

# PG&E Removal Plan for Permanently Abandoned Transmission Facilities

PG&E Update to Resolution SED-6

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## 1. Executive Summary

This document reports on Pacific Gas and Electric Company's (PG&E) plan to resolve the remedial actions set forth in Resolution SED-6 and the resulting Administrative Consent Order (ACO) agreed upon by the California Public Utilities Commission (CPUC) Safety and Enforcement Division (SED) and PG&E regarding the 2019 Kinkade Fire pursuant to Resolution M-4846.

Subject to Resolution SED-6 becoming final, PG&E agrees to pay a \$40 million fine to the General Fund of the State of California and to not seek rate recovery of capital expenditures in the amount of \$85 million for the permanent removal of abandoned transmission facilities within its service territory, for a total of \$125 million. Part of the agreement includes PG&E developing and implementing a comprehensive plan to remove identified permanently abandoned transmission facilities within PG&E's service territory.

This document and accompanying attachment outlines PG&E's plan to remove 72 permanently abandoned transmission facilities over a ten-year period, the planned year(s) and cost for removal for each facility, the complexity of the removal, as well as the assumptions built into the removal schedule.

PG&E has appropriated \$85M for the removal of approximately 86% of the permanently abandoned circuits by 2024, with the remaining 14% removed by the end of 2031. The 72 permanently abandoned facilities have been prioritized for removal based on wildfire concerns on lines where the likelihood of induction is significant, public safety, and lines in need of repair. Facilities have been evaluated for their complexity of removal, considering permitting, easements, and clearances required. After prioritization based on wildfire and public safety concerns, the complexity of the line removal was used to efficiently plan for removal of as many idle facilities as possible by 2024.

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## 2. Permanently Abandoned Transmission Line Overview

Transmission idle facilities that have been determined by PG&E to have no near future use are referred to as “permanently abandoned.” PG&E has developed a process for identifying, investigating, and documenting such facilities. The removal of permanently abandoned transmission facilities in the system is an essential component of PG&E’s strategy of minimizing wildfire risks and ensuring public safety.

Currently, there are (approximately) 72 identified abandoned transmission assets for permanent removal known to PG&E as of November 2021. The list or the prioritization of lines on the list may be subject to change if the scopes for the identified locations are reduced or increased, or new locations are identified for removal over the next 10 years. These lines have been identified through communication across Transmission and Distribution Line personnel (supervisors, operations, inspections, mapping, and customer relations). Examples of ways that transmission lines can become permanently abandoned include line rerouting, the closure or reconfiguration of transmission line customers or generation facilities.

Permanently abandoned transmission facilities can be classified as

- I. Partial Idle Line – This description is used to identify certain spans and/or structures in an otherwise active circuit that are de-energized and permanently abandoned.
- II. Whole Idle Line – This description is used to identify ENTIRE circuits that are permanently abandoned.

## 3. Scope of Permanently Abandoned Transmission Line Removal

PG&E’s program to remove permanently abandoned facilities has identified 72 whole or partial idle circuits in the system as of November 2021. PG&E will remove the conductors and structures (where applicable) associated with the 72 permanently abandoned transmission lines or portions of lines in its service territory, as required by General Order 95, Rule 31.6, over a ten-year period. Table 1 shown below outlines over the next 10 years, the number of circuits that will be in process of removal per year, and the estimated costs for removal each year, totaling at a minimum \$85M in the first three years and approximately \$134M - \$268M over the 10-year program, by showing two (2) columns that represent expected cost and a worst-case cost scenario by adding an industry practiced AACE Class 5 score.

As the grid continues to evolve, PG&E may identify additional permanently abandoned circuits that will be added to the plan for removal.<sup>1</sup> The costs of removal for these lines incurred before January 1, 2025 (if any) may be applied towards the \$85M. PG&E will communicate plan updates to the SED in the regular semiannual/annual program updates.

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<sup>1</sup> Rarely PG&E may determine that lines previously designated as permanently abandoned have a newly ascertained foreseeable future use. These facilities may be removed from the plan.

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An AACE Class 5 estimate is being applied to reflect an increase of +100%/- 50% based on the initial phase of each project.

