

Index to CPUC PEA Requirements

CPUC Requirement	PEA Section Number
Cover Sheet	
Chapter 1: PEA Summary	
(Note: This information is included in the 'Executive Summary')	
1. The major conclusions of the PEA	Executive Summary
2. Any areas of controversy	Not applicable to this project
3. Any major issues that must be resolved including the choice among reasonably feasible alternatives and mitigation measures, if any;	2.0 Alternatives Analysis
4. Description of inter-agency coordination, if any; and	6.5.8.4 (Discussion from coordination with USFWS)
5. Description of public outreach efforts, if any.	Appendix A: Letter from the Town of Windsor, 14.4.2.2
Chapter 2: Project Purpose and Need and Objectives	
(Note: This information is included in the Project Description)	
2.1 Overview Explanation of the objective(s) and/or Purpose and Need for implementing the Proposed Project.	1.1, 1.4
2.2 Project Objectives Analysis of the reason why attainment of these objectives is necessary or desirable. Such analysis must be sufficiently detailed to inform the Commission in its independent formulation of project objectives which will aid any appropriate CEQA alternatives screening process.	1.4, 2.0 Alternatives Analysis
Chapter 3: Project Description	
1.0	
3.1 Project Location	1.2
1. Geographical Location: County, City (provide project location map(s)).	1.2
2. General Description of Land Uses within the project site (e.g., residential, commercial, agricultural, recreation, traverses vineyards, farms, open space, number of stream crossings, etc.).	1.2
3. Describe if the Proposed Project is located within an existing	1.2, 1.9

CPUC Requirement	PEA Section Number
property owned by the Applicant, traverses existing rights of way (ROW) or requires new ROW. Give the approximate area of the property or the length of the project that is in an existing ROW or which requires new ROWs.	
3.2 Existing System	1.0
1. Describe the local system to which the Proposed Project relates; include all relevant information about substations, transmission lines and distribution circuits. <i>Note: regional system maps would remain confidential for security reasons.</i>	1.3
2. Provide a schematic diagram and map of the existing system.	Figure 1-3: Fulton - Fitch Mountain Distribution Planning Area Location Map
3. Provide a schematic diagram that illustrates the system as it would be configured with implementation of the Proposed Project.	Figure 1-4: Typical Three-Bank Substation Layout, Figure 1-7: Reconductoring of Existing Distribution Lines
3.3 Project Objectives (Can refer to Chapter 2, Project Purpose and Need, if already described there.)	1.4.1
3.4 Proposed Project	1.5
1. Describe whole of the Proposed Project. Is it an upgrade, a new line, new substations, etc.?	1.5
2. Describe how the Proposed Project fits into the Regional system. Does it create a loop for reliability, etc.?	1.4.4, 1.5.1
3. Describe all reasonably foreseeable future phases, or other reasonably foreseeable consequences of the Proposed Project.	Not applicable to this project
4. Provide capacity increase in MW. If the project does not increase capacity, state it.	1.4.2
5. Provide GIS (or equivalent) data layers for the Proposed Project preliminary engineering including estimated locations of all physical components of the Proposed Project as well as those related to construction. For physical components, this could include but is not limited to the existing components (e.g., ROW, substation locations, poles, etc.) as well as the proposed pole locations, transmission lines, substations, etc. For elements related to construction include: proposed or likely lay-down areas, work areas at the pole sites, pull and tension sites, access roads (e.g., temporary, permanent, existing, etc.), areas where	For security reasons, available GIS data layers will be submitted under PUC Section 583 confidentiality restrictions.

CPUC Requirement	PEA Section Number
special construction methods may need to be employed, areas where vegetation removal may occur, areas to be heavily graded, etc. More details about this type of information are provided below.	
3.5 Project Components	1.5
3.5.1 Transmission Line	1.5
1. What type of line exists and what type of line is proposed (e.g., single-circuit, double-circuit, upgrade 69 kV to 115 kV).	1.5.1, 1.5.2
2. Identify the length of the upgraded alignment, the new alignment, etc.	1.5.1, 1.5.2
3. Would construction require one-for-one pole replacement, new poles, steel poles, etc.?	1.6.4.1, 1.6.5.1
4. Describe what would occur to other lines and utilities that may be collocated on the poles to be replaced (e.g., distribution, communication, etc.).	1.6.4.1, 1.6.5.1, 1.6.5.3.4
3.5.2 Poles/Towers: Provide the following information for each pole/tower that would be installed <u>and</u> for each pole/tower that would be removed:	
1. Unique ID number to match GIS database information.	1.6.4.1. For security reasons, Unique ID numbers for poles located along the distribution line have not been provided. Available GIS data layers will be submitted under PUC Section 583 confidentiality restrictions.
2. Structure diagram and, if available, photos of existing structure. Preliminary diagram or “typical” drawings and, if possible, photos of proposed structure. Also provide a written description of the most common types of structures and their use (e.g., Tangent poles would be used when the run of poles continues in a straight line, etc.). Describe if the pole/tower design meets raptor safety requirements.	Figure 1-6: Typical Tubular Steel Pole, 1.5.2.1, 1.6.4.1, 1.6.5.1
3. Type of pole (e.g., wood, steel, etc.) or tower (e.g., self-supporting lattice).	1.6.4.1, 1.6.5.1
4. For poles, provide “typical” drawings with approximate diameter at the base and the tip; for towers, estimate the width at base and top.	Figure 1-6: Typical Tubular Steel Pole, 1.5.2.1, 1.6.4.1, 1.6.5.1.

