new paragraph (b)(3) will be added, however, to clearly require operators to consider the risk to people, property, and the environment in prioritizing the remediation of any condition that could adversely affect the safe operation of a pipeline system, including those covered by the timeframes specified in §§ 195.422(d) and (e) and 195.452(h).

##### *§ 195.414 Inspections of Pipelines in Areas Affected by Extreme Weather, a Natural Disaster, and Other Similar Events*

Extreme weather, natural disasters and other similar events can affect the safe operation of a pipeline. Accordingly, the NPRM would establish a new regulation in § 195.414 that would require operators to perform inspections after these events and to take appropriate remedial actions.

##### *§ 195.416 Pipeline Assessments*

Periodic assessments, particularly with ILI tools, provide critical information about the condition of a pipeline, but are only currently required under IM requirements in §§ 195.450 through 195.452. PHMSA has determined that operators should be required to have the information that is needed to promptly detect and remediate conditions that could affect the safe operation of pipelines in all areas. Accordingly, the NPRM would establish a new regulation in § 195.416 that requires operators to perform an assessment of pipelines that are not already subject to the IM requirements at least once every 10 years. The regulation would require that these assessments be performed with an ILI tool, unless an operator demonstrates and provides 90-days prior notice that a pipeline is not capable of accommodating such a device and that an alternative method will provide a substantially equivalent understanding of its condition.

The regulation would also require that the results of these assessments be reviewed by a person qualified to determine if any conditions exist that could affect the safe operation of a pipeline; that such determinations be made promptly, but no later than 180 days after the assessment; that any unsafe conditions be remediated in accordance with the new requirements in § 195.422 of the NPRM; and that all relevant information about the pipeline be considered in complying with the requirements of § 195.416.

*§ 195.422 Pipeline Remediation*

Section 195.422 contains the requirements for performing pipeline repairs. PHMSA has determined that new criteria should be established for remediating conditions that affect the safe operation of a pipeline. The NPRM would add a new paragraph (a) specifying that the provisions in the regulation are applicable to pipelines that are not subject to the IM requirements in § 195.452 (e.g., not in HCAs). Paragraphs (b) and (c) would contain the existing requirements in the regulation, including the general duty clause for ensuring public safety and the provision noting the applicability of the design and construction requirements to piping and equipment used in performing pipeline repairs. Paragraph (d) would establish a new remediation schedule based on the analogous provisions in the IM requirements for performing immediate and 18-month repairs, and paragraph (e) would contain a residual provision for remediating all other conditions.

*§ 195.444 Leak Detection*

Section 195.444 contains the operation and maintenance requirements for Computational Pipeline Monitoring leak detection systems. PHMSA is proposing that all pipelines should have leak detection systems. Therefore, the NPRM would reorganize the existing requirements of the regulation into paragraphs (a) and (c), and add a new general provision in paragraph (b) that would require operators to have leak detection systems on all pipelines and to consider certain factors in determining what kind of system is necessary to protect the public, property, and the environment.

*Section 195.452 Pipeline Integrity Management in High Consequence Areas*

Section 195.452 contains the IM requirements for hazardous liquid pipelines that could affect a HCA in the event of a leak or failure. The NPRM would clarify the applicability of the deadlines in paragraph (b) for the development of a written program for new pipelines, regulated rural gathering lines, and low-stress pipelines in rural areas. Paragraph (c)(1)(i)(A) would also be amended to ensure that operators consider uncertainty in tool tolerance in reviewing the results of ILI assessments. Paragraph (d) would be amended to eliminate obsolete deadlines for performing baseline assessments and to clarify the requirements for newly-identified HCAs. Paragraph (e)(1)(vii) is amended to include local environmental factors that might affect pipeline integrity. Paragraph (g) would be amended to expand upon the factors and criteria that operators must consider in performing the information analysis that is required in periodically evaluating the integrity of covered pipeline segments. Paragraph (h)(1) would also be amended by modifying the criteria, and establishing a new, consolidated timeframe, for performing immediate and 270-day pipeline repairs based on the information obtained as a result of ILI assessments or through an information analysis of a covered segment.

PHMSA is also proposing to amend the existing “discovery of condition” language in the pipeline safety regulations. The revised § 195.452(h)(2) will require, in cases where a determination about pipeline threats has not been obtained within 180 days following the date of inspection, that pipeline operators must notify PHMSA and provide an expected date when adequate information will become available. Paragraphs 195.452(h)(4)(i)(E) and (F) are also added to address issues of significant stress corrosion cracking and selective seam corrosion.

PHMSA proposes further changes to § 195.452. These changes include paragraph (j) which would be amended to establish a new provision for verifying the risk factors used in identifying covered segments on at least an annual basis, not to exceed 15

months. A new paragraph (n) would also be added to require that all pipelines in areas that could affect an HCA be made capable of accommodating ILI tools within 20 years, unless the basic construction of a pipeline will not permit that accommodation or the existence of an emergency renders such an accommodation impracticable. Paragraph (n) would also require that pipelines in newly-identified HCAs after the 20-year period be made capable of accommodating ILIs within five years of the date of identification or before the performance of the baseline assessment, whichever is sooner. Finally, an explicit reference to seismicity will be added to factors that must be considered in establishing assessment schedules under paragraph (e), for performing information analyses under paragraph (g), and for implementing preventive and mitigative measures under paragraph (i).

**V. Regulatory Notices**

*A. Executive Order 12866, Executive Order 13563, and DOT Regulatory Policies and Procedures*

Executive Orders 12866 and 13563 require agencies to regulate in the “most cost-effective manner,” to make a “reasoned determination that the benefits of the intended regulation justify its costs,” and to develop regulations that “impose the least burden on society.” This action has been determined to be significant under Executive Order 12866 and the Department of Transportation’s Regulatory Policies and Procedures. It has been reviewed by the Office of Management and Budget in accordance with Executive Order 13563 (Improving Regulation and Regulatory Review) and Executive Order 12866 (Regulatory Planning and Review) and is consistent with the requirements in both orders.

In the regulatory analysis, we discuss the alternatives to the proposed requirements and, where possible, provide estimates of the benefits and costs for specific regulatory requirements in the eight areas. The regulatory analysis provides PHMSA’s best estimate of the impact of the separate requirements. The chart below summarizes the cost/benefit analysis:

ANNUALIZED COSTS AND BENEFITS BY REQUIREMENT AREA DISCOUNTED AT 7 PERCENT

Requirement area	Costs	Benefits	Net benefits
1. Extend certain reporting requirements to all hazardous liquid (HL) gravity lines.	\$900 .....	Benefits not quantified, but expected to justify costs.	Expected to be positive.

ANNUALIZED COSTS AND BENEFITS BY REQUIREMENT AREA DISCOUNTED AT 7 PERCENT—Continued

Requirement area	Costs	Benefits	Net benefits
2. Extend certain reporting requirements to all hazardous liquid (HL) gathering lines.	23,300 .....	Benefits not quantified but expected to justify the costs.	Expected to be positive.
3. Require inspections of pipelines in areas affected by extreme weather, natural disasters, and other similar events, as well as appropriate remedial action if a condition that could adversely affect the safe operation of a pipeline is discovered.	1.5 million .....	3.5 to 10.4 million .....	2.0 to 8.9 million
4. Require periodic assessments of pipelines that are not already covered under the IM program requirements using an in-line inspection tool (or demonstrate to the satisfaction of PHMSA that the pipeline is not capable of using this tool).	16.7 million .....	17.7 million ..... Range 9.4–26.0 million .....	1 million Range (–)7.3–9.3 million Expected to be positive even at the low end of the benefit range if unquantified benefits are included.
5. Require use of leak detection systems (LDS) on new HL pipelines located in non-HCAs to mitigate the effects of failures that occur outside of HCAs.	Not quantified but expected to be minimal.	Not quantified, but expected to justify the minimal costs.	Not quantified, but positive qualitative benefits.
6. Modify the IM repair criteria, both by expanding the list of conditions that require immediate remediation, consolidating the timeframes for remediating all other conditions, and making explicit deadlines for repairs on non-IM pipeline.	Not quantified, but expected to be minimal.	Not quantified, but expected to justify the minimal costs.	Not quantified, but expected to be minimal.
7. Increase the use of inline inspection (ILI) tools by requiring that any pipeline that could affect an HCA be capable of accommodating these devices within 20 years, unless its basic construction will not permit that accommodation.	1.0 million .....	12.2 million .....	11.2 million
8. Clarify and resolve inconsistencies regarding deadlines, and information analyses for IM Plans t.	3.2 million .....	10.0 million .....	6.8 million.

Overall, factors such as increased safety, public confidence that all pipelines are regulated, quicker discovery of leaks and mitigation of environmental damages, and better risk management are expected to yield benefits that are in excess of the cost. PHMSA seeks comment on the Preliminary Regulatory Evaluation, its approach, and the accuracy of its estimates of costs and benefits. A copy of the Preliminary Regulatory evaluation has been placed in the docket.

*B. Executive Order 13132: Federalism*

This NPRM has been analyzed in accordance with the principles and criteria contained in Executive Order 13132 (“Federalism”). This NPRM does not propose any regulation that has substantial direct effects on the states, the relationship between the national

government and the states, or the distribution of power and responsibilities among the various levels of government. It does not propose any regulation that imposes substantial direct compliance costs on state and local governments. Therefore, the consultation and funding requirements of Executive Order 13132 do not apply. Nevertheless, PHMSA has and will continue to consult extensively with state regulators including NAPS R to ensure that any state concerns are taken into account.

*C. Regulatory Flexibility Act*

The Regulatory Flexibility Act of 1980 (Pub. L. 96–354) (RFA) establishes “as a principle of regulatory issuance that agencies shall endeavor, consistent with the objectives of the rule and of applicable statutes, to fit regulatory and

informational requirements to the scale of the businesses, organizations, and governmental jurisdictions subject to regulation. To achieve this principle, agencies are required to solicit and consider flexible regulatory proposals and to explain the rationale for their actions to assure that such proposals are given serious consideration.”

The RFA covers a wide range of small entities, including small businesses, not-for-profit organizations, and small governmental jurisdictions. Agencies must perform a review to determine whether a rule will have a significant economic impact on a substantial number of small entities. If the agency determines that it will, the agency must prepare a regulatory flexibility analysis as described in the RFA.

However, if an agency determines that a rule is not expected to have a

significant economic impact on a substantial number of small entities, section 605(b) of the RFA provides that the head of the agency may so certify and a regulatory flexibility analysis is not required. The certification must include a statement providing the factual basis for this determination, and the reasoning should be clear.

PHMSA performed a screening analysis of the potential economic impact on small entities. The screening analysis is available in the docket for the rulemaking. PHMSA estimates that the proposed rule would impact fewer than 100 small hazardous liquid pipeline operators, and that the majority of these operators would experience annual compliance costs that represent less than 1% of annual revenues. Less than 20 small operators would incur annual compliance costs that represent greater than 1% of annual revenues; less than 10 would incur annual compliance costs of greater than 3% of annual revenues; and none would incur compliance costs of more than 20% of annual revenues. PHMSA determined that these impacts results do not represent a significant impact for a substantial number of small hazardous liquid pipeline operators. Therefore, I certify that this action, if promulgated, will not have a significant economic impact on a substantial number of small entities.

#### *D. National Environmental Policy Act*

PHMSA analyzed this NPRM in accordance with section 102(2)(c) of the National Environmental Policy Act (42 U.S.C. 4332), the Council on Environmental Quality regulations (40 CFR parts 1500 through 1508), and DOT Order 5610.1C, and has preliminarily determined that this action will not significantly affect the quality of the human environment. A preliminary environmental assessment of this rulemaking is available in the docket and PHMSA invites comment on environmental impacts of this rule, if any.

#### *E. Executive Order 13175: Consultation and Coordination With Indian Tribal Governments*

This NPRM has been analyzed in accordance with the principles and criteria contained in Executive Order 13175 (“Consultation and Coordination with Indian Tribal Governments”). Because this NPRM does not have Tribal implications and does not impose substantial direct compliance costs on Indian Tribal governments, the funding and consultation requirements of Executive Order 13175 do not apply.

#### *F. Paperwork Reduction Act*

##### Paperwork Reduction Act

Pursuant to 5 CFR 1320.8(d), PHMSA is required to provide interested members of the public and affected agencies with an opportunity to comment on information collection and recordkeeping requests. PHMSA estimates that the proposals in this rulemaking will add a new information collection and impact several approved information collections titled:

“Transportation of Hazardous Liquids by Pipeline: Recordkeeping and Accident Reporting” identified under Office of Management and Budget (OMB) Control Number 2137–0047;

“Reporting Safety-Related Conditions on Gas, Hazardous Liquid, and Carbon Dioxide Pipelines and Liquefied Natural Gas Facilities” identified under OMB Control Number 2137–0578;

“Integrity Management in High Consequence Areas for Operators of Hazardous Liquid Pipelines” identified under OMB Control Number 2137–0605 and;

“Pipeline Safety: New Reporting Requirements for Hazardous Liquid Pipeline Operators: Hazardous Liquid Annual Report” identified under OMB Control Number 2137–0614.

Based on the proposals in this rulemaking, PHMSA will submit an information collection revision request to OMB for approval based on the requirements in this NPRM. The information collection is contained in the pipeline safety regulations, 49 CFR parts 190 through 199. The following information is provided for each information collection: (1) Title of the information collection; (2) OMB control number; (3) Current expiration date; (4) Type of request; (5) Abstract of the information collection activity; (6) Description of affected public; (7) Estimate of total annual reporting and recordkeeping burden; and (8) Frequency of collection. The information collection burden for the following information collections are estimated to be revised as follows:

1. *Title:* Transportation of Hazardous Liquids by Pipeline: Recordkeeping and Accident Reporting.

*OMB Control Number:* 2137–0047.

*Current Expiration Date:* April 30, 2014.

*Abstract:* This information collection covers the collection of information from owners and operators of Hazardous Liquid Pipelines. To ensure adequate public protection from exposure to potential hazardous liquid pipeline failures, PHMSA collects information on reportable hazardous liquid pipeline accidents. Additional information is

also obtained concerning the characteristics of an operator’s pipeline system. As a result of this NPRM, 5 gravity line operators and 23 gathering line operators would be required to submit accident reports to PHMSA on occasion. These 28 additional operators will also be required to keep mandated records. This information collection is being revised to account for the additional burden that will be incurred by these newly regulated entities. Operators currently submitting annual reports will not be otherwise impacted by this NPRM.

*Affected Public:* Owners and operators of Hazardous Liquid Pipelines.

*Annual Reporting and Recordkeeping Burden:*

Total Annual Responses: 881.

Total Annual Burden Hours: 55,455.

Frequency of Collection: On occasion.

2. *Title:* Reporting Safety-Related Conditions on Gas, Hazardous Liquid, and Carbon Dioxide Pipelines and Liquefied Natural Gas Facilities.

*OMB Control Number:* 2137–0578.

*Current Expiration Date:* May 31, 2014.

*Abstract:* 49 U.S.C. 60102 requires each operator of a pipeline facility (except master meter operators) to submit to DOT a written report on any safety-related condition that causes or has caused a significant change or restriction in the operation of a pipeline facility or a condition that is a hazards to life, property or the environment. As a result of this NPRM, approximately 5 gravity line operators and 23 gathering line operators will be required to adhere to the Safety-Related Condition reporting requirements. This information collection is being revised to account for the additional burden that will be incurred by newly regulated entities. Operators currently submitting annual reports will not be otherwise impacted by this rule.

*Affected Public:* Owners and operators of Hazardous Liquid Pipelines.

*Annual Reporting and Recordkeeping Burden:*

Total Annual Responses: 178.

Total Annual Burden Hours: 1,020.

Frequency of Collection: On occasion.

3. *Title:* Integrity Management in High Consequence Areas for Operators of Hazardous Liquid Pipelines.

*OMB Control Number:* 2137–0605.

*Current Expiration Date:* November 30, 2016.

*Abstract:* Owners and operators of Hazardous Liquid Pipelines are required to have continual assessment and evaluation of pipeline integrity through inspection or testing, as well as

remedial preventive and mitigative actions. As a result of this NPRM, operators not currently under IM plans will be required to adhere to the repair criteria currently required for operators who are under IM plans. In conjunction with this requirement, operators who are not able to make the necessary repairs within 180 days of the infraction will be required to notify PHMSA in writing. PHMSA estimates that only 1% of repair reports will require more than 180 days. Accordingly, PHMSA approximates that 75 reports per year will fall within this category.

**Affected Public:** Owners and operators of Hazardous Liquid Pipelines.

**Annual Reporting and Recordkeeping Burden:**

Total Annual Responses: 278.  
Total Annual Burden Hours: 325,508.  
Frequency of Collection: Annually.

4. **Title:** Pipeline Safety: New Reporting Requirements for Hazardous Liquid Pipeline Operators: Hazardous Liquid Annual Report.

**OMB Control Number:** 2137-0614.  
**Current Expiration Date:** April 30, 2014.

**Abstract:** Owners and operators of hazardous liquid pipelines are required to provide PHMSA with safety related documentation relative to the annual operation of their pipeline. The provided information is used compile a national pipeline inventory, identify safety problems, and target inspections. As a result of this NPRM, approximately 5 gravity line operators and 23 gathering line operators will be required to submit annual reports to PHMSA. This information collection is being revised to account for the additional burden that will be incurred. Operators currently submitting annual reports will not be otherwise impacted by this rule.

**Affected Public:** Owners and operators of Hazardous Liquid Pipelines.

**Annual Reporting and Recordkeeping Burden:**

Total Annual Responses: 475.  
Total Annual Burden Hours: 8,567.  
Frequency of Collection: Annually.

5. **Title:** Pipeline Safety: Notification Requirements for Hazardous Liquid Operators.

**OMB Control Number:** New OMB Control No.

**Current Expiration Date:** TBD.

**Abstract:** Owners and operators of non-High Consequence Area hazardous liquid pipelines will be required to provide PHMSA with notifications when unable to assess their pipeline via an in-line inspection.

**Affected Public:** Owners and operators of Hazardous Liquid Pipelines.

**Annual Reporting and Recordkeeping Burden:**

Total Annual Responses: 10.  
Total Annual Burden Hours: 10.  
Frequency of Collection: On occasion.

Requests for copies of these information collections should be directed to Angela Dow or Cameron Satterthwaite, Office of Pipeline Safety (PHP-30), Pipeline Hazardous Materials Safety Administration (PHMSA), 2nd Floor, 1200 New Jersey Avenue SE., Washington, DC 20590-0001, Telephone (202) 366-4595.

**G. Privacy Act Statement**

Anyone is able to search the electronic form of all comments received into any of our dockets by the name of the individual submitting the comment (or signing the comment, if submitted on behalf of an association, business, labor union, etc.). You may review DOT's complete Privacy Act Statement in the **Federal Register** published on April 11, 2000 (65 FR 19477), or at <http://www.regulations.gov>.

**H. Regulation Identifier Number (RIN)**

A regulation identifier number (RIN) is assigned to each regulatory action listed in the Unified Agenda of Federal Regulations. The Regulatory Information Service Center publishes the Unified Agenda in April and October of each year. The RIN contained in the heading of this document may be used to cross-reference this action with the Unified Agenda.

**List of Subjects in 49 CFR Part 195**

Incorporation by reference, Integrity management, Pipeline safety.

In consideration of the foregoing, PHMSA proposes to amend 49 CFR part 195 as follows:

**PART 195—TRANSPORTATION OF HAZARDOUS LIQUIDS BY PIPELINE**

■ 1. The authority citation for part 195 is revised to read as follows:

**Authority:** 49 U.S.C. 5103, 60101, 60102, 60104, 60108, 60109, 60116, 60118, 60131, 60131, 60137, and 49 CFR 1.97.

■ 2. In § 195.1, paragraph (a)(5) is added, paragraph (b)(2) is removed, and paragraphs (b)(3) through (10) are re-designated as (b)(2) through (9).

The addition reads as follows:

**§ 195.1 Which pipelines are covered by this part?**

(a) \* \* \*

(5) For purposes of the reporting requirements in subpart B of this part, any gathering line not already covered

under paragraphs (a)(1), (2), (3) or (4) of this section.

\* \* \* \* \*

■ 3. In section 195.2, the definition for “*Hazardous liquid*” is revised and a definition of “*Significant stress corrosion cracking*” is added in alphabetical order to read as follows:

**§ 195.2 Definitions.**

\* \* \* \* \*

*Hazardous liquid* means petroleum, petroleum products, anhydrous ammonia or non-petroleum fuel, including biofuel that is flammable, toxic, or corrosive or would be harmful to the environment if released in significant quantities.

\* \* \* \* \*

*Significant stress corrosion cracking* means a stress corrosion cracking (SCC) cluster in which the deepest crack, in a series of interacting cracks, is greater than 10% of the wall thickness and the total interacting length of the cracks is equal to or greater than 75% of the critical length of a 50% through-wall flaw that would fail at a stress level of 110% of SMYS.

\* \* \* \* \*

■ 4. In section 195.11, add paragraphs (b)(12) and (13) to read as follows:

**§ 195.11 What is a regulated rural gathering line and what requirements apply?**

\* \* \* \* \*

(b) \* \* \*  
(12) Perform pipeline assessments and remediation as required under §§ 195.416 and 195.422.

(13) Establish a leak detection system in compliance with §§ 195.134 and 195.444.

\* \* \* \* \*

■ 5. Section 195.13 is added to subpart A to read as follows:

**§ 195.13 What reporting requirements apply to pipelines transporting hazardous liquids by gravity?**

(a) *Scope.* This section applies to pipelines transporting hazardous liquids by gravity as of [effective date of the final rule].

(b) *Annual, accident and safety related reporting.* Comply with the reporting requirements in subpart B of this part by [date 6 months after effective date of the final rule].

■ 6. Section 195.120 is revised to read as follows:

**§ 195.120 Passage of internal inspection devices.**

(a) *General.* Except as provided in paragraphs (b) and (c) of this section, each new pipeline and each main line section of a pipeline where the line

pipe, valve, fitting or other line component is replaced must be designed and constructed to accommodate the passage of instrumented internal inspection devices.

(b) *Exceptions.* This section does not apply to:

- (1) Manifolds;
- (2) Station piping such as at pump stations, meter stations, or pressure reducing stations;
- (3) Piping associated with tank farms and other storage facilities;
- (4) Cross-overs;
- (5) Pipe for which an instrumented internal inspection device is not commercially available; and

(6) Offshore pipelines, other than main lines 10 inches (254 millimeters) or greater in nominal diameter, that transport liquids to onshore facilities.

(c) *Impracticability.* An operator may file a petition under § 190.9 for a finding that the requirements in paragraph (a) should not be applied to a pipeline for reasons of impracticability.

(d) *Emergencies.* An operator need not comply with paragraph (a) of this section in constructing a new or replacement segment of a pipeline in an emergency. Within 30 days after discovering the emergency, the operator must file a petition under § 190.9 for a finding that requiring the design and construction of the new or replacement pipeline segment to accommodate passage of instrumented internal inspection devices would be impracticable as a result of the emergency. If the petition is denied, within 1 year after the date of the notice of the denial, the operator must modify the new or replacement pipeline segment to allow passage of instrumented internal inspection devices.

■ 7. Section 195.134 is revised to read as follow:

**§ 195.134 Leak detection.**

(a) *Scope.* This section applies to each hazardous liquid pipeline transporting liquid in single phase (without gas in the liquid).

(b) *General.* Each pipeline must have a system for detecting leaks that complies with the requirements in § 195.444.

(c) *CPM leak detection systems.* A new computational pipeline monitoring (CPM) leak detection system or replaced component of an existing CPM system must be designed in accordance with the requirements in section 4.2 of API RP 1130 (incorporated by reference, see § 195.3) and any other applicable design criteria in that standard.

■ 8. In § 195.401, the introductory text of paragraph (b) and paragraph (b)(1) are

revised and paragraph (b)(3) is added to read as follows.

**§ 195.401 General requirements.**

\* \* \* \* \*

(b) An operator must make repairs on its pipeline system according to the following requirements:

(1) *Non integrity management repairs.* Whenever an operator discovers any condition that could adversely affect the safe operation of a pipeline not covered under § 195.452, it must correct the condition as prescribed in § 195.422. However, if the condition is of such a nature that it presents an immediate hazard to persons or property, the operator may not operate the affected part of the system until it has corrected the unsafe condition.

\* \* \* \* \*

(3) *Prioritizing repairs.* An operator must consider the risk to people, property, and the environment in prioritizing the correction of any conditions referenced in paragraphs (b)(1) and (2) of this section.

\* \* \* \* \*

■ 9. Section 195.414 is added to read as follows:

**§ 195.414 Inspections of pipelines in areas affected by extreme weather, a natural disaster, and other similar events.**

(a) *General.* Following an extreme weather event such as a hurricane or flood, an earthquake, a natural disaster, or other similar event, an operator must inspect all potentially affected pipeline facilities to ensure that no conditions exist that could adversely affect the safe operation of that pipeline.

(b) *Inspection method.* An operator must consider the nature of the event and the physical characteristics, operating conditions, location, and prior history of the affected pipeline in determining the appropriate method for performing the inspection required under paragraph (a) of this section.

(c) *Time period.* The inspection required under paragraph (a) of this section must occur within 72 hours after the cessation of the event, or as soon as the affected area can be safely accessed by the personnel and equipment required to perform the inspection as determined under paragraph (b) of this section.

(d) *Remedial action.* An operator must take appropriate remedial action to ensure the safe operation of a pipeline based on the information obtained as a result of performing the inspection required under paragraph (a) of this section. Such actions might include, but are not limited to:

(1) Reducing the operating pressure or shutting down the pipeline;

(2) Modifying, repairing, or replacing any damaged pipeline facilities;

(3) Preventing, mitigating, or eliminating any unsafe conditions in the pipeline right-of-way;

(4) Performing additional patrols, surveys, tests, or inspections;

(5) Implementing emergency response activities with Federal, State, or local personnel; and

(6) Notifying affected communities of the steps that can be taken to ensure public safety.

■ 10. Section 195.416 is added to read as follows:

**§ 195.416 Pipeline assessments.**

(a) *Scope.* This section applies to pipelines that are not subject to the integrity management requirements in § 195.452.

(b) *General.* An operator must perform an assessment of a pipeline at least once every 10 years, or as otherwise necessary to ensure public safety.

(c) *Method.* The assessment required under paragraph (b) of this section must be performed with an in-line inspection tool or tools capable of detecting corrosion and deformation anomalies, including dents, cracks, gouges, and grooves, unless an operator:

(i) Demonstrates that the pipeline is not capable of accommodating an inline inspection tool; and that the use of an alternative assessment method will provide a substantially equivalent understanding of the condition of the pipeline; and

(ii) Notifies the Office of Pipeline Safety (OPS) 90 days before conducting the assessment by:

(A) Sending the notification, along with the information required to demonstrate compliance with paragraph (c)(i) of this section, to the Information Resources Manager, Office of Pipeline Safety, Pipeline and Hazardous Materials Safety Administration, 1200 New Jersey Avenue SE., Washington, DC 20590; or

(B) Sending the notification, along with the information required to demonstrate compliance with paragraph (c)(i) of this section, to the Information Resources Manager by facsimile to (202) 366-7128.

(d) *Data analysis.* A person qualified by knowledge, training, and experience must analyze the data obtained from an assessment performed under paragraph (b) of this section to determine if a condition could adversely affect the safe operation of the pipeline. Uncertainties in any reported results (including tool tolerance) must be considered as part of that analysis.

(e) *Discovery of condition.* For purposes of § 195.422, discovery of a

condition occurs when an operator has adequate information to determine that a condition exists. An operator must promptly, but no later than 180 days after an assessment, obtain sufficient information about a condition and make the determination required under paragraph (d) of this section, unless 180 days is impracticable as determined by PHMSA.

(f) *Remediation.* An operator must comply with the requirements in § 195.422 if a condition that could adversely affect the safe operation of a pipeline is discovered in complying with paragraphs (d) and (e) of this section.

(g) *Consideration of information.* An operator must consider all relevant information about a pipeline in complying with the requirements in paragraphs (a) through (f) of this section.

■ 11. Section 195.422 is revised to read as follows:

**§ 195.422 Pipeline remediation.**

(a) *Scope.* This section applies to pipelines that are not subject to the integrity management requirements in § 195.452.

(b) *General.* Each operator must, in repairing its pipeline systems, ensure that the repairs are made in a safe manner and are made so as to prevent damage to persons, property, or the environment.

(c) *Replacement.* An operator may not use any pipe, valve, or fitting, for replacement in repairing pipeline facilities, unless it is designed and constructed as required by this part.

(d) *Remediation schedule.* An operator must complete the remediation of a condition according to the following schedule:

(1) *Immediate repair conditions.* An operator must repair the following conditions immediately upon discovery:

(i) Metal loss greater than 80% of nominal wall regardless of dimensions.

(ii) A calculation of the remaining strength of the pipe shows a burst pressure less than 1.1 times the maximum operating pressure at the location of the anomaly. Suitable remaining strength calculation methods include, but are not limited to, ASME/ANSI B31G (“Manual for Determining the Remaining Strength of Corroded Pipelines” (1991) or AGA Pipeline Research Committee Project PR-3-805 (“A Modified Criterion for Evaluating the Remaining Strength of Corroded Pipe” (December 1989)) (incorporated by reference, see § 195.3).

(iii) A dent located anywhere on the pipeline that has any indication of metal loss, cracking or a stress riser.

(iv) A dent located on the top of the pipeline (above the 4 and 8 o'clock positions) with a depth greater than 6% of the nominal pipe diameter.

(v) An anomaly that in the judgment of the person designated by the operator to evaluate the assessment results requires immediate action.

(vi) Any indication of significant stress corrosion cracking (SCC).

(vii) Any indication of selective seam weld corrosion (SSWC).

(2) Until the remediation of a condition specified in paragraph (d)(1) of this section is complete, an operator must:

(i) Reduce the operating pressure of the affected pipeline using the formula specified in paragraph 195.422(d)(3)(iv) or;

(ii) Shutdown the affected pipeline.

(3) *18-month repair conditions.* An operator must repair the following conditions within 18 months of discovery:

(i) A dent with a depth greater than 2% of the pipeline's diameter (0.250 inches in depth for a pipeline diameter less than NPS 12) that affects pipe curvature at a girth weld or a longitudinal seam weld.

(ii) A dent located on the top of the pipeline (above 4 and 8 o'clock position) with a depth greater than 2% of the pipeline's diameter (0.250 inches in depth for a pipeline diameter less than NPS 12).

(iii) A dent located on the bottom of the pipeline with a depth greater than 6% of the pipeline's diameter.

(iv) A calculation of the remaining strength of the pipe at the anomaly shows a safe operating pressure that is less than the MOP at that location. Provided the safe operating pressure includes the internal design safety factors in § 195.106 in calculating the pipe anomaly safe operating pressure, suitable remaining strength calculation methods include, but are not limited to, ASME/ANSI B31G (“Manual for Determining the Remaining Strength of Corroded Pipelines” (1991) or AGA Pipeline Research Committee Project PR-3-805 (“A Modified Criterion for Evaluating the Remaining Strength of Corroded Pipe” (December 1989)) (incorporated by reference, see § 195.3).

(v) An area of general corrosion with a predicted metal loss greater than 50% of nominal wall.

(vi) Predicted metal loss greater than 50% of nominal wall that is located at a crossing of another pipeline, or is in an area with widespread circumferential corrosion, or is in an area that could affect a girth weld.

(vii) A potential crack indication that when excavated is determined to be a crack.

(viii) Corrosion of or along a seam weld.

(ix) A gouge or groove greater than 12.5% of nominal wall.

(e) *Other conditions.* Unless another timeframe is specified in paragraph (d) of this section, an operator must take appropriate remedial action to correct any condition that could adversely affect the safe operation of a pipeline system within a reasonable time.

■ 12. Section 195.444 is revised to read as follows:

**§ 195.444 Leak detection.**

(a) *Scope.* This section applies to each hazardous liquid pipeline transporting liquid in single phase (without gas in the liquid).

(b) *General.* A pipeline must have a system for detecting leaks. An operator must evaluate and modify, as necessary, the capability of its leak detection system to protect the public, property, and the environment. An operator's evaluation must, at least, consider the following factors—length and size of the pipeline, type of product carried, the swiftness of leak detection, location of nearest response personnel, and leak history.

(c) *CPM leak detection systems.* Each computational pipeline monitoring (CPM) leak detection system installed on a hazardous liquid pipeline must comply with API RP 1130 (incorporated by reference, see § 195.3) in operating, maintaining, testing, record keeping, and dispatcher training of the system.

■ 13. In § 195.452:

■ a. Revise paragraphs (a), (b)(1), introductory text of paragraph (c)(1)(i), (c)(1)(i)(A), (d), (e)(1)(vii), (g), introductory text of (h)(1), (h)(2), and (h)(4);

■ b. Revise paragraph (i)(2)(viii) by removing the period at the end of the last sentence and adding in its place a “;” and add paragraph (i)(2)(ix);

■ c. Revise paragraphs (j)(1) and (2);

■ d. Add paragraph (n).

The revisions and additions read as follows:

**§ 195.452 Pipeline integrity management in high consequence areas.**

(a) *Which pipelines are covered by this section?* This section applies to each hazardous liquid pipeline and carbon dioxide pipeline that could affect a high consequence area, including any pipeline located in a high consequence area, unless the operator demonstrates that a worst case discharge from the pipeline could not affect the area. (Appendix C of this part provides

guidance on determining if a pipeline could affect a high consequence area.) Covered pipelines are categorized as follows:

(1) Category 1 includes pipelines existing on May 29, 2001, that were owned or operated by an operator who owned or operated a total of 500 or more miles of pipeline subject to this part.

(2) Category 2 includes pipelines existing on May 29, 2001, that were owned or operated by an operator who owned or operated less than 500 miles of pipeline subject to this part.

(3) Category 3 includes pipelines constructed or converted after May 29, 2001, low-stress pipelines in rural areas under § 195.12.

(b) \* \* \*

(1) Develop a written integrity management program that addresses the risks on each segment of pipeline in the first column of the following table not later than the date in the second column:

Pipeline	Date
Category 1	March 31, 2002.
Category 2	February 18, 2003.
Category 3	Date the pipeline begins operation or as provided in § 195.12.

\* \* \* \* \*

(c) \* \* \*

(1) \* \* \*

(i) The methods selected to assess the integrity of the line pipe. An operator must assess the integrity of the line pipe by In Line Inspection tool unless it is impracticable, then use methods (B), (C) or (D) of this paragraph. The methods an operator selects to assess low frequency electric resistance welded pipe, or lap welded pipe, or pipe with a seam factor less than 1.0 as defined in § 195.106(e) or lap welded pipe susceptible to longitudinal seam failure must be capable of assessing seam integrity and of detecting corrosion and deformation anomalies.

(A) Internal inspection tool or tools capable of detecting corrosion, and deformation anomalies including dents, cracks (pipe body and weld seams), gouges and grooves. An operator using this method must explicitly consider uncertainties in reported results (including tool tolerance, anomaly findings, and unity chart plots or equivalent for determining uncertainties) in identifying anomalies;

\* \* \* \* \*

(d) *When must operators complete baseline assessments?*

(1) *All pipelines.* An operator must complete the baseline assessment before the pipeline begins operation.

(2) *Newly-identified areas.* If an operator obtains information (whether from the information analysis required under paragraph (g) of this section, Census Bureau maps, or any other source) demonstrating that the area around a pipeline segment has changed to meet the definition of a high consequence area (*see* § 195.450), that area must be incorporated into the operator's baseline assessment plan within one year from the date that the information is obtained. An operator must complete the baseline assessment of any pipeline segment that could affect a newly-identified high consequence area within five years from the date the area is identified.

\* \* \* \* \*

(e) \* \* \*

(1) \* \* \*

(vii) Local environmental factors that could affect the pipeline (*e.g.*, seismicity, corrosivity of soil, subsidence, climatic);

\* \* \* \* \*

(g) *What is an information analysis?*

In periodically evaluating the integrity of each pipeline segment (*see* paragraph (j) of this section), an operator must analyze all available information about the integrity of its entire pipeline and the consequences of a possible failure along the pipeline. This analysis must:

- (1) Integrate information and attributes about the pipeline which include, but are not limited to:
  - (i) Pipe diameter, wall thickness, grade, and seam type;
  - (ii) Pipe coating including girth weld coating;
  - (iii) Maximum operating pressure (MOP);
  - (iv) Endpoints of segments that could affect high consequence areas (HCAs);
  - (v) Hydrostatic test pressure including any test failures—if known;
  - (vi) Location of casings and if shorted;
  - (vii) Any in-service ruptures or leaks—including identified causes;
  - (viii) Data gathered through integrity assessments required under this section;
  - (ix) Close interval survey (CIS) survey results;
  - (x) Depth of cover surveys;
  - (xi) Corrosion protection (CP) rectifier readings;
  - (xii) CP test point survey readings and locations;
  - (xiii) AC/DC and foreign structure interference surveys;
  - (xiv) Pipe coating surveys and cathodic protection surveys.
  - (xv) Results of examinations of exposed portions of buried pipelines (*i.e.*, pipe and pipe coating condition, *see* § 195.569);
  - (xvi) Stress corrosion cracking (SCC) and other cracking (pipe body or weld)

excavations and findings, including in-situ non-destructive examinations and analysis results for failure stress pressures and cyclic fatigue crack growth analysis to estimate the remaining life of the pipeline;

- (xvii) Aerial photography;
- (xviii) Location of foreign line crossings;
- (xix) Pipe exposures resulting from encroachments;
- (xx) Seismicity of the area; and
- (xxi) Other pertinent information derived from operations and maintenance activities and any additional tests, inspections, surveys, patrols, or monitoring required under this part.

(2) Consider information critical to determining the potential for, and preventing, damage due to excavation, including current and planned damage prevention activities, and development or planned development along the pipeline;

(3) Consider how a potential failure would affect high consequence areas, such as location of a water intake.

(4) Identify spatial relationships among anomalous information (*e.g.*, corrosion coincident with foreign line crossings; evidence of pipeline damage where aerial photography shows evidence of encroachment). Storing the information in a geographic information system (GIS), alone, is not sufficient. An operator must analyze for interrelationships among the data.

(h) \* \* \*

(1) *General requirements.* An operator must take prompt action to address all anomalous conditions in the pipeline that the operator discovers through the integrity assessment or information analysis. In addressing all conditions, an operator must evaluate all anomalous conditions and remediate those that could reduce a pipeline's integrity. An operator must be able to demonstrate that the remediation of the condition will ensure that the condition is unlikely to pose a threat to the long-term integrity of the pipeline. An operator must comply with all other applicable requirements in this part in remediating a condition.

\* \* \* \* \*

(2) *Discovery of condition.* Discovery of a condition occurs when an operator has adequate information to determine that a condition exists. An operator must promptly, but no later than 180 days after an assessment, obtain sufficient information about a condition and make the determination required, unless the operator can demonstrate that that 180-day is impracticable. If 180-days is impracticable to make a

determination about a condition found during an assessment, the pipeline operator must notify PHMSA and provide an expected date when adequate information will become available.

\* \* \* \* \*

(4) *Special requirements for scheduling remediation*—(i) *Immediate repair conditions*. An operator’s evaluation and remediation schedule must provide for immediate repair conditions. To maintain safety, an operator must temporarily reduce the operating pressure or shut down the pipeline until the operator completes the repair of these conditions. An operator must calculate the temporary reduction in operating pressure using the formulas in paragraph (h)(4)(i)(B) of this section, if applicable, or when the formulas in paragraph (h)(4)(i)(B) of this section are not applicable by using a pressure reduction determination in accordance with § 195.106 and the appropriate remaining pipe wall thickness, or if all of these are unknown a minimum 20 percent or greater operating pressure reduction must be implemented until the anomaly is repaired. If the formula is not applicable to the type of anomaly or would produce a higher operating pressure, an operator must use an alternative acceptable method to calculate a reduced operating pressure. An operator must treat the following conditions as immediate repair conditions:

- (A) Metal loss greater than 80% of nominal wall regardless of dimensions.
- (B) A calculation of the remaining strength of the pipe shows a predicted burst pressure less than 1.1 times the maximum operating pressure at the location of the anomaly. Suitable remaining strength calculation methods include, but are not limited to, ASME/ANSI B31G (“Manual for Determining the Remaining Strength of Corroded Pipelines” (1991) or AGA Pipeline Research Committee Project PR–3–805 (“A Modified Criterion for Evaluating the Remaining Strength of Corroded Pipe” (December 1989)) (incorporated by reference, see § 195.3).
- (C) A dent located anywhere on the pipeline that has any indication of metal loss, cracking or a stress riser.
- (D) A dent located on the top of the pipeline (above the 4 and 8 o’clock positions) with a depth greater than 6% of the nominal pipe diameter.
- (E) Any indication of significant stress corrosion cracking (SCC).
- (F) Any indication of selective seam weld corrosion (SSWC)
- (G) An anomaly that in the judgment of the person designated by the operator

to evaluate the assessment results requires immediate action.

(ii) *270-day conditions*. Except for conditions listed in paragraph (h)(4)(i) of this section, an operator must schedule evaluation and remediation of the following within 270 days of discovery of the condition:

- (A) A dent with a depth greater than 2% of the pipeline’s diameter (0.250 inches in depth for a pipeline diameter less than NPS 12) that affects pipe curvature at a girth weld or a longitudinal seam weld.
- (B) A dent located on the top of the pipeline (above 4 and 8 o’clock position) with a depth greater than 2% of the pipeline’s diameter (0.250 inches in depth for a pipeline diameter less than NPS 12).
- (C) A dent located on the bottom of the pipeline with a depth greater than 6% of the pipeline’s diameter.
- (D) A calculation of the remaining strength of the pipe at the anomaly shows a safe operating pressure that is less than MOP at that location. Provided the safe operating pressure includes the internal design safety factors in § 195.106 in calculating the pipe anomaly safe operating pressure, suitable remaining strength calculation methods include, but are not limited to, ASME/ANSI B31G (“Manual for Determining the Remaining Strength of Corroded Pipelines” (1991) or AGA Pipeline Research Committee Project PR–3–805 (“A Modified Criterion for Evaluating the Remaining Strength of Corroded Pipe” (December 1989)) (incorporated by reference, see § 195.3).
- (E) An area of general corrosion with a predicted metal loss greater than 50% of nominal wall.
- (F) Predicted metal loss greater than 50% of nominal wall that is located at a crossing of another pipeline, or is in an area with widespread circumferential corrosion, or is in an area that could affect a girth weld.
- (G) A potential crack indication that when excavated is determined to be a crack.
- (H) Corrosion of or along a longitudinal seam weld.
- (I) A gouge or groove greater than 12.5% of nominal wall.
- (iii) *Other Conditions*. In addition to the conditions listed in paragraphs (h)(4)(i) and (ii) of this section, an operator must evaluate any condition identified by an integrity assessment or information analysis that could impair the integrity of the pipeline, and as appropriate, schedule the condition for remediation. Appendix C of this part contains guidance concerning other conditions that an operator should evaluate.

- (j) \* \* \*
- (2) \* \* \*
- (ix) Seismicity of the area.