Table 1: Scope overview for removal of PG&E’s permanently abandoned facilities

Year	Expected Case Spend for Removal, Per Year TOTAL: \$134M	Worst Case Spend for Removal, Per Year TOTAL: \$268M
2022	\$16.3M	\$32.6M
2023	\$39.3M	\$78.6M
2024	\$39.6M	\$79.2M
2025	\$5.7M	\$11.4M
2026	\$5.8M	\$11.6M
2027	\$4.9M	\$9.8M
2028	\$4.9M	\$9.8M
2029	\$7.6M	\$15.2M
2030	\$6.1M	\$12.2M
2031	\$3.7M	\$7.4M

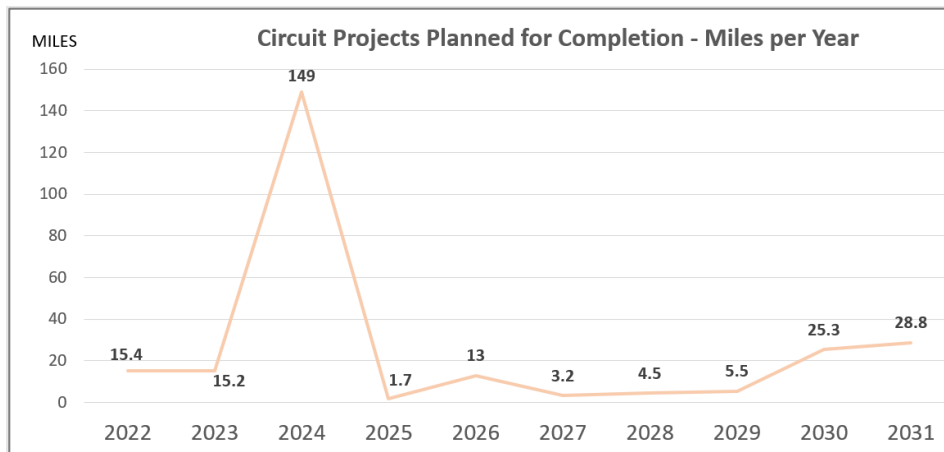


Figure 1: Permanently abandoned circuit miles in scope for removal by year

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## 3.1 Removal Prioritization and Complexity

PG&E has prioritized the removal of these facilities (from 2022 to 2024) based on the following criteria:

1. **Induction Concern** – Voltages and currents can be induced into de-energized permanently abandoned transmission conductors that are located close to other energized transmission lines by the electric and magnetic fields created by the energized lines. At the right conditions, failing idle facilities can pose significant wildfire and safety risks. PG&E has given priority to circuits with significant induction risk for removal. We have identified five (5) circuit locations for removal within 2022-2024 in this category.
2. **Public Safety** – Permanently abandoned transmission facilities that are in areas that have higher exposure to public spaces are the next set of facilities prioritized for removal. Such public locations include parks, highway and river crossings, airports etc. – unremoved permanently abandoned facilities can pose safety risks to the public in the event of an unexpected failure of any of the associated components. We have initially identified twenty-two (22) circuit locations where 13 locations are to be completed within 2022-2024. Two (2) circuit locations are scheduled within 2025-2031 due to higher scope complexity and needing more time for construction removal. Another seven (7) circuit locations have been removed and/ or are still in use as Distribution voltage and therefore, structures will not be removed.
3. **Lines in Need of Repair** - Permanently abandoned transmission facilities that have the highest volume of maintenance tags per circuit mile will also be prioritized for removal. The removal of these facilities will eliminate the potential for equipment failure as well as the time and costs associated with their inspection and maintenance.

After prioritization based on the above factors, the complexity of the line removal was considered to efficiently plan for removal as many idle facilities as possible by 2024.

PG&E assigned an **execution complexity assessment** to each facility identified for removal ranging from low, medium, and high. PG&E developed the execution complexity assessment based on a holistic view of the facilities, considering items such as line location, scope of removal, special needs (i.e., permitting, construction access, environmental review, and public safety). The impact of the assessment reflects project planning prior to and during construction. Therefore, the higher the **execution complexity assessment**, the schedule for planning, scoping, and completion of removing the line would be more extensive and complex.

For the first 3 years of the program, PG&E is targeting lower to medium complexity assessed projects with a few higher assessed (high priority) with the rationale that they can be executed quicker and support overall public safety. It should also be noted that the circuits identified for the first 3 years of removal have also been pre-identified as a priority of circuits with a high risk of induction, maintenance

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tags, and structures that hinder public safety. The next seven (7) years of the program will encompass the remaining higher complexity projects (Figure 2 and Appendix Figure 3).