CPUC Requirement	PEA Section Number
5. Identify typical total pole lengths, the approximate length to be embedded, and the approximate length that would be above ground surface; for towers, identify the approximate height above ground surface and approximate base footprint area.	1.6.4.1, 1.6.5.1
6. Describe any specialty poles or towers; note where they would be used (e.g., angle structures, heavy angle lattice towers, stub guys); make sure to note if any guying would likely be required across a road.	Not applicable to this project
7. If the project includes pole-for-pole replacement, describe the approximate location of where the new poles would be installed relative to the existing alignment.	1.6.5, 1.6.5.1, Figure 1-7: Reconductoring of Existing Distribution Lines
8. Describe any special pole types (e.g., poles that require foundations, transition towers, switch towers, microwave towers, etc.) and any special features.	Not applicable to this project
3.5.3 Conductor Cable	1.6.5
3.5.3.1 Above-Ground Installation	1.6.5.2
1. Describe the type of line to be installed on the poles/tower (e.g., single circuit with distribution, double circuit, etc.).	1.6.5.2
2. Describe the number of conductors required to be installed on the poles or tower and how many on each side including applicable engineering design standards.	1.6.5.2
3. Provide the size and type of conductor (e.g., ACSR, non-specular, etc.) and insulator configuration.	1.6.5.2
4. Provide the approximate distance from the ground to the lowest conductor and the approximate distance between the conductors (i.e., both horizontally and vertically) Provide specific information at highways, rivers, or special crossings.	1.6.5.2
5. Provide the approximate span lengths between poles or towers, note where different if distribution is present or not if relevant.	1.6.5.1, Refer to Figure 1-4: Typical Three-Bank Substation Layout for description of how the substation will interconnect to the existing line.
6. Describe if other infrastructure would likely be collocated with the conductor (e.g., fiber optics, etc); if so, provide conduit diameter of other infrastructure.	1.6.5.1, 1.6.5.3.4
3.5.3.2 Below-Ground Installation	1.6.5.3
1. Describe the type of line to be installed (e.g., single circuit cross-linked polyethylene-insulated solid-dielectric, copper-conductor	1.6.5.3

CPUC Requirement	PEA Section Number
cables).	
2. Describe the type of casing the cable would be installed in (e.g., concrete-encased duct bank system); provide the dimensions of the casing.	1.6.5.3
3. Provide an engineering ‘typical’ drawing of the duct bank and describe what types of infrastructure would likely be installed within the duct bank (e.g., transmission, fiber optics, etc.).	Figure 1-8: Typical Joint Trench Configuration
3.5.4 Substations	1.5.1
1. Provide “typical” Plan and Profile views of the proposed substation and the existing substation if applicable.	Figure 1-4: Typical Three-Bank Substation Layout Figure 1-5: Typical Three-Bank Substation Profile
2. Describe the types of equipment that would be temporarily or permanently installed and provide details as to what the function/use of said equipment would be. Include information such as, but not limited to: mobile substations, transformers, capacitors, and new lighting.	1.5.1
3. Provide the approximate or “typical” dimensions (width and height) of new structures including engineering and design standards that apply.	1.5.1
4. Describe the extent of the Proposed Project. Would it occur within the existing fence line, existing property line or would either need to be expanded?	1.5.1
5. Describe the electrical need area served by the distribution substation.	1.4.2
3.6 Right-of-Way Requirements	1.9
1. Describe the ROW location, ownership, and width. Would existing ROW be used or would new ROW be required?	1.2, 1.9
2. If new ROW is required, describe how it would be acquired and approximately how much would be required (length and width).	1.6.5.3, 1.9
3. List properties likely to require acquisition.	None anticipated
3.7 Construction	1.6
3.7.1 For All Projects	
3.7.1.1 Staging Areas	Not applicable to this project as described in Section 1.5.3

CPUC Requirement	PEA Section Number
1. Where would the main staging area(s) likely be located?	Not applicable to this project
2. Approximately how large would the main staging area(s) be?	Not applicable to this project
3. Describe any site preparation required, if known, or generally describe what might be required (i.e., vegetation removal, new access road, installation of rock base, etc.).	Not applicable to this project
4. Describe what the staging area would be used for (i.e., material and equipment storage, field office, reporting location for workers, parking area for vehicles and equipment, etc.).	Not applicable to this project
5. Describe how the staging area would be secured, would a fence be installed? If so, describe the type and extent of the fencing.	Not applicable to this project
6. Describe how power to the site would be provided if required (i.e., tap into existing distribution, use of diesel generators, etc.).	Not applicable to this project
7. Describe any grading activities and/or slope stabilization issues.	Not applicable to this project
3.7.1.2 Work Areas	1.5.1
1. Describe known work areas that may be required for specific construction activities (i.e., pole assembly, hill side construction, etc.).	1.5.1, 1.6.3, 1.6.4, 1.6.5
2. For each known work area, provide the area required (include length and width) and describe the types of activities that would be performed.	1.5.1, 1.6.3, 1.6.4, 1.6.5
3. Identify the approximate location of known work areas in the GIS database.	For security reasons, available GIS data layers will be submitted under PUC Section 583 confidentiality restrictions.
4. How would the work areas likely be accessed (e.g., construction vehicles, walk in, helicopter, etc.)?	1.5.3
5. If any site preparation is likely required, generally describe what and how it would be accomplished.	1.5.3, 1.6.3, 1.6.6
6. Describe any grading activities and/or slope stabilization issues.	1.6.3
7. Based on the information provided, describe how the site would be restored.	1.6.7
3.7.1.3 Access Roads and/or Spur Roads	1.5.3
1. Describe the types of roads that would be used and or would need to be created to implement the Proposed Project. See table below	1.5.3