\* \* \* \* \*

(j) \* \* \* (1) *General*. After completing the baseline integrity assessment, an operator must continue to assess the line pipe at specified intervals and periodically evaluate the integrity of each pipeline segment that could affect a high consequence area.

(2) *Verifying covered segments*. An operator must verify the risk factors used in identifying pipeline segments that could affect a high consequence area on at least an annual basis not to exceed 15-months (Appendix C provides additional guidance on factors that can influence whether a pipeline segment could affect a high consequence area). If a change in circumstance indicates that the prior consideration of a risk factor is no longer valid or that new risk factors should be considered, an operator must perform a new integrity analysis and evaluation to establish the endpoints of any previously-identified covered segments. The integrity analysis and evaluation must include consideration of the results of any baseline and periodic integrity assessments (see paragraphs (b), (c), (d), and (e) of this section), information analyses (see paragraph (g) of this section), and decisions about remediation and preventive and mitigative actions (see paragraphs (h) and (i) of this section). An operator must complete the first annual verification under this paragraph no later than [date one year after effective date of the final rule].

\* \* \* \* \*

(n) *Accommodation of internal inspection devices*—(1) *Scope*. This paragraph does not apply to any pipeline facilities listed in § 195.120(b).

(2) *General*. An operator must ensure that each pipeline is modified to accommodate the passage of an instrumented internal inspection device by [date 20 years from effective date of the final rule].

(3) *Newly-identified areas*. If a pipeline could affect a newly-identified high consequence area (see paragraph (d)(3) of this section) after [date 20 years from effective date of the final rule], an operator must modify the pipeline to accommodate the passage of an instrumented internal inspection device within five years of the date of identification or before performing the baseline assessment, whichever is sooner.

(4) *Lack of accommodation*. An operator may file a petition under § 190.9 of this chapter for a finding that

the basic construction (*i.e.* length, diameter, operating pressure, or location) of a pipeline cannot be modified to accommodate the passage of an internal inspection device.

(5) *Emergencies.* An operator may file a petition under § 190.9 of this chapter for a finding that a pipeline cannot be modified to accommodate the passage of

an instrumented internal inspection device as a result of an emergency. Such a petition must be filed within 30 days after discovering the emergency. If the petition is denied, the operator must modify the pipeline to allow the passage of an instrumented internal inspection device within one year after the date of the notice of the denial.

Issued in Washington, DC on October 1, 2015, under authority delegated in 49 CFR Part 1.97(a).

**Linda Daugherty,**

*Deputy Associate Administrator for Field Operations.*

[FR Doc. 2015-25359 Filed 10-9-15; 8:45 am]

**BILLING CODE 4910-60-P**



Energize Eastside EIS &lt;info@energizeeastsideeis.org&gt;

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**Energize Eastside re-open phase 2 scoping**

1 message

**Caroline Keene** <caroline.keene@outlook.com>

Tue, Jul 26, 2016 at 2:13 PM

To: "info@EnergizeEastsideEIS.org" &lt;info@energizeeastsideeis.org&gt;

To the committee,

I am very worried to see once again a committee of experts being forced to look at alternative proposals based on pressure from influential neighborhoods.

Woodridge is a small neighborhood and similar to the issue that happened with the Bellevue School District we are constantly being "bullied"... The initial plan of using the existing corridor and having a straight line seems to be the most logical. Around lake hills connector there is Kelsey Creek running and I suspect having some work and then the actual line may cause some environmental issues.

Thanks for taking the time to read my input as a Woodridge resident and I trust you will remain in line with your initial recommendation.

Caroline Keene  
12526 SE 15th Street  
98005 Bellevue  
[425-898-3338](tel:425-898-3338) 



Energize Eastside EIS &lt;info@energizeeastsideeis.org&gt;

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**"Energize Eastside"**

1 message

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**Carrie K** <ccarrieake@gmail.com>  
To: info@energizeeastsideeis.org

Sun, Jul 10, 2016 at 9:11 AM

I'd like to express my dismay that *any* route is being considered for this dangerous, over-sized and overly-expensive project when there is a safe, green and cost-effective alternative. No neighborhoods should be industrialized to increase profits for PSE's foreign owners. PSE freely admits that its bypass routes were designed to go around a jurisdiction which challenged a different PSE transmission project. I'd like to emphasize:

- PSE discounts the danger of constructing huge towers with high-voltage cables over aging, high-pressure pipelines that carry millions of gallons of jet fuel and gasoline each day. Safety experts warn there is a significant risk of a catastrophic fire caused by a construction mishap or accelerated corrosion in the pipelines.
- 
- CENSE advocates a scalable plan developed by industry experts that uses modern technology, already at work in other cities, to power Eastside growth while reducing per capita electricity demand and greenhouse gas emissions.
- The CENSE Plan saves 8,000 mature trees that PSE would cut down or limb to clear the route for its transmission lines. PSE's plan would degrade the livability of 29 neighborhoods, a key to attracting businesses and residents to the Eastside.
- 
- 
- Thank you for your time.
- 
- Sincerely,
- 
- Carolyn Keyes

**From:** [Liv Benson](#)  
**To:** [Liv Benson](#)  
**Subject:** "Energize Eastside"  
**Date:** Monday, July 25, 2016 2:25:30 PM

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**From:** Carrie K [mailto:[ccarrieake@gmail.com](mailto:ccarrieake@gmail.com)]  
**Sent:** Sunday, July 10, 2016 09:27  
**To:** Council <[Council@bellevuewa.gov](mailto:Council@bellevuewa.gov)>  
**Subject:** "Energize Eastside"

Hello,

It is my understanding that it is your job to make sure Bellevue is grown responsibly and to make sure things are done in the best interest of our community not in the best interest of a company. I'm in favor of progress that is thought through and done with consideration for environment, the public and property. I have deep reservations about the "Energize Eastside" with the information I've been given. The priority should be for the public and not for profit.

I'd like to express my dismay that *any* route is being considered for this dangerous, over-sized and overly-expensive project when there is a safe, green and cost-effective alternative. No neighborhoods should be industrialized to increase profits for PSE's foreign owners. PSE freely admits that its bypass routes were designed to go around a jurisdiction which challenged a different PSE transmission project. I'd like to emphasize:

- PSE discounts the danger of constructing huge towers with high-voltage cables over aging, high-pressure pipelines that carry millions of gallons of jet fuel and gasoline each day. Safety experts warn there is a significant risk of a catastrophic fire caused by a construction mishap or accelerated corrosion in the pipelines.
- 
- CENSE advocates a scalable plan developed by industry experts that uses modern technology, already at work in other cities, to power Eastside growth while reducing per capita electricity demand and greenhouse gas emissions.
- The CENSE Plan saves 8,000 mature trees that PSE would cut down or limb to clear the route for its transmission lines. PSE's plan would degrade the livability of 29 neighborhoods, a key to attracting businesses and residents to the Eastside.
- 
- 
- Thank you for your time.
- 
- Sincerely,
- 
- Carolyn Keyes



Energize Eastside EIS &lt;info@energizeeastsideeis.org&gt;

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## Opposition to Alternative Bypass Routes 1 & 2

1 message

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**CAROLYN A MAXIM** <CAMAXIM@msn.com>

Tue, Jul 26, 2016 at 2:16 PM

To: "info@EnergizeEastsideEIS.org" &lt;info@energizeeastsideeis.org&gt;

I oppose the alternative bypass routes PSE has proposed. (I offer no mitigations to these routes because these are the wrong ones.)

The alternative bypass routes are much longer than the preferred Willow route and so will cost more; and because they involve preparing new areas from scratch for the power lines, that cost will rise like a rocket. Rate payers will not like this.

The bypass routes would mean the western Wilburton neighborhood would be encircled by high tension poles, because City Light's high tension towers travel N-S beside 124th Avenue.

Residents looking east from the central business district, west from Wilburton and southwest and south from the Spring District, as well as drivers on I 405 would find high tension poles visually undesirable.

Construction on 120th Avenue would compete with, and slow or be slowed by, the completion of the extension of NE 6th St. to 120th and further slow traffic on already troublesome NE 8th Street, soon to be again slowed by the building of a Midlakes light rail station near NE 8th and 119th Avenue NE.

The City of Bellevue has plans to improve the area adjoining or directly overlooking this route -- the Grand Connection just east of I-405 and the viewing platform at the western edge of the Bellevue Botanical Garden are two of these -- and high tension poles are unsightly.

PSE states that it prefers a different route from these alternatives and offers them only to "reduce risk of delays". That risk does not justify these negative outcomes. It should stick with its preferred route.

Carolyn Maxim

12405 NE Second Street

# Bellevue WA 98005

**From:** [Liv Benson](#)  
**To:** [Liv Benson](#)  
**Subject:** PSE's bypass routes  
**Date:** Friday, July 29, 2016 10:25:19 AM

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**From:** CAROLYN A MAXIM [mailto:[CAMAXIM@msn.com](mailto:CAMAXIM@msn.com)]  
**Sent:** Thursday, July 28, 2016 09:47  
**To:** Council <[Council@bellevuewa.gov](mailto:Council@bellevuewa.gov)>  
**Subject:** PSE's bypass routes

Members of City Council,

I oppose the alternative bypass routes PSE has proposed "to reduce permitting risk".

- They would be longer and costlier than PSE's preferred Willow route.
- They would mean encircling western Wilburton with high tension poles, since City Light's towers border 124th Avenue, N.E.
- Residents east of 108th Street, in western Wilburton and in the Spring District, and travelers on I-405 would have unsightly views of the poles, whose exact height PSE discouragingly will not yet disclose.
- The poles wouldn't enhance the views from the planned viewing area at the Botanical Garden or the pedestrian area planned for the Grand Connection, either.
- Construction work along 120th Avenue NE along either bypass PSE proposes would interfere with traffic on already troublesome NE 8th Street, in an area now accommodating the new NE 4th extension, and to absorb the new NE 6th extension, Midlakes light rail station, and development of the Wilburton commercial area.

Enough is enough. Those towers should run along a different route, presumably the one the agency itself originally named as preferred.

Residents count on their city council members to act in Bellevue's interest, including its livability. Please use your influence to protect the city from unnecessary aesthetic, transportation-related, and costly

damage.

Carolyn Maxim

12405 NE Second Street

Bellevue



Energize Eastside EIS <info@energizeeastsideeis.org>

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## PSE's Latest Proposal: "Energize Eastside" transmission lines

1 message

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**CHRIS ALFONSO** <siscris23@gmail.com>

Thu, Jul 14, 2016 at 7:43 AM

To: info@energizeeastsideeis.org

Cc: council@bellevuewa.gov

Please don't do it.



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## **Fwd: CAISO is now accepting power from Distributed Energy Resources including Plug-in electric vehicles**

1 message

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**Christina Aron-Sycz** <aronsycz@gmail.com>  
To: info@energizeeastsideeis.org

Mon, Aug 1, 2016 at 11:08 AM

To Whom It May Concern,

In the body of this email and in the attached document are comments and pertinent information for submission to this phase of the EIS process. While these comments are submitted by myself, Christina Aron-Sycz of 13725 NE 34th Place, Bellevue, WA, 98005, they represent the views and opinions of Cense, the Coalition of Eastside Neighborhoods for Sensible Energy.

Attached please find FERC Order dated June 2, 2016 in which California ISO (CAISO) is seeking more power input from Distributed Energy Resources including Plug-in Electric Vehicles, the technology of having plug-in electric vehicles inject power into the grid to assist during peak load situations.

By encouraging these resources to offer their power to the grid, CAISO is able to have local generation help meet peak loads which helps lower the need for system wide capacity and helps avoid the need to build new transmission to meet local loads. This is one example of many in-use, proven technologies that PSE needs to consider to meet their needs rather than simply using the 20th century approach of building a lot of massive transmission lines. Based on the contents of the attached document, FERC and the CAISO are clearly on board with these non-wired approaches.

Sincerely,

Christina Aron-Sycz on behalf of CENSE

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 **CAISO accepts power from Plug in electric vehicles.pdf**  
98K

155 FERC ¶ 61,229  
UNITED STATES OF AMERICA  
FEDERAL ENERGY REGULATORY COMMISSION

Before Commissioners: Norman C. Bay, Chairman;  
Cheryl A. LaFleur, Tony Clark,  
and Colette D. Honorable.

California Independent System  
Operator Corporation

Docket No. ER16-1085-000

ORDER ACCEPTING PROPOSED TARIFF REVISIONS SUBJECT TO CONDITION

(Issued June 2, 2016)

1. On March 4, 2016, pursuant to section 205 of the Federal Power Act (FPA),<sup>1</sup> the California Independent System Operator Corporation (CAISO) filed proposed revisions to its Open Access Transmission Tariff (tariff) to facilitate participation of aggregations of distribution-connected or distributed energy resources in CAISO's energy and ancillary services markets. In this order, we accept the filing subject to condition, as discussed below, to become effective June 3, 2016, as requested.

**I. Background**

2. CAISO proposes to clarify and revise the CAISO tariff to support the participation of distributed energy resources in the CAISO markets.<sup>2</sup> CAISO explains that the proposed tariff revisions establish an initial framework to enable resources connected to distribution systems within CAISO's balancing authority area to form aggregations of 0.5 MW or more and participate in its energy and ancillary services markets. In particular, CAISO's proposed revisions address five topics: (1) provisions that recognize a distributed energy resource provider (DER Provider) as a market participant; (2) provisions that recognize a distributed energy resource aggregation as a market resource; (3) rules governing participation of these resources in the CAISO markets; (4) distinctions between the requirements for scheduling coordinators representing

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<sup>1</sup> 16 U.S.C. § 824d (2012).

<sup>2</sup> CAISO March 4, 2016 Transmittal Letter at 1-2 (CAISO Transmittal).

demand response providers and the requirements for scheduling coordinators representing DER Providers; and (5) a new *pro forma* DER Provider Agreement.<sup>3</sup>

## II. CAISO Filing

### A. DER Provider as New Type of Market Participant

3. CAISO explains that a DER Provider is the owner or operator of a distributed energy resource aggregation for purposes of wholesale market participation.<sup>4</sup> CAISO proposes to define a distributed energy resource as any resource with a first point of interconnection to a utility distribution company or a metered subsystem.<sup>5</sup> CAISO states that this broad definition encompasses multiple types of resources within its balancing authority area interconnected to the distribution system, such as distributed generation, energy storage, and plug-in electric vehicle charging stations. CAISO states that these resources could be in front of or behind a customer meter.

4. CAISO notes that the proposed framework will accommodate market participation by aggregated distributed energy resources that are directly measured.<sup>6</sup> CAISO states that, like all other market participants, a DER Provider may only participate in the CAISO markets through a scheduling coordinator or by becoming a scheduling coordinator itself.

5. CAISO emphasizes that it does not propose to change the way distribution-connected resources already participate in the CAISO markets.<sup>7</sup> CAISO states that individual generating units located in the CAISO balancing authority area that are 1 MW or greater will still be required to become participating generators and will not be eligible to aggregate their capacity through a DER Provider. CAISO states that participating

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<sup>3</sup> *Id.* at 2, 4.

<sup>4</sup> *Id.* at 5.

<sup>5</sup> A metered subsystem is a geographically contiguous system located within a single CAISO zone which has been operating as an electric utility for a number of years prior to the CAISO Operations Date as a municipal utility, water district, irrigation district, state agency or federal power marketing authority subsumed within the CAISO balancing authority area and encompassed by CAISO certified revenue quality meters. *See* CAISO Tariff, Appendix A (Definitions)

<sup>6</sup> CAISO Transmittal at n.7.

<sup>7</sup> *Id.* at 6-7.

generators that are between 0.5 MW and 1 MW will also not be eligible to be part of a distributed energy resource aggregation, unless their owners/operators decide to terminate their participating generator agreements. Also, CAISO proposes to clarify that demand response resources that participate in CAISO's market as proxy demand response resources or reliability demand response resources may not participate in a distributed energy resource aggregation and will continue to operate as curtailable demand.

6. CAISO proposes that resources that are participating in retail programs, such as net metering with storage or virtual net metering, also cannot participate in a wholesale market aggregation. CAISO explains that, under California's current net energy metering program, a participating resource already receives benefits from netting its excess energy against subsequent electricity bills;<sup>8</sup> therefore, there is no energy available to offer into the CAISO markets because excess energy is banked for later withdrawal. CAISO also notes that its proposal is consistent with Commission orders determining that exports to the transmission grid under a net energy metering program do not constitute a sale for resale of electricity under the FPA because these customers are, on a net basis, consumers.<sup>9</sup>

7. However, CAISO proposes to permit non-net energy metering distributed energy resources to participate in an aggregation as a wholesale market participant. For all resources participating in a distributed energy resource aggregation, the utility distribution company or metered subsystem in which those resources reside will have thirty (30) days from when the prospective DER Provider submits information to CAISO identifying the aggregation to provide written comments regarding the accuracy of the information about distributed energy resources comprising a distributed energy resource aggregation(s) or to raise concerns regarding whether the distributed energy resources: (1) are participating in another distributed energy resource aggregation; (2) are participating as a proxy demand response resource or a reliability demand response resource; (3) are participating in a retail net energy metering program that does not expressly permit wholesale market participation; (4) do not comply with applicable utility distribution company tariffs or requirements of the relevant local regulatory authority; or (5) may pose a threat to the safe and reliable operation of the distribution system, if operated as part of a distributed energy resource aggregation. CAISO states that this

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<sup>8</sup> *Id.* at 7 (citing CPUC Decision 16-01-044 Decision Adopting Successor to Net Energy Metering Tariff at 12-16, describing overview of California's net energy metering program. <http://docs.cpuc.ca.gov/PublishedDocs/Published/G000/M158/K285/158285436.pdf>).

<sup>9</sup> *Id.* (citing *Sun Edison LLC*, 129 FERC ¶ 61,146 (2009) *reh'g granted*, 131 FERC ¶ 61,213 (2010); *MidAmerican Energy Co.*, 94 FERC ¶ 61,340 (2001)).

proposed measure ensures that a resource will not undermine the reliable operation of the distribution system.

### **B. Distributed Energy Resource Aggregation as a Market Resource**

8. CAISO states that it will treat the aggregation, rather than the individual distributed energy resources, as the market resource, and explains that this new resource will accommodate smaller distribution-connected generation and emerging resource types that may need a different model for wholesale market participation.<sup>10</sup>

9. To ensure accurate modeling of the congestion impacts of these market resources, CAISO proposes that: (1) aggregations may consist of distributed energy resources at one pricing node or may span multiple pricing nodes;<sup>11</sup> (2) each aggregation may be no smaller than 0.5 MW; and (3) each aggregation that includes distributed energy resources located at different pricing nodes may be no larger than 20 MW.

10. CAISO also proposes requiring each distributed energy resource aggregation to be located in a single sub-load aggregation point (sub-LAP) to ensure that it does not create additional congestion on the CAISO-controlled grid.<sup>12</sup> CAISO explains that, if an aggregation were allowed to have resources on both sides of a constraint identified by CAISO, a CAISO dispatch instruction to alleviate a constraint between these two sub-LAPs may actually exacerbate the problem. CAISO states that this same requirement is placed on demand response resource aggregations participating in the CAISO markets (i.e., proxy demand response resources and reliability demand response resources).

### **C. Rules Governing Participation in CAISO Markets**

11. CAISO notes that aggregations also may comprise different distributed energy resource types.<sup>13</sup> CAISO proposes that the scheduling coordinator will submit schedules

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<sup>10</sup> *Id.* at 8-9.

<sup>11</sup> *Id.* at 9. CAISO explains that a pricing node is a single network node or subset of network nodes where a physical injection or withdrawal is modeled and for which a locational marginal price is calculated and used for financial settlements. *Id.* at n.20.

<sup>12</sup> CAISO explains that a sub-LAP is a defined subset of pricing nodes within a default load aggregation point (default LAP). According to CAISO, sub-LAPs were initially developed with the advent of congestion revenue rights to reflect major transmission constraints within each utility service territory (i.e., within a default LAP). *Id.* at n.24.

<sup>13</sup> *Id.* at 12-13.

and bids for an aggregation across multiple nodes based on the aggregation's generation distribution factors. CAISO states that the market awards and dispatch instructions will then reflect these distribution factors and that the DER Provider must provide a net response at the pricing node level that is consistent with CAISO's dispatch instructions to capture the value that the aggregation provides at the transmission-distribution interface. For aggregations across multiple pricing nodes, CAISO proposes to settle the DER Provider's response based on a weighted locational marginal price (LMP) associated with each pricing node. For aggregations located at a single pricing node, CAISO proposes to use the LMP for that single node for settlement.

12. CAISO states that, if meter data reflects that a DER Provider did not accurately respond to its dispatch instructions, the DER Provider will face financial consequences in the form of uninstructed imbalance energy charges. CAISO notes that, under this initial proposal, CAISO will not have the ability to impose uninstructed imbalance energy charges at individual pricing nodes unless the aggregation is located behind a single pricing node. CAISO states that if an aggregation operating across multiple pricing nodes fully responds to its dispatch instruction but its response deviates from its generation distribution factors, the distributed energy resource provider would face no uninstructed imbalance energy charges because CAISO settles on meter data at the market resource level, not the pricing node level. CAISO explains that, in order to monitor that a resource's response aligns with its distribution factors, it plans to sample meter data from DER Providers. CAISO states that, based on that review, it may propose enhancements to this initial proposal.

13. CAISO proposes to apply existing metering rules to distributed energy resource aggregations.<sup>14</sup> CAISO notes that it currently does not directly poll the meters of scheduling coordinator metered entities, such as demand response resources operating in the CAISO markets. CAISO states that scheduling coordinators for those resources collect meter data and submit the validated data to CAISO pursuant to settlement timelines set forth in the CAISO tariff.

14. CAISO proposes requiring distributed energy resource aggregations to adhere to the same telemetry standards as other resources. Specifically, if a distributed energy resource aggregation has a rated capacity of 10 MW or greater or provides ancillary services, then it must provide real-time data through telemetry to CAISO's energy management system in a manner similar to a participating generator. In these cases, CAISO proposes to receive telemetry data at the aggregated market resource level (i.e., not from the individual distributed energy resources comprising the aggregation nor from the distinct pricing nodes at which a multiple pricing node aggregation contains individual resources). CAISO states that, as it gains experience with these aggregations,

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<sup>14</sup> *Id.* at 13, 16-17.

it may examine modifications to its telemetry requirements to reduce the size of resources at which these requirements apply or to impose requirements at the pricing node level for distributed energy resource aggregations.

15. In addition to complying with CAISO's tariff, operating procedures, business practice manuals and applicable reliability criteria, CAISO proposes that DER Providers must comply with applicable utility distribution company tariffs and operating procedures incorporated into those tariffs and applicable requirements of the local regulatory authority (such as the Public Utilities Commission of the State of California (CPUC) or relevant municipal entity).

16. CAISO also proposes to require the DER Provider to operate its aggregation in a manner consistent with the limitations or operating orders established by the utility distribution company or metered subsystem. CAISO explains that DER Providers will need to disaggregate dispatch instructions CAISO sends to scheduling coordinators in a manner that is consistent with distribution system limitations. CAISO states that, if a utility distribution company or metered subsystem removes facilities from service that affect the operation of an aggregation, the scheduling coordinator for the DER Provider must submit the relevant information to CAISO's outage management system.<sup>15</sup> CAISO points out that these responsibilities are similar to responsibilities the existing CAISO tariff imposes on other market participants, such as participating generators and demand response providers.

**D. Requirements for Scheduling Coordinators Representing Demand Response Providers and DER Providers**

17. CAISO explains that demand response providers need to submit settlement quality meter data for the settlement interval in which they responded to a CAISO dispatch instruction, while for distributed energy resource aggregations, CAISO proposes to require settlement quality meter data in every operating interval (i.e., 24 hours per day, seven days per week).<sup>16</sup> CAISO states that its proposed revisions reflect existing rules and distinguish between requirements for the two types of scheduling coordinators. CAISO explains that scheduling coordinators representing DER Providers must submit an accurate measure of the actual production or consumption of energy by each distributed energy resource aggregation in all settlement periods, while demand response providers may continue to use a baseline methodology.

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<sup>15</sup> *Id.* at 17-18.

<sup>16</sup> *Id.* at 19-20.

**E. Pro Forma DER Provider Agreement**

18. CAISO proposes to establish a new *pro forma* contract that DER Providers must sign to participate in the CAISO markets. CAISO explains that this *pro forma* agreement sets forth the terms and conditions under which CAISO and DER Providers will discharge their respective duties and responsibilities under the CAISO tariff. CAISO further explains that the proposed agreement does not establish duties and responsibilities between a utility distribution company and distributed energy resources, except in so far as it incorporates conditions of CAISO market participation, such as operating an aggregation consistent with limitations or operating orders of a utility distribution company or metered subsystem. CAISO also incorporates standard terms and conditions from its existing *pro forma* participating resource agreements that address issues such as penalties and sanctions, cost responsibility for fulfilling the terms of the agreement, dispute resolution, representations and warranties, liability, uncontrollable forces and other miscellaneous terms.

19. CAISO proposes that a DER Provider Agreement would identify each distributed energy resource comprising an aggregation subject to the agreement as part of a schedule and explains that DER Providers will have an obligation to maintain an accurate list of the resources that participate in aggregations under their control.<sup>17</sup>

**F. Compliance with CAISO Tariff Provisions**

20. CAISO explains that the CAISO tariff contains existing provisions that also will apply to DER Providers either directly or through their scheduling coordinators. For example, CAISO states that DER Providers seeking to offer ancillary services will need to comply with technical requirements to do so, and creditworthiness requirements will apply to scheduling coordinators for DER Providers as will provisions related to settlements and billing and dispute resolution procedures.<sup>18</sup>

21. CAISO adds that, pursuant to existing CAISO tariff provisions, scheduling coordinators must ensure their meters or revenue measuring devices for each distributed energy resource participating in an aggregation meet the requirements of the appropriate local regulatory authority. CAISO notes that additional metering requirements will be set forth in its business practice manual for metering.

22. CAISO explains that existing CAISO tariff provisions will not apply to DER Providers or their aggregations in two circumstances. First, CAISO is not proposing to

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<sup>17</sup> *Id.* at 21.

<sup>18</sup> *Id.* at 21-22.

extend the meteorological data requirements that apply to eligible intermittent resources to distributed energy resources comprising an aggregation. CAISO notes that, to impose such a requirement could create an undue burden on individual distributed energy resources that will be less than 1 MW.<sup>19</sup> Second, CAISO is not proposing to recognize distributed energy resource aggregations as resource adequacy resources. For purposes of this initial proposed framework, CAISO proposes to treat distributed energy resource aggregations as if they have energy only deliverability status under CAISO's resource adequacy rules.

### **III. Notice of Filing and Responsive Pleadings**

23. Notice of CAISO's filing was published in the *Federal Register*, 81 Fed. Reg. 12,891 (2016), with interventions and protests due on or before March 25, 2016. CPUC filed a notice of intervention. The following entities filed timely motions to intervene: Alliance for Retail Energy Markets; California Department of Water Resources; Cities of Anaheim, Azusa, Banning, Colton, Pasadena and Riverside, California; City of Santa Clara, California; Department of Water and Power of the City of Los Angeles; Edison Electric Institute (EEI); Golden State Water Company; Microgrid Resources Coalition (Microgrid Coalition); Modesto Irrigation District; Northern California Power Agency; NRG Power Marketing LLC and GenOn Energy Management, LLC, jointly; Pacific Gas and Electric Company (PG&E); San Diego Gas & Electric Company (SDG&E); and Southern California Edison Company (SoCal Edison). The Electric Power Supply Association (EPSA) and SolarCity Corporation (SolarCity) filed motions to intervene out-of-time. Advanced Energy Economy; EEI, Microgrid Coalition, PG&E, SDG&E, SoCal Edison, and SolarCity filed comments.<sup>20</sup> On April 11, 2016, CAISO filed an answer.

### **IV. Discussion**

#### **A. Procedural Matters**

24. Pursuant to Rule 214 of the Commission's Rules of Practice and Procedure, 18 C.F.R. § 385.214 (2015), the notice of intervention and timely, unopposed motions to intervene serve to make the entities that filed them parties to this proceeding. Pursuant to Rule 214(d) of the Commission's Rules of Practice and Procedure, 18 C.F.R. § 385.214(d), the Commission will grant EPSA's and SolarCity's late-filed motions to intervene given their interest in the proceeding, the early stage of the proceeding, and the

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<sup>19</sup> *Id.* at 22-23.

<sup>20</sup> We note that Advanced Energy Economy and SolarCity filed comments out-of-time on April 13, 2016 and April 24, 2016, respectively.

absence of undue prejudice or delay. We also accept Advanced Energy Economy's and SolarCity's late-filed comments.<sup>21</sup>

25. Rule 213(a)(2) of the Commission's Rules of Practice and Procedure, 18 C.F.R. § 385.213(a)(2), prohibits an answer to a protest unless otherwise ordered by the decisional authority. We will accept CAISO's answer because it has provided information that assisted us in our decision-making process.

## **B. Substantive Matters**

26. We find overall that CAISO's proposed initial framework to facilitate participation of aggregations of distribution-connected or distributed energy resources in CAISO's energy and ancillary services markets is just and reasonable and we accept CAISO's proposed tariff revisions, subject to condition,<sup>22</sup> to become effective June 3, 2016, as requested, as discussed below. In the following sections of this order, we address aspects of CAISO's proposal that have been contested by various commenters.

### **1. Integrating DER Providers as a New Type of Market Participant**

27. As previously described, CAISO's proposed tariff revisions establish an initial framework to enable resources connected to distribution systems within CAISO's balancing authority area to form aggregations of 0.5 MW or more and participate in its energy and ancillary services markets as a new type of market participant.

#### **a. Comments**

28. Microgrid Coalition asks CAISO to clarify the definition of distributed energy resources and whether demand response resources can participate in an aggregation.

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<sup>21</sup> We note that, although Advanced Energy Economy filed comments in this proceeding, it did not file a motion to intervene. Therefore, pursuant to Rule 102(c) and Rule 211(a)(2) of the Commission's Rules of Practice and Procedure, §§ 385.102(c), 385.211(a)(2), while Advanced Energy Economy is a commenter, it is not a party to this proceeding.

<sup>22</sup> The Commission can revise a proposal filed under section 205 of the FPA as long as the filing utility accepts the change. *See City of Winnfield v. FERC*, 744 F.2d 871, 875-77 (D.C. Cir. 1984). A utility is free to indicate that it is unwilling to accede to the Commission's conditions in this order by withdrawing its filing.

Microgrid Coalition also asks CAISO to clarify the definition of “resource” and whether distributed energy resources may provide multiple services or engage in multiple uses.<sup>23</sup>

29. EEI explains that the utility distribution companies need to have visibility and some level of input or control into the resources that are connected to their distribution system for planning and operations purposes.<sup>24</sup> EEI states that, as such, the utility distribution companies need access to information about the operating characteristics of the distributed energy resources connected to their systems, including (1) information from the distributed energy resource if it changes its operating characteristics to participate in the wholesale markets; (2) real-time data on dispatch of these resources; and (3) information on whether the resource cleared the day-ahead or real-time markets. EEI also asks the Commission to require CAISO to work with the utility distribution companies to develop measurement and verification processes because these resources are connected to, and metered at, the distribution system.

30. Several commenters request that the Commission delay the implementation of CAISO’s proposal. PG&E argues that the effective date should be conditioned upon CAISO finalizing the relevant business practice manual provisions before the proposed tariff revisions go into effect.<sup>25</sup> SDG&E supports CAISO’s efforts but believes that it is imperative that the details of how the proposal will be implemented be thoroughly addressed before the proposal is implemented.<sup>26</sup> While SDG&E acknowledges that CAISO proposes to address these details in its business practice manual development process, SDG&E states that it believes that the Commission and stakeholders would benefit from an opportunity to examine, scope and prioritize implementation issues through a technical conference prior to the proposed tariff revisions becoming effective. SoCal Edison asks the Commission to require CAISO to provide additional detail on coordination between CAISO and the utility distribution company before accepting the proposal.<sup>27</sup> If questions arise in light of the additional detail, SoCal Edison suggests that a technical conference may be appropriate.

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<sup>23</sup> Microgrid Coalition March 25, 2016 Comments at 5-7.

<sup>24</sup> EEI March 25, 2016 Comments at 4-5, 7.

<sup>25</sup> PG&E March 25, 2016 Comments at 5, 10-12 (PG&E Comments).

<sup>26</sup> SDG&E March 25, 2016 Comments at 2.

<sup>27</sup> SoCal Edison March 25, 2016 Comments at 11-12 (SoCal Edison Comments).

31. SoCal Edison states it is concerned that proposed tariff section 4.17.4 (Identification of Distributed Energy Resources), explaining which information a DER Provider will submit to CAISO in forming an aggregation, does not describe how matters will be addressed in a timeframe consistent with market operations. SoCal Edison states it is also concerned that the proposed tariff revisions only focus on the dispatch of resources at the pricing node without similarly addressing how an aggregation on multiple distribution circuits will impact flows when dispatched. SoCal Edison notes that, while dispatch of any of the multiple resources at a single pricing node by CAISO will have the same impact on the transmission system and the wholesale market, they potentially have very different impacts on the distribution system. SoCal Edison argues that the proposed tariff revisions are insufficient and that more discussion is needed with stakeholders, in particular distribution operators, on how coordination with the utility distribution companies is going to occur from forward planning (e.g., upon the development of a distributed energy resource aggregation) through day-ahead scheduling and real-time energy imbalance.

32. PG&E suggests that CAISO modify proposed section 4.17.4 to provide that the applicable utility distribution company or metered subsystem affirmatively certify that the aggregation meets the relevant tariff requirements for participation and does not pose a threat to the safe and reliable operation of the distribution system.<sup>28</sup> PG&E adds that the thirty (30) day review period may not provide sufficient time for the utility distribution company or metered subsystem to provide this assessment and suggests that the business practice manual establish the time frame for this review.

**b. CAISO Answer**

33. In response to MicroGrid Coalition's comment, CAISO explains that demand response resources may participate in the CAISO markets as reliability demand response and proxy demand response or may elect to participate in a distributed energy resource aggregation.<sup>29</sup> CAISO adds that its proposed framework will support participation by dispatchable load in a distributed energy resource aggregation (e.g., a pump load that is capable of increasing or decreasing its consumption), but distributed energy resources in an aggregation must provide meter data for each settlement period to demonstrate performance and may not use a baseline methodology. CAISO reiterates that demand response resources that elect to participate in the CAISO markets as reliability or proxy demand response resources would not be eligible to participate in a distributed energy resource aggregation. CAISO explains that this restriction prevents double counting the resources' capability to provide services to the transmission system.

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<sup>28</sup> PG&E Comments at 5, 9-10.

<sup>29</sup> CAISO April 11, 2016 Answer at 16 (CAISO Answer).

34. In response to MicroGrid Resources, CAISO clarifies that, under this proposed framework, the aggregation itself constitutes the market resource and that the aggregation must fully participate in all operating intervals rather than providing multiple services to multiple entities in addition to the CAISO markets.<sup>30</sup> CAISO points out that CAISO, CPUC and others are just beginning to address the policies and regulatory rules clarifying how distributed energy resources may potentially provide and receive compensation for many services from multiple entities; therefore, those policies and rules are not included in this initial framework.

35. With respect to measurement and verification mechanisms and monitoring of the response to CAISO dispatch instructions, CAISO agrees with EEI that these processes are essential because CAISO is responsible for financially settling the transactions from these resources.<sup>31</sup> But CAISO points out that EEI has not identified any specific deficiencies or enhancements to the proposed measurement and verification processes. CAISO states that it is committed to sample meter data from an aggregation to validate whether the aggregation is responding to CAISO dispatch instructions consistent with its generator distribution factors and make its findings available to the market. CAISO states that, based on these data and findings, it may propose enhancements or refinements to its market rules for DER Providers, including telemetry requirements.

36. In response to PG&E's, SoCal Edison's and EEI's implementation concerns, CAISO reiterates that utility distribution company tariffs subject to applicable Commission or local regulatory authority jurisdiction may apply.<sup>32</sup> CAISO notes that the proposed tariff revisions reflect an initial step toward allowing small distributed energy resources to aggregate for purposes of participating in the CAISO markets. CAISO adds that, for resources exporting power, the utility distribution company must assess how distributed energy resources may operate as part of an aggregation and whether the utility distribution company's system is sufficiently robust to accommodate that operation in response to a range of CAISO dispatch instructions. CAISO notes that the scope of this effort largely involves the business rules of the affected utility distribution company, not CAISO. CAISO states that it recognizes that utility distribution companies and local regulatory authorities may need to consider what rules and program changes are appropriate.

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<sup>30</sup> *Id.* at 17.

<sup>31</sup> *Id.* at 12-14.

<sup>32</sup> *Id.* at 5.

37. CAISO argues that its work to define its operating procedures should not delay acceptance of this proposal.<sup>33</sup> CAISO contends that acceptance of the proposal will facilitate, and not unduly delay, implementation of the proposed DER Provider framework through appropriate operating procedures. CAISO states that it envisions that these procedures will not be static rules, anticipating an iterative process for working with affected utility distribution companies and metered subsystems to operationalize best practices. CAISO notes that it will address in its business practice manuals the other topics that PG&E highlights (such as default requirements for metering and rules for implementing distributed energy resource aggregations).

38. CAISO states that it plans on having these business practices in effect as of the requested effective date of its proposed tariff revisions.<sup>34</sup> Nevertheless, to address commenters' concerns, CAISO states that it is willing to submit an informational report on implementation efforts six (6) months after the effective date of the proposed tariff revisions. CAISO anticipates that this report will include: (1) information regarding the number of distributed energy resource aggregations that have requested to participate in the CAISO markets; (2) the status of those requests and issues identified by utility distribution companies or metered subsystems; (3) the progress of aggregations through CAISO new resource implementation process; (4) the status of changes to business practice manuals and operating procedures to implement CAISO's proposed framework; and (5) a discussion of any additional issues involving coordination between transmission and distribution service providers arising from coordinated efforts to implement CAISO's proposed framework. CAISO states that the Commission could solicit comments on that report, and, to the extent parties believe implementation gaps remain, CAISO would support convening a technical conference at that time.

39. As for day-ahead and real-time operations, CAISO states that it has initiated efforts to incorporate input from utility distribution companies on the extent of their coordination with the DER Providers.<sup>35</sup> CAISO adds that it is conducting outreach to better understand the roles and responsibilities that exist between transmission and distribution system operators, and that it anticipates incorporating the outcomes of these discussions into its operating procedures.

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<sup>33</sup> *Id.* at 8-9.

<sup>34</sup> *Id.* at 9-10. CAISO adds that, to the extent parties believe that its business practices or operating procedures do not adequately conform to the market rules set forth in the CAISO tariff, at any time, they may initiate an FPA section 206 proceeding to seek appropriate relief.

<sup>35</sup> *Id.* at 8.

40. In response to PG&E's request that CAISO require the utility distribution company to certify that the aggregation meets the relevant utility distribution company tariff requirements, CAISO states that, as part of its business processes, it will require a prospective DER Provider to obtain from the applicable utility distribution company written confirmation of any concerns that the utility distribution company may have or written confirmation that it does not have any concerns.<sup>36</sup> Once the utility distribution company provides written confirmation that it does not have concerns with the aggregation based on criteria identified in the CAISO tariff, CAISO will commence its new resource implementation process, which will take six to seven months.

**c. Commission Determination**

41. We accept, subject to condition, CAISO's proposed tariff revisions establishing a DER Provider as a new type of market participant. We find that these proposed tariff revisions create a reasonable framework that will serve to increase participation and competition in CAISO's wholesale markets. Contrary to EEI's assertion, we find that CAISO's proposal includes sufficient measurement and verification protocols because each distributed energy resource will be directly metered pursuant to the applicable utility distribution company tariff. Additionally, scheduling coordinators will submit settlement-quality meter data for the aggregation for each operating interval, and scheduling coordinators will maintain records of meter data for an aggregation's individual resources for up to three years. We also note that CAISO commits to sample meter data from an aggregation to validate whether the aggregation is responding to CAISO dispatch instructions consistent with its generator distribution factors, to make its findings available to the public, and to propose any necessary market rule enhancements or refinements. We expect CAISO to abide by this commitment as necessary.

42. We find it unnecessary to direct CAISO to include in its tariff a requirement that utility distribution companies or metered subsystems affirmatively certify that their aggregation meets the relevant tariff requirements for participation and does not pose a threat to the safe and reliable operation of the distribution system, as PG&E suggests. CAISO's proposal already includes mechanisms to ensure that distributed energy resource aggregations adhere to the requirements of the applicable utility distribution company tariffs, such as the DER Provider Agreement certifying that the individual resources within the aggregation satisfy all applicable rules of the utility distribution company tariffs.<sup>37</sup> Further, CAISO has committed to include in its business processes that it will require a prospective DER Provider to obtain written confirmation of any

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<sup>36</sup> *Id.* at 6-7.

<sup>37</sup> *See* proposed Distributed Energy Resource Provider Agreement, Article 4.1.1.

concerns that a utility distribution company may have or that it does not have any operational or reliability concerns.<sup>38</sup>

43. Decisions on whether to place an item in CAISO's tariff or a business practice manual are shaped by the Commission's "rule of reason" policy,<sup>39</sup> which dictates that provisions that "significantly affect rates, terms, and conditions" must be included in the filed tariff.<sup>40</sup> The Commission has elaborated that it is appropriate for a business practice manual to contain "implementation details, such as instructions, guidelines, examples and charts, which guide internal operations and inform market participants of how the [public utility] conducts its operations under the ... tariff."<sup>41</sup> The Commission has also found that the "rule of reason" test requires evaluation on a case-by-case basis, comparing what is in a tariff against what is in an unfiled business practice manual.<sup>42</sup>

44. We disagree with SoCal Edison that the proposed tariff revisions are insufficient and that more discussion is needed with stakeholders prior to implementation about how coordination with the utility distribution companies is going to occur and how matters will be addressed in a timeframe consistent with market operations. We also disagree with commenters' assertion that we should delay implementation of CAISO's proposal,

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<sup>38</sup> CAISO Answer at 6-7.

<sup>39</sup> See, e.g., *City of Cleveland v. FERC*, 773 F.2d 1368, 1376 (D.C. Cir. 1985) (finding that utilities must file "only those practices that affect rates and service significantly, that are reasonably susceptible of specification, and that are not so generally understood in any contractual arrangement as to render recitation superfluous"); *Public Serv. Comm'n of N.Y. v. FERC*, 813 F.2d 448, 454 (D.C. Cir. 1987) (holding that the Commission properly excused utilities from filing policies or practices that dealt with only matters of "practical insignificance" to serving customers); *Midwest Indep. Transmission Sys. Operator, Inc.*, 98 FERC ¶ 61,137, at 61,401, *clarification granted*, 100 FERC ¶ 61,262 (2002) ("It appears that the proposed Operating Protocols could significantly affect certain rates and services and as such are required to be filed pursuant to Section 205.").