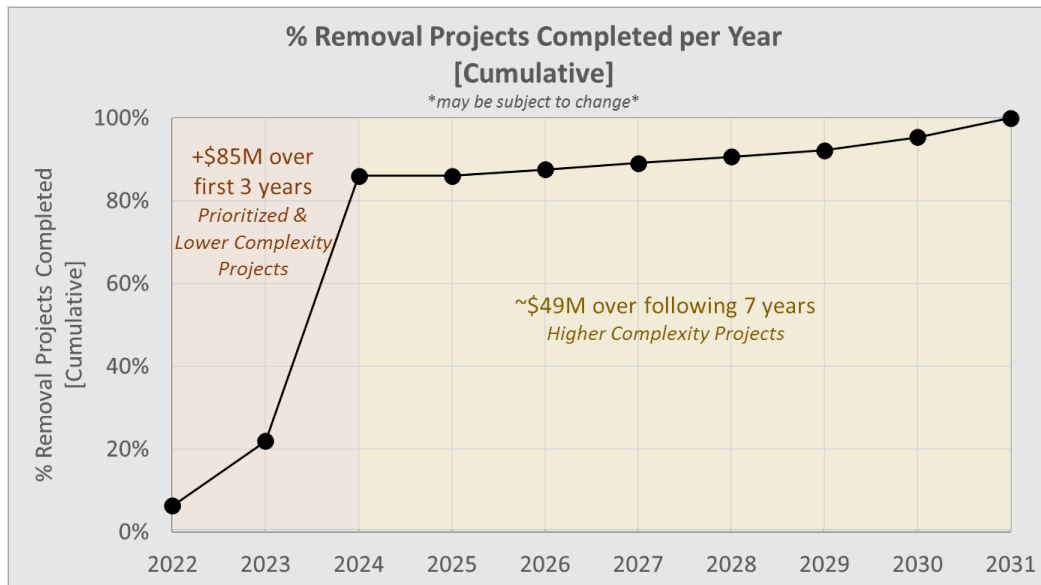


Figure 2: Cumulative completion of removal projects by year. Prioritized and lower complexity projects are completed in the first three years, spending +\$85M. The remaining higher complexity removal projects are completed in the following seven years, spending approximately \$49M.

## 3.2 Scope of Removal

The scope in Table 1 that reflects costs for removing permanently abandoned transmission facilities were evaluated based on structure type, permanently abandoned lines on double-circuit structures with active lines, and Distribution use of abandoned Transmission facilities.

Examples of the variety of removal scope include but are not limited to the following:

- Transfer of transmission line (not in use) to Distribution (for current usage) that requires minor construction.
- Removal of transmission line only on wood or light duty poles structures.
- Removal of transmission line on wood pole/light duty steel pole structures and/or topping of poles.
- Removal of transmission line on steel structures only (i.e., tubular steel poles and/or towers).
- Removal of transmission line and steel structures (i.e., tubular steel poles and/or towers).

## 3.3 Schedule Assumptions

The assumptions listed below were used in creation of the schedule and costs for the removal of the 72 permanently abandoned transmission facilities.

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- CPUC permit is not required for the removal of the lines (i.e., no Notice of Construction - NOC or Permit to Construct - PTC).
- Administrative permits will be required, as necessary (i.e., Caltrans, railroad, encroachment, and Storm Water Prevention and Pollution Program - SWPPP).
- Temporary Construction Easements (TCEs) may be required for the project(s).
- Although there is a preliminary schedule and plan, there will be a need for flexibility based on schedule delays, etc.
- Our work methods and equipment usage are typical of construction line work, including but not limited to helicopters, cranes, bucket trucks, and site access improvements.
- Typical with line work, mitigation plans may be needed after reviewing the environmental impact(s).
- Potential scope change(s) may result if new analyses indicate removal is unnecessary due to an existing or future use.

### 3.4 Schedule Risks

The risks listed below have been considered and may affect PG&E's execution to meet the schedule outlined in these documents. PG&E will modify the schedule as needed while still meeting the remedial actions outlined in Resolution SED-6.

- A planned schedule may be delayed due to permit approvals taking longer than the normal processing timelines.
- Construction resources may be redeployed for emergency work (e.g., storm, fire).
- Necessary clearances for neighboring circuits may be cancelled and/or denied by our internal operations department or the ISO (where subject to ISO approval).
- Inclement weather may delay the construction schedule.
- Due to current global supply delays, there is a potential risk of lack of in-stock material. Though material is not a major component for the removal program, there are locations where material may be required.

## 4. Recovery of Costs

Under Section III.B. of the Settlement Agreement and as approved by Resolution SED-6, PG&E agreed not to seek recovery of \$85 million in costs incurred by December 31, 2024, to remove permanently abandoned transmission facilities. If Resolution SED-6 becomes final, PG&E will not seek to recover \$85 million in costs associated with the removal of these facilities.

Depreciation rates for electric transmission facilities include accruals for the estimated future cost of removal at the asset class level, not by individual assets or facilities. This means that any amounts that have been collected for the future cost of removal are applied to the asset

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class. Thus, PG&E has, overtime, accrued amounts for the removal of transmission facilities. But those recoveries have not been accrued as to individual facilities.