CPUC Requirement	PEA Section Number
as an example of information required. Road types may include, but are not limited to: new permanent road; new temporary road; existing road that would have permanent improvements; existing road that would have temporary improvements, existing paved road; existing dirt/gravel road, and overland access.	
2. For road types that require preparation, describe the methods and equipment that would be used.	Not applicable to this project
3. Identify approximate location of all access roads (by type) in the GIS database.	For security reasons, available GIS data layers will be submitted under PUC Section 583 confidentiality restrictions.
4. Describe any grading activities and/or slope stabilization issues. See table in PEA Checklist as an example of information required. Road types may include, but are not limited to: new permanent road; new temporary road; existing road that would have permanent improvements; existing road that would have temporary improvements, existing paved road; existing dirt/gravel road, and overland access	Not applicable to this project
3.7.1.4 Helicopter Access	Not applicable to this project
1. Identify which proposed poles/towers would be removed and/or installed using a helicopter.	Not applicable to this project
2. If different types of helicopters are to be used, describe each type (e.g., light, heavy or sky crane) and what activities they will be used for.	Not applicable to this project
3. Provide information as to where the helicopters would be staged, where they would refuel, where they would land within the Project site.	Not applicable to this project
4. Describe any BMPs that would be employed to avoid impacts caused by use of helicopters, for example: air quality and noise considerations.	Not applicable to this project
5. Describe flight paths, payloads, hours of operations for known locations and work types.	Not applicable to this project
3.7.1.5 Vegetation Clearance	1.6.6
1. Describe what types of vegetation clearing may be required (e.g., tree removal, brush removal, flammable fuels removal) and why (e.g., to provide access, etc.).	1.6.6
2. Identify the preliminary location and provide an approximate area of disturbance in the GIS database for each type of vegetation	1.6.6, For security reasons, available GIS

CPUC Requirement	PEA Section Number
removal.	data layers will be submitted under PUC Section 583 confidentiality restrictions.
3. Describe how each type of vegetation removal would be accomplished.	1.6.6
4. For removal of trees, distinguish between tree trimming as required under GO-95D and tree removal.	1.6.6
5. Describe the types and approximate number and size of trees that may need to be removed.	1.6.6
6. Describe the type of equipment typically used.	1.6.6
3.7.1.6 Erosion and Sediment Control and Pollution Prevention during Construction	1.6.3, 1.6.5.3, 8.0 Geology, 10.0 Hydrology and Water Quality, 9.0 Hazards and Hazardous Materials
<p>1. Describe the areas of soil disturbance including estimated total areas, and associated terrain type and slope. List all known permits required. For project sites of less than one acre, outline the best management practices (BMPs) that would be implemented to manage surface runoff. Things to consider include, but are not limited to, the following:</p> <ul style="list-style-type: none"> • Erosion and Sedimentation BMP's; • Vegetation Removal and Restoration; and/or, • Hazardous Waste and Spill Prevention Plans. 	1.6.3, 1.6.5.3, 8.0 Geology, 10.0 Hydrology and Water Quality, 9.0 Hazards and Hazardous Materials. PG&E construction crews will implement BMPs outlined in PG&E's <i>Water Quality Construction Best Management Practices Manual</i> , a copy of which will be provided to CPUC staff on CD.
2. Describe any grading activities and/or slope stabilization issues.	1.6.3
3. Describe how construction waste (i.e., refuse, spoils, trash, oil, fuels, poles, pole structures, etc.) would be disposed.	1.6.4.1, 1.6.5.3.1, 1.6.5.3.2
3.7.1.7 Cleanup and Post-Construction Restoration	1.6.7
1. Describe how cleanup and post-construction restoration would be performed (i.e., personnel, equipment, and methods). Things to consider include, but are not limited to, restoration of the following: Natural drainage patterns; wetlands; vegetation, and other disturbed areas (i.e. staging areas, access roads, etc).	1.6.7

CPUC Requirement	PEA Section Number
3.7.2 Transmission Line Construction (Above Ground)	1.6.5.2
3.7.2.1 Pull and Tension Sites	1.6.5.2
1. Provide the general or average distance between pull and tension sites.	1.6.5.2
2. Provide the area of pull and tension sites, include the estimated length and width.	1.6.5.2
3. According to the preliminary plan, how many pull and tension sites would be required, and where would they be located? Please provide the location information in GIS.	1.6.5.2, For security reasons, available GIS data layers will be submitted under PUC Section 583 confidentiality restrictions.
4. What type of equipment would be required at these sites?	1.6.5.2, 1.6.1
5. If conductor is being replaced, how would it be removed from the site?	1.6.5.2
3.7.2.2 Pole Installation Removal	1.6.4.1, 1.6.5.1, 1.6.5.3.4
1. Describe how the construction crews and their equipment would be transported to and from the pole site location. Provide vehicle type, number of vehicles, and estimated number of trips and hours of operation.	1.6.4.1, 1.6.5.1, 1.6.5.3.4, 1.6.1
<i>Pole and Foundation Removal</i>	1.6.4.1, 1.6.5.1, 1.6.5.3.4
1. Describe the process of how the poles and foundations would be removed.	1.6.4.1, 1.6.5.1, 1.6.5.3.4
2. Describe what happens to the hole that the pole was in (i.e., reused or backfilled)?	1.6.4.1, 1.6.5.1, 1.6.5.3.4
3. If the hole is to be filled, what type of fill would be used, where would it come from?	1.6.4.1, 1.6.5.1, 1.6.5.3.4
4. Describe any surface restoration that would occur at the pole site?	1.6.4.1, 1.6.5.1, 1.6.5.3.4
5. Describe how the poles would be removed from the site?	1.6.4.1, 1.6.5.1, 1.6.5.3.4
<i>Top Removal</i> If topping is required to remove a portion of an existing transmission pole that would now only carry distribution lines, please provide the following:	Not applicable to this project
1. Describe the methodology to access and remove the tops of these	Not applicable to this