<sup>40</sup> *Cal. Indep. Sys. Operator Corp.*, 119 FERC ¶ 61,076, at P 656 (2007) (citing *ANP Funding I, LLC v. ISO-NE*, 110 FERC ¶ 61,040, at P 22 (2005); *Prior Notice and Filing Requirements Under Part II of the Federal Power Act*, 64 FERC ¶ 61,139 at 61,986-89 (1993), *order on reh'g*, 65 FERC ¶ 61,081 (1993)).

<sup>41</sup> *Cal. Indep. Sys. Operator Corp.*, 122 FERC ¶ 61,271, at P 16 (2008).

<sup>42</sup> *Cal. Indep. Sys. Operator Corp.*, 116 FERC ¶ 61,274, at P 1370 (2006), *order on reh'g*, 119 FERC ¶ 61,076, *order on reh'g*, 120 FERC ¶ 61,271 (2007).

pending the completion of the business practice manual provisions related to this filing. Based on our analysis of CAISO's proposal, except for the two items identified below,<sup>43</sup> we find that the proposed tariff revisions already contain the provisions governing the terms and conditions for DER Providers participating in the CAISO markets and that CAISO appropriately intends to place the remaining implementation details in its business practice manual. Accordingly, except for the items identified below, we will not require CAISO to place additional implementation details in its tariff. If, during the process of developing the relevant business practice manual, CAISO identifies any necessary additions to its tariff, it may propose them in a subsequent filing pursuant to FPA section 205. While we decline to delay implementation of the proposal, we emphasize CAISO's commitment to conduct outreach to better understand the roles and responsibilities that exist between transmission and distribution system operators, and incorporate the outcomes of those discussions into its operating procedures.

45. We find that it is unnecessary to hold a technical conference at this time to examine, scope and prioritize implementation issues. However, as proposed by CAISO, we direct CAISO to submit an informational report on implementation efforts six (6) months after the effective date of the proposed tariff revisions, which will include, but not necessarily be limited to, the following: (1) information regarding the number of distributed energy resource aggregations that have requested to participate in the CAISO markets, (2) the status of those requests and issues identified by utility distribution companies or metered subsystems, (3) the progress of aggregations through CAISO's new resource implementation process, (4) the status of changes to business practice manuals and operating procedures to implement CAISO's proposed framework, and (5) a discussion of any additional issues involving coordination between transmission and distribution service providers arising from coordinated efforts to implement CAISO's proposed framework. In response to PG&E's concern, we also direct CAISO to include in that report whether the thirty (30) day review period is sufficient for the utility distribution company or metered subsystem to assess whether an aggregation meets the relevant tariff requirements for participation and does not pose a threat to the safe and reliable operation of the distribution system. We note that, if parties believe that CAISO's business practices or operating procedures do not adequately conform to the market rules set forth in the CAISO tariff, they may initiate an FPA section 206 proceeding to seek appropriate relief.

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<sup>43</sup> See *infra* P 64.

## 2. Rules Governing Participation in CAISO Markets

46. As noted above, CAISO proposes numerous rules governing the participation of DER Providers in CAISO's markets.

### a. Comments

47. SoCal Edison argues that it is appropriate for the interconnection of resources intending to sell directly into CAISO wholesale markets to occur under (or convert to) the wholesale distribution access tariff (WDAT) of the applicable utility distribution company.<sup>44</sup> SoCal Edison contends that, because the Commission has jurisdiction over generator interconnection agreements for all resources interconnected to the utility distribution companies' distribution system for purposes of making wholesale sales (except for certain qualifying facilities (QFs)), all distributed energy resources (QFs and non-QFs) participating in a third-party aggregation will need to be interconnected under the applicable WDAT.

48. SoCal Edison adds that, if the proposal that distributed energy resource providers comply with the requirements of the local regulatory authority is intended to reflect interconnection requirements, then the reference is confusing and should be deleted and replaced with references to the WDAT.<sup>45</sup> SoCal Edison asserts that behind-the-meter resources selling to a third party must interconnect under the applicable WDAT. If the Commission believes that aggregated generators can participate in the CAISO wholesale markets through the CPUC's Rule 21 state-jurisdictional interconnection process, SoCal Edison asks the Commission to expressly allow jurisdictional utility distribution companies to accommodate this approach by finding that no Commission-jurisdictional interconnection agreement is necessary if interconnection service is provided pursuant to state jurisdiction. SoCal Edison asserts that the requirement that the DER Provider comply with the applicable utility distribution company tariff and operating procedures and applicable requirements of the local regulatory authority is confusing. SoCal Edison acknowledges that a distributed energy resource will need to abide by applicable CPUC requirements related to any retail service to its end-use load but argues that such retail service does not need to be addressed in CAISO's tariff.

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<sup>44</sup> SoCal Edison Comments at 2, 4-5.

<sup>45</sup> SoCal Edison Comments at n.10, 5-6, 8.

49. SolarCity disagrees with SoCal Edison, noting that not all distributed energy resource configurations require usage of the WDAT.<sup>46</sup> SolarCity asserts that CAISO's proposal provides a more streamlined process than the WDAT. SolarCity argues that requiring the use of the WDAT would impose unnecessary burdens for behind-the-meter resources such as storage, impose fees which would make participation uneconomic for certain resources, and create jurisdictional uncertainty.

50. PG&E argues that CAISO's proposal lacks an explicit means for a local regulatory authority to provide feedback to CAISO regarding whether it has modified its rules and tariffs to adequately address the jurisdictional and local reliability issues that arise from distributed energy resource aggregations' participation in the CAISO markets.<sup>47</sup> As an example, PG&E states that the proposal may allow a behind-the-meter energy storage resource to charge at a wholesale rate and discharge to serve retail load in contravention of CPUC rules.

51. PG&E argues that CAISO's proposal does not explain how CAISO will ensure that aggregated distributed energy resources respond according to their generation distribution factors.<sup>48</sup> PG&E acknowledges that the proposed tariff revisions retain CAISO's right to audit a distributed energy resource aggregation and the associated individual resources, but PG&E asks the Commission to require CAISO to establish more specific conditions in its tariff to ensure the individual resources within a distributed energy resource aggregation are responding consistent with the generation distribution factors provided in the market bids. Specifically, PG&E requests that CAISO specify triggering mechanisms, the frequency of audits, and penalties for a DER Provider failing to perform according to its submitted generation distribution factors.<sup>49</sup> PG&E argues that these audit reports promote transparency and mitigate stakeholder concerns regarding market inefficiencies. PG&E requests that CAISO file quarterly compliance filings documenting audit findings for a three-year period.

52. PG&E also comments that CAISO's pricing methodology is not captured in the tariff revisions, and asks the Commission to require CAISO to modify its tariff accordingly.<sup>50</sup>

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<sup>46</sup> SolarCity April 25, 2016 Comments at 4-5.

<sup>47</sup> PG&E Comments at 6-8.

<sup>48</sup> *Id.* at 4, 13.

<sup>49</sup> *Id.* at 13-14.

<sup>50</sup> *Id.* at 5, 14.

**b. CAISO Answer**

53. CAISO states that it opposes incorporating into its tariff a rule that all distributed energy resources seeking to participate in the CAISO markets through an aggregation must use WDAT interconnection service.<sup>51</sup> CAISO states that the WDAT may not apply to all resources, such as a dispatchable demand response resource that either consumes more or less power based on dispatch instructions issued to a distributed energy resource aggregation. CAISO states that, for this reason, providing more general language referring to the applicable interconnection requirements of a utility distribution company or metered subsystem in the CAISO tariff is the appropriate approach. CAISO explains that its proposed tariff rules recognize that distributed energy resources participating in an aggregation must adhere to applicable utility distribution company interconnection tariffs. CAISO states that its tariff does not specify that the utility distribution company WDAT applies because, if the WDAT rules apply, they do so of their own force and effect.

54. CAISO also objects to SoCal Edison's suggestion that proposed CAISO tariff section 4.17.2(b) should specify that distributed energy resources seeking to participate in the CAISO markets through an aggregation must comply with "applicable tariffs and operating procedures incorporated therein pertaining to interconnection to any wholesale usage of the distribution system of the utility distribution company."<sup>52</sup> CAISO notes that this language incorrectly attempts to characterize all distributed energy resources as requiring interconnection service under the WDAT.

55. CAISO argues that PG&E's recommendation regarding certification from the local regulatory authority is vague, unclear, and unnecessary.<sup>53</sup> CAISO asserts that the recommendation does not adequately define what constitutes "relevant jurisdictional issue" or "appropriate protections" and would effectively impede efforts to integrate aggregations of distributed energy resources into the CAISO markets. CAISO adds that it has already proposed mechanisms to ensure that aggregations of distributed energy resources seeking to participate in the CAISO markets adhere to requirements of applicable utility distribution company tariffs and requirements of local regulatory authorities. CAISO adds that PG&E seeks to place a requirement on local regulatory authorities that no local regulatory authority has sought or supported.

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<sup>51</sup> CAISO Answer at 2-3.

<sup>52</sup> *Id.* at 3.

<sup>53</sup> *Id.* at 11-12.

56. CAISO states that it believes that PG&E's concerns regarding behind-the-meter energy storage resources illustrate the importance of retaining the language in proposed CAISO tariff section 4.17.2 that DER Providers must adhere to the requirements of local regulatory authorities.<sup>54</sup> CAISO states that it disagrees that the proposal might allow a behind-the-meter energy storage resource to charge at a wholesale rate and discharge to serve retail load in contravention of CPUC rules, as PG&E suggests.<sup>55</sup> CAISO explains that its proposed tariff revisions do not alter any rules or requirements of local regulatory authorities and importantly require DER Providers to operate consistent with any such requirement that applies.<sup>56</sup> CAISO adds that, to the extent those requirements change, its tariff should be flexible enough to permit the aggregation of behind-the-meter resources to participate in the CAISO markets. CAISO explains that, for that reason, the CAISO tariff is written to allow CPUC rules to evolve, without CAISO needing to modify its tariff with each such rule change.

57. CAISO asks the Commission to reject PG&E's request that CAISO include mechanisms to ensure that individual distributed energy resources within an aggregation are responding consistent with the generator distribution factors provided in the market bids.<sup>57</sup> First, CAISO states that, under its proposal, the aggregation – not the distributed energy resources comprising an aggregation – must respond consistent with generator distribution factors. Second, CAISO argues that imposing penalties on aggregations for failing to respond consistent with generator distribution factors would be unduly discriminatory because such penalties are not imposed on proxy demand response resources, reliability demand response resources, or physical scheduling plants when they fail to follow dispatch instructions consistent with their distribution factors.

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<sup>54</sup> *Id.* at 4.

<sup>55</sup> *Id.* at 4, 12. CAISO notes that PG&E's concern that retail metering infrastructure is not in place with respect to any behind-the-meter resources that would participate in a distributed energy resource aggregation is addressed by the proposed requirement that a DER Provider comply with applicable utility distribution company or metered subsystem tariffs and operating procedures incorporated therein as well as applicable requirements of the local regulatory authority. *Id.* at 12.

<sup>56</sup> *Id.* at 4.

<sup>57</sup> *Id.* at 14.

58. CAISO also asks the Commission to reject PG&E's request that CAISO file quarterly compliance filings for three years documenting its monitoring efforts.<sup>58</sup> CAISO states that PG&E offers no support for the frequency of such a reporting requirement, which would be overly burdensome. However, CAISO agrees to conduct a market performance review of distributed energy resources at least once a year for three years from the date the Commission makes the proposed tariff revisions effective. CAISO proposes to make the findings of this performance review and any recommendations available to market participants on its website.

59. With respect to the wholesale prices applied to distributed energy resource aggregations, if the Commission so directs, CAISO states it is willing on compliance to clarify in its tariff that it will settle distributed energy resource aggregations at the applicable pricing node level.<sup>59</sup>

**c. Commission Determination**

60. We accept, subject to condition, CAISO's proposed tariff revisions establishing the rules for DER Providers participating in the CAISO markets. We agree with CAISO and SolarCity that it would be unduly discriminatory to require all distributed energy resources to interconnect through a WDAT when the WDAT interconnection rules do not apply to some distributed energy resources, such as dispatchable demand response resources. Accordingly, we find that CAISO's proposed language is reasonable because it does not limit or expand upon the scope of entities that must interconnect through a WDAT.

61. We disagree with PG&E's request to require the local regulatory authority to certify that the local regulatory authority's rules and tariffs have been satisfactorily modified to accommodate CAISO's proposal. As CAISO states, no local regulatory authority has sought or supported PG&E's approach. We find that requiring a local regulatory authority to make such a certification is outside of our jurisdiction. We also find that PG&E's concern that CAISO's proposal may allow a behind-the-meter energy storage resource to charge at a wholesale rate and discharge to serve retail load in contravention of CPUC rules is addressed by the proposed requirement that DER Providers must operate consistent with any rules or requirements of local regulatory authorities.

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<sup>58</sup> *Id.* at 14-15.

<sup>59</sup> *Id.* at 15-16.

62. We reject PG&E's request to require CAISO to modify its proposal to ensure that the individual resources within a distributed energy resource aggregation are responding consistent with the generation distribution factors provided in the aggregation's market bids. For several reasons, we disagree that an aggregation deviating from its generation distribution factors will harm distribution reliability. First, before an individual distributed energy resource can participate in the wholesale market, the utility distribution company will study the resource's impact on reliability for a range of output scenarios during the distribution-level interconnection process. Second, CAISO's proposal requires that the DER Provider adhere to any operational limits established by the utility distribution company in dispatching the distributed resources within its aggregation. Finally, utility distribution companies will be able to monitor the performance of the individual resources firsthand because the individual resources will be directly metered.

63. We also reject PG&E's request to require CAISO to assess penalties for an aggregation that fails to respond to dispatch instructions in a manner consistent with its generation distribution factors. We agree with CAISO that this practice would be unduly discriminatory given that proxy demand response resources, reliability demand response resources, and physical scheduling plants are not penalized in this manner. We also reject as overly burdensome PG&E's request that CAISO file quarterly compliance filings for three years, documenting its monitoring of the aggregations. However, as suggested by CAISO, we direct CAISO to conduct market performance reviews of distributed energy resources on at least an annual basis for a period of three years after the effective date of the proposed tariff revisions and to make the findings of this performance review and any recommendations available to market participants on the CAISO website.

64. Additionally, we note that, while CAISO's proposal as described in the transmittal letter provides that a DER Provider who fails to follow a dispatch instruction will face financial penalties in the form of uninstructed imbalance energy, no such provision exists in CAISO's proposed tariff revisions. Similarly, as pointed out by PG&E, CAISO's proposed tariff revisions do not contain its pricing methodology for single and multiple node aggregations. Consistent with the requirement in the "rule of reason" that provisions which "significantly affect rates, terms, and conditions" must be included in the tariff, we direct CAISO to submit a compliance filing within thirty (30) days of the date of this order, revising its tariff to include (1) language stating that CAISO will impose uninstructed imbalance energy charges on a DER Provider who fails to follow a dispatch instruction and (2) its pricing methodology for both single and multiple node aggregations.<sup>60</sup>

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<sup>60</sup> *Cal. Indep. Sys. Operator Corp.*, 119 FERC ¶ 61,076, at P 656 (2007) (citing *ANP Funding I, LLC v. ISO-NE*, 110 FERC ¶ 61,040, at P 22 (2005)).

The Commission orders:

(A) CAISO's proposed tariff revisions are hereby accepted, subject to condition, to become effective June 3, 2016, as discussed in the body of this order.

(B) CAISO is hereby directed to submit a compliance filing within thirty (30) days of the date of this order, as discussed in the body of this order.

(C) CAISO is hereby directed to conduct market performance reviews of distributed energy resources on at least an annual basis for a period of three years after the effective date of the proposed tariff revisions, as discussed in the body of this order.

(D) CAISO is hereby directed to submit an informational report on implementation efforts six (6) months after the effective date of the proposed tariff revisions, as discussed in the body of this order.

By the Commission.

( S E A L )

Nathaniel J. Davis, Sr.,  
Deputy Secretary.



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## White Paper on lack of 1500 MW delivery to Canada requirement - meaning EE not needed

1 message

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**Christina Aron-Sycz** <aronsycz@gmail.com>  
To: info@energizeeastsideeis.org

Mon, Aug 1, 2016 at 10:07 PM

Submitted by Christina Aron-Sycz, 13725 NE 34th PI, Bellevue, WA 98005.

Please find attached a document authored by Richard Lauckhart, former VP of power planning for Puget Power (PSE's predecessor). This document represents the opinions of CENSE (the Coalition of Eastside Neighborhoods for Sensible Energy).

This document is a brief description of numerous findings that separately or together indicate that PSE is incorrect in its assertion that 1500 MW would need to be exported to Canada at the same precise moment of an N-2 scenario during peak winter demand on the Eastside. It is simply not the case, yet PSE maintains it as a top five reason why EE must be built.

The honest, hardworking citizens of the Eastside deserve complete and total transparency in regard to a project that will permanently and significantly change the face of the Eastside for all future generations. We are depending on you, EIS team, to be extremely thorough and prudent. We have taken it upon ourselves to do enormous amounts of research. Now it is your turn to acknowledge these facts, and produce an EIS that shows that you have read and carefully considered the gravity of what has been presented.

For clarification, the attached document makes mention of the Lauckhart-Schiffman Load Flow Study. That document has already been submitted to the EIS process, and is also available at [www.cense.org](http://www.cense.org).

Sincerely,  
Christina Aron-Sycz on behalf of CENSE.org

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 **Evidence that there is no requirement to deliver v2.docx**  
17K

## White Paper

### Evidence that there is no requirement to deliver 1,500 MW to Canada on a Firm Basis....

#### Resulting Conclusion is that EE is not needed

PSE attempts to justify the Energize Eastside line by stating that PSE is required to deliver 1,500 MW to Canada on a very cold winter day during the peak load hour at the same time that 1,400 MW of local generation is not running and two major transformers on the Eastside fail.

**That there is no Firm Requirement to deliver 1,500 MW to Canada (e.g. under these extreme conditions) is evident from a number of standpoints as follows:**

- 1) Any Firm Requirement to deliver 1,500 MW to Canada would be evidenced by the existence of a contract that shows such a requirement. No one has produced a contract that includes such a requirement. The EIS record includes a request that either PSE, or Stantec, or the Bellevue EIS staff produce such a contract. No such contract has been produced. We believe there is no such contract.
- 2) FERC has stated *"The record before us shows that the Energize Eastside Project is located completely within Puget Sound's service territory, ... and that neither Puget Sound, nor any other eligible party, requested to have the project selected in the regional transmission plan for purposes of cost allocation; therefore, the project is not subject to the Order No. 1000 regional approval process."* For these stated reasons, FERC does not consider the EE line to be a FERC jurisdictional line. Instead FERC calls it a line for local need. **From this FERC finding it is clear that 1,500 MW to Canada (a Regional flow matter) should not be reflected in the study of the need for EE because PSE never requested the EE line be selected in a regional transmission plan.**
- 3) There have been unsupported claims that the Columbia River Treaty requires PSE (or BPA or some unknown entity) to deliver 1,500 MW to Canada. However that is not true as evidenced by:
  - a. The treaty deliveries to Canada were by its terms supposed to be accomplished by BPA building a new transmission line in Eastern Washington north to the Canada border near Oliver, BC, east of the Cascades. BC Hydro was supposed to build from their system in British Columbia to meet the new BPA line. Under that plan, there would be no impact on transmission in Western Washington and PSE ratepayers would have paid nothing to cause the Columbia River Treaty benefits to be moved to Canada. But for the first thirty years of the Columbia River Treaty, Canada's share of Treaty power was sold "Firm" for 30 years to US entities. In 1998 when those sales to US entities expired, the Treaty was amended to eliminate the requirement to build transmission to Oliver in exchange for giving Canada the right to sell its share of Treaty power in the future to US entities on a short term basis.
  - b. The 1998 amendment to the treaty stated that if Canada later decided it wanted its share of Treaty Power to be delivered "Firm" to Canada, then Canada needed to ask BPA to study to determine what work would need to be done on the transmission grid to make that happen. After that study, if Canada was willing to pay money for those

transmission improvements, then the Treaty power would be delivered “Firm” to Canada. **Canada has never made such a request to have its share of Treaty power delivered to Canada on a Firm Basis as evidenced by BPAs response to a Public Record Act request to search the BPA Transmission Request Queue to locate any such request from Canada. BPA stated that it did not find any such request.**

- c. BPA has known since at least 1998 (when the treaty was amended) that it would not be able to deliver Canada’s share of downstream benefits to Canada under all weather and contingency conditions. In 2009, Puget Sound Area Study Group members developed a draft report entitled “Assessment of Puget Sound Area/Northern Intertie Curtailment Risk.” That study describes certain system operating plans that could reduce the Curtailment Risk in the south-to-north direction on the tie to Canada.
- 4) On May 13, 2015 Mike Brennan was asked to have Peter Mackin of USE please provide the Firm Transmission Service that would be relevant for his load flow studies. In other words, please provide a copy of any and all contracts that Peter is aware of under which BPA has contracted to provide Firm Transmission Service in the northerly direction over this line. It has been over a year since this request was made and no response has been provided. We believe no response was provided because no such contract exists.
- 5) Gary Swofford, 38 year Puget employee who recently retired as Chief Operating Officer of PSE VP of PSE, spoke to the Bellevue City Council on December 14, 2015 and stated that “nothing could be further from the truth” than a claim that Energize Eastside is being built to deliver 1,500 MW to Canada. He claims the need for Energize Eastside is simply an eastside load matter. However, apparently unknown to Mr. Swofford, neither the USE load flow study nor the Lauckhart-Schiffman study shows a need for Energize Eastside if 1,500 MW does not need to be delivered to Canada. PSE has never produced a load flow study that says otherwise.
- 6) PSE claims that NERC/FERC reliability criteria require 1,500 MW to be delivered to Canada. The EIS record includes a request that either PSE, or Stantec, or the Bellevue EIS point to specific language in NERC/FERC reliability criteria that describes such a requirement. PSE generally refers to NERC/FERC Reliability Criteria TPL-001. But TPL-001 is a 20 page document and no one has pointed to specific language in TPL-001 that describes such a requirement. There is a reference in TPL-001 to Firm Commitments, but **no one has shown a contract under which a Firm Commitment to deliver 1,500 MW to Canada exists.**
- 7) Any Firm Contract to deliver 1,500 MW to Canada would be subject to FERC jurisdiction. Any requirement under NERC/FERC Reliability Criteria would also be subject to FERC jurisdiction. If PSE believes that a denial of their permit to build EE would violate a Firm Contract to deliver 1,500 MW to Canada or would violate a NERC/FERC Reliability Criteria, then PSE should have requested that FERC make such a finding in CENSE’s Complaint at FERC. FERC made no such finding in their Order on CENSE’s complaint. In fact, to the contrary, FERC stated it had no jurisdiction over the EE line.
- 8) The Western Electricity Coordinating Council (WECC) prepares the Base power flow cases for use by western north America power companies such as PSE to help them study the grid and its reliability. WECC prepared Base Case load flow studies for the heavy winter loading conditions for the winter of 2018. WECC ran all of the Puget Sound gas fired generation and transferred 500 MW of power to Canada in that case. The reason WECC did not transfer more power to Canada in its Base Case is that problems occur on the grid if that happens. WECC did not state

that the case was not compliant with FERC reliability criteria because WECC did not see a Firm Commitment to deliver 1,500 MW to Canada.

- 9) The Lauckhart-Schiffman load flow study effort attempted to modify the WECC heavy winter load base case for the year 2018 by increasing the flow to Canada. When they attempted to do this, the load flow study could not find a solution to satisfactorily meet reliability criteria. This was true whether or not the Energize Eastside line was included in the load flow data set being used. Simply put, the loading on the eleven transmission lines crossing the Cascades from the Columbia River to Western Washington could not handle the loading that would be necessary to delivery 1,500 MW to Canada, whether or not the Energize Eastside line is built. And this is true even with all the Puget Sound Area gas fired generation is operating. Clearly it would take a major new transmission line crossing the Cascades (or a new line to Oliver from eastern Washington) for 1,500 MW to be delivered to Canada on a Firm Basis.
- 10) CENSE has made Herculean efforts to get PSE to divulge its load flow study showing a need for the line. PSE has created a series of excuses for not showing CENSE and its experts its studies. The experts retained by CENSE believe that the real reason that PSE has chosen not to provide its studies is that any such study that they might have is artificially/inappropriately made in some fashion.
- 11) PSE refuses to show its load flow studies to the experts retained by CENSE because they fear that those experts may use the data to find weaknesses in the grid which will allow them to perform terrorist outages on the grid. FERC has stated that the CENSE experts are not considered terrorists and FERC has stated that the CENSE experts have a legitimate need to see the load flow data. In fact, FERC has provided the CENSE experts a number of sets of load flow data that include data on PSE's system and every other system in the WECC. PSE's claim that it will not provide its modifications to the WECC load flow cases because PSE is concerned about terrorist activities rings untrue. FERC has already provided the information that CENSE's experts would need to perform terrorist activities if they were so inclined. Nothing PSE would provide would give any additional help. But CENSE's experts have signed agreements with FERC in which they promise not to use the data provided them for any nefarious purpose.

Bottom line:

- a) It is clear that there is no Firm Requirement to deliver 1,500 MW to Canada.
- b) It is clear that the grid cannot deliver 1,500 MW to Canada in an extreme cold situation with or without the Energize Eastside line.
- c) **It is clear from (a) the U.S.E. and (b) the Lauckhart-Schiffman load flow studies that Energize Eastside is not needed if 1,500 MW is not being delivered to Canada.**



Energize Eastside EIS <info@energizeeastsideeis.org>

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## Comments about PSE added two new "bypass" routes

1 message

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**Liping Ke** <lipingke@gmail.com>

Wed, Jul 20, 2016 at 10:41 PM

To: info@energizeeastsideeis.org, council@bellevuewa.gov, info@cense.org

It's not strange that PSE will do some "update" from time to time with sort of "improvement" (Though I did not quite catch what's the improvement). This time I am really shocked, because PSE did not even try to say "improvement". They directly told us they wanted to "save troubles". Now they finally told the truth.

We were the unlucky neighborhoods and chosen by PSE for being impacted. So we want to know whether the project is necessary, whether there's better alternatives and whether there're new techniques to impact less people and less communities.

Now we knew the truth, PSE was trying to find a best route with less "troubles". It explained why they finally chose schools (because it's public properties!), found nicer communities easy to dealing with! I got mail notification this week, so PSE gave us only half month to think about it, especially for those new impacted neighborhoods during summer vacation!

Now, the new route is just stone's away from Bellevue downtown! What a wonderful proposal! The only reason is that East Bellevue Community is so great, they can protect their own neighborhoods!

Cripping



Energize Eastside EIS <info@energizeeastsideeis.org>

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## Scoping letter for bypass routes

1 message

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**Communities United For Reliable Energy**

<communitiesunitedforreliableenergy@outlook.com>

Sun, Jul 31, 2016 at 2:51  
PM

To: "info@energizeeastsideEIS.org" <info@energizeeastsideeis.org>

Cc: "council@bellevuewa.gov" <council@bellevuewa.gov>, "citymanager@bellevuewa.gov" <citymanager@bellevuewa.gov>

Please see attached.

Thank you.

CURE Advisory Committee



**Bypass routes scoping letter 7-31 .pdf**  
230K



July 31, 2016

Heidi Bedwell  
Energize Eastside EIS Program Manager  
City of Bellevue Office of Planning & Community Development  
450 110<sup>th</sup> Ave NE  
Bellevue, WA, 98004

RE: Energize Eastside Phase 2 EIS Scoping Comments for the “Bypass” routes

Dear Ms. Bedwell:

Communities United for Reliable Energy (CURE) is a coalition of business owners, residents, social service providers, healthcare providers, property owners, schools, convention and tourism providers, business organizations, and colleges from East King County. We appreciate the opportunity to submit scoping comments for the “bypass routes” for the Energize Eastside project.

Energize Eastside represents a critical economic infrastructure project for our community. Our members depend on reliable power – to operate our businesses, keep our homes warm, take care of our community’s most vulnerable citizens, operate our hospitals and schools, and keep our economy strong – so we need to make sure that the Energize Eastside project is studied, permitted and built in a timely manner.

We are very concerned about several issues:

1. We have grave concerns regarding the “no action” alternative. Operating our electrical system with rolling blackouts as discussed in the EIS is NOT an acceptable plan for our growing region. The devastating impact on our economy, our community, and our residents is unfathomable. We must work toward a solution that will reliably solve our transmission deficiency problem using proven methods, and we must do so in a timely manner.
2. We understand the difficult issues surrounding the permitting authority of the East Bellevue Community Council (“EBCC”). The bypass routes result from the concern that 5 individuals currently have the authority to decide for hundreds of thousands of citizens

as to where this critical infrastructure is to be built. This circumstance represents an unfortunate distortion of the democratic process.

3. We have serious concerns about the proposed bypass routes, and we request and strongly suggest that the EIS team study the following:
  - A. The increased environmental impacts, especially along the Lake Hills Connector
  - B. The impacts on the Eastside Rail Corridor
  - C. The impacts on the emerging Wilburton business district
  - D. The impacts on the proposed City of Bellevue's "Grand Connection"
  - E. The impacts on the Spring District and other businesses along Bel-Red
  - F. The impacts on the East Link project

To us it is entirely unreasonable that the process for getting this project permitted requires a vote from the EBCC that, essentially, will be the deciding factor for the rest of our community as to where this critical infrastructure project will be built – especially given that (1) there is an existing utility corridor that has been in place since the 1930's and (2) the community group that studied the route options for this project overwhelmingly recommended using the existing corridor. That to us is clearly where this project should be built. This is a big problem for the city of Bellevue, and for all of us.

We recognize that opponents of the project will be putting pressure on the EBCC members to effectively "kill" this project. We all know that moving to rolling blackouts to manage our electrical grid is absolutely unacceptable for our growing Eastside, and rolling blackouts are what would happen if the project were delayed or stopped. Additionally, to think that we would build the project outside of the existing corridor because of this opposition pressure is, to us, completely unreasonable.

Please study the impacts of the bypass routes carefully and in a timely manner. Our community and our economy cannot afford delay.

Sincerely,

CURE Advisory Committee



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## Energize Eastside EIS - Extended Phase 2 Scoping Comments

1 message

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**Curt** <curtallred@hush.com>

Mon, Aug 1, 2016 at 6:21 PM

To: info@energizeeastsideeis.org

Cc: council@bellevuewa.gov, eis@cense.org

To: Heidi Bedwell, Energize Eastside EIS Program Manager  
450 110th Ave NE  
Bellevue, WA 98004

From: Curtis Allred  
13609 SE 43rd PI  
Bellevue, WA 98006

cc: Bellevue City Council, CENSE

Subject: Energize Eastside EIS - Extended Phase 2 Scoping Comments

Date: 1 August, 2016

There are many problems, flaws, and suspicious aspects regarding PSE's Energize Eastside plan. I have enumerated some of them in previous comments to the EIS, and continue to learn more each day. Here is a summary of the top issues from my perspective:

### **Safety:**

PSE's plan has unacceptable risk both during and after construction.

The power line will follow the path of an aging pipeline that carries highly explosive jet fuel and other petroleum products. It passes through 29 neighborhoods, coming dangerously close to 9 schools and daycare centers.

During construction there will be heavy equipment rolling over and digging around the Olympic pipeline. Risk of damage to the pipeline is high if not certain. The Bellingham explosion was a result of damage caused by construction workers damaging the pipe. The actual explosion did not occur until later when there was a fuel surge in the pipeline that blew at the point of the earlier construction damage.

After construction, operation of this high voltage power lines in proximity to pipelines increases the corrosion of the pipelines significantly. Also, if a tower or line falls near the pipeline, there is a high probability that arcing could burn a hole in the pipeline and cause an explosion. This would devastate any nearby neighborhoods.

### **Ecological Impact:**

Thousands of trees will be removed and thousands more pruned and topped to make way for the power lines. PSE has said 8000 trees will be affected. How can we allow them to kill or maim 8000 trees for a power line that we don't even need?

Also, spending so much money on a power line hijacks money that could be used to support more ecologically beneficial solutions such as alternative energy, distributed generation and storage, solar, conservation, etc.

### **Aesthetics:**

The power poles will tower well above the remaining tree tops and be visible for miles around, especially on the stretches on hills. The 8000 removed or pruned trees will widen the scar making the power line corridor even more dramatic and aesthetically offensive. This flies in the face of Bellevue's claim to be a "City in a Park"

### **Cost:**

The initial estimated cost of hundreds of millions of dollars is just the beginning. Due to a catastrophic flaw in Washington public utility rules, we, the ratepayers, will continue to pay PSE a 10% return on the unjustified investment for approximately 50 years, even if it proves to be unneeded. We will end up paying billions for a power line hoax whose

only purpose was to generate profit for investors in PSE's parent's investment fund (Macquarie).

### **Need:**

It is infuriating that PSE is proposing a project of this magnitude, with such safety issues and level of destruction, and has not even justified the need for the project. Their demand projections are inconsistent with others' growth forecasts and inconsistent with current trends of lower per-capita power consumption. Their worst-case scenarios are not realistic, even impossible. The two "independent" Needs Assessment reports cannot be considered independent as they were performed by Quanta Technologies, a division of the same company they use for power line construction and maintenance.

Apparently they have fabricated a forecast and used scare tactics in attempt to gain public support for a project intended only to produce profit for Macquarie investors.

### **EIS Flaws:**

On top of all this, this EIS process is flawed. An EIS should be performed against a concrete plan (or application) so reviewers know what they are evaluating. PSE has not submitted a concrete plan, and what detail it has provided keeps changing, specifically routes and pole heights. The latest route alternatives to dodge the SBCC are absurd! It appears that they are trying to confuse and exhaust everyone who is critical of this project.

### **Conclusion:**

This EIS should be cancelled and PSE sent back to the drawing board to 1) present a realistic view of the future energy needs of the Eastside (NOT Canada and California) and 2) propose a safe and modern solution to meet those needs (not the needs of their foreign investors)

Thank you,  
Curtis Allred



Energize Eastside EIS <[info@energizeeastsideeis.org](mailto:info@energizeeastsideeis.org)>

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## FW: Scoping Comment

1 message

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**Len and Cindi Rezabek** <[shadowrez@live.com](mailto:shadowrez@live.com)>  
To: [info@energizeeastsideeis.org](mailto:info@energizeeastsideeis.org)

Sat, Jul 23, 2016 at 10:22 AM

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**From:** Len and Cindi Rezabek [<mailto:shadowrez@live.com>]  
**Sent:** Saturday, July 23, 2016 10:17 AM  
**To:** [info@EnergizeEastsideEIS.org](mailto:info@EnergizeEastsideEIS.org)  
**Subject:** Scoping Comment

Dear Heidi Bedwell,

I do not support the placement of the giant power lines along any portion of the Wilburton Railroad grade. This route is planned for future trail development and is not consistent with power poles. I especially am concerned about the visual impact near our adored railroad trestle, the only large structure of historical significance in Bellevue. The route east of Kelsey Creek Park, in an existing corridor is better.

However, I have attended meetings and read materials about this venture in general and am not convinced that the project is necessary. Technology is changing quickly and a "forever" project through our city could become obsolete within a few years. Please consider the long-term efficacy of this endeavor.

Thank you.

Cynthia Rezabek

12144 SE 14<sup>th</sup> St.

Bellevue, WA 98005



Energize Eastside EIS &lt;info@energizeeastsideeis.org&gt;

**(no subject)**

1 message

**Dan or Bonnie Renn** <dan\_sabina@yahoo.com>  
Reply-To: Dan or Bonnie Renn <dan\_sabina@yahoo.com>  
To: "Info@EnergizeEastsideEIS.org" <Info@energizeeastsideeis.org>

Thu, Jun 30, 2016 at 11:12 AM

Subject:

**PSE Energize Eastside Route around East Bellevue Community Council**

I am **Daniel Renn**. I live at 603 129<sup>th</sup> Pl. NE in Wilburton. I am the V. P. of the Wilburton Community Association. The Association Board Voted unanimously to strongly recommend that PSE use the Utilities Corridor along 136<sup>th</sup> Ave. for the Power lines.

I understand that PSE has started to look at 2 new Routes for the High Voltage Power lines for Energize Eastside. The reason for these 2 routes is to bypass the EBCC area. I am sure that there are difficult legal concerns with EBCC, but you must find a way to be sure that these Power Lines remain on the preferred route through the PSE existing Utilities Corridor.

Both of these new routes cut along the **Burlington Northern Rail Corridor** and up N E 1<sup>st</sup> St. and along 120<sup>th</sup> Ave NE through the heart of the **Wilburton Commercial Area**. Bellevue just paid considerable money to have consultants from **Urban Land Institute** recommend how to improve this **Wilburton Commercial Area**. I am sure that none of these Consultants recommended High Voltage Lines to improve this area. This area is also the terminus of the **Bellevue Grand Connection** that Bellevue is hoping to develop. Also the Rail Corridor is the future site of much anticipated Bellevue/King Co. trail system.

These 2 new ridiculous routes also cut along Bel-Red Road just south of the developing **Spring District**. This is not the way to develop the desirable living area that Bellevue wants and requires.

Both of these 2 new routes require that the new PSE lines will cross the existing Seattle City Light lines at 2 places. This makes a dangerous situation much worse in that there will be 460 KV between these 2 sets of lines. The radiation with 2 sets of power lines will be doubled what it would be with only one set.

I am asking, no I am strongly urging you to engage your Legal staff to find a way to assure that the Energize Eastside Power Lines remain in the 100 ft. wide PSE Utility Corridor near 136<sup>th</sup> Ave NE. This is where the Power Lines have been for 80 years and where they should stay. Both Bellevue Citizens and the PSE rate payers will all be better off with the existing Right Of Way.

Thank You,

Daniel J Renn,  
603 129<sup>th</sup> Pl. N E  
Bellevue, WA 98005

Vice President, Wilburton Community Association

[Dan\\_Sabina@yahoo.com](mailto:Dan_Sabina@yahoo.com)  
(425) 455 - 9990

Energize Eastside EIS <[info@energizeeastsideeis.org](mailto:info@energizeeastsideeis.org)>

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**Energize EastSide Alternate Routes.**

1 message

**Dan or Bonnie Renn** <[dan\\_sabina@yahoo.com](mailto:dan_sabina@yahoo.com)>

Sat, Jul 16, 2016 at 11:06 AM

Reply-To: Dan or Bonnie Renn <[dan\\_sabina@yahoo.com](mailto:dan_sabina@yahoo.com)>To: "info@EnergizeEastsideEIS.org" <[info@energizeeastsideeis.org](mailto:info@energizeeastsideeis.org)>

In looking at alternate routes to the main Utilities Corridor along 136th Ave, please consider that both of the alternate routes must cross the Seattle City Light Power lines that run along 124th Ave.

Please do a special investigation of how these lines will look and work crossing the Seattle City Light lines at Bel-Red Road and 124th Ave, and at Lake Hills Connector. These Alternate Routes cross the other 230KV power lines TWO times.

The Wilburton Community Association Board of Directors voted Unanimously to strongly support the original Route along the Utility Easement at about 136th Ave. This 136th Ave Route will not cross other high voltage power lines and will avoid the Wilburton Commercial Area and the Terminus of the Bellevue Grand Connection.

There should be no reason not to keep the new power lines in the same corridor that they have been for over 50 years.

Sincerely,

Daniel Renn, V P, Wilburton Community Association

603 129th Place N E

Bellevue, WA 98005

(425) 455-9990

[Dan\\_Sabina@yahoo.com](mailto:Dan_Sabina@yahoo.com)



Energize Eastside EIS &lt;info@energizeeastsideeis.org&gt;

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## Stop the madness

1 message

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**Danielle Ramos** <danielle@cdramos.com>

Sun, Jul 10, 2016 at 9:04 AM

Reply-To: Danielle Ramos &lt;danielle@cdramos.com&gt;

To: "info@EnergizeEastsideEIS.org" &lt;info@energizeeastsideeis.org&gt;, "council@bellevuewa.gov" &lt;council@bellevuewa.gov&gt;, "info@cense.org" &lt;info@cense.org&gt;

It is with disappointment that I see that that such a unnecessary and dangerous project continues to be pushed at unwilling communities by a private corporation. The community has risen up time and time again to demonstrate that the need is being exaggerated and that there are far safer and cost-effective options available to meet the real need. We all elected to live in a community that was away from industrial areas, we have invested both in our properties and our relationships here and the PSE project will turn our lovely community into an industrialized eye-sore and introduce lethal dangers through what are today beautiful and serene neighborhoods.

Rather than trying to be sensitive to the impact and to consider options better suited to our future although less profitable to PSE's foreign owners there is now an attempt to increase the already devastating impact by adding bypass routes to go around a jurisdiction that challenged a different PSE project.

The following points have been raised numerous times by the experts hired and working for our community and a better way forward, I would like to reemphasize them:

1. PSE discounts the danger of constructing huge towers with high-voltage cables over aging, high-pressure pipelines that carry millions of gallons of jet fuel and gasoline each day. Safety experts warn there is a significant risk of a catastrophic fire caused by a construction mishap or accelerated corrosion in the pipelines.
2. CENSE advocates a scalable plan developed by industry experts that uses modern technology, already at work in other cities, to power Eastside growth while reducing per capita electricity demand and greenhouse gas emissions.
3. The CENSE Plan saves 8,000 mature trees that PSE would cut down or limb to clear the route for its transmission lines. PSE's plan would degrade the livability of 29 neighborhoods, a key to attracting businesses and residents to the Eastside.

Please remember that we are talking about people here, not numbers. This project is putting families at risk and if it moves forward will turn a set of beautiful and peaceful communities into unsafe, ugly and undesirable places to live.

Let's stop the madness and work together for something that really meets the needs of the communities rather than just the self interests of a foreign owned corporation.

Sincerely,

Danielle Ramos



Energize Eastside EIS <info@energizeeastsideeis.org>

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## Question on alternatives

1 message

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**David Kleiber** <edkleibers@gmail.com>

Fri, Jul 1, 2016 at 11:16 PM

To: info@energizeeastsideeis.org

I was reviewing the alternatives and was curious why no alternative for moving lines underground. Other cities in the world place a higher value on open space vs visible power lines. Land is scarce, why are we wasting so much space for above ground power poles when instead we can have the lines underground. The capital costs maybe more but the long term risks for radiation, lost views; improved reliability due to know wind damage.

Cheers,  
Dave Kleiber

Thanks, Dave



Energize Eastside EIS &lt;info@energizeeastsideeis.org&gt;

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**Objection.**

1 message

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**Alannah** <boultonfamily@gmail.com>  
To: info@energizeeastsideeis.org

Sun, Jul 10, 2016 at 12:01 PM

I have lived in Bellevue for 30 years and I strongly object to the powerlines!!!

