*Southern California Edison*
**San Joaquin Cross Valley Loop Project A.08-05-039**

**DATA REQUEST SET SJXVL CPUC-ED-01**

**To:** ENERGY DIVISION
**Prepared by:** Henry J. Anderson
**Title:** Mgr. Transmission Project Delivery
**Dated:** 06/17/2008

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**Question 11a-c:**

***General Construction***

**Staging Areas**

Where would the two main staging areas likely be located? Multiple locations for inclusion in the environmental review document would be fine to allow for options.

a. Describe any site preparation required upon determining staging options. The PEA PD states that the staging areas "would be surfaced with crushed rock if existing surfacing is not compatible with storage and equipment requirement…" Would any additional site preparation be required?

b. Describe how power to the staging areas would be provided, if required.

c. Describe how the staging areas would be accessed (i.e., would existing roads or new access roads be required?).

**Response to Question 11a-c:**

One of the main staging areas will be located near Rector Substation. A second staging area will be placed midway though the route near structure #73, we would look for an unused industrial area or vacant field as near the right of way as possible.

a. Staging areas if not clear of brush will be grubbed graded level and compacted to degree that will support equipment and material.
b. Temporary power will be provided by SCE form the nearest Distribution circuit.
c. Staging areas will be placed adjacent to paved roads for easy access.

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**DATA REQUEST SET SJXVL CPUC-ED-01**

**To:** ENERGY DIVISION
**Prepared by:** Eric Bradley
**Title:** Engineer
**Dated:** 06/17/2008

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**Question 12:**

**Access Roads and/or Spur Roads**

For existing roads to be used, differentiate between unimproved and improved. Provide a description of the methodology of improvement.

a. Provide updated GIS shape file data to identify approximate locations of unimproved and improved access roads.

**Response to Question 12:**

**Existing access roads called Unimproved roads shall be classified as "Dirt" roads. Existing access roads called Improved roads shall be classified as "Paved" roads. Please refer to PEA, Volume 1, Section 3.10, under Access Roads and Spur Roads. For part a, two shape-files have been attached.**

*Southern California Edison*
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**To:** ENERGY DIVISION
**Prepared by:** Henry J. Anderson
**Title:** Mgr. Transmission Project Delivery
**Dated:** 06/17/2008

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**Question 13:**

**Helicopter Access**

Update Appendix D to identify which proposed poles/towers would be removed and/or installed using a helicopter.

**Response to Question 13:**

We do not anticipate using helicopters to remove or install poles/towers.

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**DATA REQUEST SET SJXVL CPUC-ED-01**

**To:** ENERGY DIVISION
**Prepared by:** Henry J. Anderson
**Title:** Mgr. Transmission Project Delivery
**Dated:** 06/17/2008

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**Question 14:**

**Helicopter Access**

Describe flight paths, payloads, and hours of operations for known locations and work types. The PEA PD states that helicopters would be used for approximately 26 days for 6 hours per day, but does not provide hours and month(s) of operation.

**Response to Question 14:**

Flight paths would be primarily along the right-of-ways and also to and from staging areas. The use of the helicopters would be intermittent and will coincide with the conductor stringing. Typically the helicopter will be needed 6 hours each day while stringing operations were being conducted. Two of the six hours would be actual flight time. The payload would be 500 to 1000lbs. Additional description: 3.3.2 Conductor and Shield Wire Stringing Page 3-19

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**DATA REQUEST SET SJXVL CPUC-ED-01**

**To:** ENERGY DIVISION
**Prepared by:** Caroline Fraser
**Title:** Technl Spclst/Scientist
**Dated:** 06/17/2008

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**Question 15:**

**Vegetation Clearance**

Identify the preliminary location and provide an approximate area of disturbance in the GIS database for each type of vegetation removal.

**Response to Question 15:**

The attached GIS Shapefile shows the location/area of Vegetation and habitat classes along the right of way of the Proposed Project Alternative 1.

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**Prepared by:** Henry J. Anderson
**Title:** Mgr. Transmission Project Delivery
**Dated:** 06/17/2008

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**Question 16:**

**Vegetation Clearance**

Describe how each type of vegetation removal would be accomplished.

**Response to Question 16:**

Vegetation (brush and weeds) is removed mechanically using a Loader or Backhoe. The technique is to scrape the surface removing the above ground vegetation leaving the root structure in place.

*Southern California Edison*
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**DATA REQUEST SET SJXVL CPUC-ED-01**

**To:** ENERGY DIVISION
**Prepared by:** Henry J Anderson
**Title:** Mgr. Transmission Project Delivery
**Dated:** 06/17/2008

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**Question 17:**

**Vegetation Clearance**

For removal of trees, distinguish between tree trimming as required under GO-95D and tree removal.

**Response to Question 17:**

A GO-95 D standard requires minimum distance between conductor and tree. The trimming distance is determined by voltage plus one year's tree growth. SCE's standard for 220kV is 25' plus one year's growth. Tree removal is the complete removal of the tree including the roots.

*Southern California Edison*
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**To:** ENERGY DIVISION
**Prepared by:** Henry J. Anderson
**Title:** Mgr. Transmission Project Delivery
**Dated:** 06/17/2008

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**Question 18:**

**Vegetation Clearance**

Describe the types of trees and approximate number and size of trees that may need to be removed. The PEA PD states that 21 acres of orchard vegetation would need to be cleared but does not describe the type or number and size of trees to be removed.

**Response to Question 18:**

During the construction phase of the project, approximately 4,900 to 6,400 trees would need to be removed in order to provide a safe and appropriate working space for equipment, vehicles, and materials. Of these 4,900 to 6,400 trees, approximately 2000 to 3500 could eventually be replaced, but approximately 2,900 trees would need to remain permanently removed to allow sufficient space for operation and maintenance activities. The tree types present in the construction areas are approximately distributed as follows: 83 percent citrus, 8 percent walnut, 7 percent plum, and less than 1 percent each of oak, olive, pine, pomegranate, and other types of trees. These tree removal estimates are for the Alternative 1 route as designed, and would be modified and adjusted as necessary during final engineering and construction planning. The size of these trees has not been established.

To maintain access roads, spur roads, and clearances around the structures (50 feet from the face of each suspension structure [pole] to the edge of ROW, and 100 feet from the face of each dead-end structure [tower] to the edge of ROW), To be consistent with NERC/WECC/CPUC reliability standards, vegetation outside the structure clearance areas but within the ROW may need to be kept trimmed in order to maintain required conductor clearances.

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**Prepared by:** Henry J. Anderson
**Title:** Mgr. Transmission Project Delivery
**Dated:** 06/17/2008

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**Question 19:**

***Transmission Line Construction (Above Ground)***

**Pole and Foundation Removal**

If a hole is to be filled, what type of fill would be used, where would it come from?

**Response to Question 19:**

Spoils from the excavation of the new poles would be used to fill holes at foundation removal sites.

*Southern California Edison*
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**Prepared by:** Henry J Anderson
**Title:** Mgr. Transmission Project Delivery
**Dated:** 06/17/2008

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**Question 20:**

***Transmission Line Construction (Above Ground)***

**Pole and Foundation Removal**

Expand on description of any surface restoration that would occur at the pole sites. The PEA PD states (p. 3-16): "Holes would be filled and compacted and then the area would be smoothed to match surrounding grade." Please provide further details (i.e., topsoil would be stockpiled and re-spread, seeded with an appropriate seed mix, etc.).

**Response to Question 20:**

The type of footings on the existing towers requires very little soil replacement. The steel is directly embedded into the earth with no concrete, so the soil replacement would be for the steel removed only. If additional soil was needed we would use soil from the excavation of the new poles. The locations would be left in a condition that was constant with property owner needs, in most locations the area would revert back to agricultural use.

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**To:** ENERGY DIVISION
**Prepared by:** Henry J. Anderson
**Title:** Mgr. Transmission Project Delivery
**Dated:** 06/17/2008

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**Question 21:**

***Transmission Line Construction (Above Ground)***

**Pole and Foundation Removal**

Provide a general description of how poles/towers would be removed via helicopter, to include number of helicopter trips per structure.

**Response to Question 21:**

We do not anticipate using helicopters to remove or install poles/towers.

*Southern California Edison*
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**DATA REQUEST SET SJXVL CPUC-ED-01**

**To:** ENERGY DIVISION
**Prepared by:** Henry J. Anderson
**Title:** Mgr Transmission Project Delivery
**Dated:** 06/17/2008

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**Question 22:**

**Pole/Tower Installation**

Provide a general description of how new poles/towers would be installed via helicopter, to include number of helicopter trips per structure.

**Response to Question 22:**

We do not anticipate using helicopters to remove or install poles/towers.

*Southern California Edison*
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**DATA REQUEST SET SJXVL CPUC-ED-01**

**To:** ENERGY DIVISION
**Prepared by:** Henry Anderson
**Title:** Mgr. Transmission Project Delivery
**Dated:** 06/17/2008

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**Question 23:**

**Pole/Tower Installation**

Expand on description of what would be done with soil removed from a hole/foundation site. The PEA PD states (p.3-17) that the soil removed would "either be used by the property owner or disposed of off site." Please provide further information (i.e., could soil be stockpiled on the work area and be used to backfill the holes, or spread on the work area?; what type of offsite disposal would occur (reuse, landfill)?)

**Response to Question 23:**

Some spoils would be stock piled to fill holes at removal sites. Where spoils could not be spread we would typically take remaining spoils to the local land fill.

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**DATA REQUEST SET SJXVL CPUC-ED-01**

**To:** ENERGY DIVISION
**Prepared by:** Henry J. Anderson
**Title:** Mgr. Transmission Project Delivery
**Dated:** 06/17/2008

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**Question 24:**

**Conductor Installation**

Provide locations of special crossing areas (i.e., roadways, stream crossing). What safety measures are necessary at these locations?

