

APPENDIX B. POTENTIAL CONSTRUCTION EQUIPMENT

Table B-1. Alternative 1 (Options A and B) and Alternative 3

Alternative & Option or Component	Construction Task	Equipment
Alternative 1 (Options A and B) and Alternative 3		
Overhead Transmission Line and Poles	Removal of conductors from existing poles	<ul style="list-style-type: none"> • Bucket truck
	Removal of existing wooden poles	<ul style="list-style-type: none"> • Line truck or trackhoe to remove the old pole • Backhoe to fill the hole
	Installation of foundations for new steel poles	<ul style="list-style-type: none"> • Auger or vacuum truck to create holes • Dump truck for hauling spoils • Concrete truck for drilled pier foundations • Backhoe to load the spoils into the dump truck • Crane to install rebar cage if required • Concrete pump truck if access to the site is challenging • Vacuum truck for site and street cleanup • Heavy-duty flatbed trucks or semi-trucks for site deliveries of equipment and construction materials
	Assembly and erection of steel poles	<ul style="list-style-type: none"> • Heavy duty trucks to deliver materials • Crane for setting the poles (size dependent upon weight of poles) • Bucket truck or crane • Basket for working on set structure (dependent upon structure height) • Auxiliary rubber tire vehicle to run the hydraulics needed for jacking the poles together • Vacuum truck for site and street cleanup • Heavy-duty flatbed trucks or semi-trucks for site deliveries of equipment and construction materials
	Installation of new conductors	<ul style="list-style-type: none"> • Bucket truck or crane basket for working on set structure (dependent upon structure height)
	Stringing of power lines	<ul style="list-style-type: none"> • Bucket truck or crane basket for working on set structure (dependent upon structure height) • Conductor reel trailer for hauling conductor reels • Tensioner for applying tension to conductor coming off reels during power line pull • Puller for pulling rope/hard line with attached conductor

Alternative & Option or Component	Construction Task	Equipment
	Regrading surfaces around new poles and work areas	<ul style="list-style-type: none"> • Bulldozer • Trackhoe • Backhoe • Concrete mixers and/or pavers
New Transformer(s) and Substation or Substation Expansion	Construct new or expanded substation	<ul style="list-style-type: none"> • Small and heavy duty trucks for delivery of materials and equipment • Bulldozer • Trackhoe • Backhoe • Concrete mixers • Crane for unloading and placing transformer(s) • Vacuum truck for site and street cleanup • Heavy-duty flatbed trucks or semi-trucks for site deliveries of equipment and construction materials

Table B-2. Alternative 1, Option C

Alternative & Option or Component	Construction Task	Equipment
Alternative 1 (Option C)		
Underground Transmission Line and Vaults	Excavation of trench and cable pulling	<ul style="list-style-type: none"> • Excavators or backhoes • Dump trucks • Bulldozers • Concrete mixers • Cranes • Conductor reel trailer for hauling conductor reels • Tensioner for applying tension to conductor coming off reels during power line pull • Puller for pulling rope/hard line with attached conductor • Vacuum truck for site and street cleanup • Heavy-duty flatbed trucks or semi-trucks for site deliveries of small equipment and construction materials

Table B-3. Alternative 1, Option D

Alternative & Option or Component	Construction Task	Equipment
Alternative 1 (Option D)		
Underwater Cable Installation	Create cable landing sites and install vaults	<ul style="list-style-type: none"> • Excavator or backhoe for open-cut and vault area trenching and loading dump truck • Dump truck for hauling spoils • Pile driver for sheet piles • Dredge for in-water conduit near shoreline • Concrete truck for poured in place vaults • Crane for lifting miscellaneous materials • Mixer truck and compaction grout pump to inject thermal backfill • Vacuum truck for site and street cleanup • Heavy-duty flatbed trucks or semi-trucks for site deliveries of small equipment and construction materials • Puller for pulling rope/hard line with attached conductor
	Install cable underwater	<ul style="list-style-type: none"> • Submarine cable laying vessel (lay barge) designed to lay the cable in one continuous piece

Table B-4. Alternative 2

Alternative & Option or Component	Construction Task	Equipment
Alternative 2		
Energy efficiency, Demand response	Install minor equipment and modify buildings.	<ul style="list-style-type: none"> • Small trucks for delivery of materials
Distributed generation	Install smaller generation equipment, typically during construction of a new building	<ul style="list-style-type: none"> • Small and heavy duty trucks for delivery of materials and equipment • Grading equipment for ground level installations • Crane for rooftop installations
Energy storage	Construct battery facility near substation	<ul style="list-style-type: none"> • Small and heavy duty trucks for delivery of materials and equipment • Bulldozer • Trackhoe • Backhoe • Concrete mixers • Crane for unloading and placing batteries
Peak Power Generation	Construct generation facility near substation	<ul style="list-style-type: none"> • Small and heavy duty trucks for delivery of materials and equipment • Bulldozer • Trackhoe • Backhoe • Concrete mixers • Crane for unloading and placing batteries