Any route is a dangerous, over-sized and overly-expensive project when there is a safe, green and cost-effective alternative. No neighborhoods should be industrialized to increase profits for PSE's foreign owners. PSE freely admits that its bypass routes were designed to go around a jurisdiction which challenged a different PSE transmission project. You might also emphasize:

1. PSE discounts the danger of constructing huge towers with high-voltage cables over aging, high-pressure pipelines that carry millions of gallons of jet fuel and gasoline each day. Safety experts warn there is a significant risk of a catastrophic fire caused by a construction mishap or accelerated corrosion in the pipelines.
2. CENSE advocates a scalable plan developed by industry experts that uses modern technology, already at work in other cities, to power Eastside growth while reducing per capita electricity demand and greenhouse gas emissions.
3. The CENSE Plan saves 8,000 mature trees that PSE would cut down or limb to clear the route for its transmission lines. PSE's plan would degrade the livability of 29 neighborhoods, a key to attracting businesses and residents to the Eastside.

Dawn McKeenan  
13115 NE 38th Place  
Bellevue, WA. 98005



Energize Eastside EIS <[info@energizeeastsideeis.org](mailto:info@energizeeastsideeis.org)>

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## Fwd: PSE's Energise Eastside

1 message

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**Dee Mulford** <[getset13@gmail.com](mailto:getset13@gmail.com)>  
To: [info@energizeeastsideeis.org](mailto:info@energizeeastsideeis.org)

Mon, Jul 11, 2016 at 11:32 AM

—— Forwarded message ——

From: **Dee Mulford** <[getset13@gmail.com](mailto:getset13@gmail.com)>  
Date: Mon, Jul 11, 2016 at 11:27 AM  
Subject: PSE's Energise Eastside  
To: [info@energizeeastsideeis.org](mailto:info@energizeeastsideeis.org)  
Cc: [council@bellevuewa.gov](mailto:council@bellevuewa.gov), [info@cense.org](mailto:info@cense.org)

To whom it may concern regarding PSE's "Energise Eastside".

I wouldn't wish this program on anyone. It's a seriously overblown, unnecessary, and dangerous plan. PSE obviously doesn't care about the quality of life for the people living in our region..

PSE discounts the danger of constructing huge towers with high voltage cables over aging high pressure pipelines that carry millions of gallons of jet fuel every day. Safety experts warn of a catastrophic fire that could happen during the construction of this line.

Although the population in the Eastside has increased over the past 10 years, our energy consumption has gone down! This is due to the increased use of energy saving appliances and light bulbs. CENSE advocates a scalable plan developed by industry experts that uses modern technology already being used in other cities to power our future growth on the Eastside. PSE's plan would degrade the livability of 29 neighborhoods, a key to attracting businesses and residents to the Eastside

The people in our communities have elected representatives to their city councils who should know their responsibilities to do the right thing. Please do not support this project of PSE.

Thank you. Sincerely, Dee Mulford 12733 SE 86th Place Newcastle WA 98056



Energize Eastside EIS <info@energizeeastsideeis.org>

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## Phase 2 Scoping Comments from CENSE

1 message

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**Don Marsh** <donmarsh@cense.org>  
To: info@energizeeastsideeis.org

Mon, Aug 1, 2016 at 5:00 PM

Dear Ms. Bedwell,

The attached PDF file contains comments for the Energize Eastside EIS Phase 2 Scoping period that I am submitting on behalf of CENSE, the Coalition of Eastside Neighborhoods for Sensible Energy. We hope these will contribute to a positive outcome for the communities we represent.

Sincerely,

Don Marsh, President  
CENSE.org

Residence:

4411 137<sup>th</sup> Ave. SE

Bellevue, WA 98006

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 **Phase 2 Scoping comments.pdf**  
393K

## 1. Notice of Bypass routes

The City of Bellevue re-opened Phase 2 of the EIS for the PSE proposed project due to PSE's decision to add new alternatives. The Notice states:

*"The City of Bellevue has reopened the scoping comment period on the Phase 2 EIS to provide the public with the opportunity to submit written comments on two new alternatives identified by PSE on May 31, 2016. The new alternatives do not represent PSE's preferred alignment, but are designed to bypass the boundaries of the East Bellevue Community Council."*

PSE's decision to add new routes to bypass the East Bellevue Community Council after the deadline had passed for Phase 2 comments is one more example of PSE's failure to provide adequate notice to citizens to comment in a meaningful manner. PSE states that the bypass routes are not PSE's preferred alignment but are designed to bypass the EBCC.

PSE's stated reason for bypassing the EBCC mentions something about scheduling risk, but the public is left without a clear justification for adding over four miles of new poles and wires through areas of Bellevue that presently do not have transmission lines. PSE has not appeared before the East Bellevue Community Council to present information about the PSE "Energize Eastside" project. PSE will make its first presentation to the EBCC about the project on Tuesday, August 2, 2016. This is the day following the comment deadline for commenting on the bypass routes of August 1, 2016. Were there no earlier opportunities to engage with the EBCC on this topic? Were members of the EBCC and their constituents provided adequate information about the project so that they could comment on the impacts to their community? If so, why is this meeting necessary?

Adding the bypass routes after the closure of the Phase 2 comment period adds more confusion to an already highly unusual and flawed process. Why did PSE choose to delay the announcement of these bypass routes until the middle of the summer, when many potentially impacted residents are on vacation or entertaining visitors? The result will be fewer comments. Neither the City nor PSE should construe the lack of comments as tacit acceptance of the routes.

## 2. Insufficient information on bypass routes

PSE provided large tables of information to members of the Community Advisory Group when the original routes for the transmission line were discussed. Participants could consider impacts on trees, schools, homes, businesses, and overall cost, among other factors.

PSE has provided none of this information for the bypass routes. As a result, the public has no basis to compare or contrast the impact of these routes. The most they can say is, "This idea seems bad to me." If these kinds of comments are lacking specificity, the fault lies with PSE, which has given us nothing specific to comment on. We don't know which side of the road the poles would be installed; how many times the wires might cross over the roadway; how tall the poles would be; how many trees would be removed; how the company proposes to cross the existing Seattle City Light lines in at least two locations; whose views might be impacted; whether new land must be acquired for the right of way; how much more this proposal might cost; whether there are other alternatives like undergrounding that might have equivalent cost and be preferable for many other reasons; what the impact of road closures during construction might be on traffic, commerce, and emergency response; how the lines might affect Sound Transit's plans in these areas; and so on.

Is the public expected to understand all these effects and comment on them during a few weeks in the middle of summer? What percentage of Bellevue residents are even aware of this major change in the project's scope?

## 3. Updated study needed

PSE recently engaged the consulting firm Navigant to help them implement Demand Response, Distributed Generation, and Energy Storage as recommended in the Seventh Northwest Power Plan. These are the pillars of the alternative solution proposed by CENSE to handle future load growth rather than a vastly over-sized transmission line. While we are happy to see PSE take this positive step, the contributions that these smart solutions will make to reduce peak demand have not been factored into the scenario that PSE analyzed more than three years ago to justify Energize Eastside.

A lot has changed since PSE's initial analysis of the Eastside's energy needs. Electrical usage continues to fall, as can be seen in PSE's 10-k statements to the Securities and Exchange Commission for the last six years. The Northwest Power Plan has been published and recommends smart grid development. PSE has agreed to shut down two of the dirtiest coal-fired generators in the country. PSE recently admitted verbally and in writing that one of the top five key assumptions included in the Eastside Needs Assessment (1500 MW of electricity exported to Canada) has no bearing on the project.

We ask that PSE's study be redone with smart grid contributions included, forecasts adjusted to account for recent consumption trends (overall declining electricity usage), a reasonable number of local generation plants running, and Canadian exports excluded. PSE should also update their weather models to account for the fact that the Puget Sound is now experiencing milder winters, and scientists expect this trend to continue for the foreseeable future.

Submitted by,  
Don Marsh  
President, CENSE



Energize Eastside EIS &lt;info@energizeeastsideeis.org&gt;

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## Energize Eastside Bypass Routes

1 message

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**Eldon Graham** <eldon.graham@hotmail.com>

Tue, Jul 26, 2016 at 3:07 PM

To: "info@EnergizeEastsideEIS.org" &lt;info@energizeeastsideeis.org&gt;

Cc: "council@bellevuewa.gov" &lt;council@bellevuewa.gov&gt;, "info@cense.org" &lt;info@cense.org&gt;

In my March 13, 2016 comments on the Phase 1 Draft EIS for the Energize Eastside Project, repeated near the bottom of this comment about the Bypass Routes, I explained that if the proposed transmission line were to be constructed along the Willow route it would cause radio frequency interference (RFI) that would interfere with my Federal Communications (FCC) licensed operations [see "Note 1" below]; that Puget Sound Energy is prohibited by the FCC from causing such interference with my operations [see "Note 2" below]; and that the Phase 1 Draft EIS does not address harms to me and similarly licensed Eastside citizens who may also be located close to the proposed route.

I have the same concern and strong objection to Bypass Route 1.

Other the other hand, I would not object if the proposed transmission line were to follow Bypass Route 2. Although our Eastside climate is certain to cause repeated corona events along the proposed transmission line, the intensity of harmful RFI reaching my operating location could be expected to be substantially reduced because of the greater distance between Bypass Route 2 and my operating location.

Eldon H Graham

13629 SE 20<sup>th</sup> Street

Bellevue, WA 98005

Note 1: One of the phenomena associated with high-voltage transmission lines is corona. The localized electric field near a conductor ionizes air close to the conductors resulting in a partial discharge of electrical energy called a corona discharge, or corona. During wet and humid conditions, water drops collect on the conductors and increase corona activity. Corona discharge from electrical transmission lines generates audible noise and radio interference (RFI).

Note 2: In the United States, electromagnetic interference from power transmission systems is governed by Part-15 of the Federal Communications Commission (FCC) Rules and Regulations. Part-15 says a power transmission system “shall be operated so that the radio frequency energy that is emitted does not cause harmful interference. In the event that harmful interference is caused, the operator of the [power transmission system] shall promptly take steps to eliminate the harmful interference.” For purposes of these regulations, harmful interference is defined as: “any emission, radiation or induction which . . . seriously degrades, obstructs or repeatedly interrupts a radio communication service operating in accordance with this chapter” [FCC 1988].

March 13, 2016

## **Comments on Phase I Draft EIS for the Energize Eastside Project**

My name is Eldon H Graham and I live at 13629 SE 20th Street, Bellevue, WA 98005.

I have an Electrical Engineering Bachelor of Science degree from Oregon State University and a Federal Communication Commission (FCC) Extra Class Personal Radio Service (Amateur) license.

Chapter 15.6.2 of Puget Sound Energy’s Energize Eastside Project Phase I Draft Environmental Impact Statement fails to address radio frequency interference the proposed 230 KV transmission line will likely cause to Personal Radio Service (PRS) licensees located along the proposed transmission line route. This is not a trivial matter. There are 480 PRS licensees in the 98005 and 98006 ZIP codes alone. Those are just two of the ZIP code areas the proposed transmission line would pass through.

PRS has a well-established reputation for providing emergency communications support to both government and non-government emergency services organizations during disasters here in the United States and in other countries throughout the world. And PRS licensees have played a crucial role in numerous at-sea-rescues, receiving distress calls transmitted from vessels via PRS and then alerting the Coast Guard to those imminent tragedies. The PRS station in City of Bellevue’s Emergency Operations Center, along side the 911 dispatch facility, provides communications support to City emergency services and is further testimony to the value of PRS.

The DEIS acknowledges the proposed project’s potential for interference with communications services such as those used by fire, police and medical response, and by cell phones and GPS but does not address PRS. Because PRS must operate at lower frequencies, at lower transmitter power, and operates over longer transmitter-to-receiver distances and with different modulation types, PRS is more susceptible to power line interference than those that have been discussed in this DEIS. Since Puget Sound Energy is aware that this proposed transmission line could interfere with PRS, it has been dismissive to have not addressed the service in this DEIS.

The DEIS says, "*Communication interference is **dependent upon the frequency** of the system in use, the **relative locations of the transmitters and receivers** with respect to one another, and other parameters (Enertech, 2015). Overhead transmission lines do not, as a general rule, interfere with radio or TV reception. **Corona-generated radio frequency noise decreases with distance from a transmission line** and also **decreases with higher frequencies**. Whenever corona is a problem, it is usually for amplitude modulation (AM) radio and **not the higher frequencies** associated with frequency modulation (FM) radio or TV/satellite signals. Generally most modern fire and emergency responder communication systems (such as mobile-radio communications) utilize either FM or digital signals that are not affected by transmission line corona. In addition, interference is unlikely with other communications devices such as cell phones and GPS units that operate with digital signals at much higher microwave frequencies.*"

**Transmit frequency:** Interference to cell phones and GPS may not be likely because they operate at higher microwave frequencies, but those frequencies are between 28 and 89 times the highest frequency possible with my PRS station and the frequencies at which most other PRS stations operate. Even FM and TV signals are at frequencies between 2 and 32 times the maximum frequency of my station.

**Relative locations of transmitters and receivers:** With the exception of GPS, transmitter-to-receiver distances of the services cited in this DEIS are in the vast majority of cases less than 100 miles. My PRS station is used exclusively for communication with stations located around the world, thousands of miles distant. Distant station signals are often very weak. Interference created by the proposed power line would make weak signals impossible for me to understand and others impossible to even be detected. This would be true for other similarly situated PRS licensees.

**Distance from the proposed transmission line:** My PRS station is located less than 300 feet from Segment E of the proposed route and as is stated in the DEIS would be more susceptible to power line corona-generated radio frequency noise. This would be true for other PRS stations located close to the proposed power line route.

**Transmitter Power:** The strength of a received signal is a function of transmitter power and will determine whether interference from a power line is of significance. It is no wonder that AM broadcast, FM broadcast and Television might not be affected, for they are permitted to transmit at substantially higher power levels than PRS licensees are allowed. Maximum AM broadcast power is 50 times, maximum FM broadcast power can be 100 times and television can be more than 300 times maximum PRS power levels. As a consequence, power line interference that would not be perceptible to someone listening to broadcast radio or watching TV can make a PRS signal unintelligible or undetectable. Many PRS stations transmit at much less power than they are allowed, some as low as 1/200 of the maximum permitted, making power line radio frequency interference an even greater impediment to their reception.

**Modulation type:** The DEIS also states that because emergency response systems, cell phones, and GPS use FM or digital modulation they are not effected by transmission line corona. That may be so for those services, but the preponderance of PRS signals are not FM or digitally

modulated.

The DEIS also says “. . . engineers take steps in the design of overhead transmission lines to **limit corona activity to acceptable levels**. . . . Corona is affected by the local electric field at the surface of the conductor (called the surface gradient.) Engineers can **control the conductor gradients by selection of conductor** size (larger conductors have lower gradients), phase spacing and arrangement, and sometimes by bundling (use of multiple conductors per phase lowers the surface gradient).”

**Acceptable levels:** What will Puget Sound Energy’s acceptable level of corona activity and radio frequency emissions be and what will the acceptable level chosen be based upon? There will certainly be a tension between Puget Sound Energy’s cost of construction and willingness to limit corona produced radio frequency emission levels that could interfere with PRS. And who would verify that the proposed power line was actually designed and constructed to not exceed the corona/radio frequency emission standard? In past instances of power line interference PRS licensees have had to seek assistance from the Federal Communications Commission in order to force power line operators to take corrective action. Unreasonable amounts of time and effort have been required. And during those protracted periods the licensees’ operations were degraded.

**Selection of conductor:** It is my understanding that both conductor design and conductor diameter influence corona susceptibility (and radio frequency interference) and that for economic reasons Puget Sound Energy currently does not favor the conductor design that is least susceptible.

In summary:

The Federal Communications Commission grants PRS licensees certain privileges and prohibits everyone, including Puget Sound Energy, from interfering with the licensees’ exercise of those privileges.

The DEIS does not address PRS. The conclusions drawn in Chapter 15.6.2 cannot be applied to the PRS. Virtually all PRS communications are restricted to much lower frequencies than those the DEIS suggests are largely immune from interference, use different modes of modulation than those suggested to be immune, operate at much lower transmitter power, and involve very large distances (often thousands of miles) between the transmitters and receivers. All the foregoing factors make PRS more susceptible to radio frequency interference than the communication services addressed in the DEIS.

Finally, my PRS station is located less than 300 feet from Segment E of the Plan and I believe is especially vulnerable to radio frequency interference if the proposed 230KV power line were allowed to occupy that segment.

It is Puget Sound Energy’s responsibility to ensure that there will be no interference with my operations and the operations of other PRS licensees.

Eldon H Graham

13629 SE 20<sup>th</sup> Street

Bellevue, WA 98005

[425-644-4282](tel:425-644-4282)



Energize Eastside EIS <info@energizeeastsideeis.org>

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## Phase 2 Route 2

1 message

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**Erika Pfeiffer** <un1erika@hotmail.com>

Tue, Jul 26, 2016 at 12:41 PM

To: "info@EnergizeEastsideEIS.org" <info@energizeeastsideeis.org>

Do not use Route 2. This will effect my view and have extra miles of transmission lines around the city.

Erika Pfeiffer

2566 128th Ave SE

Bellevue, WA 98005



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## Fwd: Proposed PSE Energize Eastside Transmission lines

1 message

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**Jerry and Annie Watkins** <ajbiking@gmail.com>  
To: info@energizeeastsideeis.org  
Cc: council@bellevuewa.gov, info@cense.org

Fri, Jul 29, 2016 at 4:12 PM

—— Forwarded message ——

From: **Jerry and Annie Watkins** <ajbiking@gmail.com>  
Date: Fri, Jul 29, 2016 at 4:07 PM  
Subject: Proposed PSE Energize Eastside Transmission lines  
To: info@energizeeastsideeis.org  
Cc: council@bellevuewa.gov, info@cense.org

We are dismayed with this proposed project. It is over-sized, dangerous and overly expensive which we rate payers will have to pay for. Mature trees numbering about 8,000, would be cut down or destroyed to provide right of way for these excessively tall lines. This would degrade the livability of 29 neighborhoods which are key to attracting residents and businesses to the Eastside. PSE says there is no real danger of these huge high voltage towers being constructed over aging high pressure gasoline and jet fuel lines. Safety experts warn there is a significant risk of catastrophic fire caused by construction or accelerated corrosion in these pipelines. The huge amount of additional electricity in these lines will speed up deterioration of the pipelines. I believe there has been one failure in this aging pipeline already.

CENSE has had industry experts including former PSE engineers develop scalable plans using modern technology at work in other cities. This brings us to the real reason **foreign-owned** PSE wants this transmission line. They want a line of this scale because they want to make large profits shipping electricity to and from Canada. It has little to do with how best to meet Bellevue and the Eastside's needs. They are trying to scare us by saying we will have brown outs in a couple of years if we don't approve this project. **Really**, how stupid do they think we are. Since their preferred routes would pass through East Bellevue Community Council's jurisdiction they decided to add a bypass route at the last minute to avoid East Bellevue Community Council. PSE has admitted this and the bypass would make this situation worse. It will add about 4 miles of new line where there has not been one before, degrading more neighborhoods. It would remove the trees along the Lake Hills Connector and pass through Wilburton and Kelsey Creek Park.

It is clear that PSE has no regard for the environment, livability or safety of Bellevue and Eastside neighborhoods. They say their study shows the need for this **old school** giant project. As far as I know they have not shown this study to anyone. It makes sense this has not been shared as it would be admitting to possibly authoring an inaccurate, self-serving study. We ask that the powers that be and most particularly the **members of the Bellevue City Council side with their constituents and** reject this PSE project.

Gerald and Anne Watkins



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## Comment letter on Energize Eastside EIS Phase 2 scoping

1 message

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**Judith Hoyle** <jhoyle@wrightrunstad.com>

Mon, Aug 1, 2016 at 3:42 PM

To: "info@EnergizeEastsideEIS.org" <info@energizeeastsideeis.org>

Cc: Greg Johnson <gjohnson@wrightrunstad.com>, "council@bellevuewa.gov" <council@bellevuewa.gov>, "Brad Miyake (bmiyake@bellevuewa.gov)" <bmiyake@bellevuewa.gov>

Good afternoon.

Please find attached our comment letter with respect to the Energize Eastside EIS Phase 2 scoping.

Our address of record is:

Wright Runstad & Company

1201 Third Avenue, Suite 2700

Seattle, WA 98101

Attention: Greg Johnson

Thank you,

**Best regards,**

**Judith K. Hoyle**

**Executive Assistant to Greg Johnson**

Wright Runstad & Company

1201 Third Avenue, Suite 2700

Seattle, WA 98101

Direct: 206/805-5884

Cell: 206/890-5672

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 **160801 Energize Eastside comment ltr.pdf**  
85K

August 1, 2016

Heidi Bedwell, EIS Program Manager  
City of Bellevue  
450 110th Ave. NE  
P.O. Box 90012  
Bellevue, WA 98009

**ENERGIZE EASTSIDE PHASE 2 COMMENTS**

Dear Ms. Bedwell:

As owners of the 36-acre Spring District development in the BelRed neighborhood of Bellevue, we are keenly interested in seeing PSE's Energize Eastside project proceed on schedule toward an outcome that ensures the reliable transmission of an adequate electrical supply to sustain a growing East King County economy and population.

Wright Runstad and Company supports PSE's preferred alignment, Willow 2, and agrees with analyses indicating that using the existing transmission corridor and proven technologies minimizes impacts to ratepayers, the environment and the community. We urge the project's continued analysis and permitting processes proceed on schedule to avoid delay in implementation of the Energize Eastside project.

We also support REI's interest, expressed in its comment letter dated August 1, 2016, in exploring opportunities for added community benefit for workers and residents by potentially using rehabilitated land in the transmission corridor to create new commuter biking, running, walking and other outdoor amenities.

We appreciate the complexities of such an inter-jurisdictional project and thank you for your continued efforts to stay focused on a productive outcome that supports a thriving Eastside community.

Sincerely,



Gregory K. Johnson  
President

GKJ/jkh

Cc: Mayor Stokes and members of the Council  
Brad Miyake, City Manager



Energize Eastside EIS &lt;info@energizeeastsideeis.org&gt;

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## Energize Eastside Phase 2 Scoping Comments

1 message

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**Heather Trescases** <director@eastsideheritagecenter.org>

Wed, Jul 20, 2016 at 3:06 PM

Reply-To: director@eastsideheritagecenter.org

To: info@energizeeastsideeis.org

Hello Heidi,

Please find attached a letter from Eastside Heritage Center regarding the Phase 2 Scoping for PSE's Energize Eastside project.

Thank you for the opportunity to provide comment.

Best,

Heather

**Heather Trescases***Executive Director*

Eastside Heritage Center

P.O. Box 40535

Bellevue, WA 98015

Ph: (425) 450-1049

Fax: (425) 450-1050

[www.eastsideheritagecenter.org](http://www.eastsideheritagecenter.org)[www.BellevueStrawberryFestival.org](http://www.BellevueStrawberryFestival.org)**EHC Comment Letter\_PSE Bypass Routes\_7-20-16.pdf**

87K

# EASTSIDE HERITAGE CENTER



*Connections for yesterday, today, and tomorrow.*

July 20, 2016

Ms. Heidi Bedwell  
City of Bellevue  
Development Services Department  
450 110th Ave NE  
Bellevue, WA 98004

Via email: [info@EnergizeEastsideEIS.org](mailto:info@EnergizeEastsideEIS.org)

Dear Ms. Bedwell,

Eastside Heritage Center (EHC) would like to take this opportunity to provide comment as part of the Phase 2 Scoping for PSE's Energize Eastside project. As the primary steward of Bellevue's history, EHC has a deep understanding of the changes and tremendous growth of our region since PSE's existing power infrastructure was installed in the 1960s. We fully recognize the need to accommodate the growth, and support PSE's plan to provide reliable power for the communities on the Eastside.

It has recently come to our attention that two alternative routes are being considered through Bellevue, in order to "bypass the boundaries of the East Bellevue Community Council." EHC does not support the proposed bypass routes. These routes will introduce power poles and lines into areas that historically have not had utility impacts of this kind, in particular the environmentally sensitive greenbelt along the Lake Hills Connector. Additionally, the bypass routes travel through the historic Wilburton neighborhood, in close proximity to the Bellevue Botanical Garden, as well as placing a pole directly in front of the historic 1918 McDowell House. There would also be a significant loss of trees along the southern portion of the bypass routes, an area known for its tree canopy and parks trail system.

Eastside Heritage Center supports PSE's preferred alignment, Willows 2, which follows the existing power corridor and passes in a straight north/south line through much of Bellevue. This route has significantly fewer impacts to neighborhoods, the environment, and historic resources.

Sincerely,

A handwritten signature in blue ink, appearing to read "Heather Trescases".

Heather Trescases  
*Executive Director*



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## WTD Comments - Energize Eastside Project Reopened Phase 2 Environmental Impact Statement

1 message

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**Sowell, Heidi** <Heidi.Sowell@kingcounty.gov>  
To: "info@EnergizeEastsideEIS.org" <info@energizeeastsideeis.org>  
Cc: "Lampard, Mark" <Mark.Lampard@kingcounty.gov>

Mon, Aug 1, 2016 at 9:03 AM

Dear Ms. Bedwell:

Attached, please find King County Wastewater Treatment Division's comments on the Energize Eastside Project Reopened Phase 2 Environmental Impact Statement.

Please contact Mark Lampard, Local Public Agency Coordinator, at [mark.lampard@kingcounty.gov](mailto:mark.lampard@kingcounty.gov) or (206) 477-5414 with any questions.

Thanks,

Heidi

Heidi Sowell

Environmental Planner | King County Wastewater Treatment Division

201 S. Jackson St. | Seattle, WA 98105-3855

[206-477-5548](tel:2064775548)

<http://www.kingcounty.gov/environment/wtd.aspx>

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### 2 attachments

 **EnergizeEastside\_EBellevueCCBypassRoutes.pdf**  
404K

 **EnergizeEastsideDEIS KCWTDCOMMENT 0728016.pdf**  
179K



## King County

Department of Natural Resources and Parks  
Wastewater Treatment Division

### Community Services & Environmental Planning

King Street Center, KSC-NR-0505  
201 South Jackson Street  
Seattle, WA 98104-3855

August 1, 2016

Sent via email: [info@EnergizeEastsideEIS.org](mailto:info@EnergizeEastsideEIS.org)

City of Bellevue  
Development Services Department  
Attn: Heidi Bedwell  
450 110th Ave NE  
Bellevue, WA 98004

RE: Energize Eastside Project Reopened Phase 2 Environmental Impact Statement

Dear Ms. Bedwell:

The King County Wastewater Treatment Division (WTD) has reviewed the scoping materials for **the Energize Eastside Project's Phase 2 Environmental Impact Statement (EIS)**. The Puget Sound Energy (PSE) transmission line alignments shown in the Phase 2 EIS scoping materials intersect WTD wastewater conveyance facilities at multiple locations. From north to south: both alternatives would cross the Lake Hills Interceptor; parallel the Eastside Interceptor and then would cross and/or parallel the Factoria Trunk. The approximate locations of these crossings and parallels are shown on the attached map. In addition, WTD may have permanent easements or similar property rights for these conveyance facilities.

(Note that these comments are in addition to the impacts identified in the May 26, 2016 Phase 2 letter submitted by WTD.)

WTD is requesting that PSE and the City of Bellevue consider the potential impacts of the proposed project on these and other wastewater facilities when identifying and analyzing the impacts of project alternatives. WTD would need to be assured the right to maintain and repair our facilities, and, in the event that a sewer line must be relocated, new permanent easements may need to be provided. Impact analysis for the Phase 2 EIS should be more specific regarding potential impacts to wastewater facilities than for Phase 1.

WTD is also requesting that PSE and the City of Bellevue submit design drawings and other project information for review as design development continues so that King County staff can assess the project's impacts. Information should be sent to:

Heidi Bedwell  
August 1, 2016  
Page 2 of 2

Mark Lampard, Local Public Agency Coordinator  
King County Wastewater Treatment Division  
201 South Jackson Street, KSC-NR-0508  
Seattle, WA 98104-3855  
(206) 477-5414  
[mark.lampard@kingcounty.gov](mailto:mark.lampard@kingcounty.gov)

Thank you for the opportunity to review and comment on this project.

Sincerely,

A handwritten signature in cursive script that reads "Heidi Sowell".

Heidi Sowell, Water Quality Planner  
Community Services and Environmental Planning

cc: Mark Lampard, Local Public Agency Coordinator, Project Management Unit



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## Wilburton Community Survey

1 message

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**Iris Jewett** <iris@wilburtonpottery.com>

Sat, Jul 30, 2016 at 1:58 PM

To: info@energizeeastsideeis.org

Hello. I did a survey on Nextdoor to get feedback about the new power lines that will impact the Wilburton Neighborhood.

First:

After five years, the Juno spacecraft is close to Jupiter. I hope that in five years, all new buildings in Bellevue would be green and no new electrical power would be needed or 100 foot power lines going through lovely neighborhoods. We really don't need new regulations to make this happen. Google and other large companies are using new scientific methods to cut their power usage and save an enormous amount of money. The technology is already here and the Bullitt building in Seattle is a prime example.

In other words instead of investing in power lines, invest in green technology and keep our air clean.

Second: Thoughts about the power lines:

1. Never in Wilburton!!! It would destroy the views from the Bellevue Botanical Garden. It would require the cutting down of 8,000 trees.
2. Put the lines underground if feasible.
3. Use the original route of the power lines.
4. One hundred foot towers would be a blight on the neighborhood.
5. Complete study if there are negative physical results from the lines.
6. Get rid of the lines for Seattle
7. Why spend the extra money for a round about route?
8. Why should we pay for the changes, let PSE pay for the new lines.
9. Wilburton would like all neighborhoods to not be impacted by the hundred foot poles. If built it would be a horrible legacy to generations in the future. Bellevue's motto is "City in a Park". Is it only a "City in a Park" for the downtown area, are you discriminating against other neighborhoods?

Iris Jewett

Bellevue resident since 1979





Energize Eastside EIS &lt;info@energizeeastsideeis.org&gt;

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## PSE's Engrize East Side and New Proposal

1 message

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**Isaiah Bier** <bierijd@comcast.net>  
To: info@energizeeastsideeis.org  
Cc: council@bellevuewa.gov, info@cense.org

Thu, Jul 28, 2016 at 3:23 PM

Dear sirs/madams,

With their new proposal PSE is trying to appease certain neighborhoods at the expense of others. They are promoting a project which is unnecessary and very expensive, and whose sole purpose is to increase their profits at the expense of their customers. First, they have decided on the project they want to accomplish and only then they try to justify it by using false data and wrong analysis and projections, to justify it. It is like putting the cart before the horse.

This project is also very dangerous due to its proximity to jet fuel pipelines and totally disregards the safety of the inhabitants of the neighborhoods it is supposed to path through.

Furthermore, their project will damage the environment, the beauty and livability of quite a few neighborhoods by cutting down many valuable trees and potentially exposing the people to high levels of EMP.

It is high time to seriously consider the proposal of CENSE which is based on sound data and analysis by experts in the field, and disregards all political pressure by the lobby of PSE.

For some time now we have experience more and more frequent power outages, the last one just a few days ago during beautiful calm weather. In the past, when Puget Power was an independent company we practically never had outages in our neighborhood, even during storms. This makes me wonder whether PSE creates them intentionally to promote their unnecessary project.

Please view the PSE project for what it is, a way to increase profits by selling more power to Canada, while customers of the company foot the bill. It is a pure manifestation of greed.

Sincerely,

Isaiah Bier

Virus-free. [www.avast.com](http://www.avast.com)



Energize Eastside EIS <info@energizeeastsideeis.org>

## Comments re "Reopened" PSE Energize Eastside Phase 2 Comment Period and New "Options"

1 message

**James Adcock** <jimad@msn.com>

Thu, Jul 7, 2016 at 12:50 PM

To: "info@energizeeastsideeis.org" <info@energizeeastsideeis.org>

Comments re "Reopened" oPSE Energize Eastside Phase 2 Comment Period and New "Options"

Comments of:

James Adcock  
Electrical Engineer  
5005 155th PL SE  
Bellevue WA 98006

PSE unfairly, after routes have been vetted and chosen by the community committees, now chooses for their own convenience to ignore those chosen routes, and continue in a new, unvetted direction, without given affected homeowners, residents, and businesses any reasonable say in the routing process. PSE gives no rationale for the new routings, other than saying they are trying to "route around" lawsuits – if you will, not picking routes on any rational basis of minimizing environmental damage, but now based simply on legal expediency – a judgement based not on environmental consideration – but rather simply picking on those people and businesses that PSE believes are least able to afford to defend themselves legally, that PSE can best "get away with" picking on.

The new routes have in no way been fairly vetted, nor has PSE in any way described what environmental changes these new routes would entail, including PSE has not even described what size and kind of poles they would use, what voltages and currents they would use, and where exactly those poles would be located, and what environmental damages they would cause. PSE shows nothing of the design of these new "Option" routes – BECAUSE PSE HAS DONE NO DESIGN WORK – they have simply drawn lines on a map!

Further, the Bellevue EIS process, and Bellevue's franchise agreement with PSE, requires PSE to submit TWO DISTINCT AND VIABLE ROUTES for consideration, NOT a smorgasbord array of little bits of "Well if this route doesn't work then we will try this other route and then if that route doesn't work then we also have another backup route for consideration, and then if that doesn't work then we are going to cut through this neighborhood..." where PSE simply keeps trying to gerrymander around this that or the other political and/or legal opposition. At this point in time, PSE HAS NOT even identified "TWO DISTINCT AND VIABLE ROUTES for consideration!"

It is not fair for City of Bellevue, and PSE, to continue to ask the public to review and comment over and over again on rapidly changing PSE's "TWO DISTINCT AND VIABLE ROUTES" when City of Bellevue, and PSE, CANNOT EVEN SAY WHAT THOSE TWO DISTINCT AND VIABLE ROUTES ARE!

A superficial look at these new unvetted routing "options" PSE proposes or maybe proposes or maybe doesn't propose, they don't actually say or even know, suggests the following environmental damages, in the minimum, would occur – damages which PSE doesn't say what they are or aren't because frankly, PSE HAS NO IDEA WHAT THEY ARE DOING – they are just drawing lines on a map! :

\*Tree cutting in Kelsey Creek Park wilderness area, damaging that beautiful public park.

\*Tree cutting in Wilburton Community Park wilderness area, damaging yet another public park.

\*Alignment along (overhead) a section of the Eastside Rail Corridor parkway, damaging a major region linear park, and a major tourism resource.

\*Adjacent to numerous populous apartment complexes, damaging the quality of life of 100's of residents.

\*Adjacent to several new car sales business – locations that PSE in their previous geospatial routing studies said they would \*not\* locate their route – damaging the high quality "luxury" image these businesses are trying to project to their potential customers – even as these business have been investing millions of dollars in upgrading their businesses!

\*Adjacent to Lake Bellevue, damaging that natural resource, and the adjacent businesses and properties.

\*Near or on top of the new Sound Transit East Link Route, hurting our ability to develop this route, now and in the future.

In summary, these latest PSE design change smorgasbord of "options" simply reinforce what this electrical engineer, and others, have tried to say from day one [and which PSE's "facilitator" prevented this electrical engineer from saying] namely: PSE's route choices are just plain stupid, PSE really doesn't know what they are doing, and they should have never attempted to develop this route in the first place. A 230kV line SIMPLY DOES NOT FIT into the highly developed, and extremely narrow corridor, where PSE is unfairly trying to cram this line as the expense of local residents!

Further PSE has proposed a split-routing through Somerset, where they would route 230kV lines about 10X closer to existing homes (near Somerset Blvd SE) than industry standards would consider normal and sane, leading to the possibility of electrocution of homeowners, or people working on those homes, such as painters, tree trimmers, or gutter cleaners. And on the other side of the split they propose newly routing 110kV lines down through a business district of Factoria. I suggest an obviously better, less expensive, and less environmentally damaging approach is to simply leave the existing 110kV lines in Somerset AS THEY CURRENTLY ARE, including leaving them at the existing 50 foot height, and then instead run the 230kV side of the line split through the business district section of Factoria – a region less impacted by the view corridor impacts of the higher 230kV poles, and by the safety concerns of running 230kV overly close to existing homes.

James Adcock  
Electrical Engineer  
5005 155th PL SE  
Bellevue WA 98006



Energize Eastside EIS <info@energizeeastsideeis.org>

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## EIS location

1 message

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**Jamie Kuo** <jkuoball@hotmail.com>

Sat, Jul 9, 2016 at 10:17 AM

To: "info@energizeeastsideeis.org" <info@energizeeastsideeis.org>

I am a resident of Waterford place situated between 120th and 124th. It has been brought to my attention that PSE has proposed 120th as an alternative route/location for the expansion and substation. Our neighborhood already has power lines and towers running on our front street, now to add another line on our backyard it just too much, both for safety and esthetic concerns. Please consider the preferred route Willow 2 as the best choice.

Thank you.

Jamie Kuo



Energize Eastside EIS &lt;info@energizeeastsideeis.org&gt;

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**No - to Bypass Route #2**

1 message

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**Jane Mueller** <jmjps Seattle@comcast.net>  
To: info@energizeeastsideeis.org

Tue, Jul 12, 2016 at 7:12 PM

To Whom It May Concern:

I reside in Woodridge/Norwood Village.

I am **NOT** in favor of Bypass Route #2.

I have concerns about how this route could potentially affect the pipeline that runs along Richards Road.

I also have concerns about how the construction of this stretch along Richards Road could affect fish habitat.

If you have to consider one of these Bypass Routes, I would respectfully request you consider Bypass Route #1.

Sincerely,

Jane Mueller

2420 123<sup>rd</sup> Ave SE

Bellevue, WA 98005



Energize Eastside EIS &lt;info@energizeeastsideeis.org&gt;

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## Phase 2 Scoping Comment - 2 New Proposed routes

1 message

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**J Bush** <jason\_g\_bush@hotmail.com>

Fri, Jul 22, 2016 at 12:43 PM

To: "info@EnergizeEastsideEIS.org" &lt;info@energizeeastsideeis.org&gt;

Hi there,

To be blunt, I do not understand why this commission would even consider rerouting the existing line path which currently has a minimal environmental footprint. The proposed routes would INCREASE the environmental impact of the Energize Eastside project by increasing the existing environmental footprint and also INCREASE the environment affected by the energy corridor passing through Bellevue comprised of the existing power lines plus the gas/oil lines which do not appear to be under consideration as a part of the Energize Eastside project.

Furthermore, as a homeowner along one of the proposed routes, the addition of power lines near my home will negatively impact my home value due to the undesirable nature (health and aesthetic) of living near power lines. I purchased my current home with the understanding that there were no power lines present and thus rerouting the lines near my home will materially alter the calculation I used to assess its fair value in a negative direction. Basically, I would NOT have purchased my home if it was near power lines and I know this is a concern for others in general based upon the depressed home values typically found near power lines.

The converse is also true in that anyone currently living along the existing line path knowingly moved there when they purchased their home, so rerouting of the power lines would shift home value from those of us along the proposed routes to those along the existing route. As such, I will expect to receive (and will legally pursue) financial compensation for not only the decrease in the value of my home but for the increased time associated with selling my home in the event any new power lines are constructed along the proposed routes.

To summarize, I am OPPOSED to both of the proposed routes as they will increase the environmental impact of the energy corridor passing through Bellevue as well as negatively impact me financially.

Thank you for reading and please let me know if you have any questions.

Jason Bush

1990 132nd Ave SE #34

7/25/2016

Weebly Email Service Mail - Phase 2 Scoping Comment - 2 New Proposed routes

Bellevue, WA 98005



Energize Eastside EIS &lt;info@energizeeastsideeis.org&gt;

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## Phase 2 Scoping period comments

1 message

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**Jeff Callison** <jeffcallison@comcast.net>  
To: info@energizeeastsideeis.org

Mon, Jul 11, 2016 at 3:08 PM

To Whom It May Concern:

These comments are in regards to the new Phase 2 options . Though I still believe the best course of action is "no action", the two new options would definitely have less impact on the existing neighborhoods along Willow 2 Route.

First- the less impact to the environment along the Olympic Pipeline route, the better. Less chance of construction conflict with the pipeline integrity. Less chance of a disastrous outcome. The chances of a catastrophic fire/explosion should not be discounted.

Second- less visual impact and construction headaches to the homeowners along the pipeline trail, as well as the destruction of many beautiful and environmentally positive trees.

Third- less chance of legal issues by the homeowners along the pipeline trail.

Fourth- less visual impact of higher poles and wires to the neighborhoods to the east of the pipeline trail- many of whom who do not currently see the existing 115V lines

Fifth- Makes more sense for the poles to follow the main streets along Richards Road instead of through backyards.

Finally, I emphasize the best solution is to determine there is no immediate need for these new power lines. The need for these lines is highly contentious and debatable, as are the motives for pushing them through the EIS at this time. There are definitely more negatives to this proposal than the proof of positive need.

Sincerely,

Jeff Callison

1805 136<sup>th</sup> Place SE

Bellevue, WA 98005



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## EIS scoping comment letter

1 message

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**Jessica Clawson** <jessica@mhseattle.com>  
To: "info@EnergizeEastsideEIS.org" <info@energizeeastsideeis.org>  
Cc: Panfilo Morelli <ctmgr@comcast.net>

Thu, Jul 28, 2016 at 12:59 PM

Please see attached EIS comment letter submitted on behalf of Eastridge Parnters LLC. Thanks.

Jessica M. Clawson  
Attorney-at-Law

[MCCULLOUGH HILL LEARY, PS](#)

701 FIFTH AVENUE, SUITE 6600

SEATTLE, WA 98104

TEL: [206.812.3388](tel:206.812.3388)

DIRECT: [206.812.3378](tel:206.812.3378)

FAX: [206.812.3389](tel:206.812.3389)

[JCLAWSON@MHSEATTLE.COM](mailto:JCLAWSON@MHSEATTLE.COM)

[WWW.MHSEATTLE.COM](http://WWW.MHSEATTLE.COM)

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 **EIS Scoping Comment letter.pdf**  
199K

# McCULLOUGH HILL LEARY, PS

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July 27, 2016

VIA Electronic Mail

City of Bellevue  
Development Services Department  
Attn: Heidi Bedwell  
450 110<sup>th</sup> Ave NE  
Bellevue WA 98004

Re: Eastridge EIS Phase 2 Scoping Comments

Dear Heidi:

We represent Eastridge Partners LLC, the owner of Eastridge Corporate Center located at 11811 & 11911 NE 1<sup>st</sup> Street, Bellevue, WA 98005 (Parcels 3325059015 and 3325059183, respectively; hereinafter referred to as the "Property"). We would like to become official parties of record for the Environmental Impact Statement ("EIS") for the Energize Eastside project (our physical mailing address is below).

The family owning Eastridge Partners has owned property on the Eastside since the early 1900s and will own the subject Property for many years to come. The Property is well-located on the edge of the "O" zone adjacent to the Botanical Gardens. It is also located in close proximity to the new Light Rail stations that will be constructed in the Wilburton Area. Last week, the Bellevue City Council voted to include the Property in the official Grand Connection/Wilburton Commercial Area planning boundary; this study will look at land use changes that will best utilize the new Light Rail stations and transit connections to come.