**Response to Question 24:**

This information is provided in Appendix D, Road Story maps refer to legend on maps indicating (Guard Structure Locations). A description is provided in section 3.3.2 page 3-18 Guard Structures

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**DATA REQUEST SET SJXVL CPUC-ED-01**

**To:** ENERGY DIVISION
**Prepared by:** Peter L Lapcich
**Title:** Project Engineering Manager
**Dated:** 06/17/2008

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**Question 25:**

***Substation Construction***

Would construction of a new MEER at the Rector Substation require any earth moving activities? If so, what type of activity and, if applicable, estimate cubic yards of materials to be reused and/or removed from the site for both site grading and foundation excavation.

**Response to Question 25:**

Construction of a new MEER building at Rector Substation would require some earth moving. Earth moving activities would include trenching, excavation, and recompaction of the soil. The amount of earth movement would range from approximately 60 to 100 cubic yards. At this time, SCE anticipates up to 50 percent of this soil to be hauled off-site to be reused or landfilled.

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**DATA REQUEST SET SJXVL CPUC-ED-01**

**To:** ENERGY DIVISION
**Prepared by:** Susan J. Nelson, AIA
**Title:** Project Manager
**Dated:** 06/17/2008

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**Question 26:**

***Substation Construction***

Provide a conceptual landscape plan in consultation with the municipality in which a substation is located.

**Response to Question 26:**

No new substations are being built as part of this project. There are no plans to modify the landscaping around the existing Rector Substation.

*Southern California Edison*
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**DATA REQUEST SET SJXVL CPUC-ED-01**

**To:** ENERGY DIVISION
**Prepared by:** Brent Gokbudak
**Title:** Project Manager
**Dated:** 06/17/2008

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**Question 27:**

***Construction Schedule***

Please provide an updated schedule that shows month, year and duration of construction activities. Analyst need to understand which activities could be occurring concurrently so a Gantt Chart would be most effective.

**Response to Question 27:**

Please refer to Appendix A to the CPCN Application, which includes a preliminary project schedule. This may be found online at http://www.sce.com/NR/rdonlyres/41FECA68-B8AF-4DAA-96C0-9783BD6FA55E/0/20080616_SJXVL_CPCN_SCE_Application.pdf.

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**DATA REQUEST SET SJXVL CPUC-ED-01**

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**Prepared by:** Henry J. Anderson
**Title:** Mgr. Transmission Project Delivery
**Dated:** 06/17/2008

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**Question 28:**

***Operation and Maintenance***

The PEA PD states that there would be aerial and ground inspections. Please describe when and why aerial inspections would be required.

**Response to Question 28:**

SCE is required by ISO to inspect Transmission lines on an annual basis, alternating between aerial patrol and ground patrol each year with the requirement that the line is touched once every two years. When the new lines are energized we will establish an annual date in which these line will be required to have Patrols completed. In addition when ever the lines relay they will be patrolled to find the cause and to see if there was any damage. These patrols may be by ground or helicopter depending on the availability and weather conditions.

*Southern California Edison*
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**DATA REQUEST SET SJXVL CPUC-ED-01**

**To:** ENERGY DIVISION
**Prepared by:** Robert J. Tucker
**Title:** Power System Planner
**Dated:** 06/17/2008

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**Question 29:**

**Alternatives**

Provide peak load capacity and peak demand forecasts in MW for Springville and Vestal Substations.

**Response to Question 29:**

The following attachment provides the most up-to-date peak demand forcast and load capacity for Springville and Vestal Substations.

# Coincident A-Bank Load Forecast (MW)

Substation Load and Large Customer Load (1-in-10 Year Heat Wave)

| SUBSTATION | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 | 2015 | 2016 | 2017 | 2018 |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Springville 220/66 | 296.8 | 298.8 | 297.7 | 307.4 | 306.8 | 308.3 | 323.2 | 328.5 | 333.6 | 339.4 | 344.7 |
| Vestal 220/66 | 175.1 | 179.9 | 180.7 | 181.7 | 183.5 | 183.3 | 184.7 | 186.0 | 188.4 | 189.9 | 191.7 |

# A-Bank Capacity (Nameplate MVA)

| SUBSTATION | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 | 2015 | 2016 | 2017 | 2018 |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Springville 220/66 | 480.0 | 480.0 | 480.0 | 560.0 | 560.0 | 560.0 | 560.0 | 560.0 | 560.0 | 560.0 | 560.0 |
| Vestal 220/66 | 200.0 | 200.0 | 200.0 | 200.0 | 380.0 | 380.0 | 380.0 | 380.0 | 380.0 | 380.0 | 380.0 |

NOTE: Both the demand forecast and the A-bank nameplate capacity are from studies "in progress" at this time; therefore the information above reflects the most recent available data, but is subject to change as ongoing annual studies are finalized.

*Southern California Edison*
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**DATA REQUEST SET SJXVL CPUC-ED-01**

**To:** ENERGY DIVISION
**Prepared by:** Robert J. Tucker
**Title:** Power System Planner
**Dated:** 06/17/2008

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**Question 30:**

**Alternatives**

Provide load forecast data for the eastern leg BC3-Springfield and BC4-Springfield circuits to ascertain the underused capacity available on those circuits to both reinforce transmission to Rector and to supply future load growth on the eastern leg lines.

**Response to Question 30:**

"Springville" Substation (not Springfield) is the only load substation located on the eastern leg of the Big Creek Corridor. The Springville substation load forecast was provided in response to question #29. The normal capacity of the existing BC3-Springville circuit is 1200 amps (approximately 478 MW) and the normal capacity of the existing BC4-Springville circuit is 895 amps (approximately 357 MW).

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**DATA REQUEST SET SJXVL CPUC-ED-01**

**To:** ENERGY DIVISION
**Prepared by:** Robert J. Tucker
**Title:** Power System Planner
**Dated:** 06/17/2008

**Question 31:**

**Alternatives**

What is the direction of energy flow on the Rector-Vestal circuits? How much capacity is available to move more energy to Rector from the south?

**Response to Question 31:**

The direction and the magnitude of energy flow on the Rector-Vestal circuits can vary greatly, depending on operating conditions in the corridor. For example, under summer peak load conditions at Rector with high output from Big Creek Hydro generation ("on-peak" operating pattern), the Rector-Vestal lines are typically lightly loaded with power flow generally in a south-to-north direction. Likewise, under conditions of high load at Rector but low Big Creek Hydro generation availability (late summer "shoulder-hour" operating pattern), the Rector-Vestal lines are typically heavily loaded with power flow south-to-north. Similarly, under conditions of low load at Rector and maximum Big Creek Hydro generation ("spring run-off" operating pattern) the Rector-Vestal lines are typically lightly loaded with power flow north-to-south.

The normal capacity of the two existing Rector-Vestal circuits is 885 amps (approximately 353 MW) per circuit.

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**To:** ENERGY DIVISION
**Prepared by:** Robert J. Tucker
**Title:** Power System Planner
**Dated:** 06/17/2008

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**Question 32:**

**Alternatives**

Page 2-9, Section 2.2.1 of the PEA discusses line impedance as related to length as a major factor influencing the elimination of the Alternative 4 route from further consideration because the line length from BC3 to Rector would be greater than the other alternative routes. Please provide a table of line length vs. impedance and line capacity to properly evaluate this scenario.

**Response to Question 32:**

The requested table providing line length vs. impedance is provided in the attachment below. The normal capacity of the Big Creek 1-Rector 220-kV line and the Big Creek 3-Rector No. 1 220-kV line is 885 amps (approximately 353 MW) per circuit. The normal capacity of the proposed Big Creek 3-Rector No. 2 220-kV line and the proposed Rector-Springville 220-kV line is 1200 amps (approximately 478 MW) per circuit.

**Attachments to this response contain confidential information of Southern California Edison Company and is being provided in accordance with and pursuant to P.U. Code Section 583 and G.O. 66-c. Public disclosure is restricted.**

*Southern California Edison*
**San Joaquin Cross Valley Loop Project A.08-05-039**

**DATA REQUEST SET SJXVL CPUC-ED-01**

**To:** ENERGY DIVISION
**Prepared by:** Robert J. Tucker
**Title:** Power System Planner
**Dated:** 06/17/2008

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**Question 33:**

**Alternatives**

The PEA in several places states that the new poles and towers will be designed so that in the future as need arises capacity can be further increased by reconductoring. Can the lines on the existing towers be upgraded to increase capacity now by reconductoring with larger conductors or double conductoring?

**Response to Question 33:**

**This response contains confidential information of Southern California Edison Company and is being provided in accordance with and pursuant to P.U. Code Section 583 and G.O. 66-c. Public disclosure is restricted.**

*Southern California Edison*
**San Joaquin Cross Valley Loop Project A.08-05-039**

**DATA REQUEST SET SJXVL CPUC-ED-01**

**To:** ENERGY DIVISION
**Prepared by:** Erika Wilder
**Title:** Environmental Coordinator
**Dated:** 06/17/2008

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**Question 34:**

**Environmental Impact Assessment**

**Air Quality**

Quantify construction and operational emissions of criteria pollutants and GHGs and provide detailed back-up calculations

**Response to Question 34:**

As discussed in Section 4.3 of the PEA (Air Quality), the San Joaquin Valley Air Pollution Control District does not require quantified air emission estimates for projects falling within the parameters of a Small Project Analysis Level. An example of an SJVAPCD SPAL is a development of 152 single family residences. Because construction of the Proposed Project would be smaller and less intensive than constructing a development of 152 single family residences, the Proposed Project would qualify as a SPAL and would only require PM10 reduction measures to be implemented during construction.

However, criteria pollutants were used to calculate estimates of greenhouse gas emissions reported in Section 4.3 of the PEA. Please see the attached files for construction emission estimations and operation emission estimations.