CPUC Requirement	PEA Section Number
poles	project
2. Describe any special methods that would be required to top poles that may be difficult to access, etc.	Not applicable to this project
<i>Pole/Tower Installation</i>	1.6.4.1, 1.6.5.1, 1.6.5.3.4
1. Describe the process of how the new poles/towers would be installed; specifically call out any special construction methods (e.g., helicopter installation) for specific locations or for different types of poles/towers.	1.6.4.1, 1.6.5.1, 1.6.5.3.4
2. Describe the types of equipment and their use as related to pole/tower installation.	1.6.4.1, 1.6.5.1, 1.6.1
3. Describe actions taken to maintain a safe work environment during construction (e.g., covering of holes/excavation pits, etc.).	1.6.4.1, 1.6.5.1
4. Describe what would be done with soil removed from a hole/foundation site.	1.6.4.1, 1.6.5.1
5. For any foundations required, provide description of construction method(s), approximate average depth and diameter of excavation, approximate volume of soil to be excavated, approximate volume of concrete or other backfill required, etc.	1.6.4.1, 1.6.5.1
6. Describe briefly how poles/towers and associated hardware are assembled.	1.6.4.1, 1.6.5.1
7. Describe how the poles/towers and associated hardware would be delivered to the site; would they be assembled off-site and brought in or assembled on site?	1.6.4.1, 1.6.5.1
8. Provide a table of pole/tower installation metrics and associated disturbance area estimates as in PEA Checklist 3.7.2.2	Provided in narrative format 1.6.4.1, 1.6.5.1
3.7.2.3 Conductor/Cable Installation	1.6.5.2
1. Provide a process-based description of how new conductor/cable would be installed and how old conductor/cable would be removed, if applicable. Note, graphical representation of the general sequencing is helpful for the reader here.	1.6.5.2
2. Generally describe the conductor/cable splicing process.	1.6.5.2
3. If vaults are required, provide their dimensions and approximate location/spacing along the alignment.	1.6.5.3.3, Figure 1-7: Reconductoring of 12 kV Distribution Lines
4. Describe in what areas conductor/cable stringing/installation activities would occur.	1.6.4.2, 1.6.5.2
5. Describe any safety precautions or areas where special	1.6.5.4, 1.10

CPUC Requirement	PEA Section Number
methodology would be required (e.g., crossing roadways, stream crossing).	
3.7.3 Transmission Line Construction (Below Ground)	1.6.5.3
3.7.3.1 Trenching	1.6.5.3.3
1. Describe the approximate dimensions of the trench (e.g., depth, width).	1.6.5.3.3
2. Describe the methodology of making the trench (e.g., saw cutter to cut the pavement, back hoe to remove, etc.).	1.6.5.3.3
3. Provide the total approximate cubic yardage of material to be removed from the trench, the amount to be used as backfill and the amount to subsequently be removed/disposed of off-site.	1.6.5.3.3
4. Provide off-site disposal location, if known, or describe possible option(s).	1.6.5.3.3
5. If engineered fill would be used as backfill, provide information as to the type of engineered backfill and the amount that would be typically used (e.g., the top two feet would be filled with thermal-select backfill).	1.6.5.3.3
6. Describe if dewatering would be anticipated, if so, how the trench would be dewatered, what are the anticipated flows of the water, would there be treatment, and how would the water be disposed.	1.6.5.3.2
7. Describe the process for testing excavated soil or groundwater for the presence of pre-existing environmental contaminants that could be exposed as a result of trenching operations.	1.6.5.3.2
8. If a pre-existing hazardous waste were encountered, describe the process of removal and disposal.	1.6.5.3.3, Chapter 9.0: Hazards and Hazardous Materials
9. Describe any standard BMPs that would be implemented.	1.6.5.3.3, Chapter 9.0: Hazards and Hazardous Materials, 1.10
3.7.3.2 Trenchless Techniques: Microtunnel, Bore and Jack, Horizontal Directional Drilling	
1. Provide the approximate location of the sending and receiving pits.	1.6.5.3.1, 1.6.5.3.2
2. Provide the length, width and depth of the sending and receiving pits.	1.6.5.3.1, 1.6.5.3.2
3. Describe the methodology of excavating and shoring the pits.	1.6.5.3.1, 1.6.5.3.2
4. Describe the methodology of the trenchless technique.	1.6.5.3.1, 1.6.5.3.2
5. Provide the total cubic yardage of material to be removed from the pits, the amount to be used as backfill and the amount to	1.6.5.3.1, 1.6.5.3.2