We are extremely concerned and disturbed by the proposed Bypass Routes 1 and 2, both of which pass directly in front of the Property. We note that a change to the south side of the Bypass Route is proposed, but the northern side remains the same. As a result, both alternatives are equally impactful to our Property, and we do not believe these are two meaningfully different alternatives under SEPA. To that end, the EIS should thoroughly consider a new Bypass Alternative that avoids the Property. In addition, the EIS should consider:

- The impacts to Land Use that could occur. Both Bypass routes significantly impact the Wilburton/Grand Connection study area. Will the Bypass routes be factored into the City's study? What potential impacts to redevelopment that might be anticipated associated with the Light Rail stations could occur? What infill density will not occur, or will not be allowed to occur, due to proximity to overhead powerlines? What impact to Greenhouse Gas Emissions will the loss of density proximate to Light Rail stations cause?

July 28, 2016

Page 2 of 2

- Impacts to parks. The Bypass Routes will impact the City's Botanical Gardens. What impacts to aesthetics and recreation will occur as a result of the Bypass Routes? Other park/trailways may also be negatively impacted, including the Lake Hills Connector.
- Impacts to vegetation, and in particular large mature trees. The Bypass Routes appear to pass through areas which include many large trees and other native/wetland areas. These impacts should be quantified and disclosed. How many large trees will require removal? How many trees that could grow large today will not be able to grow large because of the overhead wires?
- Impacts to safety. It appears both Bypass Routes cross over the aging fuel pipelines. This issue should be carefully studied and should be strongly considered in determining which alternatives are best for the City of Bellevue and the safety of its citizens.
- Impacts to traffic. The Bypass Routes impact more streets and arterial routes than the initial alternative. What are the traffic disruptions, both during construction and permanently that will occur as a result of the project?
- Impacts to project budget. The Bypass Routes appear to more than double the amount of infrastructure in the form of wires and towers that will be required, due to the new circuitous routes. What impact to project budget/ratepayers will occur as a result of this expensive and unnecessary reroute? In addition, how much more money will be required to be spent to obtain the condemnation/easement rights across the many more private properties that will be impacted?

We understand PSE's need to include a study alternative, but we do not believe the two alternatives are meaningfully different as it relates to the Property. We would appreciate a full review of this issue, as well as the issues raised above, and all other related issues/elements of the environment as appropriate.

Sincerely,



Jessica M. Clawson



Energize Eastside EIS <info@energizeeastsideeis.org>

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## Comments to Environmental Impact Study

1 message

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**Joan Cohee** <coheej@gmail.com>

Sun, Jul 31, 2016 at 4:00 PM

To: info@energizeeastsideeis.org, council@bellevuewa.gov, info@cense.org

[My comments are attached. Please let me know if you have difficulty accessing file.](#)

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**Environmental Impact Study.docx**

15K

To: Environmental Impact Study of Alternatives to Energize Eastside

From: Joan Cohee

Date: July 31, 1916

My first reaction to the two revised alternatives, Bypass Routes 1 & 2, proposed by Puget Sound Energy was one of disbelief. How could PSE present options adding additional miles of transmission lines through highly developed business and industrial areas for an essentially unneeded project. This must be some kind of a joke to demoralize and wear down those who oppose the necessity of Energize Eastside in the first place.

I have attended EIS public comment meeting and CENSE information meetings, educated myself on the issues and written to the City of Bellevue Development Services Department. I continue to believe the project in both its initial and revised form is dangerous, environmentally insensitive, and overly expensive.

PSE's original proposal to construct power lines near schools, neighborhoods and a jet fuel pipeline presents risk of fire or explosion due to pipeline corrosion and or construction proximity. This project is dangerous to the citizens of the Eastside.

In addition, the original project involves removing 8000 trees and acquiring residences. It affects and alters 29 neighborhoods. The revised alternatives add 4 miles of transmission lines through highly developed business and residential neighborhoods, along the lovely green Lake Hills Connector and through Wilburton and Kelsey Creek Park This is supposedly to bypass East Bellevue Community Council boundaries and makes even less sense than the original design alternatives.

This whole “Energize Eastside” project seems to have been formulated to increase profits of PSEs owners and to increase the company’s resale value. It is overly expensive as it overbuilds what is needed. Eastsiders will be paying for it for years.

According to CENSE, electricity demand to meet future Eastside power needs can be achieved by scaling resources, using modern technology and promoting conservation. Eighteen miles of higher capacity transmission lines are unnecessary. PSE has not effectively demonstrated the need at this time.

Please consider the articulate public reaction to “Energize Eastside” and advocate the more moderate plan CENSE proposes. And please totally reject the ill-considered, ludicrous Bypass route 1& 2.

Thank you for your consideration.

Joan Cohee

12109 SE 23<sup>rd</sup> Street

Bellevue WA 98005



Energize Eastside EIS &lt;info@energizeeastsideeis.org&gt;

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## Scoping comments regarding Energize Eastside

1 message

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**Joy** <cafferty\_j@msn.com>

Fri, Jul 8, 2016 at 2:05 PM

To: "info@energizeeastsideeis.org" &lt;info@energizeeastsideeis.org&gt;

To Whom It May Concern:

I live at 12201 NE 3rd Place along the ridge overlooking 120th Avenue NE and have concerns about the new by-pass options being proposed by PSE. If either of these new options are approved by the City, we, homeowners living along 124th Avenue NE, will be surrounded by power transmission lines within a 4 block radius both on the east by Seattle City Light power lines running along 124th Avenue NE and then with new power lines for PSE running along 120th Avenue NE. This situation causes several concerns that I would like the EIS process to consider:

- 1) The health concerns regarding the proximity of so many power lines to residents living/working in this area.
- 2) The impact to property values.
- 3) The aesthetics of additional power transmission lines running through the Wilburton neighborhood.
- 4) The cost of a longer route -vs- the current approved Willows 2 route.
- 5) The impact these new routes will have on the trail system proposed to run along the rail tracks and the proposed development of the Bel-Red corridor (Spring District, etc.).

Although I hear that PSE prefers to use the currently approved Willows 2 route, I am concerned that they will take the easy way out if the City gives it to them. It seems absurd to approved a new area for power transmission lines that will have so much more of an impact on our beautiful city -vs- requiring PSE to use the current utility corridor that already has power lines in place.

If it is not possible to have the power lines installed underground, we should certainly not condone installing additional lines in new areas.

Thank you for your consideration,

Joy Cafferty



Energize Eastside EIS &lt;info@energizeeastsideeis.org&gt;

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## Energize Eastside proposed routes

1 message

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**Saddlerock** <joyphelps@joyphelps.com>

Fri, Jul 15, 2016 at 10:09 AM

To: info@energizeeastsideeis.org

I oppose the new routes proposed by Energize Eastside for the following reasons:

- they would destroy 8000 more trees in our community, altering the character of our “city in a park”
- the proposed routes would disturb soil along already aging gas pipelines, running serious risk of explosion as new poles are installed and old poles are removed
- Energize Eastside relies on assumptions for energy needs that conflict with projections of other regional utility companies, e.g. Seattle City Light; the size of the project is far greater than needed for the communities it is supposed to serve
- Energize Eastside does not make use of alternate scalable technologies to power growth while reducing demand; planners are simply not interested in battery farms and placing solar panels on public buildings among other technologies

The premise for Energize Eastside needs to be re-examined and the project redesigned with the needs of the community as well as the environment in mind.

Joy Phelps



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**Re: Comments By Bellevue Man 7/31/2016.**

1 message

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**VON WILL** <vonwill@gmail.com>

Sun, Jul 31, 2016 at 10:54 PM

To: Energize Eastside EIS <info@energizeeastsideeis.org>

The Enegerize Eastside project is not necessary and conflicts with more advanced engineering possibilities that could save the Eastside 8000 mature trees. Save the Eastside looking like a Godzilla film industrial cityscape with a monstrous power line up the middle. Why regressive industry with a scorched earth policy? We need these trees for air quality, for aesthetics and for a line in the sand against a multinational corporation dictating to Washington State. Throughout the world, trees are going fast, either cut down or burnt. Siberia is on fire every summer, the Amazon is deforested and slowly fires take Washington State trees beyond the ability to recover in equal proportion. I say no to this project and its destruction of trees. Moreover, the project is gearing up for a massive influx of people that both the transportation and economy cannot sustain. Its forced, regressive and bad engineering. PSE is not considering more alternative eco-friendly plans.

PSE has just settled a dispute with the Sierra Club and the Montana Environmental Information Center for violating the federal Clean Air Act. They have a record of breaking the law. I believe this project breaks the law, and common decency. It's gotten this far because people are sleeping. One tower up will start the revolt. PSE has stated that we can get by on the preexisting lines. I choose this alternative. Wait until the next recession is over, wait until we get a control on our growth here on the Eastside please!

For PSE this project is a serious stain on the company, it will be ridiculed by future generations. It's a type of violence. This project causes me trauma and is a violence to nature. This project is part of the process leading to human extinction. Its the dark future now looming over our homes.

One last thing. In many cities around the world power goes underground. I have lived in Europe and Asia and spent 15 years in Hong Kong. They have no problem to put these underground and it's not expense. They do it with little destruction. I seen them at work, its amazing. Maybe we should talk to one of these companies or a German engineering firm from Verdun and have these lines put underground like a modern sophisticated city and not some dark science fiction horror. Run more lines.

Thank you for your kind attention.

Julian von Will, Phd.

Bellevue, WA. 7/31/2016



Energize Eastside EIS &lt;info@energizeeastsideeis.org&gt;

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## Comment for extended Phase 2 EIS

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KEsayian@aol.com &lt;KEsayian@aol.com&gt;

Sat, Jul 23, 2016 at 2:00 PM

To: info@energizeeastsideeis.org

Cc: council@bellevuewa.gov, info@cense.org

July 23, 2016

Inasmuch as the EIS process is designed to include the comments from the residents of the communities affected - it is therefore expected that the Councils and city staff of those cities accept those comments, documents and proposals with equal weight as those from the applicant (PSE). What happens on our city streets and in our backyards is of great concern and we fully expect our elected officials and their staff to represent us.

In the Phase 2 Summary report of community comments - the overwhelming request was for an **alternative** to PSE's currently proposed Energize Eastside.

I urge you to look at 21st Century solutions for a city known for 21st Century technology. Please do not keep us locked into a 1970's version of electrical transmission. Please take the time to evaluate what other cities are accomplishing with distributed resources, whether it be demand response, smart wires, storage, etc. Please hire independent experts to advise on these suggestions and use that knowledge when making a decision on the proposed PSE EE project. PSE has again been allowed to submit new bypass routes at the last hour of Phase 2 comments. If these submissions are accepted, then the Lauckhart-Schiffman load flow study, the EQL Alternative Plan, and the Northwest Power and Conservation Council's updated report on PSE's load forecast should be reviewed by independent experts in the field.

The second most voiced concern according to the Summary report is that of **safety**. The safety concerns involved with collocating flammable fuel pipelines with 230kV transmission lines, let alone 115kV transmission lines, cannot be overlooked. The safety concerns should not be overlooked in a business district; they cannot be overlooked in a residential neighborhood; they *absolutely must not* be overlooked in the vicinity of a school. (The prime example of this is the current proximity of the 115kV transmission lines and the OPL within 170 feet of Tyee Middle School.)

In reading Title 20 of the *Bellevue Land Use Code: 20.20.255* Electrical utility facilities, considering alternative siting analysis - first consideration is given to siting the electrical utility facility in a "nonresidential land use district." I would submit that the proposed PSE EE project does not take this into consideration.

With regard to the *PSE Energize Eastside Economic Considerations Report* dated January 2016 - it is extremely unsettling that this report addresses the economic changes which would affect the coffers of the City of Bellevue - with subdued reference to the **economic impact** it would have on the residents of Bellevue. It states there would be positive changes in AV and property tax revenues with PSE construction; positive changes to sales tax revenues based on (PSE) construction and positive changes to real estate transfer tax revenues based on land transactions by PSE. The negative impacts?...they would be from the changes in AV and property tax revenues based on *residential* zoned land being used for public utilities and other impacts on *residential* properties, like "view shed impacts". If this project is truly for the benefit of the downtown business core, the outlying residential neighborhoods should not be shouldering the expected rate increases along with the economic and environmental impact on their neighborhoods.

I also refer to my earlier comments submitted for Phase 1 and the first part of Phase 2 of the EIS: consider the environmental impact of Alternative 1A on areas like the *Coal Creek Natural Area*; consider the impact of a permanent clear zone as proposed with Alternative 1A and its impact on the vision of a "*City in a Park*"; consider these proposed clear zones and the impact it would have on the neighborhoods supporting the City of Bellevue; consider the impact of the proposed PSE EE on the wildlife and tree canopy along the Eastside; and consider the contradiction the EE proposal presents with the LID Principles Project as outlined on the City of Bellevue web site.

I urge you to consider the **legacy** you will be leaving for the future of the City of Bellevue and the entire Eastside. Please deny the PSE Energize Eastside project as proposed; this plan is a disservice to a supposed progressive city like Bellevue. I ask that you pave the way to the 21st Century and beyond.

Karen Esayian  
4601 135th Ave SE  
Bellevue, WA 98006  
KEsayian@aol.com





Energize Eastside EIS <info@energizeeastsideeis.org>

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## Extended EIS comment period

1 message

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**Karin L. Morgan** <karin01@mac.com>

Sun, Jul 10, 2016 at 9:23 AM

To: info@energizeeastsideeis.org

Cc: council@bellevuewa.com, info@cense.org

To whom it may concern,

I am submitting my comments in regards to the proposed "Energize Eastside" transmission line project. I am deeply concerned that the city of Bellevue is considering any proposed route for this over-sized and very expensive project. Especially when the citizens of Bellevue and the City Council have been presented with a viable, safe, green and cost-effective alternative. None of Bellevue's neighborhoods, nor any neighborhoods from Renton to Redmond, should be industrialized for this project when there are alternatives available.

CENSE has worked tirelessly to propose a safe, desirable plan using modern technology to power Eastside growth, while reducing per capita electricity demand and greenhouse gas emissions. We have an amazing opportunity now to change the way we power our region. By using modern technology, we can meet the demands for our energy needs WITHOUT impacting the natural beauty that we enjoy here on the Eastside. Destroying 8,000 mature trees to lay new transmission lines is NOT what I want to in my community!

Safety is also a concern with PSE's proposed transmission project. Placing huge towers with high-voltage cables over aging, high-pressure pipelines carrying millions of gallons of jet fuel and gasoline every day places significant risk to our communities. To discount this risk, as PSE has done, is very disturbing.

I respectfully ask that my comments be considered when making decisions around "Energize Eastside" - decisions that will effect our region for many years to come.

Sincerely,

Karin L. Morgan  
12427 NE 29th St  
Bellevue WA 98005



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## East Bellevue Community Council bypass route 1 and 2

1 message

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**Kayla** <seattlekay@comcast.net>  
To: info@energizeeastsideeis.org

Mon, Aug 1, 2016 at 5:02 PM

To: City of Bellevue Council Members

Mr. Conrad Lee  
Bellevue Councilmember  
450 110th Ave. NE  
P.O. Box 90012  
Bellevue, WA  
98009

Ms. Jennifer Robertson  
Bellevue Councilmember  
450 110th Ave. NE  
P.O. Box 90012  
Bellevue, WA

Ms. Lynne Robinson  
Bellevue Councilmember  
450 110th Ave. NE  
P.O. Box 90012  
Bellevue, WA  
98009  
info@EnergizeEastsideEIS.org

Ms. Vandana Slatter  
Bellevue Councilmember  
450 110th Ave. NE  
P.O. Box 90012  
Bellevue, WA  
98009

Mr. Kevin Wallace,  
Bellevue Councilmember  
450 110th Ave. NE  
P.O. Box 90012  
Bellevue, WA  
98009

Mayor Mr. John Stokes  
Bellevue Councilmember  
450 110th Ave. NE  
P.O. Box 90012  
Bellevue, WA  
98009

Deputy Mayor Mr. John Chelminiak  
Bellevue Councilmember  
450 110th Ave. NE  
P.O. Box 90012  
Bellevue, WA  
98009

C/O Development Services Department  
Attn: Heidi Bedwell

450 110th Ave NE  
Bellevue, WA 98004

RE: Energize Eastside

Dear Members,

I live in Newcastle, but I also own property in the Lake Hills Connector area where I plan to live someday. I emphatically oppose Route 1, because of going over and through Bannerwood Sports Park. Oh yes, I see that Route 2 skirts Bannerwood, but of the two routes my preference is continuing Route 2 on Lake Hills Connector Rd. to Richards Rd and SE 26th St. Although Route 2's impact is greater on the environment, (and costs, length, etc.), it lessens (if I read the map correctly) the impact on the current corridor.

As this is not my first memo/letter to the council, I have advised each council member of my opinions, and feelings on this entire project. But again, if this project proceeds, I feel there are construction dangers to all communities involved from Redmond to Renton. The environmental (including visual, and financial) impact is significant to all. We all need to look for, and find help in, ways to reduce our costs and energy consumption. I am very grateful that my electricity and natural gas has been very reliable. Let's keep it that way without this project.

Thank you for your time and attention to this matter.

Sincerely,

*Kayla Laughlin*

Kayla Laughlin  
8316 127 PI SE  
Newcastle, WA 98056  
[425 430 0604](tel:4254300604)  
[Seattlekay@comcast.net](mailto:Seattlekay@comcast.net)



Energize Eastside EIS <[info@energizeeastsideeis.org](mailto:info@energizeeastsideeis.org)>

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## PSE Energize Eastside 2 Phase Comment

1 message

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**Kim Wilson** <[kim@wilsonmed.com](mailto:kim@wilsonmed.com)>

Thu, Jul 7, 2016 at 7:56 AM

To: "info@EnergizeEastsideEIS.org" <[info@energizeeastsideeis.org](mailto:info@energizeeastsideeis.org)>

I strongly feel this project was mishandled and has not presented the facts and needs in a balanced manner. I do not feel we need such a project particularly with the cost and route disruption that will result from a new substation and 18 miles plus of high capacity electric transmissions lines from Renton to Redmond!

As a 30 year Bellevue resident and Bellevue based business owner this is the first time I have felt compelled to comment on a public funded project! Best Kim Wilson 13413 NE 37<sup>th</sup> Place Bellevue WA 98005. Cell [206 300 0581](tel:2063000581)

**Energize Eastside EIS** <info@energizeeastsideeis.org>

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**new proposals by PSE**

1 message

**Kory Livingston** <kory\_mccormick@hotmail.com>

Sat, Jul 9, 2016 at 1:27 PM

To: "Info@EnergizeEastsideEIS.org" &lt;info@energizeeastsideeis.org&gt;

hello, I wanted to send a comment that I do NOT support the 2 new options presented by PSE. I would prefer PSE to negotiate with the EBCC to have the primary route originally scoped to be continued. If a professional negotiator needs to be employed to get to that point they should be. During a PSE presentation to the Wilburton community, that will be directly impacted by all of the options, the presenters made it seem that it would be too difficult to come to terms with EBCC, and that we would be less of a squeaky wheel to deal with. They said that they had only communicated with a few folks, and that others would not meet with them. I think it is the city's duty to make these two groups meet with a professional negotiator.

**Thx-  
K.L.**



Energize Eastside EIS <info@energizeeastsideeis.org>

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## EIS for Energize Eastside

1 message

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**Kristina Weir** <khweir@hotmail.com>  
To: info@energizeeastsideeis.org

Thu, Jul 14, 2016 at 10:21 AM

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 **EIS July 2016.docx**  
98K

Heidi Bedwell, Energize Eastside EIS Program Manager

RE: Energize Eastside EIS

The recently submitted two new bypass routes by PSE only add to our concerns about the Energize Eastside proposal.

Aesthetically unappealing:

The by pass route will add four more miles of high voltage transmission lines to areas that currently have no transmission poles. The route also goes through tree-lined Lake Hills Connector and through Wilburton and Kelsey Creek parks. This clearly detracts from Bellevue's promotion that it has the feel of "a city in the park."

Problematic timing:

PSE added the new routes on the last day of the comment period, hardly in the spirit of an honest open comment period for the EIS. PSE said the new routes were added to avoid an area under the purview of the East Bellevue Community Council (EBCC) as EBCC has opposed a previous PSE project, and it feared EBCC would be a risk in the permitting process. Why did PSE wait until the last comment day to voice its concern? PSE professes to solicit community input but in reality is trying to control the conversation.

We earlier submitted our concerns for the EIS on Energizing Eastside project:

- the demand forecast is unrealistic and overstated
- it is highly risky to place high voltage lines above the Olympic pipeline
- the reduction of tree canopy reduces carbon recapture and degrades the aesthetics of our city
- residents and businesses will see rates go up

CENSE has proposed a more cost-effective solution, relying on conservation and new technologies—a more climate friendly solution as well which maintains our "city in the park".

Kristi and Tom Weir

July 14, 2016

**Energize Eastside EIS** <[info@energizeeastsideeis.org](mailto:info@energizeeastsideeis.org)>

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## Frequent Kenmore Power Outages

1 message

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**Larisa Lindemann** <[larisa1500@yahoo.com](mailto:larisa1500@yahoo.com)>  
To: [info@energizeeastsideeis.org](mailto:info@energizeeastsideeis.org)

Fri, Jul 1, 2016 at 3:26 PM

I am very concerned and frustrated not to mention inconvenienced by the frequent power outages in Kenmore. I live near City Hall and across from the Northshore Fire Station. We have had 6 outages the past 10 mos. and i live in senior housing with 4 floors and most of us are dependent on the elevator since we can't handle stairs.

It's no secret the Eastside has been growing phenomenally for at least the past decade+ and projected future growth shows the same. Last Nov i filed complaints with PSE and WA Utilities & Transp Commission. A PSE engineer called me as a f/up to my complaints and said 2016 is the yr they expect to upgrade the distribution lines running thru Redmond and Kirkland after obtaining necessary city permits. Now he tells me we are looking at 2017.

We do not live in a 3rd world country and I have lived in Alaska, Colorado and Bellingham in the 70s/80s and never had power outages to the degree we have in Kenmore. Any outages were rare and brief and i never lost any food. There were severe weathers conditions in all those regions with old growth trees. PSE covers Bellingham and i rarely had outages when living there. Half my small freeze section is now filled with ice blocks in an attempt to save my food during extended outages.

Unfortunately there is no other service provider so we are stuck with PSE. I am looking for answers as to when PSE intends to provide Kenmore with 21st century service to replace the current antiquated service. It is obvious that the needed upgrades over the yrs have not been made presumably related to \$\$\$ issues.

Thank you in advance for your assistance. I told the mgr of my residence i would get back to her once I get some concrete answers to my questions. She will then pass the info on to the other residents. I left a voice msg for Heidi Bedwell/Program Mgr for Energize Eastside EIS about my concerns.

Larisa Lindemann

Larisa Lindemann  
7111 NE 181st Street #310  
Kenmore WA 98028-2402  
[425-481-7486](tel:425-481-7486)



Energize Eastside EIS &lt;info@energizeeastsideeis.org&gt;

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## Comment regarding reopened scoping comment period on the Phase 2 EIS, Energize Eastside

1 message

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Larry Johnson <larry.ede@gmail.com>  
To: info@energizeeastsideeis.org

Thu, Jul 7, 2016 at 4:03 PM

These comments relate to PSE's decision to look at new routes on the chance that the EBCC concludes the EE line is not needed and denies a permit for that line.

PSE's approach makes no sense. If EBCC legitimately concludes that the EE line is not needed (which conclusion CENSE thinks would rationally be reached from the record that has been developed so far), then the line should not be permitted and built.

If PSE believes that the EBCC erroneously reached this conclusion, then the solution is not to find a less favorable routing for the line. There is an appropriate path for PSE to get past a local jurisdiction denial of a permit for a transmission line in Washington State. That method is for PSE to make their application to EFSEC. EFSEC has the ability to permit a line through the EBCC area if EFSEC concludes the line is needed and the best route for the line is to go through the EBCC area.

That PSE is so reluctant to make a filing at EFSEC is further evidence that PSE does not have a legitimate load flow study showing the need for the line. CENSE has made Herculean efforts to get PSE to divulge its load flow study showing a need for the line. PSE has created a series of excuses for not showing CENSE and its experts its studies. The experts retained by CENSE have demonstrated that the assumptions that PSE claims to have used in its load flow study cannot produce a legitimate load flow study.

The EIS should not permit PSE to propose and permit a less than ideal line route to avoid the EBCC area in order for PSE to avoid providing its load flow study. The EIS should suggest that the alternative for PSE (if EBCC denies a permit for EE) is for PSE to go to EFSEC. The EFSEC hearing process is much more conducive to developing the needed record for a decision regarding building a line. The EFSEC hearing would necessarily require PSE to show the load flow study that PSE claims demonstrates the need for the line.

Larry G. Johnson  
Attorney at Law  
8505 129th Ave SE  
Newcastle, WA 98056  
tel.: [425 228-3786](tel:4252283786)



Energize Eastside EIS &lt;info@energizeeastsideeis.org&gt;

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## Comment on Alternative Bypass Options

1 message

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**Lesley Stuart** <lesley.stuart@gmail.com>

Thu, Jun 30, 2016 at 1:02 PM

To: info@energizeeastsideeis.org

Greetings:

I am a concerned citizen of Bellevue and I take issue with the need for these power lines proposed by PSE in the first place, and certainly with either bypass alternative in the second.

I question the veracity of PSE's stated need for such power to accommodate growth in this area. From the marketing slides presented at a recent community meeting in Bellevue, there was no documentation supporting the grown figures. Also, there was no real explanation given for what appears to be an artificially accelerated implementation of this project, one that completely disregards more modern and forward-looking methods of transporting energy to where it is needed. Third, there appear to be actual dangers in the plan in that in certain areas, residents would be surrounded by power lines on two sides, and in another place the two power line systems would actually cross each other.

Now, as for these 'bypass routes' – obviously they are both contrived, but if either is in serious consideration, then it should be noted that at least through the area in Wilburton, views would be disturbed all along that section. The poles would be in what is supposed to be a recreational corridor (retired BNSF) and the cross-downtown-Bellevue Grand Corridor would actually terminate right under the lines! Lines in the area south of that Grand Corridor would go through what is the original townsite of Bellevue/Wilburton and is an area of historical importance. Lines would come very close to the Historical Society's McDowell House as well as the few remaining original dwellings from the turn of the other century.

Please do not approve either alternative, and please also consider not approving this project at all unless and until more modern (invisible) methods of transporting energy are seriously considered and presented by Puget Sound Energy.

Thank you,

Lesley Stuart  
11804 SE 5th St  
Bellevue, WA 98005  
[425-688-0048](tel:425-688-0048)

**Energize Eastside EIS** <info@energizeeastsideeis.org>

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**Puget Sound Energy's Plans**

1 message

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**Linda Young** <lyry@comcast.net>  
To: info@energizeeastsideeis.org

Thu, Jun 30, 2016 at 3:46 PM

Linda Young  
12813 SE 80th Way  
Newcastle, WA 98056

I am a homeowner in "Olympus", Newcastle, WA

The community has told you over and over again they do not want this construction throughout the Eastside. Listen to CENSE and you will understand this project is not necessary and there are better alternatives. This just makes Puget Sound Energy more money for the pockets of their Hedge Fund owners and when they are sold off Puget Sound Energy will look so much more attractive to future buyers.

At countless meetings you have heard from brilliant minds with engineering backgrounds, MIT degrees, Dr's and nurses and please do not forget the three young eloquent school girls who told you at the last meeting held at Bellevue City Hall that they did not want to die in an explosion.

I don't care how many times Puget Sound Energy "plays" with the routing it does not change the important fact that this is beyond dangerous putting high voltage over an ancient gas line. What don't you people get regardless of how many times you are told - no one, and I repeat, no one can say an explosion will not happen. You have a moral obligation to think about the residents of the Eastside and what would you say to families if their loved ones died due to your rulings?



Energize Eastside EIS &lt;info@energizeeastsideeis.org&gt;

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**Puget Sound Energy**

1 message

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**Linda Young** <lyry@comcast.net>

Sun, Jul 10, 2016 at 9:27 AM

To: info@energizeeastsideeis.org

Cc: council@bellevuewa.gov

Stop and think do you want to be the people who are responsible for causing harm, destruction and total madness upon your fellow citizens?

Listen to the voices of reason and don't put the almighty dollar as your number one priority. You have been shown by some very bright and knowledgeable citizens that this money making project for Puget Sound Energy is not needed. I am sure the Bellevue Council Members heard the frightened voices of three teenage girls as they spoke of not wanting to die in an explosion.

No one can say that an explosion will NOT happen.

This project would wreck and spoil twenty nine neighborhoods and who would want to live here? We all know tax revue is vital and it could really effect your in-take of money and make it harder to run the Eastside.

We have been fighting this for well over two and half years and you have made our lives misery. There have been fleeting moments when I have thought about quitting, but that is not in my nature. This Puget Sound Energy project makes me cry, be angry and all the other emotions, but my home and my memories of my late wonderful husband keep me fighting on.

Again, I remind you of three teenage girls not wanting to die - they have lives ahead of them and who knows what they will achieve.

Linda Young  
12813 SE 80th Way  
Newcastle, WA 98056

Olympus Development Homeowner



## Comments to PSE bypass routes

1 message

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**Loretta Lopez** <llopez@mstarlabs.com>

Mon, Aug 1, 2016 at 5:00 PM

To: HBedwell@bellevuewa.gov, info@energizeeastsideeis.org

The there is not sufficient information to assess the new routes that PSE has proposed.

The new routes include additional transmission lines through the Wilburton and Bel-Red areas. Those two areas have land use plans in place that are not consistent with 230Kv lines. In particular, it is not clear how the transmission lines where the transmission lines will be placed in relation to the Sound Transit alignment.

The maps which PSE has posted on the website do not reflect in detail where the poles will be placed. The signs announcing the new by pass routes do not provide detailed information. It is highly likely that many citizens assumed that the comment period ended at the DEIS comment deadline. It was a surprise to see the announcement of the new bypass routes, not many days after the DEIS comment period had closed.

PSE asserts that PSE is proposing the bypass routes to avoid the jurisdiction of the EBCC. Why does PSE want to avoid EBCC jurisdiction? What changed that PSE decided to add the new bypass routes at such a late date in the process?

PSE has not produced accurate, credible evidence to support the need for PSE project. PSE continues to send brochures to ratepayers (according to the last brochure to 55,000 residents) which state the project must be built in order to keep the lights on.

That statement is not true. CENSE has produced evidence that there are ways to continue to have reliable power and to allow growth without building the 18 mile 230Kv line as PSE proposes.

Loretta Lopez  
13419 NE 33rd Lane  
Bellevue Wa 98005

Vice President Bridle Trails Community Club  
Member of CENSE

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## Comment on PSE's Latest Proposal by August 1

1 message

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**Lucy lam** <[lucylamusa@hotmail.com](mailto:lucylamusa@hotmail.com)>

Tue, Jul 19, 2016 at 1:40 PM

To: "info@EnergizeEastsideEIS.org" <[info@energizeeastsideeis.org](mailto:info@energizeeastsideeis.org)>

Cc: "council@bellevuewa.gov" <[council@bellevuewa.gov](mailto:council@bellevuewa.gov)>, "info@cense.org" <[info@cense.org](mailto:info@cense.org)>

### Comment on PSE's Latest Proposal

- It is alarming and concerning that PSE should persist on their extensive plan to increase high-voltage power lines for the very large area of the Eastside neighborhood.
- The high risk of danger will threaten people living along the construction route.
- PSE's projected growth and needs are assumptions based on present conditions and hypothetical future conditions. People are moving more towards environmentally friendly options.
- It is not enough to just listen to what residents have to say, PSE should seriously consider the safer and cleaner alternative.
- First and foremost people and environment should be the focus on which decisions are made for such an extensive project – the impact is tremendous and has long term implications.
- PSE should listen and do the right thing for the general good of the community.
- Anything done should be to improve people's lives and help the environment and not the opposite.

Thank you.

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Subject: Please Comment on PSE's Latest Proposal by August 1

From: [mail@cense.org](mailto:mail@cense.org)

New bypass routes - Extended EIS comment period

[View this email in your browser](#)

# CENSE

***Coalition of Eastside Neighborhoods  
for Sensible Energy***

[cense.org](http://cense.org)

As described in the last CENSE newsletter, PSE added two new "bypass" routes for its proposed "Energize Eastside" transmission lines - an 18-mile scar of massive poles and wires through 29 neighborhoods from Redmond to Renton. The bypass routes add about 4 miles of transmission lines where there are none today, including the tree-lined Lake Hills Connector through Wilburton and Kelsey Creek Park.

**NO MORE LINES**



The City of Bellevue is accepting written comments until August 1 on these new routes. We need as many voices as possible expressing deep concerns about PSE's mega-project because it doesn't meet our community's needs.

## What might you say?

Please start by expressing your dismay that *any* route is being considered for this dangerous, over-sized and overly-expensive project when there is a safe, green and cost-effective alternative. No neighborhoods should be industrialized to increase profits for PSE's foreign owners. PSE freely admits that its bypass routes were designed to go around a jurisdiction which challenged a different PSE transmission project. You might also emphasize:

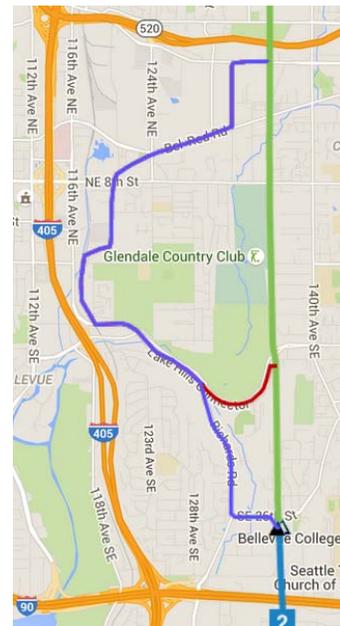
1. PSE discounts the danger of constructing huge towers with high-voltage cables over aging, high-pressure pipelines that carry millions of gallons of jet fuel and gasoline each day. Safety experts warn there is a significant risk of a catastrophic fire caused by a construction mishap or accelerated corrosion in the pipelines.
2. CENSE advocates a scalable plan developed by industry experts that uses modern technology, already at work in other cities, to power Eastside growth while reducing per capita electricity demand and greenhouse gas emissions.
3. The CENSE Plan saves 8,000 mature trees that PSE would cut down or limb to clear the route for its transmission lines. PSE's plan would degrade the livability of 29 neighborhoods, a key to attracting businesses and residents to the Eastside.

Of course we hope you'll voice your own concerns.

**Submit comments to the Environmental Impact Study at [info@EnergizeEastsideEIS.org](mailto:info@EnergizeEastsideEIS.org) and cc both the Bellevue City Council at [council@bellevuewa.gov](mailto:council@bellevuewa.gov) and CENSE at [info@cense.org](mailto:info@cense.org) by August 1.**

Please forward this newsletter widely. It's especially important to reach people living along the [bypass routes](#).

To learn more, donate or volunteer with CENSE, go to [CENSE.org](http://CENSE.org)



Bypass Routes recently introduced by PSE

**Our mailing address is:**

CENSE  
12819 SE 38th St. #294  
Bellevue, Wa 98006

[Add us to your address book](#)

[unsubscribe from this list](#) [update subscription preferences](#)





Energize Eastside EIS <info@energizeeastsideeis.org>

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## REI comments on Energize Eastside EIS

1 message

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**Marc Berejka** <mberejk@rei.com>

Mon, Aug 1, 2016 at 3:11 PM

To: "info@EnergizeEastsideEIS.org" <info@energizeeastsideeis.org>, Taldi Walter <tawalte@rei.com>

Cc: "council@bellevuewa.gov" <council@bellevuewa.gov>, "BMiyake@bellevuewa.gov" <BMiyake@bellevuewa.gov>

Ms. Bedwell – Attached are comments from REI on the EE EIS. We tried to make them short and to the point. Let us know if we can help at all w/ the process going forward. On the TO line is my colleague Taldi, who, like me, is getting more and more deeply engaged in Bellevue's infrastructure conversations. Regards,

Marc Berejka

Director | Community & Government Affairs

REI | [marc.berejka@rei.com](mailto:marc.berejka@rei.com) | 253-437-7991

*"We believe a life outdoors is a life well lived"*

6750 S. 228<sup>th</sup> Street

Kent, WA 98032

Attention!. This e-mail has been checked by REI's Spam filtering application and contains PDF attachment. If you suspect the message might not be authentic or you don't recognize the sender, don't use the links in the email and do not open any attachments! Please contact REI Service Desk and REI Corporate Information Security ([seconcall@rei.com](mailto:seconcall@rei.com)) with any questions and problems.

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 **REI EE comments 1aug16.pdf**  
235K



August 1, 2016

Heidi Bedwell, EIS Program Manager  
City of Bellevue  
450 110th Ave. NE  
P.O. Box 90012  
Bellevue, WA 98009

RE: Energize Eastside Phase 2 Comments

Dear Ms. Bedwell:

REI Co-op looks forward to a possible headquarters move to Bellevue over the coming half-decade. As we do our due diligence, we are increasingly interested in the way new infrastructure projects might rollout – not only in and around the Spring District, where we would build a campus, but throughout the greater Eastside, where we expect employees to live, play, exercise, engage the community and (frequently) commute by bike. It's through this lens that we view and comment on PSE's Energize Eastside project.

At bottom, we would hope PSE would provide electricity throughout the region in as cost-effective, reliable way as possible, while mitigating community impact. To the extent possible, it'd be great to see PSE use this transition period also to create new community value. On the first point, REI suggests using existing transmission corridors for the same purpose. While such a use might concern some, re-using existing dedicated right of way seems on balance to be the least disruptive. As to new value, we would ask that in the EIS you and your team look at ways that land in the transmission corridor might be rehabilitated, post-construction, in ways that create more commuter biking, running, walking and other outdoor opportunities for residents and workers. Today, the green space has some gravel, hilly trails. What more could be envisioned as a community amenity? How could it become a more inviting and widely used green space? We would welcome that inquiry.

We understand that a project of this nature can be challenging, so appreciate your team's commitment to it. If we can be of any assistance, please do not hesitate to contact us.

Respectfully submitted,

/s/ Marc Berejka

Director, Community & Government Affairs  
REI  
6750 S. 228th Street  
Kent, Washington 98032  
(253) 437 7991  
[Marc.Berejka@rei.com](mailto:Marc.Berejka@rei.com)

CC: Mayor John Stokes and members of the Council  
Brad Miyake, City Manager

Energize Eastside EIS <[info@energizeeastsideeis.org](mailto:info@energizeeastsideeis.org)>

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**RE: Delivery Confirmation Re: PSE new alternative proposal**

1 message

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**Margaret Moore** <[mmooreii@comcast.net](mailto:mmooreii@comcast.net)>  
To: Energize Eastside EIS <[info@energizeeastsideeis.org](mailto:info@energizeeastsideeis.org)>  
Cc: [council@bellevuewa.gov](mailto:council@bellevuewa.gov)

Mon, Jul 11, 2016 at 1:34 PM

Energize Eastside EIS Scoping - New Proposal

Question:

What governmental or other agency has the power to put a stop to the PSE project?

It seems like no one is really able to deal effectively and conclusively with this question. Very frustrating for citizens who are counting on our public officials' responsiveness to community concerns about this ill-conceived project. Everyone seems to be punting, which is a certain recipe for a disastrous conclusion.

Margaret Moore  
4707 135th PL SE  
Bellevue, WA 98006  
[mmooreii@comcast.net](mailto:mmooreii@comcast.net)

—Original Message—

From: Energize Eastside EIS [<mailto:info@energizeeastsideeis.org>]  
Sent: Monday, July 11, 2016 1:11 PM  
To: [mmooreii@comcast.net](mailto:mmooreii@comcast.net)  
Subject: Delivery Confirmation Re: PSE new alternative proposal

Thank you for your interest in the Energize Eastside EIS. Emails with comments received on or before August 1, 2016 will be included in the public record for the reopened scoping comment period. If your email includes a question, about the EIS process, it will be forwarded to the relevant City for a response.

Note: if you send multiple emails within a 24 hour period you will only receive 1 confirmation email for the first email you send.

See [www.energizeeastsideeis.org](http://www.energizeeastsideeis.org) for more information.



Energize Eastside EIS &lt;info@energizeeastsideeis.org&gt;

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## PSE new alternative proposal

1 message

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**Margaret Moore** <mmooreii@comcast.net>

Mon, Jul 11, 2016 at 1:10 PM

To: info@energizeeastsideeis.org

Cc: info@cense.org, council@bellevuewa.gov, Karen Esayian &lt;kesayian@aol.com&gt;, bmooreii@comcast.net

July 11, 2016

Environmental Impact Study

Energize Eastside EIS comments

To those in a position to actually do something reasonable about this project:

This is one of the most frustrating experiences of my life as a concerned citizen! We vote conscientiously and hope to elect officials who have the good of the entire community as their paramount concern. Part of the task of these officials is to safeguard our community from abuse at the hand of those who try to circumvent the common good in order to serve their own financial interests. The current efforts of PSE and its foreign ownership is a blatant effort to do just that.

Yes, a fair process to determine how to proceed in allowing major, highly visible, permanently impactful changes to take place is necessary. But it is extremely disheartening to watch PSE's process be so manipulative and cavalier about the community they are attempting to damage permanently with an enormous project that impacts so many citizens. PSE can put up the big, dangerous lines and walk away to make millions on the backs of those who remain to pay for the project – the citizens of the Eastside. They try to whitewash the effort as necessary to “energize” us for the future, when evidence this project is unnecessary is abundant and well-researched by energy experts – in both need forecasting and supply methods.

Now, to see this highly political reroute effort be offered as an obvious pander to a portion of the community that was successful in halting an earlier PSE effort is too much! Why should this be allowed? Why should it make anything any better by adding an additional 4 miles of ugly, dangerous wires on a different route through the community? Why is PSE allowed to persist in this costly, unnecessary, dangerous, self-serving project? Where is the community government process that can intercede and bring this effort at PSE self-aggrandizement to an end?

To conclude, let me emphasize thoughts I hope will serve as guidelines as the EIS process works to a conclusion:

1. The CENSE coalition has proposed an alternative solution that offers a reasonable, cost-effective, scalable alternative that is more in line with how energy will be delivered in the 21st century. Why saddle us with a dinosaur project only because we yielded to PSE pressure to line its pockets instead of being proactive about where the world is going in terms of energy delivery? There is a better way, and Bellevue should look to the future and be a leader in transforming how we power our lives going forward.
2. The idea that putting that much power through lines going through the same corridor as a decaying, jet fuel line carrying high-pressure gasoline, is unthinkable and inviting a disaster beyond anything we want to imagine. Also, why does anyone think the newly proposed 80 foot poles over part of the route are any more acceptable than the 135 foot ones in the earlier plan? Those of us who have to live near them don't.
3. The new proposed route just lets PSE destroy more of the green environment we prize on the Eastside. The CENSE plan will save at least 8,000 trees from demolition or disfigurement, while accomplishing a better solution to future energy needs.

This is the time for those of us who can actually control what happens and leave a legacy of a beautiful, viable community to act boldly. Deny PSEs current request and send the future energy question back to the drawing boards for a better, more appropriate solution.