Emissions factors sources: SCAQMD Air Quality Handbook (http://www.aqmd.gov/ceqa/hdbk.html), USEPA Update of Nitrous Oxide and Methane Emissions Factors (http://www.epa.gov/oms/models/ngm/420p04016.pdf), and IPCC Working Group I: The Physical Science Basis for Climate Change (http://ipcc-wg1.ucar.edu/wg1/wg1-report.html)

| | | | | | | | | ROG | | CO | | NOX | | SOX | | PM | | CO2 | | CH4 | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Equipment | hp | Fuel | Quantity | Days | Hours | Miles | Factor | ROG | factor | CO | Factor | NOX | Factor | SOX | Factor | PM | Factor | CO2 | Factor | CH4 |
| Survey | 1/2 Ton Pick-up Truck, 4X4 | 200 | Gas | 2 | 20 | 8 | 50 | 0.001 | 1.8 | 0.008 | 16.5 | 0.001 | 1.8 | 0.000 | 0.0 | 0.000 | 0.2 | 1.096 | 2191.4 | 0.000 | 0.2 |
| Material Staging Yard | 1 Ton Crew Cab 4X4 | 300 | Diesel | 1 | 260 | | 50 | 0.003 | 39.5 | 0.012 | 155.4 | 0.038 | 496.9 | 0.000 | 0.5 | 0.002 | 23.8 | 4.211 | 54745.7 | 0.000 | 1.8 |
| | 30 Ton Crane Truck | 300 | Diesel | 1 | 260 | 2 | | 0.124 | 64.6 | 0.346 | 180.1 | 1.237 | 643.3 | 0.001 | 0.7 | 0.047 | 24.4 | 112.000 | 58240.0 | 0.011 | 5.8 |
| | 10,000 lb Rough Terrain Fork Lift | 200 | Diesel | 1 | 260 | 5 | | 0.074 | 95.9 | 0.331 | 429.8 | 0.554 | 720.2 | 0.001 | 0.8 | 0.034 | 43.8 | 56.100 | 72930.0 | 0.007 | 8.7 |
| | Truck, Semi, Tractor | 350 | Diesel | 1 | 260 | 1 | 20 | 0.003 | 15.8 | 0.012 | 62.2 | 0.038 | 198.7 | 0.000 | 0.2 | 0.002 | 9.5 | 4.211 | 21898.3 | 0.000 | 0.7 |
| | Commute | | | 1 | 260 | | 25 | 0.001 | 5.9 | 0.008 | 53.7 | 0.001 | 6.0 | 0.000 | 0.1 | 0.000 | 0.6 | 1.096 | 7121.9 | 0.000 | 0.5 |
| ROW Clearing | 1 Ton Crew Cab 4X4 | 300 | Diesel | 1 | 9 | | 50 | 0.003 | 1.4 | 0.012 | 5.4 | 0.038 | 17.2 | 0.000 | 0.0 | 0.002 | 0.8 | 4.211 | 1895.0 | 0.000 | 0.1 |
| | Road Grader | 350 | Diesel | 1 | 9 | 6 | | 0.176 | 9.5 | 0.493 | 26.6 | 1.790 | 96.7 | 0.002 | 0.1 | 0.066 | 3.6 | 172.000 | 9288.0 | 0.016 | 0.9 |
| | Track Type Dozer | 350 | Diesel | 1 | 9 | 6 | | 0.142 | 7.7 | 0.404 | 21.8 | 1.549 | 83.7 | 0.002 | 0.1 | 0.052 | 2.8 | 172.000 | 9288.0 | 0.013 | 0.7 |
| | Water Truck | 350 | Diesel | 2 | 9 | | 50 | 0.003 | 2.7 | 0.012 | 10.8 | 0.038 | 34.4 | 0.000 | 0.0 | 0.002 | 1.6 | 4.211 | 3790.1 | 0.000 | 0.1 |
| | Lowboy Truck/Trailer | 500 | Diesel | 1 | 9 | | 10 | 0.003 | 0.3 | 0.012 | 1.1 | 0.038 | 3.4 | 0.000 | 0.0 | 0.002 | 0.2 | 4.211 | 379.0 | 0.000 | 0.0 |
| | Backhoe/Front Loader | 350 | Diesel | 1 | 14 | 6 | | 0.142 | 11.9 | 0.404 | 33.9 | 1.549 | 130.1 | 0.002 | 0.2 | 0.052 | 4.4 | 172.000 | 14448.0 | 0.013 | 1.1 |
| | Small Loader | 50 | Diesel | 1 | 4 | 8 | | 0.126 | 4.0 | 0.355 | 11.4 | 0.311 | 10.0 | 0.000 | 0.0 | 0.031 | 1.0 | 30.300 | 969.6 | 0.011 | 0.4 |
| | 10-cu. yd. Dump Truck | 350 | Diesel | 2 | 4 | | 100 | 0.003 | 2.4 | 0.012 | 9.6 | 0.038 | 30.6 | 0.000 | 0.0 | 0.002 | 1.5 | 4.211 | 3369.0 | 0.000 | 0.1 |
| | Commute | | | 1 | 260 | | 25 | 0.001 | 5.9 | 0.008 | 53.7 | 0.001 | 6.0 | 0.000 | 0.1 | 0.000 | 0.6 | 1.096 | 7121.9 | 0.000 | 0.5 |
| Roads and Landing Work | 1 Ton Crew Cab 4X4 | 300 | Diesel | 2 | 16 | | 50 | 0.003 | 4.9 | 0.012 | 19.1 | 0.038 | 61.2 | 0.000 | 0.1 | 0.002 | 2.9 | 4.211 | 6737.9 | 0.000 | 0.2 |
| | Road Grader | 350 | Diesel | 1 | 16 | 4 | | 0.176 | 11.3 | 0.493 | 31.6 | 1.790 | 114.6 | 0.002 | 0.1 | 0.066 | 4.2 | 172.000 | 11008.0 | 0.016 | 1.0 |
| | Track Type Dozer | 350 | Diesel | 1 | 16 | 6 | | 0.142 | 13.6 | 0.404 | 38.8 | 1.549 | 148.7 | 0.002 | 0.2 | 0.052 | 5.0 | 172.000 | 16512.0 | 0.013 | 1.2 |
| | Drum Type Compactor | 250 | Diesel | 1 | 16 | 4 | | 0.117 | 7.5 | 0.590 | 37.8 | 0.993 | 63.5 | 0.001 | 0.1 | 0.054 | 3.5 | 107.000 | 6848.0 | 0.011 | 0.7 |
| | Water Truck | 350 | Diesel | 2 | 260 | | 50 | 0.003 | 79.1 | 0.012 | 310.8 | 0.038 | 993.7 | 0.000 | 1.1 | 0.002 | 47.6 | 4.211 | 109491.4 | 0.000 | 3.7 |
| | Lowboy Truck/Trailer | 500 | Diesel | 1 | 8 | | 50 | 0.003 | 1.2 | 0.012 | 4.8 | 0.038 | 15.3 | 0.000 | 0.0 | 0.002 | 0.7 | 4.211 | 1684.5 | 0.000 | 0.1 |
| | Backhoe/Front Loader | 350 | Diesel | 1 | 16 | 6 | | 0.142 | 13.6 | 0.404 | 38.8 | 1.549 | 148.7 | 0.002 | 0.2 | 0.052 | 5.0 | 172.000 | 16512.0 | 0.013 | 1.2 |
| | Commute | | | 1 | 260 | | 25 | 0.001 | 5.9 | 0.008 | 53.7 | 0.001 | 6.0 | 0.000 | 0.1 | 0.000 | 0.6 | 1.096 | 7121.9 | 0.000 | 0.5 |
| Guard Structure Installation | 3/4 Ton Pick-up Truck, 4X4 | 300 | Diesel | 2 | 10 | | 50 | 0.003 | 3.0 | 0.012 | 12.0 | 0.038 | 38.2 | 0.000 | 0.0 | 0.002 | 1.8 | 4.211 | 4211.2 | 0.000 | 0.1 |
| | 1 Ton Crew Cab Flat Bed, 4X4 | 300 | Diesel | 1 | 10 | | 50 | 0.003 | 1.5 | 0.012 | 6.0 | 0.038 | 19.1 | 0.000 | 0.0 | 0.002 | 0.9 | 4.211 | 2105.6 | 0.000 | 0.1 |
| | Compressor | 120 | Diesel | 1 | 10 | 4 | | 0.101 | 4.1 | 0.335 | 13.4 | 0.598 | 23.9 | 0.001 | 0.0 | 0.055 | 2.2 | 47.000 | 1880.0 | 0.009 | 0.4 |
| | Auger Truck | 500 | Diesel | 1 | 10 | 6 | | 0.149 | 8.9 | 0.557 | 33.4 | 1.705 | 102.3 | 0.003 | 0.2 | 0.061 | 3.7 | 311.000 | 18660.0 | 0.013 | 0.8 |
| | Extendable Flat Bed Pole Truck | 350 | Diesel | 1 | 10 | 6 | | 0.164 | 9.8 | 0.430 | 25.8 | 1.615 | 96.9 | 0.002 | 0.1 | 0.057 | 3.4 | 167.000 | 10020.0 | 0.015 | 0.9 |
| | 80ft. Hydraulic Man-lift | 350 | Diesel | 1 | 10 | 4 | | 0.110 | 4.4 | 0.415 | 16.6 | 1.185 | 47.4 | 0.001 | 0.0 | 0.048 | 1.9 | 125.000 | 5000.0 | 0.010 | 0.4 |
| | 30 Ton Crane Truck | 500 | Diesel | 1 | 10 | 6 | | 0.182 | 10.9 | 0.663 | 39.8 | 1.772 | 106.3 | 0.002 | 0.1 | 0.069 | 4.1 | 180.000 | 10800.0 | 0.016 | 1.0 |
| | Commute | | | 1 | 260 | | 25 | 0.001 | 5.9 | 0.008 | 53.7 | 0.001 | 6.0 | 0.000 | 0.1 | 0.000 | 0.6 | 1.096 | 7121.9 | 0.000 | 0.5 |
| Remove Existing Conductor | 1 Ton Crew Cab 4X4 | 300 | Diesel | 4 | 9 | | 50 | 0.003 | 5.5 | 0.012 | 21.5 | 0.038 | 68.8 | 0.000 | 0.1 | 0.002 | 3.3 | 4.211 | 7580.2 | 0.000 | 0.3 |
| | 80ft. Hydraulic Man-lift | 350 | Diesel | 3 | 9 | 8 | | 0.110 | 23.8 | 0.415 | 89.7 | 1.185 | 256.0 | 0.001 | 0.3 | 0.048 | 10.4 | 125.000 | 27000.0 | 0.010 | 2.1 |
| | Sleeving Truck | 300 | Diesel | 0 | 9 | 0 | | 0.164 | 0.0 | 0.430 | 0.0 | 1.615 | 0.0 | 0.002 | 0.0 | 0.057 | 0.0 | 167.000 | 0.0 | 0.015 | 0.0 |
| | 30 Ton Crane Truck | 300 | Diesel | 1 | 9 | 4 | | 0.124 | 4.5 | 0.346 | 12.5 | 1.237 | 44.5 | 0.001 | 0.0 | 0.047 | 1.7 | 112.000 | 4032.0 | 0.011 | 0.4 |
| | Truck, Semi, Tractor | 350 | Diesel | 1 | 8 | | 10 | 0.003 | 0.2 | 0.012 | 1.0 | 0.038 | 3.1 | 0.000 | 0.0 | 0.002 | 0.1 | 4.211 | 336.9 | 0.000 | 0.0 |
| | Bull Wheel Puller | 500 | Diesel | 1 | 6 | 4 | | 0.164 | 3.9 | 0.430 | 10.3 | 1.615 | 38.8 | 0.002 | 0.0 | 0.057 | 1.4 | 167.000 | 4008.0 | 0.015 | 0.4 |
| | Hydraulic Rewind Puller | 300 | Diesel | 1 | 6 | 4 | | 0.164 | 3.9 | 0.430 | 10.3 | 1.615 | 38.8 | 0.002 | 0.0 | 0.057 | 1.4 | 167.000 | 4008.0 | 0.015 | 0.4 |
| | Commute | | | 1 | 260 | | 25 | 0.001 | 5.9 | 0.008 | 53.7 | 0.001 | 6.0 | 0.000 | 0.1 | 0.000 | 0.6 | 1.096 | 7121.9 | 0.000 | 0.5 |
| Remove Existing Towers | 1 Ton Crew Cab, 4X4 | 300 | Diesel | 3 | 16 | | 50 | 0.003 | 7.3 | 0.012 | 28.7 | 0.038 | 91.7 | 0.000 | 0.1 | 0.002 | 4.4 | 4.211 | 10106.9 | 0.000 | 0.3 |
| | 80 Ton Rough Terrain Crane | 350 | Diesel | 1 | 8 | 8 | | 0.124 | 8.0 | 0.346 | 22.2 | 1.237 | 79.2 | 0.001 | 0.1 | 0.047 | 3.0 | 112.000 | 7168.0 | 0.011 | 0.7 |
| | 30 Ton Crane Truck | 300 | Diesel | 2 | 16 | 6 | | 0.124 | 23.9 | 0.346 | 66.5 | 1.237 | 237.5 | 0.001 | 0.2 | 0.047 | 9.0 | 112.000 | 21504.0 | 0.011 | 2.2 |
| | Compressor Truck | 300 | Diesel | 2 | 8 | 8 | | 0.164 | 21.0 | 0.430 | 55.1 | 1.615 | 206.7 | 0.002 | 0.2 | 0.057 | 7.3 | 167.000 | 21376.0 | 0.015 | 1.9 |
| | Flat Bed Truck & Trailer | 350 | Diesel | 1 | 7 | | 10 | 0.003 | 0.2 | 0.012 | 0.8 | 0.038 | 2.7 | 0.000 | 0.0 | 0.002 | 0.1 | 4.211 | 294.8 | 0.000 | 0.0 |
| | Rough Terrain Forklift | 200 | Diesel | 1 | 7 | 4 | | 0.074 | 2.1 | 0.331 | 9.3 | 0.554 | 15.5 | 0.001 | 0.0 | 0.034 | 0.9 | 56.100 | 1570.8 | 0.007 | 0.2 |
| | Commute | | | 1 | 260 | | 25 | 0.001 | 5.9 | 0.008 | 53.7 | 0.001 | 6.0 | 0.000 | 0.1 | 0.000 | 0.6 | 1.096 | 7121.9 | 0.000 | 0.5 |
| Remove Existing Foundation | 10-cu. yd. Dump Truck | 350 | Diesel | 2 | 10 | | 100 | 0.003 | 6.1 | 0.012 | 23.9 | 0.038 | 76.4 | 0.000 | 0.1 | 0.002 | 3.7 | 4.211 | 8422.4 | 0.000 | 0.3 |
| | Backhoe/Front Loader | 350 | Diesel | 1 | 10 | 8 | | 0.142 | 11.3 | 0.404 | 32.3 | 1.549 | 123.9 | 0.002 | 0.2 | 0.052 | 4.2 | 172.000 | 13760.0 | 0.013 | 1.0 |
| | Excavator | 300 | Diesel | 2 | 10 | 8 | | 0.145 | 23.2 | 0.393 | 62.9 | 1.494 | 239.0 | 0.002 | 0.3 | 0.052 | 8.3 | 159.000 | 25440.0 | 0.013 | 2.1 |
| | 1 Ton Crew Cab Flat Bed, 4X4 | 300 | Diesel | 1 | 10 | | 50 | 0.003 | 1.5 | 0.012 | 6.0 | 0.038 | 19.1 | 0.000 | 0.0 | 0.002 | 0.9 | 4.211 | 2105.6 | 0.000 | 0.1 |
| | Commute | | | 2 | 260 | | 25 | 0.001 | 11.9 | 0.008 | 107.4 | 0.001 | 11.9 | 0.000 | 0.1 | 0.000 | 1.1 | 1.096 | 14243.9 | 0.000 | 1.1 |
| Install Tower Foundations | 1 Ton Crew Cab Flat Bed, 4X4 | 300 | Diesel | 2 | 16 | | 50 | 0.003 | 4.9 | 0.012 | 19.1 | 0.038 | 61.2 | 0.000 | 0.1 | 0.002 | 2.9 | 4.211 | 6737.9 | 0.000 | 0.2 |
| | 30 Ton Crane Truck | 300 | Diesel | 1 | 16 | 5 | | 0.124 | 9.9 | 0.346 | 27.7 | 1.237 | 99.0 | 0.001 | 0.1 | 0.047 | 3.8 | 112.000 | 8960.0 | 0.011 | 0.9 |
| | Backhoe/Front Loader | 200 | Diesel | 1 | 16 | 8 | | 0.142 | 18.2 | 0.404 | 51.7 | 1.549 | 198.3 | 0.002 | 0.2 | 0.052 | 6.7 | 172.000 | 22016.0 | 0.013 | 1.6 |
| | Auger Truck | 500 | Diesel | 1 | 16 | 8 | | 0.149 | 19.0 | 0.557 | 71.2 | 1.705 | 218.3 | 0.003 | 0.4 | 0.061 | 7.9 | 311.000 | 39808.0 | 0.013 | 1.7 |
| | 10 cubic yard Dump Truck | 350 | Diesel | 2 | 16 | | 50 | 0.003 | 4.9 | 0.012 | 19.1 | 0.038 | 61.2 | 0.000 | 0.1 | 0.002 | 2.9 | 4.211 | 6737.9 | 0.000 | 0.2 |
| | 4000 gallon Water Truck | 350 | Diesel | 1 | 16 | | 50 | 0.003 | 2.4 | 0.012 | 9.6 | 0.038 | 30.6 | 0.000 | 0.0 | 0.002 | 1.5 | 4.211 | 3369.0 | 0.000 | 0.1 |

| | | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 10 cu. yd. Concrete Mixer Truck | 425 | Diesel | 3 | 16 | | 50 | 0.003 | 7.3 | 0.012 | 28.7 | 0.038 | 91.7 | 0.000 | 0.1 | 0.002 | 4.4 | 4.211 | 10106.9 | 0.000 | 0.3 |
| | Commute | | | 1 | 260 | | 25 | 0.001 | 5.9 | 0.008 | 53.7 | 0.001 | 6.0 | 0.000 | 0.1 | 0.000 | 0.6 | 1.096 | 7121.9 | 0.000 | 0.5 |
| Tower Steel Haul | 1 Ton Crew Cab Flat Bed, 4X4 | 300 | Diesel | 2 | 12 | | 50 | 0.003 | 3.6 | 0.012 | 14.3 | 0.038 | 45.9 | 0.000 | 0.0 | 0.002 | 2.2 | 4.211 | 5053.4 | 0.000 | 0.2 |
| | 40' Flat Bed Truck & Trailer | 350 | Diesel | 2 | 12 | | 50 | 0.003 | 3.6 | 0.012 | 14.3 | 0.038 | 45.9 | 0.000 | 0.0 | 0.002 | 2.2 | 4.211 | 5053.4 | 0.000 | 0.2 |
| | 10,000 lb Rough Terrain Fork Lift | 200 | Diesel | 1 | 12 | 6 | | 0.074 | 5.3 | 0.331 | 23.8 | 0.554 | 39.9 | 0.001 | 0.0 | 0.034 | 2.4 | 56.100 | 4039.2 | 0.007 | 0.5 |
| | Commute | | | 1 | 260 | | 25 | 0.001 | 5.9 | 0.008 | 53.7 | 0.001 | 6.0 | 0.000 | 0.1 | 0.000 | 0.6 | 1.096 | 7121.9 | 0.000 | 0.5 |
| Tower Steel Assembly | 30 Ton Crane Truck | 300 | Diesel | 2 | 36 | 8 | | 0.124 | 71.6 | 0.346 | 199.5 | 1.237 | 712.6 | 0.001 | 0.7 | 0.047 | 27.1 | 112.000 | 64512.0 | 0.011 | 6.5 |
| | 3/4 Ton Pick-up Truck, 4X4 | 300 | Diesel | 3 | 36 | | 50 | 0.003 | 16.4 | 0.012 | 64.6 | 0.038 | 206.4 | 0.000 | 0.2 | 0.002 | 9.9 | 4.211 | 22740.5 | 0.000 | 0.8 |
| | 1 Ton Crew Cab Flat Bed, 4X4 | 300 | Diesel | 2 | 36 | | 50 | 0.003 | 10.9 | 0.012 | 43.0 | 0.038 | 137.6 | 0.000 | 0.1 | 0.002 | 6.6 | 4.211 | 15160.3 | 0.000 | 0.5 |
| | Compressor Trailer | 350 | Diesel | 2 | 36 | 6 | | 0.123 | 52.9 | 0.341 | 147.4 | 1.398 | 604.1 | 0.002 | 0.6 | 0.046 | 20.0 | 131.000 | 56592.0 | 0.011 | 4.8 |
| | Commute | | | 3 | 260 | | 25 | 0.001 | 17.8 | 0.008 | 161.1 | 0.001 | 17.9 | 0.000 | 0.2 | 0.000 | 1.7 | 1.096 | 21365.8 | 0.000 | 1.6 |
| Tower Erection | 3/4 Ton Pick-up Truck, 4X4 | 300 | Diesel | 2 | 12 | | 50 | 0.003 | 3.6 | 0.012 | 14.3 | 0.038 | 45.9 | 0.000 | 0.0 | 0.002 | 2.2 | 4.211 | 5053.4 | 0.000 | 0.2 |
| | 1 Ton Crew Cab Flat Bed, 4X4 | 300 | Diesel | 2 | 12 | | 50 | 0.003 | 3.6 | 0.012 | 14.3 | 0.038 | 45.9 | 0.000 | 0.0 | 0.002 | 2.2 | 4.211 | 5053.4 | 0.000 | 0.2 |
| | Compressor Trailer | 350 | Diesel | 1 | 12 | 6 | | 0.123 | 8.8 | 0.341 | 24.6 | 1.398 | 100.7 | 0.002 | 0.1 | 0.046 | 3.3 | 131.000 | 9432.0 | 0.011 | 0.8 |
| | 180 Ton Rough Terrain Crane | 500 | Diesel | 1 | 12 | 6 | | 0.182 | 13.1 | 0.663 | 47.7 | 1.772 | 127.6 | 0.002 | 0.1 | 0.069 | 4.9 | 180.000 | 12960.0 | 0.016 | 1.2 |
| | Commute | | | 1 | 260 | | 25 | 0.001 | 5.9 | 0.008 | 53.7 | 0.001 | 6.0 | 0.000 | 0.1 | 0.000 | 0.6 | 1.096 | 7121.9 | 0.000 | 0.5 |
| Install Tubular Pole Foundati | 1 Ton Crew Cab Flat Bed, 4X4 | 300 | Diesel | 3 | 54 | | 50 | 0.003 | 24.6 | 0.012 | 96.8 | 0.038 | 309.6 | 0.000 | 0.3 | 0.002 | 14.8 | 4.211 | 34110.8 | 0.000 | 1.2 |
| | 30 Ton Crane Truck | 300 | Diesel | 1 | 54 | 5 | | 0.124 | 33.6 | 0.346 | 93.5 | 1.237 | 334.0 | 0.001 | 0.4 | 0.047 | 12.7 | 112.000 | 30240.0 | 0.011 | 3.0 |
| | Backhoe/Front Loader | 200 | Diesel | 1 | 54 | 8 | | 0.142 | 61.3 | 0.404 | 174.4 | 1.549 | 669.3 | 0.002 | 0.8 | 0.052 | 22.6 | 172.000 | 74304.0 | 0.013 | 5.5 |
| | Auger Truck | 500 | Diesel | 1 | 54 | 8 | | 0.149 | 64.3 | 0.557 | 240.5 | 1.705 | 736.7 | 0.003 | 1.3 | 0.061 | 26.5 | 311.000 | 134352.0 | 0.013 | 5.8 |
| | 10-cu. yd. Dump Truck | 350 | Diesel | 2 | 54 | | 100 | 0.003 | 32.8 | 0.012 | 129.1 | 0.038 | 412.8 | 0.000 | 0.4 | 0.002 | 19.8 | 4.211 | 45481.0 | 0.000 | 1.5 |
| | 4000 gallon Water Truck | 350 | Diesel | 1 | 54 | | 50 | 0.003 | 8.2 | 0.012 | 32.3 | 0.038 | 103.2 | 0.000 | 0.1 | 0.002 | 4.9 | 4.211 | 11370.3 | 0.000 | 0.4 |
| | 10 cu. yd. Concrete Mixer Truck | 425 | Diesel | 3 | 54 | | 100 | 0.003 | 49.3 | 0.012 | 193.7 | 0.038 | 619.2 | 0.000 | 0.7 | 0.002 | 29.7 | 4.211 | 68221.5 | 0.000 | 2.3 |
| | Commute | | | 1 | 260 | | 25 | 0.001 | 5.9 | 0.008 | 53.7 | 0.001 | 6.0 | 0.000 | 0.1 | 0.000 | 0.6 | 1.096 | 7121.9 | 0.000 | 0.5 |
| Tubular Pole Haul | 3/4 Ton Pick-up Truck, 4X4 | 300 | Diesel | 2 | 27 | | 50 | 0.003 | 8.2 | 0.012 | 32.3 | 0.038 | 103.2 | 0.000 | 0.1 | 0.002 | 4.9 | 4.211 | 11370.3 | 0.000 | 0.4 |
| | 40' Flat Bed Truck & Trailer | 350 | Diesel | 2 | 27 | | 100 | 0.003 | 16.4 | 0.012 | 64.6 | 0.038 | 206.4 | 0.000 | 0.2 | 0.002 | 9.9 | 4.211 | 22740.5 | 0.000 | 0.8 |
| | 180 Ton Rough Terrain Crane | 500 | Diesel | 1 | 27 | 6 | | 0.182 | 29.5 | 0.663 | 107.3 | 1.772 | 287.1 | 0.002 | 0.3 | 0.069 | 11.1 | 180.000 | 29160.0 | 0.016 | 2.7 |
| | Commute | | | 1 | 260 | | 25 | 0.001 | 5.9 | 0.008 | 53.7 | 0.001 | 6.0 | 0.000 | 0.1 | 0.000 | 0.6 | 1.096 | 7121.9 | 0.000 | 0.5 |
| Tubular Pole Assembly | 3/4 Ton Pick-up Truck, 4X4 | 300 | Diesel | 2 | 54 | | 50 | 0.003 | 16.4 | 0.012 | 64.6 | 0.038 | 206.4 | 0.000 | 0.2 | 0.002 | 9.9 | 4.211 | 22740.5 | 0.000 | 0.8 |
| | 1 Ton Crew Cab Flat Bed, 4X4 | 300 | Diesel | 2 | 54 | | 50 | 0.003 | 16.4 | 0.012 | 64.6 | 0.038 | 206.4 | 0.000 | 0.2 | 0.002 | 9.9 | 4.211 | 22740.5 | 0.000 | 0.8 |
| | Compressor Trailer | 120 | Diesel | 1 | 54 | 5 | | 0.101 | 27.4 | 0.335 | 90.5 | 0.598 | 161.4 | 0.001 | 0.2 | 0.055 | 14.7 | 47.000 | 12690.0 | 0.009 | 2.5 |
| | 180 Ton Rough Terrain Crane | 500 | Diesel | 1 | 54 | 6 | | 0.182 | 59.0 | 0.663 | 214.7 | 1.772 | 574.2 | 0.002 | 0.6 | 0.069 | 22.2 | 180.000 | 58320.0 | 0.016 | 5.3 |
| | Commute | | | 1 | 260 | | 25 | 0.001 | 5.9 | 0.008 | 53.7 | 0.001 | 6.0 | 0.000 | 0.1 | 0.000 | 0.6 | 1.096 | 7121.9 | 0.000 | 0.5 |
| Tubular Pole Erection | 3/4 Ton Pick-up Truck, 4X4 | 300 | Diesel | 2 | 54 | | 50 | 0.003 | 16.4 | 0.012 | 64.6 | 0.038 | 206.4 | 0.000 | 0.2 | 0.002 | 9.9 | 4.211 | 22740.5 | 0.000 | 0.8 |
| | 1 Ton Crew Cab Flat Bed, 4X4 | 300 | Diesel | 2 | 54 | | 50 | 0.003 | 16.4 | 0.012 | 64.6 | 0.038 | 206.4 | 0.000 | 0.2 | 0.002 | 9.9 | 4.211 | 22740.5 | 0.000 | 0.8 |
| | Compressor Trailer | 120 | Diesel | 1 | 54 | 5 | | 0.101 | 27.4 | 0.335 | 90.5 | 0.598 | 161.4 | 0.001 | 0.2 | 0.055 | 14.7 | 47.000 | 12690.0 | 0.009 | 2.5 |
| | 180 Ton Rough Terrain Crane | 500 | Diesel | 1 | 54 | 6 | | 0.182 | 59.0 | 0.663 | 214.7 | 1.772 | 574.2 | 0.002 | 0.6 | 0.069 | 22.2 | 180.000 | 58320.0 | 0.016 | 5.3 |
| | Commute | | | 1 | 260 | | 25 | 0.001 | 5.9 | 0.008 | 53.7 | 0.001 | 6.0 | 0.000 | 0.1 | 0.000 | 0.6 | 1.096 | 7121.9 | 0.000 | 0.5 |
| Install Conductor and OPGW | 1 Ton Crew Cab Flat Bed, 4X4 | 300 | Diesel | 5 | 115 | | 50 | 0.003 | 87.4 | 0.012 | 343.7 | 0.038 | 1098.9 | 0.000 | 1.2 | 0.002 | 52.6 | 4.211 | 121072.2 | 0.000 | 4.1 |
| | Wire Truck & Trailer | 350 | Diesel | 6 | 115 | | 50 | 0.003 | 104.9 | 0.012 | 412.4 | 0.038 | 1318.6 | 0.000 | 1.4 | 0.002 | 63.2 | 4.211 | 145286.6 | 0.000 | 4.9 |
| | Dump Truck (Trash) | 350 | Diesel | 1 | 115 | | 50 | 0.003 | 17.5 | 0.012 | 68.7 | 0.038 | 219.8 | 0.000 | 0.2 | 0.002 | 10.5 | 4.211 | 24214.4 | 0.000 | 0.8 |
| | 3/4 Ton Pick-up Truck, 4X4 | 300 | Diesel | 6 | 115 | | 50 | 0.003 | 104.9 | 0.012 | 412.4 | 0.038 | 1318.6 | 0.000 | 1.4 | 0.002 | 63.2 | 4.211 | 145286.6 | 0.000 | 4.9 |
| | 30 Ton Manitex | 350 | Diesel | 4 | 115 | 6 | | 0.164 | 452.4 | 0.430 | 1187.1 | 1.615 | 4457.4 | 0.002 | 5.2 | 0.057 | 158.4 | 167.000 | 460920.0 | 0.015 | 40.8 |
| | 22 Ton Manitex | 350 | Diesel | 1 | 115 | 8 | | 0.164 | 150.8 | 0.430 | 395.7 | 1.615 | 1485.8 | 0.002 | 1.7 | 0.057 | 52.8 | 167.000 | 153640.0 | 0.015 | 13.6 |
| | Splicing Rig | 350 | Diesel | 2 | 115 | 2 | | 0.164 | 75.4 | 0.430 | 197.8 | 1.615 | 742.9 | 0.002 | 0.9 | 0.057 | 26.4 | 167.000 | 76820.0 | 0.015 | 6.8 |
| | Splicing Lab | 300 | Diesel | 2 | 26 | 2 | | 0.164 | 17.0 | 0.430 | 44.7 | 1.615 | 168.0 | 0.002 | 0.2 | 0.057 | 6.0 | 167.000 | 17368.0 | 0.015 | 1.5 |
| | Pole Truck & Trailer | 500 | Diesel | 1 | 36 | | 40 | 0.003 | 4.4 | 0.012 | 17.2 | 0.038 | 55.0 | 0.000 | 0.1 | 0.002 | 2.6 | 4.211 | 6064.1 | 0.000 | 0.2 |
| | 20,000 lb. Rough Terrain Fork Lift | 350 | Diesel | 1 | 115 | 2 | | 0.065 | 15.0 | 0.171 | 39.3 | 0.716 | 164.7 | 0.001 | 0.2 | 0.023 | 5.2 | 77.100 | 17733.0 | 0.006 | 1.4 |
| | 580 Case Backhoe | 120 | Diesel | 1 | 115 | 2 | | 0.091 | 20.9 | 0.362 | 83.3 | 0.566 | 130.3 | 0.001 | 0.1 | 0.052 | 11.8 | 51.700 | 11891.0 | 0.008 | 1.9 |
| | Spacing Cart | 10 | Diesel | 3 | 29 | 8 | | 0.012 | 8.2 | 0.062 | 42.9 | 0.074 | 51.3 | 0.000 | 0.1 | 0.003 | 2.1 | 10.100 | 7029.6 | 0.001 | 0.8 |
| | Static Truck | 350 | Diesel | 1 | 115 | 2 | | 0.164 | 37.7 | 0.430 | 98.9 | 1.615 | 371.5 | 0.002 | 0.4 | 0.057 | 13.2 | 167.000 | 38410.0 | 0.015 | 3.4 |
| | 3 Drum Straw line Puller | 300 | Diesel | 2 | 115 | 4 | | 0.164 | 150.8 | 0.430 | 395.7 | 1.615 | 1485.8 | 0.002 | 1.7 | 0.057 | 52.8 | 167.000 | 153640.0 | 0.015 | 13.6 |
| | 60lk Puller | 525 | Diesel | 1 | 115 | 3 | | 0.171 | 58.8 | 0.607 | 209.3 | 1.982 | 683.8 | 0.003 | 0.9 | 0.068 | 23.4 | 254.000 | 87630.0 | 0.015 | 5.3 |
| | Sag Cat w2 winch | 350 | Diesel | 2 | 115 | 2 | | 0.142 | 65.2 | 0.404 | 185.7 | 1.549 | 712.7 | 0.002 | 0.9 | 0.052 | 24.1 | 172.000 | 79120.0 | 0.013 | 5.9 |
| | D8 Cat | 300 | Diesel | 4 | 115 | 1 | | 0.142 | 65.2 | 0.404 | 185.7 | 1.549 | 712.7 | 0.002 | 0.9 | 0.052 | 24.1 | 172.000 | 79120.0 | 0.013 | 5.9 |
| | Hughes 500 E Helicopter | | Jet A | 1 | 26 | 6 | | 0.301 | 47.0 | 1.140 | 177.8 | 3.747 | 584.5 | 0.004 | 0.6 | 0.116 | 18.1 | 384.000 | 59904.0 | | 0.0 |
| | Fuel, Helicopter Support Truck | 300 | Diesel | 1 | 26 | | 50 | 0.003 | 4.0 | 0.012 | 15.5 | 0.038 | 49.7 | 0.000 | 0.1 | 0.002 | 2.4 | 4.211 | 5474.6 | 0.000 | 0.2 |
| | Low Boy Truck & Trailer | 500 | Diesel | 1 | 115 | | 10 | 0.003 | 3.5 | 0.012 | 13.7 | 0.038 | 44.0 | 0.000 | 0.0 | 0.002 | 2.1 | 4.211 | 4842.9 | 0.000 | 0.2 |
| | Commute | | | 6 | 260 | | 25 | 0.001 | 35.6 | 0.008 | 322.2 | 0.001 | 35.8 | 0.000 | 0.4 | 0.000 | 3.4 | 1.096 | 42731.6 | 0.000 | 3.2 |
| Guard Structure Removal | 3/4 Ton Pick-up Truck, 4X4 | 300 | Diesel | 2 | 10 | | 50 | 0.003 | 3.0 | 0.012 | 12.0 | 0.038 | 38.2 | 0.000 | 0.0 | 0.002 | 1.8 | 4.211 | 4211.2 | 0.000 | 0.1 |
| | 1 Ton Crew Cab Flat Bed, 4X4 | 300 | Diesel | 2 | 10 | | 50 | 0.003 | 3.0 | 0.012 | 12.0 | 0.038 | 38.2 | 0.000 | 0.0 | 0.002 | 1.8 | 4.211 | 4211.2 | 0.000 | 0.1 |

| | | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Compressor Trailer | 120 | Diesel | 2 | 10 | 4 | | 0.101 | 8.1 | 0.335 | 26.8 | 0.598 | 47.8 | 0.001 | 0.0 | 0.055 | 4.4 | 47.000 | 3760.0 | 0.009 | 0.7 |
| | Extendable Flat Bed Pole Truck | 350 | Diesel | 2 | 10 | | 50 | 0.003 | 3.0 | 0.012 | 12.0 | 0.038 | 38.2 | 0.000 | 0.0 | 0.002 | 1.8 | 4.211 | 4211.2 | 0.000 | 0.1 |
| | 80ft. Hydraulic Man-lift | 350 | Diesel | 1 | 10 | 4 | | 0.110 | 4.4 | 0.415 | 16.6 | 1.185 | 47.4 | 0.001 | 0.0 | 0.048 | 1.9 | 125.000 | 5000.0 | 0.010 | 0.4 |
| | 30 Ton Crane Truck | 500 | Diesel | 1 | 10 | 6 | | 0.182 | 10.9 | 0.663 | 39.8 | 1.772 | 106.3 | 0.002 | 0.1 | 0.069 | 4.1 | 180.000 | 10800.0 | 0.016 | 1.0 |
| | Commute | | | 1 | 260 | | 25 | 0.001 | 5.9 | 0.008 | 53.7 | 0.001 | 6.0 | 0.000 | 0.1 | 0.000 | 0.6 | 1.096 | 7121.9 | 0.000 | 0.5 |
| Rector Substation Modificatic | Crew Truck | 300 | Diesel | 2 | 40 | | 50 | 0.003 | 12.2 | 0.012 | 47.8 | 0.038 | 152.9 | 0.000 | 0.2 | 0.002 | 7.3 | 4.211 | 16844.8 | 0.000 | 0.6 |
| | Dump Truck | 350 | Diesel | 2 | 40 | | 50 | 0.003 | 12.2 | 0.012 | 47.8 | 0.038 | 152.9 | 0.000 | 0.2 | 0.002 | 7.3 | 4.211 | 16844.8 | 0.000 | 0.6 |
| | 5 Ton Stake Bed Truck | 235 | Diesel | 1 | 40 | | 50 | 0.003 | 6.1 | 0.012 | 23.9 | 0.038 | 76.4 | 0.000 | 0.1 | 0.002 | 3.7 | 4.211 | 8422.4 | 0.000 | 0.3 |
| | Trencher | 85 | Diesel | 1 | 10 | 8 | | 0.184 | 14.7 | 0.437 | 34.9 | 0.362 | 29.0 | 0.000 | 0.0 | 0.041 | 3.2 | 32.900 | 2632.0 | 0.017 | 1.3 |
| | Drill Rig | 500 | Diesel | 1 | 10 | 8 | | 0.149 | 11.9 | 0.557 | 44.5 | 1.705 | 136.4 | 0.003 | 0.2 | 0.061 | 4.9 | 311.000 | 24880.0 | 0.013 | 1.1 |
| | Tractor | 350 | Diesel | 1 | 40 | 7 | | 0.142 | 39.7 | 0.404 | 113.0 | 1.549 | 433.8 | 0.002 | 0.5 | 0.052 | 14.6 | 172.000 | 48160.0 | 0.013 | 3.6 |
| | Forklift | 200 | Diesel | 1 | 40 | 4 | | 0.074 | 11.8 | 0.331 | 52.9 | 0.554 | 88.6 | 0.001 | 0.1 | 0.034 | 5.4 | 56.100 | 8976.0 | 0.007 | 1.1 |
| | Mobile crane | 300 | Diesel | 1 | 5 | 8 | | 0.124 | 5.0 | 0.346 | 13.9 | 1.237 | 49.5 | 0.001 | 0.1 | 0.047 | 1.9 | 112.000 | 4480.0 | 0.011 | 0.4 |
| | 8 Ton Stake Truck | 200 | Diesel | 1 | 90 | | 50 | 0.003 | 13.7 | 0.012 | 53.8 | 0.038 | 172.0 | 0.000 | 0.2 | 0.002 | 8.2 | 4.211 | 18950.4 | 0.000 | 0.6 |
| | Crew Cab Truck | 300 | Diesel | 2 | 90 | | 50 | 0.003 | 27.4 | 0.012 | 107.6 | 0.038 | 344.0 | 0.000 | 0.4 | 0.002 | 16.5 | 4.211 | 37900.9 | 0.000 | 1.3 |
| | Carryall Vehicle | 300 | Gasoline | 2 | 90 | | 50 | 0.003 | 27.4 | 0.012 | 107.6 | 0.038 | 344.0 | 0.000 | 0.4 | 0.002 | 16.5 | 4.211 | 37900.9 | 0.000 | 1.3 |
| | 50 ton Crane | 350 | Diesel | 1 | 45 | 8 | | 0.124 | 44.7 | 0.346 | 124.7 | 1.237 | 445.4 | 0.001 | 0.5 | 0.047 | 16.9 | 112.000 | 40320.0 | 0.011 | 4.0 |
| | Lift gate Truck | 300 | Diesel | 1 | 90 | | 50 | 0.003 | 13.7 | 0.012 | 53.8 | 0.038 | 172.0 | 0.000 | 0.2 | 0.002 | 8.2 | 4.211 | 18950.4 | 0.000 | 0.6 |
| | Pickup | 200 | Diesel | 2 | 90 | | 50 | 0.003 | 27.4 | 0.012 | 107.6 | 0.038 | 344.0 | 0.000 | 0.4 | 0.002 | 16.5 | 4.211 | 37900.9 | 0.000 | 1.3 |
| | Forklift | 200 | Diesel | 1 | 90 | 8 | | 0.074 | 53.1 | 0.331 | 238.0 | 0.554 | 398.9 | 0.001 | 0.4 | 0.034 | 24.3 | 56.100 | 40392.0 | 0.007 | 4.8 |
| | Manlift | 350 | Diesel | 2 | 90 | 8 | | 0.110 | 159.0 | 0.415 | 597.7 | 1.185 | 1706.4 | 0.001 | 1.7 | 0.048 | 69.0 | 125.000 | 180000.0 | 0.010 | 14.3 |
| | Support Truck | 300 | Diesel | 2 | 90 | | 50 | 0.003 | 27.4 | 0.012 | 107.6 | 0.038 | 344.0 | 0.000 | 0.4 | 0.002 | 16.5 | 4.211 | 37900.9 | 0.000 | 1.3 |
| | Carry deck crane | 300 | Diesel | 1 | 10 | 8 | | 0.124 | 9.9 | 0.346 | 27.7 | 1.237 | 99.0 | 0.001 | 0.1 | 0.047 | 3.8 | 112.000 | 8960.0 | 0.011 | 0.9 |
| | Support Truck | 300 | Diesel | 1 | 15 | | 50 | 0.003 | 2.3 | 0.012 | 9.0 | 0.038 | 28.7 | 0.000 | 0.0 | 0.002 | 1.4 | 4.211 | 3158.4 | 0.000 | 0.1 |
| | Wire Truck | 350 | Diesel | 2 | 60 | | 10 | 0.003 | 3.6 | 0.012 | 14.3 | 0.038 | 45.9 | 0.000 | 0.0 | 0.002 | 2.2 | 4.211 | 5053.4 | 0.000 | 0.2 |
| | Test Truck | 300 | Diesel | 1 | 60 | | 10 | 0.003 | 1.8 | 0.012 | 7.2 | 0.038 | 22.9 | 0.000 | 0.0 | 0.002 | 1.1 | 4.211 | 2526.7 | 0.000 | 0.1 |
| | Commute | | | 1 | 260 | | 25 | 0.001 | 5.9 | 0.008 | 53.7 | 0.001 | 6.0 | 0.000 | 0.1 | 0.000 | 0.6 | 1.096 | 7121.9 | 0.000 | 0.5 |
| Big Creek 3 Substation Modi | 8 Ton Stake Truck | 200 | Diesel | 1 | 4 | | 50 | 0.003 | 0.6 | 0.012 | 2.4 | 0.038 | 7.6 | 0.000 | 0.0 | 0.002 | 0.4 | 4.211 | 842.2 | 0.000 | 0.0 |
| | Crew Cab Truck | 300 | Diesel | 2 | 4 | | 50 | 0.003 | 1.2 | 0.012 | 4.8 | 0.038 | 15.3 | 0.000 | 0.0 | 0.002 | 0.7 | 4.211 | 1684.5 | 0.000 | 0.1 |
| | 50 ton Crane | 350 | Diesel | 1 | 3 | 8 | | 0.124 | 3.0 | 0.346 | 8.3 | 1.237 | 29.7 | 0.001 | 0.0 | 0.047 | 1.1 | 112.000 | 2688.0 | 0.011 | 0.3 |
| | Lift gate Truck | 300 | Diesel | 1 | 4 | | 50 | 0.003 | 0.6 | 0.012 | 2.4 | 0.038 | 7.6 | 0.000 | 0.0 | 0.002 | 0.4 | 4.211 | 842.2 | 0.000 | 0.0 |
| | Pickup | 200 | Diesel | 2 | 4 | | 50 | 0.003 | 1.2 | 0.012 | 4.8 | 0.038 | 15.3 | 0.000 | 0.0 | 0.002 | 0.7 | 4.211 | 1684.5 | 0.000 | 0.1 |