CPUC Requirement	PEA Section Number
subsequently be removed/disposed of off-site.	
6. Describe process for safe handling of drilling mud and bore lubricants.	1.6.5.3.1, 1.6.5.3.2
7. Describe process for detecting and avoiding “fracturing-out” during HDD operations.	1.6.5.3.1, 1.6.5.3.2
8. Describe process for avoiding contact between drilling mud/lubricants and stream beds.	1.6.5.3.1, 1.6.5.3.2
9. If engineered fill would be used as backfill, provide information as to the type of engineered backfill and the amount that would be typically used (e.g., the top two feet would be filled with thermal-select backfill).	1.6.5.3.1, 1.6.5.3.2
10. Describe if dewatering would be anticipated, if so, how the pit would be dewatered, what are the anticipated flows of the water, would there be treatment, and how would the water be disposed.	1.6.5.3.1, 1.6.5.3.2
11. Describe the process for testing excavated soil or groundwater for the presence of pre-existing environmental contaminants.	1.6.5.3.1, 1.6.5.3.2
12. If a pre-existing hazardous waste were encountered, describe the process of removal and disposal.	1.6.5.3.1, 1.6.5.3.2
13. Describe any grading activities and/or slope stabilization issues.	1.6.5.3.1, 1.6.5.3.2
14. Describe any standard BMPs that would be implemented.	1.6.5.3.1, 1.6.5.3.2, 1.10, PG&E will implement BMPs outlined in the <i>PG&E Horizontal Directional Drilling Manual</i> , a copy of which will be provided to CPUC staff on a separate CD.
3.7.4 Substation Construction	1.6.3
1. Describe any earth moving activities that would be required; 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.	1.6.3
2. Provide a conceptual landscape plan in consultation with the municipality in which the substation is located.	Figure 1-4: Typical Three-Bank Substation Layout
3. Describe any grading activities and/or slope stabilization issues.	1.6.3
4. Describe possible relocation of commercial or residential property, if any.	Not applicable to this project.
3.7.5 Construction Workforce and Equipment	1.6.8, 1.6.1

CPUC Requirement	PEA Section Number
1. Provide the estimated number of construction crew members.	1.6.8
2. Describe the crew deployment, would crews work concurrently (i.e., multiple crews at different sites); would they be phased, etc.	1.6.8
3. Describe the different types of activities to be undertaken during construction; the number of crew members for each activity i.e. trenching, grading, etc.; and number and types of equipment expected to be used for said activity. Include a written description of the activity. See example in PEA Checklist 3.7.5.	1.6.8, 1.6.1
4. Provide a list of the types of equipment expected to be used during construction of the Proposed Project as well as a brief description of the use of the equipment. See example in PEA Checklist 3.7.5.	1.6.1
3.7.6 Construction Schedule	1.7
1. Provide a Preliminary Project Construction Schedule; include contingencies for weather, wildlife closure periods, etc. Include Month Year, or Month Year to Month Year for each. See example in PEA Checklist 3.7.6.	1.7
3.8 Operation and Maintenance	1.8
1. Describe the general system monitoring and control (i.e., use of standard monitoring and protection equipment, use of circuit breakers and other line relay protection equipment, etc.).	1.8.1
2. Describe the general maintenance program of the Proposed Project, include items such as: <ul style="list-style-type: none"> • Timing of the inspections (i.e., monthly, every July, as needed); • Type of inspection (i.e., aerial inspection, ground inspection); and • Description of how the inspection would be implemented. Things to consider, who/how many crew members; how would they access the site (walk to site, vehicle, ATV); would new access be required; would restoration be required, etc. 	1.8.2
3. If additional full time staff would be required for operation and/or maintenance, provide the number and for what purpose.	Not applicable to this project.
3.9 Applicant Proposed Measures	1.10
1. If there are measures that the Applicant would propose to be part of the Proposed Project, please include those measures and reference plans or implementation descriptions.	1.10 and within applicable resource chapters 4.0 through 14.0
Chapter 4: Environmental Setting	4.0 through 14.0
Note: PG&E has elected to combine Environmental Setting with the impact assessment.	4.0 through 14.0

CPUC Requirement	PEA Section Number
4.1 Aesthetics	4.0
1. A description of the physical environment in the vicinity of the project (e.g. topography, land use patterns, biological environment, etc.)	4.4.1
• Local environment (site-specific)	4.4.1, 4.4.2
• Regional environment	4.4.2
2. A description of the regulatory environment/context	4.5
• Federal	Not applicable to this project
• State	Not applicable to this project
• Local	4.5.1
4.2 Agriculture Resources	11.0
1. A description of the physical environment in the vicinity of the project (e.g. topography, land use patterns, biological environment, etc.)	11.3.4
• Local environment (site-specific)	11.3.4
• Regional environment	11.3.1
2. A description of the regulatory environment/context	11.3.1
• Federal	None
• State	None
• Local	11.3.1.1, 11.3.1.2
4.3 Air Quality	5.0
1. A description of the physical environment in the vicinity of the project (e.g. topography, land use patterns, biological environment, etc.)	5.4, 5.4.1
• Local environment (site-specific)	5.4, 5.4.1
• Regional environment	5.4
2. A description of the regulatory environment/context	5.3
• Federal	5.3.1
• State	5.3.2
• Local	5.3.3
4.4 Biological Resources	6.0

CPUC Requirement	PEA Section Number
1. A description of the physical environment in the vicinity of the project (e.g. topography, land use patterns, biological environment, etc.)	6.4
• Local environment (site-specific)	6.4
• Regional environment	6.4
2. A description of the regulatory environment/context	6.2
• Federal	6.2.1
• State	6.2.2
• Local	6.2.3
4.5 Cultural Resources	7.0
1. A description of the physical environment in the vicinity of the project (e.g. topography, land use patterns, biological environment, etc.)	7.4
• Local environment (site-specific)	7.4
• Regional environment	7.4
2. A description of the regulatory environment/context	7.3
• Federal	7.3
• State	7.3
• Local	7.3
4.6 Geology, Soils and Seismic Potential	8.0
1. A description of the physical environment in the vicinity of the project (e.g. topography, land use patterns, biological environment, etc.)	8.4
• Local environment (site-specific)	8.4
• Regional environment	8.4
2. A description of the regulatory environment/context	8.3
• Federal	8.3
• State	8.3
• Local	8.3
4.7 Hazards and Hazardous Materials	9.0
1. A description of the physical environment in the vicinity of the project (e.g. topography, land use patterns, biological environment, etc.)	9.3.2