Sincerely,

Margaret R. Moore  
4707 135th PL SE  
Bellevue, WA 98006  
[mmooreii@comcast.net](mailto:mmooreii@comcast.net)

cc: Bellevue City Council  
CENSE



Energize Eastside EIS &lt;info@energizeeastsideeis.org&gt;

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**EIS for Energize Eastside**

1 message

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**Mark Long** <mtlcpa@comcast.net>  
To: info@energizeeastsideeis.org

Sun, Jul 10, 2016 at 5:31 PM

I want to express my strong preference for Route 2 of the planned PSE bypass. Route 2 is a much better alternative as it does not go over the natural gas pipeline which is inherently unsafe. I am particularly concerned about the potential impact of an earthquake and the interplay of a huge power line and gas lines in the exact same location. Route 2 would separate those 2.

In addition, Route 2 would also have a larger section of the power lines in commercial areas instead of residential areas which are used a lower % of the day.

Sincerely,

Mark Long

2221 135<sup>th</sup> PL SE

Bellevue, WA 98005

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## EIS Feedback/Participation

1 message

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**michael ahern** <mahern@gmail.com>  
To: info@energizeeastsideeis.org

Mon, Aug 1, 2016 at 7:08 PM

Michael Ahern  
107 118th Ave. SE  
Bellevue, WA 98005

From Nextdoor.com  
[https://wilburton.nextdoor.com/news\\_feed/?post=28509457](https://wilburton.nextdoor.com/news_feed/?post=28509457)

[Michael Ahern](#) from Wilburton

13 Jul

A lot of good discussion here. People seem to be on both sides if whether or not this project is needed.

On the other hand, the original route would improve the conditions compared to what is mostly already there today.

**If you look at this picture, the alt (red) route would require more than \*twice\* as many poles to manage all of the curves on this indirect and serpentine path.**

**The alternate paths would also be very visible to very much of the rest of Bellevue including most of downtown and many roads and areas due to being perched on the hills of Wilburton.**

**I believe that the "preferred" route makes more sense than the "alternate" routes and would be much less intrusive (and cost less) for a much greater number of families.**





## EIS Energizeeastside Comments

1 message

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**Hansennp@aol.com** <Hansennp@aol.com>  
To: info@energizeeastsideeis.org

Sun, Jul 31, 2016 at 2:52 PM

To: City of Bellevue, Development Services Development, Attn: Heidi Bedwell, 450 110th Ave. NE, Bellevue Wa. 98004

Visual and other Impacts:

In commenting on the EIS it is difficult to know the exact visual impact of new transmission line poles. The info so far seems to indicate that these poles are in "approximately the same location as the existing poles. However, the EIS lacks clarity as to the exact location and specifies that pole spacing can vary from 350 to 1400 ft. (1050 feet) and heights could vary between 100 to 135 ft.

To me, this is like trying to assess the impact of an office building not knowing how many stories and only knowing the location within 350 to 140 ft.

The EIS needs to provide exact pole locations or at least within 5 to 10 feet? This would help tremendously in assessing EIS visual and other impacts.

Norm Hansen, 3851 136th Ave. NE .Bellevue, WA 98005



Energize Eastside EIS &lt;info@energizeeastsideeis.org&gt;

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**my comments re: project**

1 message

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**Patricia Lee** <plee1901@gmail.com>  
To: info@energizeeastsideeis.org

Sun, Jul 10, 2016 at 5:58 PM

***1. It is TOO out of scale with the real need..perhaps not ever needed given rapidly advancing technology.***

***2. It cost TOO much...when debt service and the return granted to PSE by the WUTC the \$200million to \$300million project balloons over 40+ years to approximately \$1,400,000,000, yup \$1.4 BILLION!***

***3. It does TOO much environmental damage cutting as many as 8,000 trees to make way for the gigantic towers and 230KV transmission lines that will scar 18 miles of our landscape above the existing tree canopy through five eastside cities and dozens of our residential neighborhoods.***

***4. It avoids TOO many Sensible, Reasonable, Reliable Alternatives and new technology and non wired alternatives that are far less costly.***

***5. It is TOO Unsafe....co-locating 230KV powerful Transmission lines next to two high pressure petroleum/jet fuel pipelines running right next to many of our schools and homes is just not wise!  
We MUST have far wider set backs/buffers than 10' to 50' or even 100' when other states require up to 1,500' and in some cases do not allow at all. It is just too dangerous, the risk and price is too high!***

**Patricia Lee  
Bellevue, WA**



**Energize Eastside EIS** <info@energizeeastsideeis.org>

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**sensible engergy**

1 message

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**Paula Maratea** <marateap@gmail.com>

Thu, Jul 21, 2016 at 2:25 PM

To: info@energizeeastsideeis.org

Cc: council@bellevuewa.gov, info@cnese.org

Build it underground and stay away from gas line too.

Paula Maratea Fuld



Energize Eastside EIS &lt;info@energizeeastsideeis.org&gt;

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## I oppose the PSE alternative route high tension transmission lines

1 message

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**Peter Maxim** <pemaxim1015@gmail.com>

Thu, Jul 28, 2016 at 9:16 PM

To: info@energizeeastsideeis.org

I do not want the alternate PSE route developed. There is no way this route can be modified to be acceptable. This alternative route will cost more and the costs will be passed on to ratepayers who will be forced to swallow the added expense. The western Wilburton neighborhood is already blighted by high tension Seattle City Light poles looking from the downtown and from the developing Spring District. These new poles would ruin the Grand Connection view route planned by the city, and the viewing platform prospect from the popular Botanical Garden. Such a route would further complicate the building of the Midlakes light rail station along the route. PSE says it would rather not develop this route. It should go back to its original ideas or come up with a different alternative. We should not have to have another high tension route forced on us.



Energize Eastside EIS &lt;info@energizeeastsideeis.org&gt;

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**feedback on the Energize Eastside Project**

1 message

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**q s** <qs\_yhzs@yahoo.com>

Tue, Jul 5, 2016 at 10:11 AM

Reply-To: q s &lt;qs\_yhzs@yahoo.com&gt;

To: "info@EnergizeEastsideEIS.org" &lt;info@energizeeastsideeis.org&gt;

Hi Heidi,

I am writing to express my strong opposition to the ill-conceived Energize Eastside Project for the following reasons.

Firstly the project is based on a false claim. The main purpose of the project is not to address the alleged capacity shortfall of the Eastside. To use the city of Bellevue as an example, its grid density of high voltage transmission lines has far exceeded that of many cities of similar sizes. The Eastside is being used as a corridor to deliver energy to other service areas of PSE. To hide the true intention of the project and mislead the public is dishonest and shameful.

Secondly the project has severe environment impact on the people living on the Eastside. Any capacity upgrade has to be done in a way with zero long term environmental impact. Bellevue prides itself on being a city in a park. Ironically there are already too many high voltage transmission lines that are within close vicinity to our parks and schools. Putting the aesthetic issue aside, the negative effects these transmission lines have on the health of the people nearby simply cannot be ignored as shown by plethora of scientific studies.

Thirdly even if there was going to be a capacity shortfall, it would need to be addressed using a 21st century approach. Increases in efficiency and conservation should be the two pillars of any sensible solution. Erecting high poles and thicker wires would not only be wasteful but also would not resolve the problem for the long run.

Thank you for taking the time to read my feedback.

Sincerely,  
Qiang



Energize Eastside EIS &lt;info@energizeeastsideeis.org&gt;

---

## Amended PSE Proposal

1 message

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**randy tada** <textbytada@comcast.net>  
To: info@energizeeastsideeis.org  
Cc: council@bellevuewa.gov, info@cense.org

Sat, Jul 16, 2016 at 6:47 PM

I am totally opposed to this amended proposal because it would negatively impact another part of Bellevue just to avoid closer scrutiny by a neighborhood that did not support PSE's efforts in the past. The fact that PSE has chosen to proceed in this manner should tell you something about their motivations. They are in business to maximize their profits without taking into consideration newer technologies nor the people and neighborhoods that will be potentially impacted. In their press releases, they minimize the danger of constructing huge, unsightly towers with high-voltage cables over aging, high-pressure pipelines that carry millions of gallons of jet fuel and gasoline each day. Safety experts have warned, however, that there is a significant risk of a catastrophic fire caused by a construction mishap or accelerated corrosion in the pipelines. If allowed to build these monstrous towers, they will also cut down or limb 8,000 mature trees that will be in the path of their proposed transmission lines. A more sensible solution, which has been supported by industry experts, would be to use more modern technologies that would address future growth and reduce per capita electricity demands and greenhouse gas emissions.

If PSE still had strong corporate roots in the Pacific Northwest, was a regular for-profit entity and not a regulated utility, they would certainly act more responsibly and be more beholden to the customers who pay their bills. It is hard to believe that a socially-conscious company would claim that they were doing the best for their ratepayers by (1) re-routing their transmission lines to avoid scrutiny, (2) avoiding new, proven, and safer technologies because they receive a better return by spending more money on infrastructure, and (3) degrading the livability of 29 neighborhoods, the same neighborhoods that are so attractive to businesses and residents who want to live on the Eastside. For these fundamental reasons, this amended proposal should be DENIED.

My hope is that PSE will be forced to return to their original selected routes and open themselves to evaluation and analysis along each part of their route. Hopefully, other governmental and neighborhood jurisdictions will have the fortitude and conviction to do the right right thing instead of bowing down to big business and protecting their own personal interests. The current PSE "solution" doesn't pass the "smell" test and should be abandoned and/or seriously modified to include considerations for safety, the environment, and the well-being of our neighborhoods. Long term livability should not be sacrificed for short-term financial gains.



Energize Eastside EIS <info@energizeeastsideeis.org>

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## Phase 2 extension comments

1 message

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**Roger Karen Orth** <rkorth@comcast.net>  
To: info@energizeeastsideeis.org

Thu, Jun 30, 2016 at 7:28 PM

Having the public comment on details (alternates 1 & 2 ) when the need is in question and the more realistic CENSE alternative is not being considered, makes the present extension laughable.

Roger Orth

4530 Somerset Drive SE

Bellevue, WA 98006



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## Energize Eastside EIS Public Comments: Case Studies of Better Alternatives

1 message

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**Russell Borgmann** <rborghmann@hotmail.com>

Mon, Aug 1, 2016 at 9:01 AM

To: "info@energizeeastsideEIS.org" <info@energizeeastsideeis.org>, "HBedwell@bellevuewa.gov" <HBedwell@bellevuewa.gov>, "BMiyake@bellevuewa.gov" <BMiyake@bellevuewa.gov>, "mkberens@bellevuewa.gov" <mkberens@bellevuewa.gov>, "CHelland@bellevuewa.gov" <CHelland@bellevuewa.gov>, "Council@bellevuewa.gov" <Council@bellevuewa.gov>  
Cc: "rborghmann@hotmail.com" <rborghmann@hotmail.com>

Dear City Staff, City Council, and EIS Representatives,

Important alternatives worthy of consideration have been used for many years by utility companies around the country. These alternatives have been vetted industry experts. Contrary to what PSE has stated, Energize Eastside is NOT the only way.

Attached to this email are **CASE STUDIES** showing how other cities have solved this exact issue more reliably, less expensively, more safely, and with minimal environmental impact. The issue we face is not unique to Bellevue. **Will the City of Bellevue please consider these alternatives as part of the EIS?**

Sincerely,

Russell Borgmann

2100 120<sup>th</sup> Place SE

Bellevue, WA 98005

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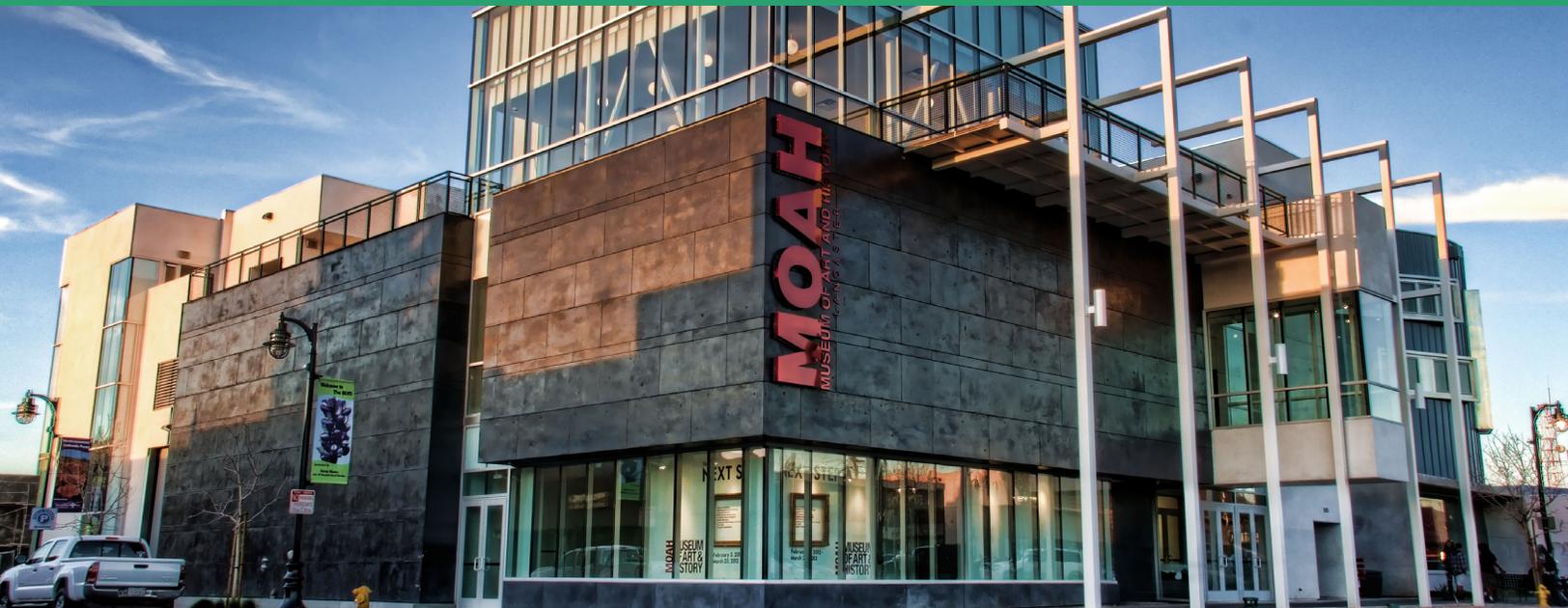
### 9 attachments

-  **CaseStudy-City of Santa Clara Battery Storage.pdf**  
728K
-  **Case Study - Los Altos School District Battery Storage.pdf**  
922K
-  **Case Study - Peralta Community College Battery Storage.pdf**  
526K
-  **CaseStudy-Walgreens Battery Storage.pdf**  
967K
-  **Case Study - Peak Shave Water Heating Program.pdf**  
504K
-  **Case Study - San Francisco Morgan Stanley Skyscraper Battery Storage.pdf**  
297K
-  **Case Study - SmartAC Program.pdf**  
499K
-  **Case Study-Dispatchable Standby Generation.pdf**

473K



**CaseStudy-City of Lancaster CA Battery Storage.pdf**  
1203K



## The City of Lancaster Aims to Become the First Net-Zero City in the U.S. with Energy Storage System from Green Charge Networks



### The Problem

The City of Lancaster has an ambitious mission: to be the nation's very first net-zero emissions city. At the regional, state, and national levels, they have continuously been recognized as an environmental leader. The city has continuously adopted environmentally-friendly initiatives to lower its carbon footprint, starting with the Blue Skies Program for using alternative fuels in 1994. In March 2013, the city became the first in the US to mandate solar on every new housing development.

Renewable energy, however, has its limitations. To truly achieve net zero emissions, the city has adopted energy storage to further push the envelope in pioneering green technologies. City of Lancaster recognizes that achieving net-zero emissions city-wide is no easy task—but that doing it with the help of intelligent energy storage is not only the answer, but it also contributes to the city's financial bottom-line.

### Case Study Specifications

Project name:	City of Lancaster
Location:	Museum of Art & History
Project Dates:	June 2014 - Present
GreenStation Size:	30 kW / 30 kWh
Electric Utility:	Southern California Edison
Results:	Reduced demand charges by up to 50% per month 24x7x365 operation Interconnected on customer's side of meter Rugged, outdoors design

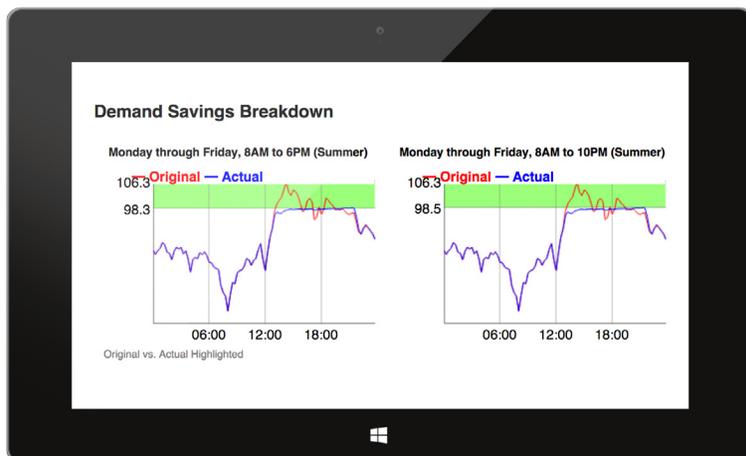


## The Problem (continued)

Green Charge Networks offered the perfect solution at the City's Museum of Art & History, with no upfront cost while saving taxpayer money for years to come.

## Our Solution

The City of Lancaster selected Green Charge Networks as it gave the City a cost-effective, fiscally responsible path to continue its environmental stewardship. In March 2014, the Lancaster City Council approved an initiative to add GreenStation™ energy storage systems to municipal facilities, starting with the Museum of Art and History. This building is a showcase of the City's dedication to sustainability, opened in 2012. The GreenStation is paired with a high-powered DC fast charger for electric vehicles at the site. Lancaster is the first in the high desert to adopt energy storage, paving the way for other cities to follow suit.



## Customer Reference

"The City of Lancaster continues to seek new and innovative ways to foster the use of renewable energy, protect the environment, and create cost savings for our taxpayers in the process. Energy storage is the cutting edge of renewable energy technology and it will propel our city toward becoming America's first truly Net Zero City. We are proud to partner with Green Charge Networks to implement this technology in our community."

- Mayor R. Rex Parris, City of Lancaster

## Our Results

Like many of Green Charge Networks' customers, Lancaster City signed a 10-year Power Efficiency Agreement (PEA) for the Museum of Art and History. A PEA is a shared-savings financing instrument in which Green Charge Networks finances the entire system and Lancaster City and Green Charge Networks share the monthly electric bill savings. With the GreenStation™, City of Lancaster is able to lower its demand charges (and total electricity bill) without spending money upfront or taking technology risks.

## Case Study: Dispatchable Standby Generation

### Project Description

**Dispatchable Standby Generation (DSG)** has been successfully used since 2000 in Portland, Oregon. Businesses, hospitals, military installations, prisons, and other facilities with idle back-up generators provide power to the grid during peak loads. In return, the owners of those back-up generators receive financial incentives, like free testing and maintenance. It's a win-win scenario for building facilities managers and for utilities.

<i>At A Glance</i>	
Who	Portland General Electric, 840,000 customers, 4,000-sq mile service area
What	Dispatchable Standby Generation (DSG)
Goal	Lowest Cost Peaking Resource for Utility
When	Since 2000
Peak Power	125MW or more, scalable
Outcome	Keeps electricity rates low for business/residential customers as well as utilities. Positive, wide acceptance

The **Portland General Electric (PGE) customers lend their standby generators to the utility for approximately 200 hours per year** (less than 2.5% of a calendar year). This approach allows PGE to avoid having to buy electricity on the open spot market during peak demand periods, when wholesale power prices spike. It provides improved grid reliability, while simultaneously providing better maintenance for distributed generators acting as critical infrastructure throughout Portland. These generators would otherwise be sitting idle for longer periods of time, under-utilized, where they

could fall into a state of disrepair.

Dispatchable Standby Generation operates in parallel with the distribution grid. The utility is instantly available if the generator fails, and likewise the generators are instantly available if the utility fails.

Using standard Day-Ahead utility transmission planning, PGE provides 24 hours' notice when they know the power will be needed. Facilities managers don't even see the lights blink due to high quality monitoring and control equipment installed by PGE. All generators in the DSG program are run under full load conditions, which is better for the engine and extends the life of a company's backup/emergency power system. Customer participation is voluntary, and companies have the option of making their generators unavailable by simply switching their control system out of remote mode or notifying PGE.

### Timeline

The first installation occurred in 1999, with the first economic dispatching test of a paralleled distributed generation site on PGE's system in June 2000 at the program's pilot site, the **MacLaren Youth Correctional Facility** in Woodburn, Oregon. Woodburn is located approximately 32 miles from downtown Portland, within PGE's service area. The MacLaren 500 kW generator operates at a baseload of 400 kW.

**TEKsystems Internet Business Services** and the **Oregon Military Department's State Emergency Services** building became the next customers. By 2001, the DSG network had a total capacity of 20MW from four customers and growing. Over 125MW of backup generators were identified and are

integrated into the DSG program. The ultimate goal for the program was to obtain 100MW of standby generation.

### Cost

PGE pays for installation of the control systems to place the generators in-parallel with the grid. They also pay for maintenance costs and any fuel consumed by standby generators.

PGE saves by avoiding having to buy electricity on the open spot market during peak demand periods, when wholesale power prices spike. Wholesale prices hit a high on the PGE system of more than \$1,300/MWh for several hours in June 2000. The MacLaren 500 kW generator, alone (operating at 400kW) saves the utility \$490 each hour under those conditions. PGE savings increases as more customers sign-up. PGE's savings also increase as wholesale prices continue to rise.

Participating companies save \$25,000 to \$100,000 over a five-year period, depending on the number of generators at an installation.

PGE customers save by avoiding electricity rate increases. By using existing under-utilized resources, additional infrastructure costs are avoided which would result in rate increases.

### Benefit

Wholesale savings under the DSG program go towards keeping everyone's prices lower. By starting paralleled generators throughout PGE's territory, PGE no longer has to purchase expensive peak power from out-of-state generators. The program is part of the regulated operations of the utility and its goal is to be the lowest cost peaking resource for the utility.

### Outcome

The DSG program has been widely accepted and is in-use throughout the Portland area with additional standby generation continuing to come on-line as more customers sign-up.

### Public Perception

The public is pleased with the DSG approach taken by Portland General Electric. Businesses and residents recognize the value of putting to use under-utilized resources, like standby generators, to keep everyone's electricity prices lower.

### Contact Info

<http://www.power-eng.com/articles/print/volume-105/issue-3/features/putting-standby-generators-to-work-on-grid-support.html>

Portland General Electric Dispatchable-Standby-Generation-faq.pdf

**EDUCATION**

Customer Success Story

**MOUNTAIN VIEW LOS ALTOS  
HIGH SCHOOL DISTRICT****DISTRICT GETS A+ IN  
ENERGY THRIFT AND  
\$86,000 IN ANNUAL  
SAVINGS****Locations:** Mountain View and Los Altos, California**Size:** 4,300 students, faculty and staff**Customer Challenge**

Support environmentally sustainable commuting without impacting tight school budget

**Green Charge Solutions**

Energy storage coupled with EV charging

**Why Green Charge**

- No cost energy storage system and EV chargers
- Educated stakeholders on shared savings model
- Provided connection to California energy market, offering new revenue opportunity for schools

**Benefits**

- Projected \$86,000 in annual demand charge savings, totaling \$1 million over lifetime of project
- Access to electric vehicle charging on campus
- Additional savings and revenue streams made possible through energy arbitrage and California Independent System Operator (CAISO) market

“Each year, we expect to reduce our demand charges by \$86,000, if not more. Every dollar saved is a dollar we can spend in supporting greater educational opportunities here.”

– Mike Mathiesen, Associate Superintendent, Business Services, MVLA



Photo by Ross Martinez

## Quest for affordable EV charging leads to revenue opportunities.

“Schools aren’t typically seen as technological innovators,” notes Mike Mathiesen, Associate Superintendent, Business Services at the Mountain View Los Altos High School District (MVLA). But MVLA is no typical school district. Located in the heart of Silicon Valley, with campuses in Mountain View and Los Altos, California, it serves families who work and live on the cutting edge of technology. They are among the earliest adopters of green technologies, such as solar energy and electric vehicles, and expect private and public sector employers to invest in such technologies in their workplaces.

But when those workplaces are schools, the harsh realities of tight educational budgets can be challenging, even for MVLA. As part of its sustainability initiatives, the district wanted to install EV charging stations to encourage electric vehicle use among its faculty and staff. But footing the bill for EV charger installation and maintenance was a big obstacle, until Sybil Cramer, community advocate and member of MVLA’s Go Green Sustainability Committee, found Green Charge Networks.

**TEACHERS GO HOME RECHARGED**

With funding acquired by Green Charge, MVLA had four Level 2 EV chargers installed, two each at its Mountain View High School and Los Altos High School campuses. Faculty and staff pay a flat annual fee to use the chargers, and can go home every evening with a fully-charged vehicle, making it practical to drive an EV to work, even for those with long commutes.

With a full load of responsibilities on his shoulders—everything from facilities maintenance and operations to transportation and insurance—Mathiesen has little spare time for extra reams of paperwork. “Green Charge drafted all the documentation and took care of the approvals,” Mathiesen recalls. “All we needed to provide was 15-minute interval [power usage] data from our utility.”

But EV charging was just the beginning of MVLA’s sustainability success story. Once the EV chargers were in place, Green Charge Networks also installed a combined 1.08 MWh of lithium-ion-based energy storage capacity at the two campuses, also at no cost to the district. Remotely monitored through the GreenStation controller, these energy storage systems discharge when needed to minimize spikes in electricity demand from the grid, helping MVLA avoid costly demand charges. The energy storage systems then recharge during lower-cost off-peak hours. “Each year, we expect to reduce our demand charges by \$86,000, if not more,” Mathiesen says. “Every dollar saved is a dollar we can spend in supporting greater educational opportunities here.”

Trends show utility demand charges increasing, and as they do, the need to avoid demand spikes will become more acute. With the energy storage systems in place, conservative estimates put MVLA’s total savings at more than one million dollars, over the lifetime of its Power Efficiency Agreement with Green Charge Networks.



Image depicts several Green Charge Networks energy storage systems (silver and green towers); part of an installation located at the Mountain View High School campus.

The algorithms in the Green Charge storage system that minimize the district’s demand peaks can also be used to generate savings for the district through energy arbitrage. For example, demand for electricity is typically higher and congruently more expensive in the late afternoon and early evening, when schools are closed for the day. By storing cheap, off-peak electricity to use during expensive peak times, the district can reap additional energy savings—without any additional investment on its part.

These savings may soon turn to revenues. Recently, MVLA became the first Green Charge customer to take part in the California Independent System Operator (CAISO) wholesale energy market. Through the program, Green Charge will aggregate the excess capacity of multiple sites and offer it on the CAISO market in order to help relieve stresses in the transmission network. According to Mathiesen, the CAISO program will provide the district with a new source of revenue beyond energy arbitrage and demand charge savings.

**WHAT YOU SEE IS NOT ALL THAT YOU GET**

Excited to be at the forefront of sustainability innovation in the education sector, Mathiesen acknowledges that energy storage isn’t top of mind for many in the education sector. Often, it takes another initiative, such as EV charging, to realize that demand charges can be a major issue. Energy storage initially offers a remedy for demand charges, but ultimately becomes a powerful benefit in its own right.

“EV charging is what people see,” Mathiesen says, “but the real benefit is in the energy storage.”

[greencharge.net](http://greencharge.net)

“EV charging is what people see, but the real benefit is in the energy storage.”  
– Mike Mathiesen, Associate Superintendent, Business Services, MVLA

**DEMAND CHARGE SAVINGS AND BEYOND**

Like many Green Charge customers, MVLA was initially skeptical of the proposal to install all of this sophisticated equipment at no upfront cost to the district. But both the district’s project management firm and the local utility, with whom Mathiesen vetted the proposal, agreed that it would be mutually beneficial: MVLA would avoid the cost and risk of the installation, and Green Charge would get a share in the district’s demand charge savings. “The EV chargers were a great idea,” Mathiesen says, “but from a financial perspective, packaging the chargers and the energy storage was even better.”



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800.426.5010 (Toll Free) • 408.638.0072 (Local)  
[info@greencharge.net](mailto:info@greencharge.net)

**About Green Charge Networks**

Green Charge Networks delivers intelligent energy storage solutions that are the easiest way for commercial and industrial businesses, municipalities, and schools to save energy costs. Our award winning solution delivers industry-leading savings, up to 50% of demand charges on monthly energy bills. Since 2009, we have been providing risk-free, financed energy storage and software that shifts the time of power use, and optimizes electric vehicle charging, solar, and energy efficiency measures. Green Charge is headquartered in Santa Clara, California, with offices in New York City and San Diego. For more information, visit [greencharge.net](http://greencharge.net).

## Case Study: Peak Shave Water Heating Program

### Project Description

Conventional hot water heater load control and energy efficiency programs have been offered in the U.S. for decades, “Flexible load” in the form of demand response or behind-the-meter energy storage has found renewed interest in water heating load control as a means to improve the reliability, economics, and environmental footprint of the power grid.

<i>At A Glance</i>	
Who	Great River Energy Co-Operative, 665,000 member consumers, serving 1.7 million people of Minnesota
What	Peak Shave Water Heating Program and Electric Thermal Storage (ETS) Program; 70,000+ Customers
Goal	Peak Load Shaving, using Hot Water Heaters as Energy Storage (batteries)
When	Since the 1990’s
Peak Reduction Capability	~20 MW (Peak Shave Program) 50 MW Year Round (ETS Program)
Outcome	Residential and Business customers pleased; Co-ops realize savings as well

Electric water heaters are essentially pre-installed thermal batteries sitting idle in more than 50 million homes across the U.S. Water heaters are being controlled to reduce peak demand. They are also being controlled in real-time to shift electricity consumption away from peak demand periods when high-priced wholesale electricity rates spike, to off-peak periods when generation is less costly. Technology advancements have also enabled “grid interactive water heaters” to be controlled over very short time intervals and with near instantaneous response, allowing them to provide frequency regulation and other grid balancing services. These services are highly valuable, serving to smooth-out supply fluctuations as markets continue to add

more variable wind and solar resources.

Electric water heaters account for 9% of all electricity consumed by households nationally. This represents the third single largest source of residential electricity consumption, behind only space cooling (13%) and lighting (11%). More than 40% of U.S. households have electric water heating. A 50-gallon tank can be interrupted for up to four hours with little risk of running out of hot water across a range of customers with diverse hot water needs.

Three strategies make use of electric hot water heater energy storage:

1. **“Peak Shaving”** in which load is curtailed during peak hours on a limited number of days per year, the Peak Shave strategy is well suited for market conditions where there is a peak demand-driven need for generation and/or transmission capacity, a relatively flat energy price profile, and/or a limited ability to promote adoption of larger hot water tank sizes. The Peak Shaving strategy is best suited for situations where customers require the most minimally intrusive program or have a high sensitivity to a possible hot water shortage.
2. **“Thermal Storage”** in which the water is heated each night to avoid higher priced hours during the day, the Thermal Storage strategy significantly increases benefits relative to the Peak Shave strategy, at little incremental cost. The Thermal Storage strategy is best suited for customers with larger (80+ gallon) water tanks in market conditions with a significant price differential between peak and off-peak periods.
3. **“Fast Response”** strategy provides balancing services in the form of quick load increases and decreases. The Fast Response strategy can significantly increase benefits over the other two

load control strategies in electricity grid environments with a need for resources that can quickly ramp load up and down. “Fast Response” benefits are less dependent on tank size but are dependent on market conditions, including whether market rules allow demand-side resources to participate in ancillary services markets.

**Great River Energy** is a Minnesota umbrella cooperative serving 1.7 million people via 28 smaller cooperatives. GRE has employed a Peak Shave Water Heating Program and an Electric Thermal Storage (ETS) Program for many years, essentially using water heaters as batteries. In the graph below, the dark blue line represents the typical baseline daily load profile of residential hot water electricity consumption in GRE’s service territory. This load profile assumes maintaining a water temperature of at least 120 degrees - the standard temperature for heated water in most residential applications. In the Peak Shave Program, the water heater is curtailed on a limited number of days of the year (typically 10 to 15) when the system peak is likely to occur. Curtailments occur for a limited number of hours on those days (typically 2 to 4, depending on the duration needed to confidently capture the hour of the system peak). The water heater is not controlled on the other days of the year. This strategy is used to capture capacity value.

For the ETS Program, larger volume water heaters charge during nighttime hours. These 85-to-120 gallon heaters come on at 11pm and charge (heat) until 7am the next morning. The rest of the day, approximately 16 hours, the water heaters do not consume electricity. Thus, the electricity used to power the heaters is cheaper than it would be if they were charging during the day, and everybody saves money as a result, says Gary Connett, GRE Director of Demand-Side Management and Member Services.

Hourly Electricity Consumption Profiles for Hot Water Heater Programs



In addition to these long-standing energy efficiency programs, Great River Energy is also piloting a program in which water heaters charging at night also help provide grid frequency regulation services by slightly altering how much electricity they use. As the grid adds more variable resources - like wind and solar power - water heaters provide a useful “ballast” against that variability.

GRE’s Connett says, “These water heaters <are> kind of an unsung hero, but we’ve studied smart appliances, and I have to say, maybe the smartest appliance is this water heater.”

## Cost

Societal costs and benefits are shared by the utility, participants, and non-participants, such as generators and other customers, depending upon how participation incentives are structured and upon the way program costs are recovered.

Net benefits of these approaches reach around \$200 per participant per year under certain market conditions. This effectively pays for the entire cost of the water heater and associated control equipment (including installation) in 5 years. Considering only incremental costs of the advanced control capability, the payback period is around 3 years.

## Benefit

In two Minnesota markets, PJM East and MISO (Minnesota hub), using market data from 2014, the net benefits per water heater in the PJM 2014 and MISO 2028 scenarios are \$13 and \$29 per customer per year. When capacity prices are very low (e.g. the MISO 2014 scenario), the avoided costs do not overcome the incremental cost of the equipment to control the water heater, with a net benefit of -\$15 per customer per year.

In Minneapolis, the approximate energy savings per unit (customer) is 0.4kW. Across both the Peak Shave Program and the ETS program, Minnesota is realizing an annual peak load reduction of approximately 70MW. If 25% participation were reached nationwide, as suggested by a FERC study, the resulting savings is estimated to be about 5,300MW of peak demand reduction. This equates to about \$424 million in utility savings due to reduced on-peak generation needs.

Peak load reductions can avoid or defer the need for new utility Transmission & Distribution capital investments that are driven specifically by system peak demand growth.

Reducing load during high priced peak load hours leads to a reduction in energy costs.

The Peak Shave Water Heating Program and ETS Program reduce CO2 emissions due to a change in energy consumption patterns. When load is shifted from peak hours to off-peak hours, there is a change in CO2 emissions, depending on the fuel-mix burned to produce electricity during those hours.

## Contact

<http://greatriverenergy.com/>

<http://greatriverenergy.com/we-use-energy-wisely/energy-efficiency/smart-energy-use/>

<http://midwestenergynews.com/2016/05/02/qa-an-energy-storage-solution-may-already-be-in-your-basement/>

<https://www.washingtonpost.com/news/energy-environment/wp/2016/02/24/the-secret-power-of-your-most-boring-home-appliance/>

<http://www.nreca.coop/wp-content/uploads/2016/02/The-Hidden-Battery-01-25-2016.pdf>

[http://c.ymcdn.com/sites/www.peakload.org/resource/resmgr/PLMA\\_Water\\_Heater\\_Demand\\_Man.pdf](http://c.ymcdn.com/sites/www.peakload.org/resource/resmgr/PLMA_Water_Heater_Demand_Man.pdf)

<http://www.ferc.gov/legal/staff-reports/06-09-demand-response.pdf>

**EDUCATION**

Customer Success Story

**PERALTA COMMUNITY COLLEGES****ENERGY STORAGE COUPLED WITH EV CHARGING COMES WITH NO UPFRONT COSTS****Location:** Oakland, CA**Size:** 27,000 students, faculty and staff**Customer Challenge**

Address sustainability objectives with limited budget

**Green Charge Solutions**

Energy storage coupled with EV charging

**Why Green Charge**

- Energy storage mitigates risk of EV chargers producing costly spikes in electricity demand
- No-cost energy storage with shared savings financing model
- Green Charge provided expertise to help move project through committees

**Benefits**

- Reduced monthly peak-demand charges
- Infrastructure makes it easier for more people to adopt lower carbon standards
- Increasing awareness of Peralta in the community, as more people are drawn to campus

“Green Charge Networks was instrumental in making expertise available during the committee meetings. It was a pleasure to work with them.”

– Charles Neal, Energy and Environmental Sustainability Manager, Peralta Community Colleges

**Low-impact EV charging helps drive fulfillment of sustainability policies.**

With four campuses serving northern Alameda County, California, the Peralta Community College District has been a premiere destination for undergraduate and continuing education for more than 50 years. Because it promises to help students change their lives, Peralta must evolve as well, continually adapting to the students' needs, as well as those of its employees, the surrounding communities, and the environment that sustains them.

As part of his duties as Peralta's Energy and Environmental Sustainability Manager, Charles Neal is tasked with finding ways to reduce the district's carbon footprint. Doing so, he says, requires not only money for technology and infrastructural improvements, but also behavioral change.

One of the behaviors Neal is targeting is the commute habits of Peralta staff and students. For those who drive to class or to work, electric or plug-in hybrid vehicles would be ideal, but the dearth of charging stations can be a significant obstacle. "Transportation is a primary contributor to our carbon footprint," Neal says. "Providing EV charging stations here on campus makes it easier to adapt to lower carbon standards."

Generous subsidies from a partnership between the Community College League of California and charging station provider NRG eVgo made installing EV charging stations an attractive option for Peralta. Operating them however, might have less-appealing side effects: Simultaneous use of the chargers—especially DC fast chargers—could cause spikes in the electricity pulled from the grid, triggering costly demand charges on Peralta's energy bill.

## ENERGY STORAGE MAKES EV CHARGING MORE FEASIBLE

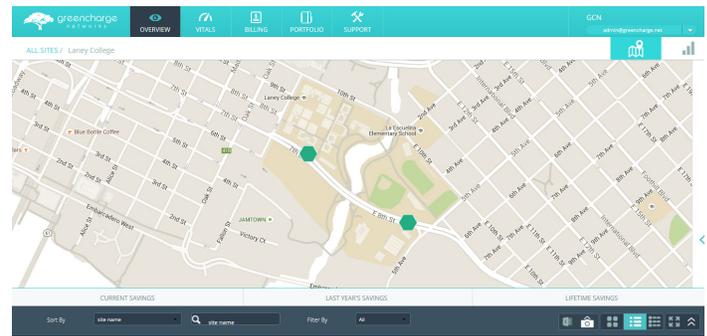
Consequently, when Neal was introduced to the intelligent energy storage solutions offered by Green Charge Networks, he supported the concept: "It makes good sense to draw energy at lower rates and then use the stored energy when rates are higher," he says. Green Charge Networks would install and maintain the storage systems at no cost to Peralta, and share the accrued demand charge savings between them.

In the initial phase, Green Charge Networks coupled a 30kW energy storage tower with each of the DC fast chargers installed at the Peralta District office in Oakland and at the adjacent Laney College campus. Green Charge monitors the energy storage systems over a dedicated network and populates a user portal with real-time performance data, including monthly demand charge savings. Designated staff members at Peralta Community Colleges, such as Neal, can securely log in and view this data at any time.

As the charging stations become more popular, the storage systems will adapt to the evolving energy use patterns. But even now, the project has put Peralta in the vanguard of EV initiatives in education, and has given the district insight into the impact of EV charging on energy use and cost as well as the behavior of energy consumers. As Neal explains, "It was a chance to look at how it works on a limited basis—on our own property—with an eye to deploying it on a larger scale later on."

## GAINING STAKEHOLDER TRUST

Though he is guided by the District's Environmental Sustainability policy and has the full backing of the Chancellor's office, Neal must still steer his environmental initiatives through multiple layers of approval. Like many educational institutions, the Peralta Community College District has a shared governance policy, which requires managers to collaborate with campus facilities committees on major projects, as well as gain approval from the District's board of trustees. "Green Charge Networks was instrumental in making expertise available during the committee meetings," Neal says. "It was a pleasure to work with them."



Using Green Charge Networks' portal, Peralta can click to view historical and real-time data for each storage system deployment (green hexagon) shown on the map.

## GOODWILL A VEHICLE FOR FUTURE SAVINGS

Green Charge Networks calculated that the energy storage systems could reduce Peralta's demand charges by more than \$12,000 annually. In its first summer online, the energy storage solution reduced demand charges at Laney College by approximately \$1,000 in a single month; Neal is eager to see if the cumulative data in the coming months confirms the initial estimate.

What is already apparent is that the charging stations are heavily used by the public. "Drawing drivers to the campuses to charge their vehicles is both generating goodwill and increasing awareness of Peralta Community Colleges in the community," Neal says. What drivers may not be aware of is that EV charging at Peralta can continue to be feasible in the long run thanks to the demand charge reduction benefits of Green Charge Networks' storage systems.

greencharge.net



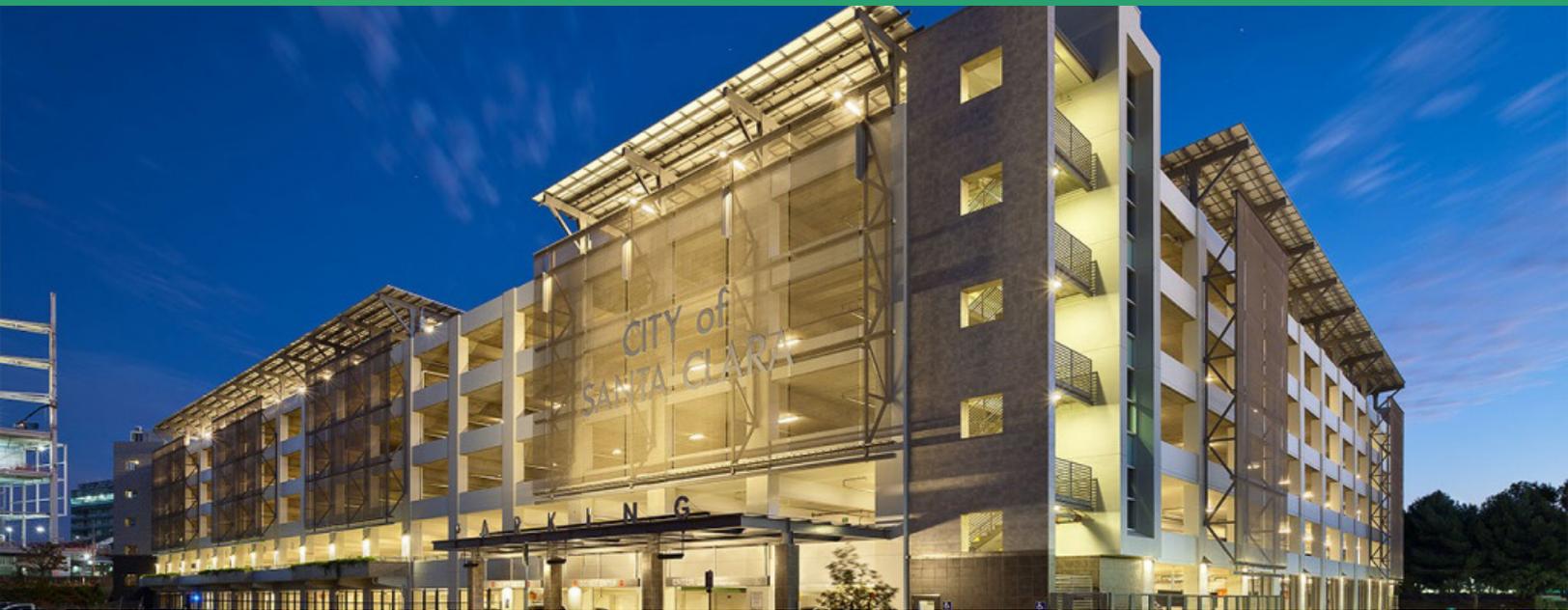
4151 Burton Drive • Santa Clara, CA 95054  
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info@greencharge.net

### About Green Charge Networks

Green Charge Networks delivers intelligent energy storage solutions that are the easiest way for commercial and industrial businesses, municipalities, and schools to save energy costs. Our award winning solution delivers industry-leading savings, up to 50% of demand charges on monthly energy bills. Since 2009, we have been providing risk-free, financed energy storage and software that shifts the time of power use, and optimizes electric vehicle charging, solar, and energy efficiency measures. Green Charge is headquartered in Santa Clara, California, with offices in New York City and San Diego. For more information, visit [greencharge.net](http://greencharge.net).