| | Forklift | 200 | Diesel | 1 | 4 | 8 | | 0.074 | 2.4 | 0.331 | 10.6 | 0.554 | 17.7 | 0.001 | 0.0 | 0.034 | 1.1 | 56.100 | 1795.2 | 0.007 | 0.2 |
| | Manlift | 350 | Diesel | 1 | 2 | 8 | | 0.110 | 1.8 | 0.415 | 6.6 | 1.185 | 19.0 | 0.001 | 0.0 | 0.048 | 0.8 | 125.000 | 2000.0 | 0.010 | 0.2 |
| | Support Truck | 300 | Diesel | 2 | 4 | | 50 | 0.003 | 1.2 | 0.012 | 4.8 | 0.038 | 15.3 | 0.000 | 0.0 | 0.002 | 0.7 | 4.211 | 1684.5 | 0.000 | 0.1 |
| | Test Truck | 300 | Diesel | 1 | 5 | | 10 | 0.003 | 0.2 | 0.012 | 0.6 | 0.038 | 1.9 | 0.000 | 0.0 | 0.002 | 0.1 | 4.211 | 210.6 | 0.000 | 0.0 |
| | Wire Truck | 350 | Diesel | 1 | 4 | | 10 | 0.003 | 0.1 | 0.012 | 0.5 | 0.038 | 1.5 | 0.000 | 0.0 | 0.002 | 0.1 | 4.211 | 168.4 | 0.000 | 0.0 |
| | Commute | | | 1 | 260 | | 25 | 0.001 | 5.9 | 0.008 | 53.7 | 0.001 | 6.0 | 0.000 | 0.1 | 0.000 | 0.6 | 1.096 | 7121.9 | 0.000 | 0.5 |
| Springville Substation Modifi | 8 Ton Stake Truck | 200 | Diesel | 1 | 3 | | 50 | 0.003 | 0.5 | 0.012 | 1.8 | 0.038 | 5.7 | 0.000 | 0.0 | 0.002 | 0.3 | 4.211 | 631.7 | 0.000 | 0.0 |
| | Crew Cab Trucks | 300 | Diesel | 2 | 3 | | 50 | 0.003 | 0.9 | 0.012 | 3.6 | 0.038 | 11.5 | 0.000 | 0.0 | 0.002 | 0.5 | 4.211 | 1263.4 | 0.000 | 0.0 |
| | 50 ton Crane | 350 | Diesel | 1 | 2 | 8 | | 0.124 | 2.0 | 0.346 | 5.5 | 1.237 | 19.8 | 0.001 | 0.0 | 0.047 | 0.8 | 112.000 | 1792.0 | 0.011 | 0.2 |
| | Lift gate Truck | 300 | Diesel | 1 | 3 | | 50 | 0.003 | 0.5 | 0.012 | 1.8 | 0.038 | 5.7 | 0.000 | 0.0 | 0.002 | 0.3 | 4.211 | 631.7 | 0.000 | 0.0 |
| | Pickup | 200 | Diesel | 2 | 3 | | 50 | 0.003 | 0.9 | 0.012 | 3.6 | 0.038 | 11.5 | 0.000 | 0.0 | 0.002 | 0.5 | 4.211 | 1263.4 | 0.000 | 0.0 |
| | Forklift | 200 | Diesel | 1 | 3 | 8 | | 0.074 | 1.8 | 0.331 | 7.9 | 0.554 | 13.3 | 0.001 | 0.0 | 0.034 | 0.8 | 56.100 | 1346.4 | 0.007 | 0.2 |
| | Manlifts | 350 | Diesel | 1 | 2 | 8 | | 0.110 | 1.8 | 0.415 | 6.6 | 1.185 | 19.0 | 0.001 | 0.0 | 0.048 | 0.8 | 125.000 | 2000.0 | 0.010 | 0.2 |
| | Support Truck | 300 | Diesel | 2 | 3 | | 50 | 0.003 | 0.9 | 0.012 | 3.6 | 0.038 | 11.5 | 0.000 | 0.0 | 0.002 | 0.5 | 4.211 | 1263.4 | 0.000 | 0.0 |
| | Test Truck | 300 | Diesel | 1 | 5 | | 10 | 0.003 | 0.2 | 0.012 | 0.6 | 0.038 | 1.9 | 0.000 | 0.0 | 0.002 | 0.1 | 4.211 | 210.6 | 0.000 | 0.0 |
| | Wire Truck | 350 | Diesel | 1 | 3 | | 10 | 0.003 | 0.1 | 0.012 | 0.4 | 0.038 | 1.1 | 0.000 | 0.0 | 0.002 | 0.1 | 4.211 | 126.3 | 0.000 | 0.0 |
| | Commute | | | 1 | 260 | | 25 | 0.001 | 5.9 | 0.008 | 53.7 | 0.001 | 6.0 | 0.000 | 0.1 | 0.000 | 0.6 | 1.096 | 7121.9 | 0.000 | 0.5 |
| Vestal Substation Modificatio | 8 Ton Stake Truck | 200 | Diesel | 1 | 3 | | 50 | 0.003 | 0.5 | 0.012 | 1.8 | 0.038 | 5.7 | 0.000 | 0.0 | 0.002 | 0.3 | 4.211 | 631.7 | 0.000 | 0.0 |
| | Crew Cab Trucks | 300 | Diesel | 2 | 3 | | 50 | 0.003 | 0.9 | 0.012 | 3.6 | 0.038 | 11.5 | 0.000 | 0.0 | 0.002 | 0.5 | 4.211 | 1263.4 | 0.000 | 0.0 |
| | 50 ton Crane | 350 | Diesel | 1 | 2 | 8 | | 0.124 | 2.0 | 0.346 | 5.5 | 1.237 | 19.8 | 0.001 | 0.0 | 0.047 | 0.8 | 12.032 | 192.5 | 0.011 | 0.2 |
| | Lift gate Truck | 300 | Diesel | 1 | 3 | | 50 | 0.003 | 0.5 | 0.012 | 1.8 | 0.038 | 5.7 | 0.000 | 0.0 | 0.002 | 0.3 | 4.211 | 631.7 | 0.000 | 0.0 |
| | Pickup | 200 | Diesel | 2 | 3 | | 50 | 0.003 | 0.9 | 0.012 | 3.6 | 0.038 | 11.5 | 0.000 | 0.0 | 0.002 | 0.5 | 4.211 | 1263.4 | 0.000 | 0.0 |
| | Forklift | 200 | Diesel | 1 | 3 | 8 | | 0.074 | 1.8 | 0.331 | 7.9 | 0.554 | 13.3 | 0.001 | 0.0 | 0.034 | 0.8 | 19.411 | 465.9 | 0.007 | 0.2 |
| | Manlift | 350 | Diesel | 1 | 2 | 8 | | 0.110 | 1.8 | 0.415 | 6.6 | 1.185 | 19.0 | 0.001 | 0.0 | 0.048 | 0.8 | 12.275 | 196.4 | 0.010 | 0.2 |
| | Support Truck | 300 | Diesel | 2 | 3 | | 50 | 0.003 | 0.9 | 0.012 | 3.6 | 0.038 | 11.5 | 0.000 | 0.0 | 0.002 | 0.5 | 4.211 | 1263.4 | 0.000 | 0.0 |
| | Test Truck | 300 | Diesel | 1 | 5 | | 10 | 0.003 | 0.2 | 0.012 | 0.6 | 0.038 | 1.9 | 0.000 | 0.0 | 0.002 | 0.1 | 4.211 | 210.6 | 0.000 | 0.0 |
| | Wire Truck | 350 | Diesel | 1 | 3 | | 10 | 0.003 | 0.1 | 0.012 | 0.4 | 0.038 | 1.1 | 0.000 | 0.0 | 0.002 | 0.1 | 4.211 | 126.3 | 0.000 | 0.0 |
| | Commute | | | 1 | 260 | | 25 | 0.001 | 5.9 | 0.008 | 53.7 | 0.001 | 6.0 | 0.000 | 0.1 | 0.000 | 0.6 | 1.096 | 7121.9 | 0.000 | 0.5 |
| Restoration | 1 Ton Crew Cab 4X4 | 300 | Diesel | 2 | 20 | | 50 | 0.003 | 6.1 | 0.012 | 23.9 | 0.038 | 76.4 | 0.000 | 0.1 | 0.002 | 3.7 | 4.211 | 8422.4 | 0.000 | 0.3 |
| | Road Grader | 350 | Diesel | 1 | 20 | 6 | | 0.176 | 21.1 | 0.493 | 59.2 | 1.790 | 214.8 | 0.002 | 0.2 | 0.066 | 7.9 | 172.000 | 20640.0 | 0.016 | 1.9 |
| | Backhoe | 350 | Diesel | 1 | 20 | 6 | | 0.142 | 17.0 | 0.404 | 48.4 | 1.549 | 185.9 | 0.002 | 0.2 | 0.052 | 6.3 | 172.000 | 20640.0 | 0.013 | 1.5 |
| | Front End Loader | 350 | Diesel | 1 | 20 | 6 | | 0.142 | 17.0 | 0.404 | 48.4 | 1.549 | 185.9 | 0.002 | 0.2 | 0.052 | 6.3 | 172.000 | 20640.0 | 0.013 | 1.5 |
| | Track Type Dozer | 350 | Diesel | 1 | 20 | 6 | | 0.142 | 17.0 | 0.404 | 48.4 | 1.549 | 185.9 | 0.002 | 0.2 | 0.052 | 6.3 | 172.000 | 20640.0 | 0.013 | 1.5 |

| | | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Drum Type Compactor | 250 | Diesel | 1 | 20 | 6 | | 0.117 | 14.0 | 0.590 | 70.8 | 0.993 | 119.1 | 0.001 | 0.1 | 0.054 | 6.5 | 107.000 | 12840.0 | 0.011 | 1.3 | |
| Water Truck | 350 | Diesel | 1 | 20 | | 50 | 0.003 | 3.0 | 0.012 | 12.0 | 0.038 | 38.2 | 0.000 | 0.0 | 0.002 | 1.8 | 4.211 | 4211.2 | 0.000 | 0.1 | |
| Lowboy Truck/Trailer | 300 | Diesel | 1 | 20 | | 10 | 0.003 | 0.6 | 0.012 | 2.4 | 0.038 | 7.6 | 0.000 | 0.0 | 0.002 | 0.4 | 4.211 | 842.2 | 0.000 | 0.0 | |
| Commute | | | 1 | 260 | | 25 | 0.001 | 5.9 | 0.008 | 53.7 | 0.001 | 6.0 | 0.000 | 0.1 | 0.000 | 0.6 | 1.096 | 7121.9 | 0.000 | 0.5 | |
| | | | | | | | Totals | Pounds | 3758.8 | | 13537.7 | | 38224.1 | | 45.5 | | 1599.9 | | 4313057.5 | | 292.4 | |
| | | | | | | | | | ROG | | CO | | NOX | | SOX | | PM | | CO2 | | CH4 | N2O |
| | | | | | | | Totals | Tons | 1.9 | | 6.8 | | 19.1 | | 0.0 | | 0.8 | | 2156.5 | | 0.1 | 0.146225 |
| | | | | | | | Totals | CO2 Equivalents (tons) | | | | | | | | | | | 2156.5 | | 3.7 | 43.57505 |