CPUC Requirement	PEA Section Number
• Local environment (site-specific)	9.3.2
• Regional environment	9.3.2
2. A description of the regulatory environment/context	9.3.1
• Federal	9.3.1
• State	9.3.1
• Local	9.3.1
4.8 Hydrology and Water Quality	10.0
1. A description of the physical environment in the vicinity of the project (e.g. topography, land use patterns, biological environment, etc.)	10.3
• Local environment (site-specific)	10.3
• Regional environment	10.3
2. A description of the regulatory environment/context	10.2.1
• Federal	10.2.1
• State	10.2.1
• Local	10.2.1
4.9 Land Use and Planning	11.0
1. A description of the physical environment in the vicinity of the project (e.g. topography, land use patterns, biological environment, etc.)	11.3.2
• Local environment (site-specific)	11.3.2, 11.3.1.2
• Regional environment	11.3.2, 11.3.1
2. A description of the regulatory environment/context	11.3.1, 11.3.2
• Federal	None
• State	None
• Local	11.3.1.1, 11.3.1.2
4.10 Mineral Resources	8.0
1. A description of the physical environment in the vicinity of the project (e.g. topography, land use patterns, biological environment, etc.)	8.4.6
• Local environment (site-specific)	8.4.6
• Regional environment	8.4.6

CPUC Requirement	PEA Section Number
2. A description of the regulatory environment/context	8.3
• Federal	8.3
• State	8.3
• Local	8.3
4.11 Noise	12.0
1. A description of the physical environment in the vicinity of the project (e.g. topography, land use patterns, biological environment, etc.)	12.3.2
• Local environment (site-specific)	12.3.2
• Regional environment	12.3.2
2. A description of the regulatory environment/context	12.3.1
• Federal	12.3.1
• State	12.3.1
• Local	12.3.1
4.12 Population and Housing	13.0
1. A description of the physical environment in the vicinity of the project (e.g. topography, land use patterns, biological environment, etc.)	13.3.1
• Local environment (site-specific)	13.3.1
• Regional environment	13.3.1
2. A description of the regulatory environment/context	13.3.1
• Federal	None
• State	None
• Local	13.3.1
4.13 Public Services	13.0
1. A description of the physical environment in the vicinity of the project (e.g. topography, land use patterns, biological environment, etc.)	13.3.2
• Local environment (site-specific)	13.3.2
• Regional environment	13.3.2
2. A description of the regulatory environment/context	13.3.2
• Federal	None

CPUC Requirement	PEA Section Number
<ul style="list-style-type: none"> • State 	None
<ul style="list-style-type: none"> • Local 	13.3.2
4.14 Recreation	11.0
1. A description of the physical environment in the vicinity of the project (e.g. topography, land use patterns, biological environment, etc.)	11.3.3
<ul style="list-style-type: none"> • Local environment (site-specific) 	11.3.3
<ul style="list-style-type: none"> • Regional environment 	11.3.3, 11.3.1
2. A description of the regulatory environment/context	11.3.1
<ul style="list-style-type: none"> • Federal 	None
<ul style="list-style-type: none"> • State 	None
<ul style="list-style-type: none"> • Local 	11.3.1.1, 11.3.1.2
4.15 Transportation and Traffic	14.0
1. A description of the physical environment in the vicinity of the project (e.g. topography, land use patterns, biological environment, etc.)	14.3.2, 14.3.3, 14.3.4, 14.3.5, 14.3.6, 14.3.7
<ul style="list-style-type: none"> • Local environment (site-specific) 	14.3.2, 14.3.3, 14.3.4, 14.3.5, 14.3.6, 14.3.7
<ul style="list-style-type: none"> • Regional environment 	14.3.2, 14.3.3, 14.3.4, 14.3.5, 14.3.6, 14.3.7
2. A description of the regulatory environment/context	14.3.1
<ul style="list-style-type: none"> • Federal 	14.3.1
<ul style="list-style-type: none"> • State 	14.3.1
<ul style="list-style-type: none"> • Local 	14.3.1
4.16 Utilities and Public Services	13.0
1. A description of the physical environment in the vicinity of the project (e.g. topography, land use patterns, biological environment, etc.)	13.3.3
<ul style="list-style-type: none"> • Local environment (site-specific) 	13.3.3
<ul style="list-style-type: none"> • Regional environment 	13.3.3
2. A description of the regulatory environment/context	13.3.3
<ul style="list-style-type: none"> • Federal 	None
<ul style="list-style-type: none"> • State 	None