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October 6, 2015



## City of Santa Clara Installs No-Cost Power Efficiency to Complement Levi's® Stadium's Energy Efficiency Measures



### Project Description

The City of Santa Clara led the development of the brand new state-of-the-art Levi's® Stadium — a \$1.2 billion facility that serves as the new home of the San Francisco 49ers, one of the National Football League's (NFL) most storied franchises.

The stadium, with a maximum capacity of approximately 70,000 spectators, is leading a growing movement in the sports industry of maximizing comfort for fans while being energy-conscious. The extras making the stadium an environmentally-friendly and energy-neutral facility include an 18,000-square-foot green rooftop, recycled materials, and over 1,000 solar panels, among other impressive green measures. In fact, Levi's® Stadium is the largest building registered with the U.S. Green Building Council, the organization that runs LEED Certification. Naturally, the City of Santa Clara made sure that the overflow parking garage for Levi's® Stadium followed suit with impressive environmental and energy measures of its own. Like the stadium, the garage implemented a prominent array of solar panels and multiple EV chargers.

### Case Study Specifications

Project name:	<b>Tasman Parking Garage at Levi's® Stadium</b>
Location:	City of Santa Clara, CA Parking Structure
Industry:	Sports and entertainment
Project Dates:	May 2014 - Present
GreenStation Size:	30 kW / 30 kWh
Electric Utility:	Silicon Valley Power
Results:	Reduced demand charges by combining energy storage, solar PV, and Electric Vehicle

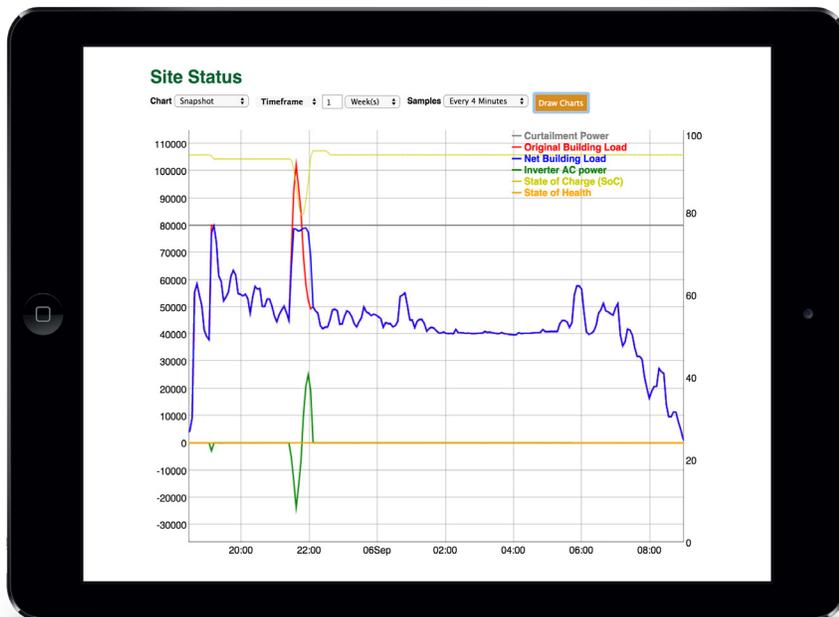


## The Challenge

The City of Santa Clara recognized that curbing energy (kWh) consumption alone was not enough, and that power (kW) saving measures would bring added benefits. Like the stadium itself, the parking garage sees incredible spikes in demand during certain hours on game days only, caused by the EV chargers, elevators, gates, and similar loads. The City therefore realized that managing power demand, while complementing its environmental and electricity-saving initiatives, would provide yet another cost-effective solution.

## Our Solution

Green Charge Networks worked with the City of Santa Clara and Silicon Valley Power to design and install a 30 kW / 30 kWh GreenStation™ and DC Fast Charger at the Tasman Drive Parking Structure. Located on the ground floor of the City's parking garage, the energy storage solution mitigates the spikes in demand caused by electric vehicles, elevators, gates, and other building loads when fans arrive for game days. On top of this, the GreenStation™ mitigates intermittency in production of the 300kW solar car port on the garage's roof.



On top of this, the GreenStation™ mitigates intermittency in production of the 300kW solar car port on the garage's roof.

- » In the U.S.A., buildings account for 38% of all CO<sub>2</sub> emissions.
- » Over \$80 billion dollars are spent every year on electricity and natural gas in buildings.
- » On July 10, 2002, California recorded highest peak demand at 52,863 MW. Peak demand is growing at 2.4% per year on average.

## Our Results

Adding GreenStation™ energy storage to the project's growing list of green measures was a sound economic decision. By signing a Power Efficiency Agreement (PEA) with Green Charge, the City of Santa Clara was able to bring a DC Fast Charger and GreenStation™ energy storage system to the garage, at absolutely no cost to the City or to 49ers' fans. In sharing in the demand charge savings, the City of Santa Clara was able to successfully reduce operating costs of their beautiful new LEED Gold stadium and related facilities.





## Businesses Look to Save Money by Using Power More Efficiently with Green Charge Network's GreenStation



### Project Description

Operating over 8,000 retail health and drugstore outlets across the U.S., Walgreens is all about helping Americans improve and maintain health and fitness. Hand-in-hand with this commitment, Walgreens, like a large and growing number of U.S. businesses, is also intent on enhancing the social and environmental, as well as economic, sustainability of its operations.

In 2012, Walgreens installed a greater number of solar energy systems than any other company in the U.S. barring Walmart. This year, the nationwide retail health and drugstore chain operator became the first company of its kind to install an intelligent energy storage system. Signing a Power Efficiency Agreement<sup>SM</sup> (PEA<sup>SM</sup>) with Green Charge Networks, Walgreens is becoming a leader in the fast emerging U.S. energy storage space.

### Case Study Specifications

Project name:	Walgreens
Industry:	National drugstore chain
Location:	Yonkers, New York
Project Dates:	May 2014 - Present
GreenStation Size:	27 kW / 64 kWh
Electric Utility:	Con Edison of New York
Results:	Reduced demand charges by up to 50% per month
	24x7x365 operation
	Interconnected on customer's side of meter
	Rugged, outdoors design



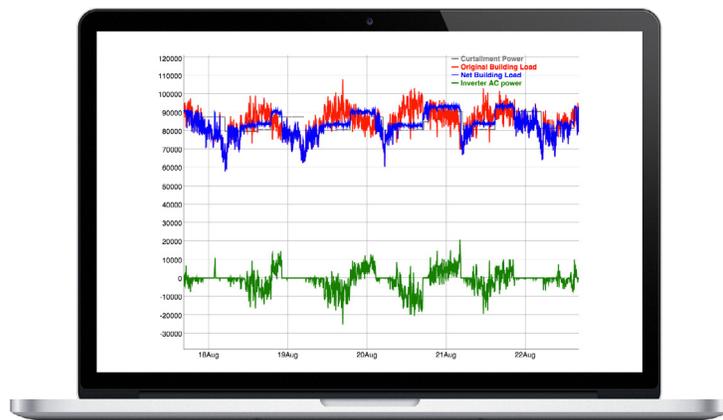
## Project Description, continued

A GreenStation™ intelligent energy storage system was first installed at a Walgreens retail outlet in Yonkers, New York, near the banks of the majestic Hudson River. The 27kW / 64kWh GreenStation™ is expected to save Walgreens up to 50% in demand charges in the summer when peak demand charges are high.

## The Problem

National retail chains like Walgreens have large energy and ecological, as well as economic and geographic, footprints. High and volatile fossil-fuel energy costs, along with the long-term impacts of fossil-fuel energy use on human and environmental health and safety, has led the New York State government to join with utilities, businesses and local communities to identify and implement sustainable “green” energy and energy efficiency solutions.

The rising costs of peak-demand electricity usage and the strain it puts on aging electricity grids led Walgreens to search for a cost-effective means of reducing power consumption and enhancing power efficiency. The national retailer turned to Green Charge Networks and its GreenStation™ intelligent energy storage system for a solution.



## Environmental Savings

By committing to reducing energy usage and expanding on their renewable energy initiatives, Walgreens is sparing the environment from the effects of harmful emissions such as automobile emissions, industrial emissions and the emissions from the power plants still using coal. Commercial buildings account for 18% of US CO2 emissions (\*). Through Green Charge’s GreenStation™, building owners can save up to 50% on their electricity bills.

Buildings Overview,  
Center for Climate and Energy Solutions

## Our Solution

Green Charge Networks’ GreenStation™ actively minimizes monthly peak electricity demand usage as measured by the utility meter. Historical and live streaming data points are posted into a cloud based data warehouse where an automated network operation center uses heuristic and predictive algorithms to determine an optimized maximum peak demand value.

As GreenStation™ gains experience, it learns the site-specific characteristics of the facility’s load profile and adjusts the second-by-second charge / discharge profile to minimize utility demand charges. That can lead to substantial reductions in peak power demand and associated utility charges, as well as enhance the reliability of on-site electricity supply.

In addition, Green Charge Networks’ Power Efficiency Agreements<sup>SM</sup> (PEAs<sup>SM</sup>) make financing easy. A pay-for-performance contract, Green Charge PEAs<sup>SM</sup> eliminate the need for GreenStation™ users to invest any capital up-front. Green Charge takes care of project design and installation, as well as operations and maintenance. Resulting electricity bill savings are shared between Green Charge and the customer.

## Case Study: Energy Efficiency Gains – PG&E SmartAC Program

### Project Description

Energy efficiency is being identified as the new “bridge fuel” to address load shedding during periods of peak demand and to cut carbon emissions.

<i>At A Glance</i>	
Who	Pacific Gas & Electric, 5.4million electric customers, 70,000-sq mile service area (Coastal & Northern California)
What	SmartAC Program installed for 150,000+ homeowners and 7,000+ businesses by end of 2014
Goal	Shift Peak Load Demand during hot summer periods
When	Since at least 2008
Load Reduction	100 - 120MW peak load reduction 18% avg load reduction (1pm to 6pm)
Outcome	Residential and Business customers pleased, with few complaints

**Pacific Gas and Electric’s (PG&E) Smart AC Program** has over 150,000 voluntary residential customers with one-way paging load control devices that provide peak period load reduction of approximately 100-to-120 MW. The SmartAC program is about the utility working together with customers to smooth out spikes in energy usage. This helps keep everyone’s rates lower.

PG&E installs a small device on air conditioning units that enables PG&E to send a signal directing your air conditioning to briefly run at a lower capacity during periods of peak load. The ability to cycle air conditioning across hundreds of thousands

of customers allows PG&E to shift peak load demand. Customers only briefly experience lower AC demand. Most customers don’t notice when the SmartAC device is active. The SmartAC device works with standard central air conditioners as well as heat pumps.

The SmartAC device is installed by PG&E on or near a customer’s air conditioning unit. The Smart AC device is activated remotely so that a customer’s air conditioner compressor cycles on and off in short increments totaling no more than 15 minutes of every half hour. This results in 50% “duty cycle” control, not temperature control. (Less than 50% duty cycle does not result in appreciable load shedding for PG&E.) The air conditioning fan continues to circulate the cold air already in the customers’ homes, thus activation is rarely noticed.



SmartAC “event days” are infrequent. PG&E uses standard “Day-Ahead” and “Hour-Ahead” transmission planning as well as evolving “real-time dispatch”. Using standard planning scenarios, coupled with advanced weather forecasting, PG&E is able to anticipate when the SmartAC devices in a particular area will be remotely activated. Events last as little as 2 hours and no more than 6 hours. SmartAC events occur between May 1<sup>st</sup> and October 31<sup>st</sup>. Customers may experience up to 15 events per season, for a maximum of 100 hours per season. PG&E posts activations of a SmartAC “event day” by 11am on the day of the event. Event times are between 2pm and 7pm. The SmartAC program is only triggered during energy peak demand emergencies or system reliability testing.

If a SmartAC “event day” is called at a time that is inconvenient, customers can return their air conditioning to normal settings. Customers are always able to log-in or call PG&E and ask not to participate for a particular day without penalty. Customers can opt out in 24-hr increments at any time. The SmartAC device is reset to re-start again at midnight of each day.

Customers can also log-in to their PG&E account to view their SmartAC cycling history which shows the dates and durations when the device received SmartAC “event day” signals.

Customers that wish to stop participation altogether notify PG&E, and they disable the SmartAC device.

### Cost

There is no cost to customers to participate. In exchange for voluntary participation, PG&E gives customers a one-time \$50 rebate. PG&E does not provide a specific monthly credit on customers’ electricity bills for participation. However, overall electricity usage may decrease slightly which may result in minor savings.

Customers also gain free technical support (troubleshooting, not repair) of their air conditioning system. If a problem arises, PG&E will troubleshoot if the problem lies with the SmartAC device or with the air conditioning unit.

PG&E saves by avoiding having to buy electricity on the open spot market during peak demand periods, when wholesale power prices spike. They also avoid the prospect of rolling blackouts, which caused costly problems for California in the early 2000’s in the wake of the Enron scandal.

### Benefit

The SmartAC Program smooths out spikes in energy usage. The program addresses periods of peak demand – when electrical system capacity is temporarily exceeded. By smoothing out these electricity spikes, customers avoid potential power interruptions and helps keep everyone’s rates lower.

Better management of electricity demand means generating less electricity from polluting fossil fuel plants during peak demand periods. Fewer greenhouse gases are produced which results in cleaner air for all residents. Less pollution lowers medical costs for those suffering from respiratory ailments and is better for the environment and climate.

As other utilities across the country look to upgrade their load control systems, they will benefit from the groundwork PG&E has laid with programs like the SmartAC program.

Here in the Pacific Northwest, where air conditioners are less prevalent, this same approach can be taken with residential hot water heaters, furnaces, and heat pumps. This same approach addresses periods of peak demand when electrical system capacity is temporarily exceeded.

## Public Perception

Most residential and business customers are very pleased with the program. Customers like free troubleshooting if air conditioning system problems arise. Most customers surveyed do not notice when SmartAC activation occurs, and most do not notice any compromise in comfort, temperature, or control. There have been a few minor complaints from some customers expecting their electricity bills to decrease.

## Contact

[http://www.pge.com/en/myhome/saveenergymoney/plans/smartac/index.page?WT.mc\\_id=Vanity\\_smartac](http://www.pge.com/en/myhome/saveenergymoney/plans/smartac/index.page?WT.mc_id=Vanity_smartac)

<http://www.nexant.com/resources/smartac-load-impact-evaluation>

<http://www.pge.com/en/myhome/saveenergymoney/plans/smartac/faq/index.page?>

[http://www.pge.com/tariffs/tm2/pdf/ELEC\\_MAPS\\_Service\\_Area\\_Map.pdf](http://www.pge.com/tariffs/tm2/pdf/ELEC_MAPS_Service_Area_Map.pdf)

<http://www.pge.com/en/myhome/servicerequests/treertrimming/territory/index.page>



One Maritime Plaza in Downtown San Francisco



Highest and Best Use

### MORGAN STANLEY'S REAL ESTATE INVESTMENT ARM

(MSRE) has partnered with Advanced Microgrid Solutions (AMS) to transform a San Francisco skyscraper into the City's first Hybrid Electric Building®.

AMS will install and operate a Tesla energy storage system on an unused loading dock inside the downtown building. The storage system, paired with AMS's proprietary software platform, will decrease utility electricity costs, bolster grid resiliency, and lower the building's demand for electricity from high emitting "peaking" resources. In exchange for hosting the system, MSRE will receive fixed, long-term lease payments for the physical space.

### CREATING NOI FROM UNUSED SPACE

Through its partnership with AMS, Morgan Stanley will convert 338 square feet of previously idle space at the One Maritime building into a revenue-generating "host site" for a state-of-the-art Tesla energy storage system. Under the terms of the agreement, AMS will install a 500 kilowatt/1,000 kilowatt-hour Tesla Powerpack that will lower the 534,000 square foot building's energy demand and provide resilience to the electric grid. AMS will provide the system at no upfront cost, operate the system, and pay for any maintenance over its 10-year contract. MSRE will recognize the additional, risk-free cash flow as rental income, increasing its Net Operating Income (NOI).



Advanced Microgrid Solutions



## IMPROVING BUILDING PERFORMANCE

The energy storage system at One Maritime will provide essential grid support by reducing the building's peak energy demand by as much as twenty percent, curbing unpredictable spikes in energy usage that can lead to costly utility bills. The system will improve the building's performance without causing any changes to building activities or the occupants' experience. The battery project will also integrate seamlessly into One Maritime's existing building management system and operate autonomously, with 24/7 remote monitoring by AMS's network operating center, without requiring any work or upkeep from property or facility managers.

The battery installation also adds a new dimension to the building's history of excellence in sustainability. One Maritime became LEED Certified in 2011 and has been ENERGY STAR rated for six consecutive years. By hosting a Tesla Powerpack system, One Maritime could qualify for a higher level of LEED certification and receive other environmental recognition. The system will enhance the building's participation in utility demand response programs by combing the load drop of the battery with other end use equipment.

In addition to creating building-level benefits, the project contributes to Morgan Stanley's goal of integrating sustainability into its investment portfolios. A new [report](#), released by Morgan Stanley's Institute for Sustainable Investing, argues that sustainable technology can cut a typical office building's annual expenses by 3% to 30%, improve occupancy rates, and increase Net Operating Income per square foot.

- 20% REDUCTION IN PEAK ENERGY DEMAND
- SEAMLESS INTEGRATION WITH EXISTING BMS
- AUTONOMOUSLY OPERATED
- NO MAINTENANCE
- ENHANCE UTILITY DEMAND RESPONSE

## SUPPORTING A GREENER SAN FRANCISCO

In addition to the host site benefits, this collaboration serves the City's ambition to transition to 100% clean energy by 2030. As noted by Barbara Hale, Assistant General Manager for Power at the San Francisco Public Utilities Commission, a greenhouse gas-free grid will require "battery storage solutions to bolster the electricity resilience of critical facilities around the City." The first Hybrid Electric Building® at One Maritime will deliver that strategic support to San Francisco while generating revenue for its host. As San Francisco transitions to cleaner energy for its residents and businesses, the City will need to deploy more advanced battery systems such as this groundbreaking development at One Maritime to integrate renewables and provide essential grid support.





Energize Eastside EIS <info@energizeeastsideeis.org>

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## Energize Eastside EIS Public Comments: Public Outreach

1 message

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**Russell Borgmann** <rborgmann@hotmail.com>

Mon, Aug 1, 2016 at 3:22 PM

To: "info@energizeeastsideEIS.org" <info@energizeeastsideeis.org>, "HBedwell@bellevuewa.gov"

<HBedwell@bellevuewa.gov>

Cc: "rborgmann@hotmail.com" <rborgmann@hotmail.com>

The Public Outreach for the recently proposed Bypass Routes should notify ALL PSE ratepayers, not just those along the corridor. This change will impact cost, and costs impact ALL ratepayers. PSE needs to include proper notification to all 1.1 million customers, since according to PSE's Energize Eastside FAQs ALL ratepayers are responsible for Energize Eastside. At a minimum PSE should include proper notification in all ratepayers' monthly bills.

The current public outreach notification process for the EIS is inadequate.

Russell Borgmann

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Energize Eastside EIS <info@energizeeastsideeis.org>

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## Energize Eastside EIS Public Comments: Impact to Public Facilities

1 message

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**Russell Borgmann** <rborgmann@hotmail.com>

Mon, Aug 1, 2016 at 3:26 PM

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**How will the recently proposed Bypass Routes affect Kelsey Creek Park?** The green space that runs along the west side of Lake Hills Connector is called Woodridge Open Space. **How will the Bypass Routes impact the Woodridge Open Space?**

**How will it affect the new Wilburton Elementary School, where there are already 230kV lines in close proximity (Seattle City Light transmission lines)?**

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## Energize Eastside EIS Public Comments: Safety/Olympic Pipeline

1 message

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**Russell Borgmann** <rborgmann@hotmail.com>

Mon, Aug 1, 2016 at 3:31 PM

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**Olympic Pipeline was installed AFTER the power lines** were installed. **Not the opposite.** The sequence of power lines first and pipeline second is important. Now PSE is considering installing significantly higher power/voltage/ampere power lines on top of existing, old jet fuel pipelines. This is a recipe for disaster and **presents considerably more safety risk** above and beyond the risks that were incurred when the original pipeline was installed AFTER the power poles and lines were already installed.

Please consider the sequence of installation historically, as you consider mitigations and permitting for the Energize Eastside project.

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## Energize Eastside EIS Public Comments: Environmental Impacts of Bypass Routes

1 message

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**Russell Borgmann** <rborghmann@hotmail.com>

Mon, Aug 1, 2016 at 3:36 PM

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Bypass Routes 1 & 2 skirt the Kelsey Creek Park and **sensitive wetlands** areas along Wilburton Hill Park. The confluence of Mercer Slough with Richards Creek and Kelsey Creek is a sensitive wetlands area. This is a sensitive estuary and confluence of multiple watersheds feeding into Lake Washington. This area is home to delicate native vegetation, abundant terrestrial wildlife, mating bald eagle pairs, blue herons, and other abundant waterfowl.

**Questions: How will the City protect the sensitive wetlands and estuary at the confluence of Richards Creek, Kelsey Creek, and Mercer Slough? How will Energize Eastside specifically impact sensitive wetlands and the estuary at the confluence of Richards Creek, Kelsey Creek, and Mercer Slough?**

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## Energize Eastside EIS Public Comments: Design Elements

1 message

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**Russell Borgmann** <rborgmann@hotmail.com>

Mon, Aug 1, 2016 at 3:41 PM

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Power lines do not go around curves. The Bypass Routes show the line snaking along Lake Hills Connector. The maps and descriptions of the Bypass Routes are inadequate to provide meaningful EIS comments. **How many times will the line cross Lake Hills Connector? Where will the poles go? How tall will the poles be? What types of poles will they be? What is the spacing between poles? Where are the Bypass Route specific design details?**

**Questions: How many additional trees will be removed? The CAG information showed 7,989 trees will be removed or mutilated. How many additional trees are affected by Willow2, Oak2, Bypass Route 1, and Bypass Route 2? How many additional Sensitive Community Land Uses are affected by PSE's route alterations? Schools affected? Parks affected? Recreation areas affected? Trails affected? Historic Sites affected? Stream crossings affected? Steep Slope Instability affected? Earthquake fault lines?**

Russell Borgmann

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## Energize Eastside EIS Public Comments: Process Concerns

1 message

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**Russell Borgmann** <rborgmann@hotmail.com>

Mon, Aug 1, 2016 at 4:44 PM

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Cc: "rborgmann@hotmail.com" <rborgmann@hotmail.com>

It is surprising, based on my understanding of the EIS process requirements, that additional routes may be added to avoid what amounts to **a political issue rather than an environment concern.**

### Questions:

- **Can the City of Bellevue please provide reference to EIS guidelines that allow the addition of routes after the public comment periods are over?**
- **What is the process to allow additional route alterations at such a late stage after three Public Comment Periods have already passed?**
- **What criteria is used to allow the addition of alternatives?**

On June 29, 2016 Mr. Mark Williamson and Ms. Keri Pravitz told me that they did not know any specific EBCC objections to Energize Eastside. Bypass Routes 1 & 2 were proactively proposed, to avoid any schedule delays that MIGHT occur if EBCC decided to deny permits. PSE will not present Energize Eastside to the EBCC until 8/2/2016 – AFTER the Public Open Comment Period closes (8/1/2016).

### Questions:

- **Why did PSE wait until so late to include the Bypass Routes as alternatives and wait so late to publically engage EBCC?**
- **Why doesn't PSE learn about any SPECIFIC objections that EBCC may have about the Energize Eastside project BEFORE proposing further damaging route alterations?**
- **Why doesn't PSE learn exactly what problem they are trying to solve for before proposing terrible solutions?**
- **How will the City of Bellevue and EBCC ensure their constituents are provided adequate information and adequate time to comment on the impacts to their community – since the information will be presented AFTER the current Public Open Comment Period is closed?**
- **By waiting to present the Energize Eastside project to the EBCC AFTER the Public Open Comment Period closes, how does the City of Bellevue justify this as a valid EIS process, as the sequence of events calls in question the impartiality and fairness of the EIS process?**

I look forward to answers to these questions as a requirement of the EIS process.

Sincerely,

Russell Borgmann

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## Energize Eastside EIS Public Comments: Economic/Cost Impact

1 message

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**Russell Borgmann** <rborghmann@hotmail.com>

Mon, Aug 1, 2016 at 4:48 PM

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Both of these Bypass Routes are adding length, and cost, to the Energize Eastside project. On June 29, 2016 Mr. Mark Williamson and Ms. Keri Pravitz told me that they did not like Bypass Route 1 & 2. They said these routes were "ugly", would "cost more", cause "more environmental impact, and require "more Right of Way Acquisition".

**Questions: Can PSE just "tack it on the bill" and raise our electricity rates even higher? Where is the Cost/Benefit Analysis? Where is the economic analysis? Where is the fiscal accountability?**

The lack of fiscal accountability on the Energize Eastside project is egregious to the citizens of the Eastside. **Added cost of Bypass Routes could instead be spend on undergrounding portions of line.** On June 29, 2016, Mr. Williamson indicated that the added cost of the Bypass Routes was approximately equivalent to the cost of undergrounding along the EBCC jurisdiction. Undergrounding this portion could go down 140<sup>th</sup> Ave NE with a 6-foot wide, 4-foot deep trench, thereby avoiding sensitive digging near aging jet fuel pipelines. But, PSE has stated that placing transmission lines underground in East Bellevue would require extensive engineering work and that they are not planning to study undergrounding within the existing corridor. **Why not? If the costs are about equivalent why isn't undergrounding being considered? Until more design work is done, how will PSE know if this is a feasible alternative and that it should not be categorically dismissed?** It is far too early to make key decisions on the Bypass Route alternatives without more information and more design work being conducted.

On June 29, 2016, Mr. Mark Williamson and Ms. Keri Pravitz told me that "*Energize Eastside won't raise your rates. Energize Eastside is one of PSE's capital projects. PSE has annual capital budgets, which are already covered and accounted for in customers' current bills. PSE plans capital investments several years in advance and spread them out so our annual capital budget covers various projects (including Energize Eastside) each year.*"

On the PSE Energize Eastside website, the FAQ section says, "Who will pay for the project and how much will it cost? Upgrades or additions to the electric infrastructure are shared by all of PSE's 1.1 million customers and paid for over time. We don't yet know the total cost of the project, but estimates range from \$150 million to \$300 million. **We expect approximately \$1 to \$2 of the average monthly bill for residential customers will go towards paying for Energize Eastside.** Once we determine the final design and alignment, we will have a better idea of the total cost."

When I pointed this statement out to Mr. Williamson and Ms. Pravitz, Mr. Williamson said the website was wrong, and that it should probably be corrected.

**Questions: Will Energize Eastside affect our electricity bills, or not? That should be a simple question to answer. A follow-up question: If Energize Eastside will affect our electricity bills, by how much can we expect to see our bills increase and for how long?**

The website says we can expect a \$1 to \$2 per month increase for the next 40 years or more. Considering that PSE has 1.1 million customers, Energize Eastside stands to generate over \$1 billion in revenue for PSE – reimbursement for project costs PLUS an authorized rate of return.

**Why are we now being told that Energize Eastside will not have any effect on customers' electricity bills? How does PSE reconcile two completely contradictory statements publically and prominently displayed on the PSE Energize Eastside website as of 8/1/2016 (the end of the Public Open Comment Period)? How can we count on the information that is publically available when PSE's own representatives have indicated it is inaccurate?**

I look forward to answers to these questions as a requirement of the EIS process.

Sincerely,

Russell Borgmann

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## Energize Eastside EIS Public Comments: Essential Public Facility Designation

1 message

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Mon, Aug 1, 2016 at 4:53 PM

To: "info@energizeeastsideeis.org" <info@energizeeastsideeis.org>, "HBedwell@bellevuewa.gov" <HBedwell@bellevuewa.gov>, "BMiyake@bellevuewa.gov" <BMiyake@bellevuewa.gov>, "mkberens@bellevuewa.gov" <mkberens@bellevuewa.gov>, "CHelland@bellevuewa.gov" <CHelland@bellevuewa.gov>, "Council@bellevuewa.gov" <Council@bellevuewa.gov>  
Cc: "rborgmann@hotmail.com" <rborgmann@hotmail.com>

There are no energy facilities (generation or transmission) found in any list of EPFs under the Growth Management Act. The same is true of Washington administrative regulations (state and county), as well as the Bellevue Land Use Code and Comprehensive Plan. The reason energy facilities are absent from the code is that a separate process exists for approval of energy facilities. That process is solely the jurisdiction of **EFSEC**. PSE should not put cities in the position to assess highly technical data and issue permits for difficult-to-site facilities. That is why EFSEC was originally created in the 1970s (e.g. siting nuclear power plants). EFSEC has the technical staff to make informed decisions as well as the authority to supersede zoning laws and land use codes. The appropriate forum for analysis and approval of new high voltage transmission lines is via EFSEC.

- **Why hasn't PSE petitioned EFSEC to address the Energize Eastside project, and help city managers and city councils out of the "hot seat"?**
- **Why aren't City Staff and City politicians pressing PSE on this question to get a full, accurate, and well-reasoned answer as to why PSE is not presenting the Energize Eastside project to EFSEC?**
- **Why aren't PSE's answers to the EFSEC question being publically disclosed to inform the general public?**
- **Why is PSE afraid of EFSEC, if Energize Eastside's "need" is so blatantly obvious and iron-clad?**
- **Why isn't PSE willing to provide political cover for eastside politicians and city staff by seeking EFSEC approval that trumps everything? Why isn't PSE willing to help out the City of Bellevue?**
- **Will the lingering questions and questionable data justifying the Energize Eastside project withstand analysis and scrutiny by EFSEC?**
- **What is PSE hiding from EFSEC?**
- **What does the City of Bellevue (acting as SEPA Lead Agency) have to lose by denying the Energize Eastside permits, thereby forcing PSE's hand to submit Energize Eastside before EFSEC?**

These are not rhetorical questions. As a requirement of the EIS process, I look forward to thorough answers to each of these questions.

Sincerely,

Russell Borgmann

2100 120<sup>th</sup> Place SE

Bellevue, WA 98005

[rborgmann@hotmail.com](mailto:rborgmann@hotmail.com)



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## Energize Eastside EIS Public Comments: Canadian Export

1 message

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**Russell Borgmann** <rborgmann@hotmail.com>

Mon, Aug 1, 2016 at 4:57 PM

To: "info@energizeeastsideeis.org" <info@energizeeastsideeis.org>, "HBedwell@bellevuewa.gov" <HBedwell@bellevuewa.gov>, "BMiyake@bellevuewa.gov" <BMiyake@bellevuewa.gov>, "mkberens@bellevuewa.gov" <mkberens@bellevuewa.gov>, "CHelland@bellevuewa.gov" <CHelland@bellevuewa.gov>, "Council@bellevuewa.gov" <Council@bellevuewa.gov>  
Cc: "rborgmann@hotmail.com" <rborgmann@hotmail.com>

In the Eastside Needs Assessment Report, one of the 6 key assumptions is:

- **Winter peak Northern Intertie transfers were 1,500 MW exported to Canada**

On 6/29/2016 Mr. Mark Williamson and Ms. Keri Pravitz told me that the assumption above has absolutely no bearing on Energize Eastside. "That assumption should have never been included in the Eastside Needs Assessment Report." It's as if saying "the sky is blue". That assumption has nothing to do with the need for Energize Eastside. Ms. Pravitz stated, "***It has no bearing.***" (7/31/2016)

I asked Mr. Williamson why the Needs Assessment Report isn't corrected to have that assumption removed from the report if it has no bearing on the need for Energize Eastside? I was led to believe it was too much trouble to go back to open that report to make the correction. Yet there was a Supplemental Eastside Needs Assessment revision published, and the 1,500MW electricity export to Canada was still included as a key assumption.

**Question: Is 1,500MW exported to Canada an important justification for Energize Eastside or is it not?** Much time and energy has been put into clarifying the need for Energize Eastside. The public deserves a clear and transparent explanation for the need – above and beyond the co-opted studies produced by Stantec, EXPONENT, U.S.E., Quanta, and PSE. It seems implausible that a key assumption like 1,500MW of electricity exported to Canada is unimportant and should never have been included in the Eastside Needs Assessment Report. **If the 1,500MW of electricity export to Canada has absolutely no bearing on the Energize Eastside project, when will PSE run new power flow studies WITHOUT that key assumption and publically publish those reports?**

As a requirement of the EIS process, I look forward to thorough answers to each of these questions.

Sincerely,

Russell Borgmann

2100 120<sup>th</sup> Place SE

Bellevue, WA 98005

[rborgmann@hotmail.com](mailto:rborgmann@hotmail.com)

**Energize Eastside EIS** <[info@energizeeastsideeis.org](mailto:info@energizeeastsideeis.org)>

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## Comment for Bypass Route 2

1 message

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**Shan Theodore** <[shanotheo@gmail.com](mailto:shanotheo@gmail.com)>  
To: [Info@energizeeastsideeis.org](mailto:Info@energizeeastsideeis.org)

Sun, Jul 10, 2016 at 3:47 PM

Dear Ms. Bedwell,

Our family would like to comment on "Energize Eastside" proposed power lines. We prefer route 2 for the following visual and recreational reasons: We drive both Kamber (SE 26th) and Lake Hills Connector almost daily. We also hike the trails in Kelsey Creek Park. The hiking trails off of Lake Hills connector are enjoyed by many and the area is visually beautiful. We have seen fox and coyote use this area as habitat. Richards Road is already fully developed and Lake Hills Connector is a beautifully preserved area, and this is why we chose Route 2 as our preference.

I confirm that route 2 is our choice, but hopefully visual simulations will be conducted for the Skyridge/College Hill and Sunset communities. We are also concerned about the the visual impact of the Skyridge hiking trail which starts at the end of 134th Ave SE (dead end) and ends at the Skyridge's Park playground. This is a new trail and has views of Richard's Valley, especially in the winter. Likewise, the visual impact from Sunset Park should be considered for Route 2.

Thank you for taking comments.

Shan Theodore  
[425-974-0744](tel:425-974-0744)

14220 SE 24th St  
Bellevue WA 98007



**Energize Eastside EIS <info@energizeeastsideeis.org>**

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## Thanks for listening to your customer

1 message

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**The Shaws** <ceoping@hotmail.com>

Thu, Jun 30, 2016 at 7:06 PM

To: "info@energizeeastsideeis.org" <info@energizeeastsideeis.org>

I applaud you for finally listening to your customer with the alternative routes. This is the first step. Now let's continue that steak by doing better planning by putting the lines along the freeway and work with your neighbor in utilizing the existing underground system. It can be done with some effort. Let's do this proactively instead of your customer doing it for you.

Sent via the Samsung Galaxy S®6 active, an AT&T 4G LTE smartphone



Energize Eastside EIS <info@energizeeastsideeis.org>

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## Energize Eastside Phase 2 Scoping EBCC Bypass Routes Comment

1 message

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**Sido DeCassis** <sidonie.decassis@gmail.com>

Mon, Aug 1, 2016 at 11:54 PM

To: info@energizeeastsideeis.org, council@bellevuewa.gov

Please see attached.

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 **PSE Comment PDF.pdf**  
38K

## Energize Eastside Phase 2 Scoping EBCC Bypass Routes Comment

August 1, 2016

To the Bellevue City Council and Energize Eastside EIS team,

PSE has stated that the proposed bypass routes do not represent PSE's preferred alignment and rather were designed to bypass the boundaries of the East Bellevue Community Council and avoid risking a potential project delay.

Avoiding the EBCC boundaries may be expeditious for PSE, though benefits for ratepayers and residents are more dubious. The proposed EBCC bypass routes run through the same neighborhoods for all but the 0.9 miles of the route and ultimately differ in length by only 0.1 miles. PSE did not identify the pole types to be used on the bypass routes. This leaves limited distinction for the public to compare the two routes.

The proposed bypass routes do not resolve route alignment concerns and questions surfaced during Phase I. The proposed routes *increase* the number of lines in residential areas; near schools, parks or trails and in areas considered for other uses, such as light rail. The sections north and south of the bypass are still co-located with the Olympic Pipeline. The proposed bypass routes also increase loss of trees, loss of wildlife habitat and increase impact on environmentally sensitive areas, such as Kelsey Creek, a salmon bearing stream that would be impacted by both routes.

Currently, utility poles do not run on the proposed sections of Lake Hills Connector or Richards Rd. There are no above ground lines on this stretch. The juxtaposition of placing 80-100' poles with overhead lines would be a stark departure from the neighborhood's current leafy, park-like setting.

Please continue to explore the alternatives. When designing the preferred route, community members asked PSE to prioritize safety, avoid residential and sensitive environmental areas, avoid impacts to aesthetics, build within existing utility corridors and minimize impacts to the environment.

Please explore any combination of non-wire measures that would meet energy generation needs in the corridor for a longer term and that would be operationally, commercially and economically feasible. Please continue to protect the city's parks, greenspaces and trees and the quality of life and the character of our neighborhoods that makes Bellevue stand out as a great place to live.

Sincerely,

Sidonie De Cassis

Dianne De Cassis

13025 SE 21<sup>st</sup> Pl

Bellevue, WA 98005



Energize Eastside EIS &lt;info@energizeeastsideeis.org&gt;

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## Reopened Phase 2 Scoping Public Comment regarding Bypassing East Bellevue Community Council

1 message

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**Steven and Nanette Fricke** <fricke\_family@msn.com>

Sun, Jul 10, 2016 at 4:33 PM

To: info@energizeeastsideeis.org

Cc: council@bellevuewa.gov, info@cense.org

Dear PSE

I am taking this opportunity to voice my displeasure with PSE regarding its choice to consider routing a dangerous, over-sized and overly-expensive project through Bellevue, especially when there is a safe, green and cost-effective alternative.

From what I understand, this proposed project will really do nothing for the local community but will mainly benefit PSE and its stock holders. Your proposed route/project does not account for the danger of constructing huge towers with high-voltage cables over aging, high-pressure pipelines that carry millions of gallons of jet fuel and gasoline each day. Safety experts warn there is a significant risk of a catastrophic fire caused by a construction mishap or accelerated corrosion in the pipelines. One merely has to do a simple web search on "Olympic Pipeline explosion" to realize the danger you are attempting to subject the Bellevue residents to.

Not only will your proposed route/project do nothing for the Bellevue residents, it will force the cutting down around 8000 mature trees. Thus further impacting the wildlife and canopy that the Bellevue residents enjoy.

Please stop this project and look for more environmentally sound alternatives. At a minimum, please look out for the interests of Bellevue

residents because your current project fails to account for their interest but rather makes them pay the environmental and livability costs of your project.

Sincerely,

Steven Fricke



Energize Eastside EIS &lt;info@energizeeastsideeis.org&gt;

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## Comment Regarding Energize Eastside Project

1 message

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**Ting-Wei Yang, MD** <yang.tingwei@gmail.com>

Thu, Jul 28, 2016 at 10:00 PM

To: info@energizeeastsideeis.org

Dear Ms. Bedwell,

My name is Ting-Wei Yang, and I am the homeowner of 4326 129th Place SE, Bellevue WA 98006. I am writing to formally submit comment regarding PSE's Energize Eastside project.

As a physician, I cannot possibly condone the very real health risk posed by high-voltage power line. As such, I am flabbergasted that PSE is so nonchalantly dismissing health concerns in its proposal of running 230 kV transmission line right through high population density community such as Bellevue.

Such a project should only be a choice of last resort, and its footprint must be minimized at all cost. As such, Willow 1 appears to be the only viable option.

I strongly believe that we have a duty to protect our children. Such high voltage power line must be kept away from schools. It is already quite unbelievable that PSE is proposing running these lines beside Tyee Middle School. It would be criminal to also involve running transmission line right beside Newport High School. As a parent with school age children, I hope you understand my concerns. City of Bellevue has an obligation to protect its youngest citizens, and I expect nothing less from my city officials.

Thank you for your consideration.

Ting-Wei Yang, MD  
Commander, Medical Corps, US Navy

4326 129th Place SE  
Bellevue WA 98006



Energize Eastside EIS &lt;info@energizeeastsideeis.org&gt;

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## PSE's Latest Proposal

1 message

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**ToniVincent@aol.com** <ToniVincent@aol.com>

Sun, Jul 10, 2016 at 10:56 AM

To: info@energizeeastsideeis.org, council@bellevuewa.gov, info@cense.org

*Any route being considered for this dangerous, over-sized and overly-expensive project when there is a safe, green and cost-effective alternative is unacceptable. No neighborhoods should be industrialized to increase profits for PSE's foreign owners. PSE freely admits that its bypass routes were designed to go around a jurisdiction which challenged a different PSE transmission project. You might also emphasize:*

1. PSE discounts the danger of constructing huge towers with high-voltage cables over aging, high-pressure pipelines that carry millions of gallons of jet fuel and gasoline each day. Safety experts warn there is a significant risk of a catastrophic fire caused by a construction mishap or accelerated corrosion in the pipelines.
2. CENSE advocates a scalable plan developed by industry experts that uses modern technology, already at work in other cities, to power Eastside growth while reducing per capita electricity demand and greenhouse gas emissions.
3. The CENSE Plan saves 8,000 mature trees that PSE would cut down or limb to clear the route for its transmission lines. PSE's plan would degrade the livability of 29 neighborhoods, a key to attracting businesses and residents to the Eastside.