## San Joaquin Cross Valley Loop Project

## Annual Project Operation Equipment and Personnel Requirements

Transmission structures and access roads would undergo aerial and ground inspections on alternate years, and the transmission facilities would also undergo inspection after any relay event. The access roads and spur roads would undergo annual routine maintenance. It is also assumed the transmission structures would require minimal maintenance on an annual scale, resulting in negligible annual operation emissions.

| **Activity** | **Number of Personnel** | **Equipment** | **Estimated Usage** | |
|---|---|---|---|---|
| | | | **Hours/Day** | **Days/Year** |
| Transmission Line Inspection<br>(Ariel Inspection Years) | 2 | Helicopter | 2 | 1.5<br>(One day every other year, and after relay event) |
| Transmission Line Inspection<br>(Ground Inspection Years) | 2 | Heavy Duty Patrol Truck | 8 | 7.5<br>(Five days every other year, and after relay event) |
| Access Road and Spur Road Maintenance | 2 | 1-ton Truck<br>Grader | 6<br>6 | 3 |

*Southern California Edison*
**San Joaquin Cross Valley Loop Project A.08-05-039**

**DATA REQUEST SET SJXVL CPUC-ED-01**

**To:** ENERGY DIVISION
**Prepared by:** Erika Wilder
**Title:** Environmental Coordinator
**Dated:** 06/17/2008

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**Question 35:**

**Biological Resources**

The PEA states that surveys for wetlands would occur during the preconstruction Environmental Surveys for the proposed project to determine if they are present. This approach does not provide sufficient information on which to base the CEQA analysis. Provide conduct a wetland survey and provide a delineation map identifying potential jurisdictional waters of the U.S. and State.

**Response to Question 35:**

During the March 4, 2008 meeting between representatives of the CPUC, ESA, and SCE, the subject of biological surveys was discussed. The attendees had agreed to conduct the surveys (which would include wetlands surveys) together during Spring 2009, when access to all relevant properties could be obtained by court order, if necessary.