CPUC Requirement	PEA Section Number
<ul style="list-style-type: none"> Local 	13.3.3
Chapter 5: Environmental Impact Assessment Summary	
<p>5.1 Aesthetics</p> <p>Provide visual simulations of prominent public view locations, including scenic highways to demonstrate the before and after project implementation. Additional simulations of affected private view locations are highly recommended.</p>	<p>Chapter 4.0</p> <p>Figure 4-3A and Figure 4-3B</p> <p>Figure 4-4A and Figure 4-4B</p> <p>Figure 4-5A and Figure 4-5B</p>
<p>5.2 Agriculture Resources</p> <p>Identify the types of agricultural resources affected.</p>	<p>Chapter 11.0</p> <p>11.3.4</p>
<p>5.3 Air Quality</p>	Chapter 5.0
<p>1. Provide supporting calculations / spreadsheets / technical reports that support emission estimates in the PEA.</p>	Appendix B and Appendix C
<p>2. Provide documentation of the location and types of sensitive receptors that could be impacted by the project (e.g., schools, hospitals, houses, etc.). Critical distances to receptors is dependant on type of construction activity.</p>	Locations of sensitive receptors, such as schools, hospitals, and houses that could be impacted by the project are discussed in Chapter 13.0: Population and Housing, Public Services, and Utilities and Service Systems
<p>3. Identify Project Green House Gas (GHG) emissions as follows:</p>	
<ul style="list-style-type: none"> Quality GHG emissions from a business as usual snapshot. That is, what the GHG emissions will be from the proposed project if no mitigations were used 	<p>5.5.2 and 5.5.3</p> <p>Appendix B and Appendix C</p>
<ul style="list-style-type: none"> Quantify GHG emission reductions from every Applicant Proposed Measure that is implemented. Itemize quantifications and place in a table format 	<p>5.5.2 and 5.5.3</p> <p>Appendix B and Appendix C</p>
<ul style="list-style-type: none"> Identify the net emissions of a project after mitigations have been applied. 	<p>5.5.2 and 5.5.3</p> <p>Appendix B</p>
<ul style="list-style-type: none"> Calculate and quantify GHG emissions (CO₂equivalent) for the project including construction & operation. 	<p>5.5.2 and 5.5.3</p> <p>Appendix B and Appendix C</p>

CPUC Requirement	PEA Section Number
<ul style="list-style-type: none"> Calculate and quantify the GHG reduction based on reduction measures proposed for the project. 	5.5.2 and 5.5.3 Appendix B and appendix C
<ul style="list-style-type: none"> Propose Applicant Proposed Measures (APM) to implement and follow to maximize GHG reductions. If sufficient, CPUC will accept them without adding further mitigation measures. 	5.6
<ul style="list-style-type: none"> Discuss programs already in place to reduce GHG emissions on a system wide level. This includes Applicant's voluntary compliance with USEPA SF6 reduction program, reductions from energy efficiency, demand response, LTPP, et al. 	5.6
5.4 Biological Resources - In addition to an Impacts Analysis:	Chapter 6.0
1. Provide a copy of the Wetland Delineation and supporting documentation (i.e., data sheets). If verified, provide supporting documentation. Additionally, GIS data of the wetland features should be provided as well.	Not applicable to this project.
2. Provide a copy of special status surveys for wildlife, botanical and aquatic species, as applicable. Any GIS data documenting locations of special-status species should be provided.	Special status surveys for wildlife, botanical, and aquatic species will be provided separately on CD to the CPUC. Due to the sensitivity of the information, available GIS data will be submitted under PUC Section 853 confidentiality restrictions.
5.5 Cultural Resources - In addition to an Impacts Analysis:	Chapter 7.0
1. Cultural Resources Report documenting a cultural resources investigation of the Proposed Project. This report should include a literature search, pedestrian survey, and Native American consultation.	Due to the sensitivity of the information, the report will be submitted under PUC Section 853 confidentiality restrictions.
2. Provide a copy of the records found in the literature search.	Due to the sensitivity of the information, the report will be submitted under PUC Section 853 confidentiality restrictions.
3. Provide a copy of all letters and documentation of Native	Appendix D

CPUC Requirement	PEA Section Number
American consultation.	
5.6 Geology, Soils and Seismic Potential - In addition to an impacts analysis:	Chapter 8.0
1. Provide a copy of geotechnical investigation if completed, including known and potential geologic hazards such as ground shaking, subsidence, liquefaction, etc.	This report or study is normally performed as part of the detailed design phase of work, which has not yet started. The project schedule shows the engineering design activities to start in the June-July 2010 time frame. A copy of this report will be provided at this time.
5.7 Hazards and Hazardous Materials [Reference and list the documents that apply.] - In addition to an impacts analysis:	Chapter 9.0
1. Environmental Data Resources Report.	To be provided separately to the CPUC on CD
2. Hazardous Substance Control and Emergency Response Plan.	Equivalent to be provided separately to the CPUC on CD
3. Health and Safety Plan.	Equivalent to be provided separately to the CPUC on CD
4. Worker Environmental Awareness Program (WEAP).	Equivalent to be provided separately to the CPUC on CD
5. Describe what chemicals would be used during construction and operation of the Proposed Project. For example: fuels, etc. for construction, naphthalene to treat wood poles before installation.	9.3.3
5.8 Hydrology and Water Quality – In addition to an impacts analysis:	Chapter 10.0
1. Describe impacts to groundwater quality including increased run-off due to construction of impermeable surfaces, etc.	10.4.2, 10.4.3
2. Describe impacts to surface water quality including the potential for accelerated soil erosion, downstream sedimentation, and reduced surface water quality.	10.4.2, 10.4.3