Toni Vincent  
Bellevue, WA



Energize Eastside EIS &lt;info@energizeeastsideeis.org&gt;

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**FW: Energize Eastside**

1 message

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**Bob Moore** <bmooreii@comcast.net>  
To: info@energizeeastsideeis.org

Tue, Jul 12, 2016 at 10:07 AM

To whom it may concern,

Where are the voices of reason who are in position to influence a more rational outcome to meeting the energy demands on the east side? How can we allow foreign financial interests to invade the city of Bellevue and other Eastside communities with dangerous and visibly disturbing infrastructure which will damage our quality of life and the quality of life for future generations to come. What kind of legacy do the leaders of our community want to leave behind? Where is the courage to stand up to a bad, bad solution? We all know there are better alternatives as suggested below. I hope and pray that our elected representatives will stand up to a powerful financial entity and work aggressively to utilize today's technology, including conservation, to fulfill our energy needs. Please search you conscience and take care of our citizens and not pander to powerful financial interests. Please consider the following:

1. The CENSE coalition has proposed an alternative solution that offers a reasonable, cost-effective, scalable alternative that is more in line with how energy will be delivered in the 21st century. Why saddle us with a dinosaur project only because we yielded to PSE pressure to line its pockets instead of being proactive about where the world is going in terms of energy delivery? There is a better way, and Bellevue should look to the future and be a leader in transforming how we power our lives going forward.
2. The idea that putting that much power through lines going through the same corridor as a decaying, jet fuel line carrying high-pressure gasoline, is unthinkable and inviting a disaster beyond anything we want to imagine. Also, why does anyone think the newly proposed 80 foot poles over part of the route are any more acceptable than the 135 foot ones in the earlier plan? Those of us who have to live near them don't.
3. The new proposed route just lets PSE destroy more of the green environment we prize on the Eastside. The CENSE plan will save at least 8,000 trees from demolition or disfigurement, while accomplishing a better solution to future energy needs.

This is the time for those of us who can actually control what happens and leave a legacy of a beautiful, viable community to act boldly. **Deny PSEs current request and send the future energy question back to the drawing boards for a better, more appropriate solution.**

W. Robert Moore

4707 135<sup>th</sup> Place SE

Bellevue, WA 98006



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## Fw: EIS Process

1 message

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**whalvrsn1@frontier.com** <whalvrsn1@frontier.com>  
Reply-To: "whalvrsn1@frontier.com" <whalvrsn1@frontier.com>  
To: Energizeeastsideeis Info <info@energizeeastsideeis.org>

Mon, Aug 1, 2016 at 5:00 PM

— Forwarded Message —

**From:** "whalvrsn1@frontier.com" <whalvrsn1@frontier.com>  
**To:** "o@EnergizeEastsideEIS.org" <o@EnergizeEastsideEIS.org>  
**Sent:** Monday, August 1, 2016 4:58 PM  
**Subject:** EIS Process

To: City of Bellevue EIS Team

When PSE and the EIS team announced an extension of the EIS process, I was curious about their reasons for doing this. No matter what the reasons are, PSE decided to introduce yet another transmission line route too late to be seriously evaluated and considered in an already confusing and elongated process. It is commendable that you seek citizen feedback and equally commendable that PSE is looking at alternatives.

However, the methodology used to acquire feedback seems to lack substance. If you really want feedback about the Oak and/or By Pass routes, you should target these citizens/markets with mailers/questionnaires/open houses etc. Several weeks ago I suggested this more targeted approach to your EIS team members but have seen nothing other than revised signage along the roads (which is impossible to read) and providing general information on websites. As we know there is a tremendous NIMBY attitude amongst the cities and neighborhoods. This, too, then suggests that a significant portion of the population would like PSE to seriously consider alternatives other than a transmission line. Your extension of the EIS does not adequately describe or publicize these alternatives.

For these reasons, one has to question the real purpose and value of this extension. The information that you are acquiring is not timely.... is not valid nor reliable.

Warren E. Halverson

13 July 2016

City of Bellevue  
Development Services Department  
Attn: Heidi Bedwell  
450 110<sup>th</sup> Ave NE  
Bellevue, WA 98004

RECEIVED

JUL 15 REC'D

Development Services

RE: Energize Eastside DEIS

This is a follow-on to our 14 March 2016 letter expressing concern with several aspects of the proposed Energize Eastside project and draft EIS.

Recent changes proposed by Puget Sound Energy clearly requires a new EIS to include assessment of the impact of those new proposals.

The new "bypass route" segment appears simply to skirt (bypass) the opposition raised by East Bellevue Community Council, and instead several impact neighborhoods not heretofore involved in the impact review process. Have those neighborhoods become informed, had time to consider the EIS impact being newly directed their way, and been given sufficient time to comment?

PSE recently presented to the Somerset Home Owners Association a plan to reduce the profile of their proposed new powerline towers, but their assurances have not, that we've seen, been amended into the draft EIS. Until it is, we have no assurance that impact is in fact reduced.

Simple assurances that there is no safety impact of constructing new towers and stringing high-voltage cables over existing pipelines does nothing to allay our fears of a catastrophic mishap. Were the new powerlines clearly necessary, which does not appear the case, we would expect more safety evidence and documented mitigation plans than simple assurances.

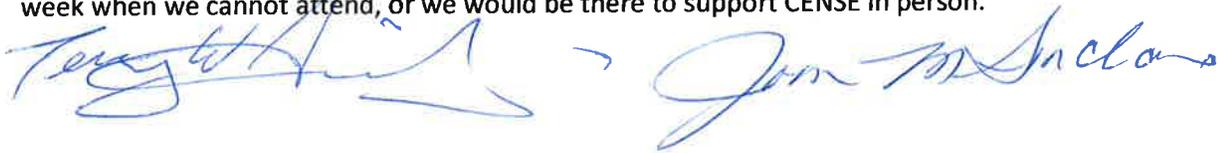
PSE is insisting on a proposed plan that refuses to consider, or even address, a more modest and scalable plan that employs technologies in successful use in other cities. It appears PSE is intent on a plan that costs local PSE subscribers a half-billion dollars to support future energy capacity not in "Eastside." If we're truly and honestly trying to "Energize Eastside" (meet future and emergency response capability), the Coalition of Eastside Neighborhoods for Sensible Energy (CENSE) plan looks like an effective alternative at one-fourth the cost and considerably less safety, environment and quality of life impacts.

We rely on the Bellevue City Council, and their staff of the Development Services Department, to look out for the best interest of the community. We do not get a sense of that impartiality, rather it feels more like the Department is more responsive to PSE and not considering the concerns raised by the community, or the merits of the alternatives raised by CENSE.

Bellevue City's response to our March stated concerns, expressed also by many in CENSE, did not respond to the major concerns expressed, rather seem to say "don't worry, it'll be safe, PSE has everything under control."

Please continue to include us as a party of record.

Unfortunately, Tuesday evenings when all public meetings on this issue are held, is the one night of the week when we cannot attend, or we would be there to support CENSE in person.

Handwritten signatures of Terry and Joan Sinclair in blue ink. The signature on the left is 'Terry Sinclair' and the signature on the right is 'Joan Sinclair'. There is a small arrow pointing from the first signature to the second.

Terry & Joan Sinclair  
4510 144<sup>th</sup> Ave SE  
Bellevue WA 98006-2325  
twsinclair@comcast.net

Timestamp	First Name	Last Name	Comment
7/24/2016 15:29:05	Amy	Faith	<p>Dear Energize Eastside Representative,</p> <p>I'm writing to express my dismay that any route is being considered for this dangerous, oversized and overly expensive project, when there is a safe, green, and cost effective alternative available.</p> <ol style="list-style-type: none"> <li>1. It is not acceptable for PSE to push through a project that is meant to increase profits for its foreign owners.</li> <li>2. The latest two alternatives were created to sidestep the boundaries of the East Bellevue Community that blocked a similar project. We told you clearly we don't need or want that project. And we don't need or want this one in our community either. It is not acceptable for PSE to sidestep such boundaries.</li> <li>3. It is not acceptable for PSE to put in high voltage power lines over aging pipelines. The risk for explosion is just too great.</li> <li>4. The bypass routes would go through the tree lined Lake Hills Connector and Kelsey Creek Park. This would destroy trees and a beautiful natural area in our community. This is not acceptable.</li> </ol> <p>Amy Faith Bellevue</p>
7/24/2016 15:47:19	Amy	Faith	I would also like to add to my recently submitted comments that Energize Eastside should provide additional public meetings for our community members in which the two latest proposed alternatives are included. The past public meetings did not include these alternatives for comment.
8/1/2016 20:41:07	Ann	Clark	The entire Energize Eastside project is practically Victorian in regards to the technological finesse displayed by the options. It is hard to believe that a more sophisticated, physically reduced footprint is not possible. All of the options currently offered have terrible consequences for the quality of life in Bellevue and surrounding areas. Moreover, it appears that the lines will land up in the least wealthy, least organized areas, shameful on all accounts.
8/1/2016 14:24:48	Bruce	Williams	<p>It has not been proven that EE is needed. The studies done by PSE should be done by an independent outside agency.</p> <p>The scope of this project and the loss of an overwhelming number of trees and wildlife habitat has no place in our residential setting. PSE has failed to provide the studies that would have accurate estimates of tree loss and the effect on wildlife. PSE has ignored the impact this project will have on endangered species of birds. There will be a huge impact on all types of wildlife.</p> <p>This construction project on top of a 50 year old pipeline poses immense danger to the entire Eastside. There have been no studies as to the damage that will be done and the number of lives that will be lost when an explosion occurs. THIS IS NOT SAFE!</p>
7/23/2016 9:47:13	Bruce & Alene	Patterson	We strongly support PSE's original plan for routing power lines on PSE/Olympic established rights-of-way rather than incur the additional cost of a meandering route through Bellevue.
7/14/2016 11:37:24	Christy	Bear	We don't need Energize Eastside to provide un-needed additional power to our city - we have what we need for now and many, many years into the future. And we certainly don't need such ginormous power lines towering over our beautiful city and marring the land. PSE shame on you for trying to bolster your profits on the backs of communities that don't even benefit from the blight you fight so hard to build.
8/1/2016 15:44:34	Chun-Te	Chu	I vote for Bypass Route 2 since it passes the area which has fewer people living nearby.
7/31/2016 12:05:32	Cindy	Ludwig	The alternative proposed by CENSE still are the most appropriate. These two most recent proposals (Bypass Routes 1 and 2) from Energize Eastside are a desperate attempt by PSE to impose an unneeded and unwanted plan on the Eastside Communities. The new owners of PSE have a lot to learn about the Eastside residents and our involvement in utility planning. It is obvious the only motive for PSE is creation of a cheap surplus of energy which they can sell to Canada at the expense of Eastside residents. As a customer of this utility, I ask you to give serious consideration to the CENSE alternative and stop wasting tax payers money on evaluating PSE's frivolous attempts to implement a sub-standard option. Thank you!
8/1/2016 13:37:24	Diane	Switzer	I oppose this. We need further evaluation for other options.
7/8/2016 14:27:55	Ellen	McCartan	Both of these draft alternatives run down the lake hills connector and along Kelsey Creek Park, an area that is a wonderful oasis within Bellevue of tall trees, native vegetation, all recently re-established. I am very afraid of the loss of trees and habitat if you use these routes.
7/1/2016 16:30:49	Gerald	Watkins	PSE hasn't given any access to their study showing that we need this huge project. Experts working with CENSE say we don't need this project now and maybe never. Why would we pay for a project on the basis of PSE's word? The real goal is to make money for foreign owners by shipping power to and from Canada by hood winking local power users. They proposed moving the lines out of the East Bellevue Community Council's area as they lost the 148th project in court. This one may end up in court as well and it should.
7/13/2016 13:51:59	Hunter	Branham	<p>PSE says the Energize Eastside Project is necessary now due to the incredible growth of the Eastside communities since the 1960's when they last upgraded the transmission system that serves that region. That is the line that now runs (mostly) along 136th Avenue. That need is hard to argue with.</p> <p>Some oppose this upgrade claiming that it is not needed. That contention is hard to support. My belief is most opponents are using this obfuscation to cover up their NIMBY ("not in my back yard") objection. I think most of those opposing the project just don't want to see the new taller towers, which would necessarily be visible from more properties than currently are in the line of sight.</p> <p>A two-year-long Citizens Advisory Group, representing the entire corridor area, studied the need and various route alternatives in great depth, and then recommended building the new line in the old corridor. This would save PSE ratepayers money since PSE already owns that right-of-way.</p> <p>PSE then chose their recommendation as the "preferred" alignment.</p> <p>The East Bellevue Community Council (EBCC), that represents a neighborhood that includes some of the 136th Avenue corridor area in Bellevue, then threatened PSE with legal action to prevent the new line from being built along the existing corridor in their neighborhood. This solidifies my belief that their major objection is, in fact, NIMBY.</p> <p>The PSE suggested an alternative, is nothing more than an "easy" way out: The path of least resistance, not the path of least cost. This longer route would jog the new line around the EBCC area, running instead through Wilburton and Woodridge, at great additional expense, but avoiding the litigious EBCC threat. In other words, PSE now suggests spending more money to put the line in someone else's (my) neighborhood, just to appease the EBCC.</p> <p>As a resident of Bellevue since 1967, and Wilburton since 1987, I think this proposed cop-out is ill advised! PSE should build the new transmission line where the community, as represented by the CAG, wants it. And that is also the least cost alternative. The Utilities and Transportation Commission exists to assure that PSE serves its service territory cost effectively and will not look favorably on this dodge. PSE has the power and expertise to stand up to the always cantankerous EBCC, and they should.</p> <p>PSE should stick to its principles, and do the right thing: They should listen to their Citizens' Advisory Group, and act on their recommendations. Ignoring their work puts at stake the hard-earned, wide spread, and (so far) well-deserved and solid community support PSE now enjoys. If destroyed, rebuilding that trust and support will perhaps never again be possible.</p> <p>PSE should use the preferred alignment. It's the right thing to do!</p> <p>Hunter Branham Former manager of PSPL's Presidential Award-winning Customer Involvement Program (That would be President Ronald Reagan, not Kimberly Harris)</p>
7/31/2016 22:42:26	James	Mantell	<p>I oppose the Bypass Route 1 and 2 options.</p> <p>On the basis of my research, I believe that future energy consumption estimates are overstated and do adequately incorporate alternative technology, conservation and efficiency strategies.</p> <p>Only after additional vetting of alternative strategies should we consider 1) construction project of this magnitude as well as 2) placement in non residential regions.</p>

7/31/2016 18:38:35	Jeffrey	Byers	<p>I'm surprised and disheartened that any transmission line route is being considered for Energize Eastside. The transmission line solution is dangerous, over-sized, and overly-expensive and it's alarming that any regulatory or review body should see it as reasonable when there is a safe, green, and cost-effective alternative. Simply put, Energize Eastside's transmission lines are designed to increase profit for PSE rather than improve electrical reliability or safety for the Puget Sound region.</p> <p>It also merits consideration that PSE freely admits that its bypass routes were designed to go around a jurisdiction which challenged a different PSE transmission project. Sadly, with respect to Energize Eastside, PSE is not interested in serving its customers, it's interested in serving its profit goals.</p> <p>The following items must be considered before approving PSE's transmission line solution:</p> <ol style="list-style-type: none"> <li>1) PSE discounts the danger of constructing huge towers with high-voltage cables over aging, high-pressure pipelines that carry millions of gallons of jet fuel and gasoline each day. Safety experts warn that there is a significant risk of a catastrophic fire caused by a construction mishap or accelerated corrosion in the pipelines. These dangers have been recorded in detail and submitted during the EIS process. Any agency that reviews and approves a transmission line project needs to accept that they have read these warnings and would have to take responsibility for a catastrophe if it should come to pass.</li> <li>2) The safe, green, and cost-effective alternative that I mentioned earlier is the approach advocated by the Coalition of Eastside Neighbors for Sensible Energy (CENSE). This is a scalable plan developed by industry experts that uses modern solutions already in place in other cities that can be used to power Eastside growth while reducing per capita electricity demand and greenhouse gas emissions. This forward-thinking plan can be found at the following URL: <a href="http://cense.org/CENSE-Plan.pdf">http://cense.org/CENSE-Plan.pdf</a>.</li> <li>3) The CENSE Plan saves 8,000 mature trees that PSE would cut down or limb to clear the route for its transmission lines. PSE's plan would degrade the livability of 29 neighborhoods, a key to attracting businesses and residents to the Eastside.</li> </ol>
8/1/2016 18:00:58	Julia	May	<p>Hello,</p> <p>I've reviewed documents on <a href="http://www.energizeeastsideeis.org/">http://www.energizeeastsideeis.org/</a> as well as <a href="http://cense.org/">http://cense.org/</a>. I live just off of Richards Road.</p> <p>Overall, the study produced by Lauckhart-Schiffman at <a href="http://cense.org/Lauckhart-Schiffman%20Load%20Flow%20Study.pdf">http://cense.org/Lauckhart-Schiffman%20Load%20Flow%20Study.pdf</a> has some valid questions as to the actual need for the new transformer station at Richards Creek. It questions the base assumptions, such as redirecting power to Canada when we're having an emergency outage - I agree that this is an unlikely scenario. However, their assumption in creating their load test of only a .5% increase in demand over time is too small. They also increased their max load from PSE's 700 to their 900+ - I'm not sure how either group came up with this. These three variables seem to me to be the important pieces of determining if we need this transformer station and when. It seems like the more likely high tolerance would be to remove the Canada redirect variable and increase demand from .5% to 1.5% (less than the 2.5% PSE assumed). It may be telling to see how much longer the current infrastructure will meet demands - my guess is it's between PSE and Cense's estimations.</p> <p>Nevertheless, at some point in the future (now or 10 yrs from now), the city will be evaluating this situation, perhaps with these 2 bypass solutions. Of the two bypass solutions, #1 would seem to have the least impact, so I think it's preferable to bypass solution #2. Considering light rail may also be coming down to Richard's Road from I-90 and then connecting to 405, it seems it would be better for these two projects to be as far from each other as possible.</p> <p>Regards, Julia May</p>
7/14/2016 19:23:38	Karin L	Morgan	<p>To whom it may concern,</p> <p>I am submitting my comments in regards to the proposed "Energize Eastside" transmission line project. I am deeply concerned that the city of Bellevue is considering any proposed route for this over-sized and very expensive project. Especially when the citizens of Bellevue and the City Council have been presented with a viable, safe, green and cost-effective alternative. None of Bellevue's neighborhoods, nor any neighborhoods from Renton to Redmond, should be industrialized for this project when there are alternatives available.</p> <p>CENSE has worked tirelessly to propose a safe, desirable plan using modern technology to power Eastside growth, while reducing per capita electricity demand and greenhouse gas emissions. We have an amazing opportunity now to change the way we power our region. By using modern technology, we can meet the demands for our energy needs WITHOUT impacting the natural beauty that we enjoy here on the Eastside. Destroying 8,000 mature trees to lay new transmission lines is NOT what I want in my community!</p> <p>Safety is also a concern with PSE's proposed transmission project. Placing huge towers with high-voltage cables over aging, high-pressure pipelines carrying millions of gallons of jet fuel and gasoline every day places significant risk to our communities. To discount this risk, as PSE has done, is very disturbing.</p> <p><u>I respectfully ask that my comments be considered when making decisions around "Energize Eastside" - decisions that will effect our region for many years to come.</u></p>
7/15/2016 10:44:49	Kathleen	Sherman	<ol style="list-style-type: none"> <li>1. Why is the city of Bellevue facilitating a massive wealth transfer out of Bellevue and the Eastside?</li> <li>2. The city of Bellevue is selectively enforcing code and building regulations. A home owner needs a building permit to replace a sink even if they do not move any pipes. But Energize Eastside does not need a permit to start its process</li> <li>3. The scoping hearings are fraudulent because the questions from the first scoping hearings have not been addressed</li> <li>4. Why did the city of Bellevue allow Energize Eastside to change the route at the end of the comment period. What is the advantage for the city for this selective law enforcement?</li> </ol> <p>E</p>
8/1/2016 16:47:39	Kathy	Jones	<p>One of the reasons why the eastside neighborhoods are so sought after is due to the lush forest and views that surround us. This will be destroyed with the proposed utility lines that will be brought to our area if PSE is granted this project! No one wants to look at ugly massive utility poles and lines towering above our beautiful tree line scenery. I would also note that this project is massively oversized and will not be using 21st century technology that other cities are using successfully! We pride ourselves on being home to the greatest technology industry and yet we are using 20th century technology to solve this issue? We need to ask PSE to plan for the future using tech that we have available today not a generation ago.</p> <p>Thank you for your consideration, Kathy Jones</p>

7/6/2016 22:26:23	Kelly	McGill	<p>Please accept this as my third public scoping comment relating to this project.</p> <p>As I related in my previous comments, I am a former employee of PSE. I left on voluntary and amicable terms in 2014. PSE has not asked for me to share my thoughts on this project since my departure, though as a member of the Puget Sound community and someone with subject matter expertise in Real Estate and Land Use, I feel inclined to speak up.</p> <p>Puget Sound Energy is attempting to build an electrical system that will support the type of vibrant economy that Bellevue, Kirkland, Renton and Newcastle currently enjoy. PSE, in coordination with public input, wisely chose to promote a preferred route substantially through an existing powerline Right of Way that has existed longer than nearly every community that so tightly hugs it. While these neighborhoods are affluent, well educated and filled with good people, they seem not to feel responsible for their decision to buy property that in many cases shares a building eave coincident with PSE's easement boundary! The corridor has already been cleared of most of its substantial timber stands, and represents the most Sensible and Sane route to utilize for the infrastructure at hand.</p> <p>Many see PSE's insertion of additional route options as somehow deceitful or sneaky. I disagree. As you know, the EBCC took actions to deny PSE land use approval for the Lake Hills - Phantom lake project. They applaud now, however that decision spoke volumes against their own self interest, as both substations will remain radially fed, rather than enjoy the benefit of a redundant "looped" system. In light of that decision, what choice does PSE have, other than to keep its options open so that it can continue reliable service to the quiet majority of its ratepayers?</p> <p>While I do not live in PSE's service territory, I have family and friends that do, as well as an economic self interest to ensure this region continues to attract the next wave of business and commerce that fuels the lifestyle we so enjoy in Western Washington.</p> <p>We can hope for all the energy conservation and technology in the world to arrive at our doorsteps tomorrow, but a reliable backbone to our energy system cannot be wished or pleaded away by a well organized few, acting against their own self interest. Please do not limit PSE's options to build this project.</p> <p>Sincerely  Kelly McGill SR/WA</p>
7/13/2016 15:07:39	Lavinia	Hales Griesmer	<p>Both alternative routes to Willow concern me because they both run dangerously close to the riparian zones next to Kelsey Creek and the Kelsey Creek wetlands.</p> <p>It also seems to me, the longer you run the lines, the greater the risk is to the environment and community so the shortest distance that is safe should be the one chosen unless it poses the greatest environmental risk. Both bypasses create many more miles of line, more length for storm damage, more people affected by the lines and greater risk to the environment. It just doesn't seem like a sensible alternative.</p> <p>Is it possible to run the lines underground? We are building a train tunnel to downtown. Is it possible to utilize those tunnels to run, at least some of, the lines underground? I know this is the more expensive option, but it has worked well in other communities. Possible to run the lines across the bottom of the lake?</p> <p>I live against the wetlands and drive along the route every day. It will impact me, but anything you do will impact someone - I understand this. I also don't think creating more risk and expense is worth it to appease one small community (and I do drive along the Willow route almost every day too).</p>
7/4/2016 23:30:31	Lisa	Heilbron	<p>The 2 proposed alternate routes for Energize Eastside are ABSOLUTELY INSANE, especially for a project Bellevue DOESNT NEED! Sending high powered lines through the new Spring District and the high traffic 116th corridor makes as little sense as sending the lines through a quiet neighborhood. Bottom line, high power lines don't belong inside a dense urban area like Bellevue.</p>
7/13/2016 16:55:06	Liwei	Peng	<p>I am a Bellevue Wilburton resident. I learned from our neighborhood board that PSE has a proposal to install new power lines that'll go through Wilburton neighborhood, something like putting 100 foot power lines that have a five foot base in Wilburton.</p> <p>As a Wilburton resident, I strongly don't like PSE to do this. PSE should think other alternatives for their power lines. They shouldn't go through Wilburton neighborhood.</p>
8/1/2016 15:16:36	Lyle and Sandy	Moss	<p>We agree with Cense comments that they are in "dismay that any route is being considered for this dangerous, over-sized and overly-expensive project when there is a safe, green and cost-effective alternative. No neighborhoods should be industrialized to increase profits for PSE's foreign owners. PSE freely admits that its bypass routes were designed to go around a jurisdiction which challenged a different PSE transmission project." From all that we have read, it just surprises us that in the high-tech world that we live in, that there is not a better solution that is more green and safe. Some how we put a stadium in that no one said that we could afford, and we are putting in a tunnel that we were told was too expensive. We just hope that the cities in these areas are giving their best effort to do what is right for the community of people, their health, and the beauty of our area for future generations.</p>
8/1/2016 20:05:12	Lynn	Ang	<p>Please find an alternative and not build a high voltage power line in front of my house. It will be detrimental to our health. Also, the Olympic pipeline is just around the corner so if there is any leak, it can cause explosion and kill all of us. We are in the earth quake zone so it's dangerous the have overhead transmission line. I don't understand why I can be put underground. There is way to do the right thing.</p>
7/10/2016 8:18:03	Margaret	Niendorff	<p>This oversized project just keeps getting bigger and more convoluted. These bypass routes specifically avoid the authority of the citizens in the EBCC area, negating the thoughtful and thorough process that the council members have contributed. This end-run is shameful. PSE should be sent back to the drawing board and be compelled to justify the whole so-called "Energize Eastside" project from its position as a utility supplier for the citizens of the eastside, not a hedge-fund looking for income for its share-holders.</p>
8/1/2016 13:43:48	Maria	Vlachopoulou	<p>I have already commented on Phase I of the Draft EIS that this project is not necessary since the energy peak load energy load forecast for the Eastside is grossly overestimated by PSE. If the city still insists on building a system with expanded capacity, I would recommend Alternative 2B. The city needs to understand the value of green, smart new technologies and ask PSE to move towards that direction. There is plenty of opportunity to achieve higher capacity using these methods instead of the proposed transmission line.</p>
8/1/2016 23:05:53	Martha	Ellis	<p>These proposals do not seem to be the best options for expanding lines. It seems the most prudent course of action would be to go back to the drawing board to explore more viable possibilities.</p>
8/1/2016 16:57:41	Matt	Baerwalde	<p>This project will occur in the heart of the Snoqualmie People's homeland. The Snoqualmie Indian Tribe has numerous cultural, environmental, and archaeological resources in the project area that will be potentially negatively affected by implementation of Energize Eastside. We request continued standing as an interested Party of Record and may have additional, detailed comments in the future as planning progresses. Thank you for the opportunity to comment.</p>
7/14/2016 11:44:05	Natalie	Duryea	<p>Proposing these routes to avoid scrutiny by the neighborhood committees is a clear sign that PSE does not work in the best interest of the communities it serves. These two new routes offer nothing to ease the concerns posed by the original routes and only serve to make citizens work harder to mobilize against this project. Let's please work together and with Seattle City Light to utilize the existing power corridor and not blight Bellevue anymore with outdated infrastructure.</p>
8/1/2016 13:17:47	Nick	Sripipat	<p>Preference is bypass route 1</p>
7/14/2016 11:35:51	Pamela	Johnston	<p>Imagine the impact on traffic for these two new routes in the Bel-Red corridor, Wilburton, and Lake Hills with construction from this and Sound Transit. Now imagine living through that impact for a building a system that we don't need.</p> <p>PSE's reasoning for the new routes is to get the project done quickly by by-passing East Bellevue. They seem to want it done so quickly that they slipped in two routes to avoid public comment.</p> <p>We don't want something done quickly that should not be done and will mar the beauty of the neighborhoods and better options to provide reliable energy exist.</p> <p>We do not need and do not want to pay for a new electric substation and approximately 18 miles of high capacity electric transmission lines from Redmond to Renton.</p> <p>Listen to the neighborhoods. We don't want Energize Eastside. We don't want a transmission line project.</p>
7/15/2016 14:12:51	Pearl	Nardella	<p>I vote for you using the existing lines /route for your upgrades.  Not the alternative plan that goes on 120th ave se, Bellevue WA</p>

7/31/2016 23:15:21	Richard	Kaner	<p>The revised route for EE should be evaluated with, at minimum, the same data provided for previously considered routes. The EIS process is backwards. How can we comment on the route without any data: where are the poles, both in relation to homes and the pipeline? How many trees will be altered? What is involved in creating new right-of-way from the previous route?</p> <p>This process is flawed and has seemingly been created on the fly. The CAG process looked at different routes. After the "Willow" route was chosen, the route was changed to "Willow 2" without warning or updated data that was used in the CAG process. After losing a court battle with the EBCC and realizing the route clipped part of this neighborhood, the route was changed again to avoid the potential of EBCC blocking the project.</p> <p>I have never heard of an EIS process where comment is made on a project without knowledge of the exact details of that project. In this case, where each pole is located, exact numbers on environmental impact such as trees amongst other details, submitted PERMITS. It seems that PSE is able to shift the details whenever it pleases and is able to proceed without providing critical information. In addition, it appears they have unmitigated power to decide what, if any, alternatives are evaluated. A very thoughtful Alternate 2-B has been submitted but has been effectively dismissed by PSE even though each passing month reveals more and more examples of successful use of newer technologies that render EE both oversized, short-sighted and obsolete.</p> <p>I respectfully reject this entire EIS process as commenting on general visions and incomplete details with no provision to mandate honest and thorough evaluation of alternatives.</p>
8/1/2016 14:38:56	Rick	Gratzer	<p>Somerset Recreation Club 4445 Somerset Blvd SE, Bellevue, WA 98006 July 31, 2016</p> <p>Since 1963, the Somerset Recreation Club (SRC) has been a Key Recreational Facility for the Somerset Residential Community and the surrounding neighborhoods. Since the Energize Eastside (EE) project was initiated, we have followed all of EE's Phases and the resulting impacts to our Community. In addition, we continue to work to determine the direct and indirect impacts on SRC- if the new high voltage lines are installed along the existing PSE corridor. The following are SRC's Scoping Comments for the "Reopening of Phase 2 Draft Environmental Impact Statement (DEIS)".</p> <p>Overall Project-Per our Comment Letter submitted on the Phase 1 DEIS, "The First -Phase 2", and now the "REOPENING of Phase 2"; we expected to receive comprehensive responses during the Phase 1 and 2 of the Draft Environmental Impact Statement process. However, these comments were not addressed in the Phase 1 FEIS, since it is was not going to be prepared. Per our previous comment letter, we would like to have an explanation of why the Phase 1 FEIS was not being separately prepared. We are unsure if a combined DEIS/FEIS for Phase 1 and both Phase 2's will occur. This question needs to be addressed and if there is not a combined document, an explanation must be given. This process is not consistent with Washington State Department of Ecology's State Environmental Policy Act (SEPA) guidelines and we would like an explanation, legal justification, and examples of other DEIS (for similar proposed actions) that have been recently prepared following that same approach.</p> <p>In addition, SRC is requesting that all of our comments regarding the Phase 1 and these scoping comments be answered in the Phase 2/Reopened Phase 2 DEIS. In addition, a justification for this project and the mitigation measures that will minimize or eliminate the impacts to the Somerset Recreation Club needs to be included in the D/FEIS.</p> <p>ELEMENTS OF THE ENVIRONMENT- SRC has reviewed the current scoping notice and has reviewed the proposed action and potential elements of the environment. We have identified the following elements that need to be included and evaluated in the Phase 2/"Reopened" Phase 2 DEIS.</p> <p>Natural Environment: Earth-The Bypass Routes are both located along the Lake Hills Connector within a several parks and have many wetlands, culverts, and streams that exist in that corridor. Potential impacts and significant mitigation measures need to be addressed to minimize impacts to plants and animals (e.g. significant wetland areas and it should be noted that fish migrate from Lake Washington into those areas and Bald Eagles that have been observed there too.) Air- An increase in EMF and construction impacts can affect air quality and these needs to be assessed. Regional effects on "climate change" need to be evaluated too. Energy &amp; Natural Resources- An assessment of the validity of this project, comment letters/studies provided during the "Phase 1/2 and Reopening of Phase 2" DEIS must be included and evaluated to determine if this project is justified and if the Bypass Routes are viable option(s) for the City. Built Environment: Environmental Health- Noise-This element (per SEPA), should be listed under Environmental Health element.)There are a significant noise/vibration issues due to the existing transmission system along the corridor and potentially all new lines and facilities that will be constructed in the corridor. This element needs to be analyzed and mitigation provided.</p>
8/1/2016 14:38:56	Rick	Gratzer	<p>Land Use- Housing -This section needs to provide a detailed overview of the changes to "Housing" in the Land Use Section, the proposed action, and alternative alignments/routes. It also needs to address the project's compliance with COB's codes and regulations and what key mitigation measures will be offered.</p> <p>Views &amp; Visual Resources -The views from all structures along the alignment need to be evaluated and quantified in the Economic section of the DEIS. It must assess the impacts on the property values and tax consequences to each parcel and provide mitigation measures that are viable.</p> <p>Transportation-The Bypass Route's are located in very busy corridors- Lake Hills Connector and Bel-Red Road and they will have potential transportation impacts to the City. This needs to be evaluated and mitigation measures provided.</p> <p>Elements of the Environment that were not included- Economics-An Economic analysis is often included in a DEIS and is an allowed part of the SEPA process. This element should be included in the Built Environment Section of Phase 2 and the Reopened Phase 2 DEIS, so that the impacts that affect the property values and property taxes need to be described for properties in the corridor or properties that view it too. Mitigation measures also need to be provided.</p> <p>Thank you for reviewing this scoping comment letter. We look forward to receiving comments through the Reopening of the Phase 2 EIS process that adequately address our questions and concerns.</p> <p>Regards,</p> <p><u>Somerset Recreational Club and its Members</u></p>
8/1/2016 16:11:33	Roberto	Velasco	<p>If these two alternative routes were not considered in the initial study, I would propose that they don't be considered now just to mitigate the risk of lawsuits from the EBCC. The original alternatives pass through the existing high voltage utility corridor that is zoned for this purpose. Why subject existing residents to a risk that they did not anticipate when they chose to reside in their current neighborhoods. Please continue to study other alternatives and don't become subject to the EBCC's threats. Thanks.</p>

7/1/2016 13:13:48	Ron	Imhoff	<p>To whom it may concern:</p> <p>I have a couple of issues with this project that don't seem to be addressed:</p> <ol style="list-style-type: none"> <li>1) It seems that there is not a good faith attempt by PSE to work with all stakeholders about this project.</li> <li>2) Changing the route options at the last minute is not good. The new routes seem to be more impactful than the previous one.</li> <li>3) I have not seen anything to indicate cost break downs by business or residential.</li> <li>4) Why should all PSE customers pay for something that only the eastside benefits from?</li> <li>5) What financial benefits does PSE get from doing this project? Is that factored into the budget anywhere?</li> <li>6) How many years will be required to pay for the project?</li> <li>7) Once the project is payed for, will the customer bills be reduced?</li> <li>8) What is the planned growth rate for personal solar and how is that factored into the project?</li> </ol> <p>Thanks.</p>
8/1/2016 15:08:12	Roy	Grinnell	<p>To: info@EnergizeEastsideEIS.org City of Bellevue Development Services Department Attn: Heidi Bedwell 450 110th Ave NE Bellevue, WA 98004</p> <p>The Draft Phase 2 EIS is significantly flawed in many ways. It is consistently skewed to overstate the demand for electricity, the need for an alternative that builds lines, and the risks of grid problems that would support the need for a new or upgraded transmission line. The Draft EIS understated the costs and challenges of building new or upgraded lines while keeping the Olympic pipeline safe and keeping the existing lines operational during construction, and the risks that these built lines would be subject to once in operation. The additional corridors options added to provide a route for transmission lines around the jurisdiction of the community council are ridiculous in their very existence. These alternatives have even greater negative impacts and costs than the basic Alternative 1A, and should not be allowed simply to avoid a legal situation. Alternative 2 is inadequately designed to be the fully-viable alternative to building transmission lines that it should and could be if it was updated and improved by appropriate experts on such subjects. It must be as fully and well developed in the EIS as the leading alternative of building transmission lines.</p> <p>Roy Grinnell 17500 SE 46th St Bellevue, WA 98006</p>
6/30/2016 14:34:01	Sam	Fetchero	I do not support either option. We do not want these lines running through our city. How many times do we have to tell you?
7/26/2016 9:49:42	Seema	Bahl	As a concerned parent of a young child, I strongly oppose PSE's Energize Eastside Project due to the negative environmental and health impacts that these proposed powerline additions pose to our children. I am particularly concerned about Bypass Route 2, in which high-capacity electric transmission powerlines will be running directly through neighborhoods that many families have invested in precisely for the educational excellence of the Bellevue School District and the future of our children. Exposing children to these high-frequency electromagnetic waves is most definitely a dangerous proposition, and a needless one. I OBJECT TO ENERGIZE EASTSIDE!!!
7/31/2016 14:32:24	Steve	O'Donnell	<p>***There is insufficient information regarding the location of the lines with respect to both By-Pass Routes.</p> <p>***There is insufficient information regarding the costs (that rate payers will ultimately have to absorb).</p> <p>***There is insufficient information regarding consistency with other Land Use Codes.</p> <p>***The routing of the new lines, if a wired solution is even allowed, which in my opinion it should not, should only go through the commercials areas that are to be the primary beneficiaries...in other words, place the lines, generation at the source of the growth...Bellevue's CBD but mostly for the Bell-Red Corridor up zones i.e. the Spring District. The 230KV Transmission lines and towers should NOT go through ANY Residential areas throughout the five cities of Redmond, Kirkland, Bellevue, Newcastle and Renton.</p> <p>1,100,000 PSE rate payers should not have to bear the financial burden for 40+ years to benefit maybe 100,000 people. And to pad PSE coffers with a near 10% guaranteed rate of return.</p> <p>***The entire EE proposal is fraught with too much costs, too much environmental damage (cutting 8,000 trees) is too out of scale with the real/actual need, avoids too many viable, reliable, cost efficient and effective Alternatives and finally if it too UNSAFE given the co-location to high pressure petroleum and jet fuel BP/Olympic Pipelines.</p> <p>Non-Wired Alternatives that MUST be considered and studied include but are not limited to: Distributive Generation plans, Geo-Thermal, additional Clean and Renewable Power Sources at the location of need including Solar, Community Solar, Wind, Time of Day Pricing/Conservation measures (LED lighting conversions and requirements for all new buildings) AND Grid Battery Storage Systems (UNI Energy located right here in Mukilteo, WA.) has been making great strides and to overlook this technology when be inexcusable) both at building sites as well as sub station location(s) such as Lakeside Sub Station....these alternatives have the ability to eliminate the 230KV lines and towers as well as the looming gas peaker plant that PSE is proposing for the 2022-2024 time from in their IRP.</p> <p>Alternatively wire solutions should include the study of undergrounding part or all of the 18 miles route and/or submerging all or part of the lines in Lake Sammamish, through the Mercer Slough and into Lake Washington south to Renton. A 230KV line has already been installed in San Francisco Bay. The By-Pass routes add too many miles of 230KV lines and too many extremely tall towers through too many areas. We have many technological advances to consider now and in the near future to approve a highly questionable old legacy (100+ year) technology. Also, in a "wired scenario"...the SmartWire equipment must be part of the equation using exiting lines...other communities have already deployed. Thank you.</p> <p>Steve O'Donnell, Co-Founder of CENSE and past president. Member of current Exec. Board sdofour@aol.com (C) 206-953-6483 <u>Member of Somerset Community Association Board for the past ten years and twice president</u></p>
7/29/2016 16:08:54	Sue	Stronk	<p>Where are the 3 alternatives to this project that are required by both Bellevue and Newcastle land use codes? You started out with many alternatives--now only alternatives to location of the same wired plan! Where are all the answers we asked in Phase 1--we have no answers. Where are your project specifics? Can you keep changing your routing until the very end? PSE and this EIS--needs to look hard at the NEED and 21st century alternatives that even PSE as a company is looking into now--and be a community steward--and step up and right scale this project instead of padding PSE stock holders pockets by the consumer fraud you will be committing if this project goes through. Wake us when you are done messing around in this lengthy process--because there are so many places for lawsuits.</p> <p>Then look at Safety--as these pipelines weave through your ROW space. Can't wait to hear what DNV-GL says about that since corrosion is off the charts at 5000' with 3 phase power paralleling pipelines--their own study! What happened to the 120'-150' right of way needed for a 230kV line stated in the EIS? Another lawsuit in the making. You say you will not take homes( because you can't) and wish to smash this unsafely in an already over-burdened ROW--just because you have it--another lawsuit in the making!</p> <p>A PUD should replace PSE--that would be to our local benefit and the state WUTC needs to change what they rushed through to grease the skids for PSE to behave like this without oversight. You are on their radar!! Build this project --then not get approval for any rate increase would serve you right and cause you bankruptcy!! You know how much the state loves you!! Your influence may be everywhere--but not for long. Back out gracefully now before it gets messy for you! This has been a total waste of time and money and this whole process is flawed from the start!! Another lawsuit!!</p>
6/30/2016 22:29:05	Susanna	Kanther-Raz	Re: Energize Eastside Phase 2 Alternate routes: I'm not sure why as a community we are still talking about the utility of these unnecessary transmission lines. The residents and data have spoken very clearly, that Energize Eastside will become an antiquated waste very quickly. The environmental, economic, and neighborhood impact would be extraordinary. Laws need to change so all residents can have dependable energy resources via undergrounding. The answer is no.

8/1/2016 12:26:30	Theresa	Cuthill	I am a resident of the Woodridge neighborhood and want to share my concern with the alternate routes (bypass 1 and bypass 2) for Energize Eastside that are being considered. I believe that the Energize Eastside lines should be constructed in a route that will provide the least amount of impact to several areas of Bellevue and the existing route through the Glendale golf course seems to be the best plan. Why would a route be considered that would come near the Wilburton Trestle? Given the historical nature of the trestle, we should be doing our best to preserve that. Also, it seems unreasonable to build new towers in the Spring district, where the City is developing future residential communities. Keeping the power lines in an existing corridor, where they would be the least amount of visual impact and impact to an historical site, makes the most sense.
7/31/2016 22:19:59	Todd	Patrick	I still believe the primary motivation for this project is to increase compensation for PSE management, Board, etc. Were they do guarantee in the writing that none would ever benefit from this project, I would support it....
8/1/2016 13:11:41	Vik	Bahl	I oppose BOTH of these routes and ask that the PSE abandons this project and looks for ways to decrease the environmental impact of its projects. Consider keeping the current routes as is and not adding to the voltage running through our communities. Consider also using underground power lines to minimize environmental impacts.
7/1/2016 8:26:06	Zhanbing	Wu	I went to a PSE presentation on the project and I've been following the updates. I'm still not convinced that the whole project is the right way to go, especially given the huge environmental and visual impact it has on the affected neighborhoods. PLEASE STOP AND REALLY LISTEN TO WHAT RESIDENTS ARE SAYING!!!