CPUC Requirement	PEA Section Number
5.9 Land Use and Planning - In addition to an impacts analysis:	Chapter 11.0
1. Provide GIS data of all parcels within 300' of the Proposed Project with the following data: APN number, mailing address, and parcel's physical address.	Appendix G, for security reasons, GIS data layers and electronic Excel Spreadsheet will be submitted under PUC Section 583 confidentiality restrictions.
5.10 Mineral Resources - Data needs already specified under Chapter 3 would generally meet the data needs for this resource area.	Chapter 8.0
5.11 Noise	Chapter 12.0
1. Provide long term noise estimates for operational noise (e.g., corona discharge noise, and station sources such as substations, etc.).	12.4.1.2, 12.4.1.3, 12.4.2, 12.4.3, Figure 12-1: Sound Field Prediction for Full Build Out of Three-Bank Configuration
5.12 Population and Housing Data needs already specified under Chapter 3 would generally meet the data needs for this resource area.	Chapter 13.0
5.13 Public Services Data needs already specified under Chapter 3 would generally meet the data needs for this resource area.	Chapter 13.0
5.14 Recreation Data needs already specified under Chapter 3 would generally meet the data needs for this resource area	Chapter 11.0
5.14 Transportation and Traffic Describe the likely probable routes that are the subject of the traffic analysis.	Chapter 14.0
1. Discuss traffic impacts resulting from construction of the Proposed Project including ongoing maintenance operations.	14.4.2, 14.4.3
2. Provide a preliminary description of the traffic management plan that would be implemented during construction of the	The traffic management plan has not yet been prepared as it will be

CPUC Requirement	PEA Section Number
Proposed Project.	subject to site-specific conditions based on the location of the work along the ROW and engineering design. The Pedestrian and Traffic Control Plan will be submitted to the CPUC staff once developed.
5.16 Utilities and Services Systems	13.0
1. Describe how treated wood poles would be disposed of after removal, if applicable.	1.6.4.1, 1.6.5.1, 13.4.2.3
5.17 Cumulative Analysis	15.0
1. Provide a list of projects (i.e., past, present and reasonably foreseeable future projects) within the Project Area that the applicant is involved in.	Table 15-1: Planned and Current Projects in the Vicinity of the Project
2. Provide a list of projects that have the potential to be proximate in space and time to the Proposed Project. Agencies to be contacted include but are not limited to: the local planning agency, Caltrans, etc.	Table 15-1: Planned and Current Projects in the Vicinity of the Project
5.18 Growth-Inducing Impacts, If Significant	15.0
1. Provide information on the Proposed Project's growth inducing impacts, if any. The information should include, but is not necessarily limited, to the following:	
<ul style="list-style-type: none"> Any economic or population growth, in the surrounding environment that will directly or indirectly, result from the Proposed Project 	15.2.2
<ul style="list-style-type: none"> Any increase in population that could further tax existing community service facilities (i.e., schools, hospitals, fire, police, etc.), that will directly or indirectly result from the Proposed Project 	15.2.3, 15.2.4, 15.2.5, 15.2.6
<ul style="list-style-type: none"> Any obstacles to population growth that the Proposed Project would remove 	15.2.2, 15.2.6
<ul style="list-style-type: none"> Any other activities, directly or indirectly encouraged or facilitated by the Proposed Project that would cause population growth that could significantly affect the environment, either individually or cumulatively 	15.2, 15.2.2, 15.2.3, 15.2.4, 15.2.5, 15.2.6
Chapter 6: Detailed Discussion of Significant Impacts	Not applicable to this project.
Note: With implementation of PG&E's APMs, all impacts will be less than	

CPUC Requirement	PEA Section Number
significant. Therefore this chapter is not required.	
6.2 Description of Project Alternatives and Impact Analysis	2.0
1. Provide a summary of the alternatives considered that would meet most of the objectives of the Proposed Project and an explanation as to why they were not chosen as the Proposed Project.	2.2.1, 2.4, 2.6
2. Alternatives considered and described by the Applicant should include, as appropriate:	2.0
a. System or facility alternatives	2.5.1, 2.5.2, 2.5.3, 2.5.4
b. Route alternatives	Not applicable to this project
c. Route variations	Not applicable to this project
d. Alternative locations.	2.3, 2.4
3. A description of a “No Project Alternative” should be included.	2.3.4
4. If significant environment effects are assessed, the discussion of alternatives shall include alternatives capable of substantially reducing or eliminating any said significant environmental effects, even if the alternative(s) substantially impede the attainment of the project objectives, and are more costly.	2.3, 2.4
6.3 Growth-Inducing Impacts	15.0
Information required to analyze the Proposed Project’s effects on growth would vary depending on the type of project proposed. Generally, for transmission line projects the discussion would be fairly succinct and focus on the following:	
1. Would the Proposed Project foster economic or population growth, either directly or indirectly, in the surrounding environment?	15.2.2
2. Would the Proposed Project cause an increase in population that could further tax existing community service facilities (i.e., schools, hospitals, fire, police, etc.)?	15.2.3, 15.2.4, 15.2.5, 15.2.6
3. Would the Proposed Project remove obstacles to population growth?	15.2.3, 15.2.4, 15.2.5, 15.2.6
4. Would the Proposed Project encourage and facilitate other activities that would cause population growth that could significantly affect the environment, either individually or cumulatively?	15.2, 15.2.3, 15.2.4, 15.2.5, 15.2.6
6.4 Applicant Proposed Measures to address GHG Emissions	5.6, GHG Emissions and PG&E’s associated

CPUC Requirement	PEA Section Number
	Avoidance and Protection Measures are discussed in Chapter 5.0: Air Quality Chapter
See the menu of suggested APM's in PEA Checklist Section 6.4 that applicants can consider. Applicants can and are encouraged to propose other GHG reducing mitigations. Priority is given to on-site and/or near by mitigation measures. Off-site mitigation measures within California will be considered.	
Chapter 7: Other Process-Related Data Needs	
<ol style="list-style-type: none"> Excel spreadsheet that includes all parcels within 300 feet of any project component with the following data: APN number, owner mailing address, and parcels physical address. [Note: notice of all property owners within 300 feet is required under GO 131-D.] 	Appendix G, For security reasons, GIS data layers and electronic Excel Spreadsheet will be submitted under PUC Section 583 confidentiality restrictions.