Generally, amounts accrued for cost of removal decrease rate base by increasing Accumulated Depreciation. When removal costs are incurred, they are recorded as a reduction to Accumulated Depreciation, increasing rate base. To not seek recovery of \$85 million in removal costs, PG&E will record the \$85 million of removal costs to Below the Line expense, rather than to Accumulated Depreciation. By not reducing Accumulated Depreciation by \$85 million, PG&E's customers will receive the benefit of a rate base remaining lower by \$85 million. Further, under group depreciation, these amounts will be used to offset the estimated removal costs needed for PG&E's remaining transmission facilities. This typically results in lower depreciation rates as compared to the result if these amounts were removed from accumulated depreciation.

Once PG&E has incurred \$85M in removing the lines, PG&E will provide data to SED showing which lines in the plan have been removed and associated costs. PG&E will also provide documentation showing the costs recorded to Below the Line expense. SED will have the opportunity to examine the documentation and seek further explanation.

## 5. City/ County Communications

PG&E will communicate with public officials within the city/ county jurisdictions as to the planned work and schedule for any identified idle line to be removed. PG&E will adhere to all required permits and working conditions as set forth by local jurisdictions. Communicated detailed work plans and schedule will be concurred by all parties with public safety being paramount.

## 6. Conclusion

The Phase 1 execution of this program, occurring through December 31, 2024, will encompass spending \$85 million or more. Phase 2 execution will complete the remaining removals by 2031. PG&E will adhere to all internal standards for removal, construction, and public safety. PG&E intends to execute the work as planned, but the identified locations for removal may be subject to change to reach the goal of \$85 million spend or more in the first 3 years.

## Attachments

Map of each of permanently abandoned transmission facilities:

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## Appendix

List of permanently abandoned transmission facilities, location, scope, and anticipated schedule for removal:<sup>†</sup>

Circuit Name	ETL	Design Voltage	Idle Line Section of Structures (numbering sequence)	Miles of the Idle Section for Removal	County Location	Scope of Work	Forecasted Scheduled Work (by years)	Execution Complexity Assessment
<b>Agnew Tap 115kV</b>	ETL.3122	115 kV	Entire line (000/007-000/019)	1.32	043-Santa Clara County	Remove conductor and top wood poles. Zanker #1 pole 000/0007 through Agnew 000/001-000/019.	2022-2024	Medium
<b>Brighton - Grand Island #'s 1 &amp; 2 115kV - Phase 2</b>	ETL.1150	115 kV	041/307 to 043/324	2.4	034-Sacramento County	Remove conductor from Tower 041/307 to 041/311B, remove Towers 041/307 to 043/324 and foundations	2022-2024	Medium
<b>Brighton-Clayton #'s 1&amp;2 115kV - Phase 2</b>	ETL.1130	115 kV	050/377 to 51/386	1.5	007-Contra Costa County	Remove 10 Towers and both 115kV circuits 1 # 2 @ 1.5 miles	2022-2024	Medium
<b>Brighton-Davis 115kV - Pt. 1</b>	ETL.1140	115 kV	Pt. 1: :000/118E to 000/114D	<b>Pt. 1:</b> 4.5	048-Solano County	<b>Pt. 1:</b> Remove 32 towers and 4.5 miles of conductor	2025-2031	High
<b>Brighton-Davis 115kV - Pt. 2</b>	ETL.1140	115 kV	Pt. 2: :000/118E to :000/130E	<b>Pt. 2:</b> 13	048-Solano County	<b>Pt. 2:</b> Remove 87 towers and 13 miles of conductor	2025-2031	High
<b>Brighton-Oleum - Phase 2</b>	ETL.1162	115 kV	149I - 148E	1.5	007-Contra Costa County	Need to top poles and remove conductor. ET GIS reflects Underbuild. Transfer assets to Distribution.	2025-2031	High

<sup>†</sup> The identified lines, the scope of removal for an identified line, or the schedule for removal are subject to change.



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Circuit Name	ETL	Design Voltage	Idle Line Section of Structures (numbering sequence)	Miles of the Idle Section for Removal	County Location	Scope of Work	Forecasted Scheduled Work (by years)	Execution Complexity Assessment
California Avenue-Kearney	ETL.8530	70 kV	000/002 to 016/015A	3.22	010-Fresno County	013/013 (000/002 West Fresno-Cal Ave) to 016/015A, Remove 3.2 miles of conductor and 53 poles.	2022-2024	Low
Caribou Palermo	ETL.3190	115 kV	11/087 to :033/266	23	032-Plumas County	In Construction - 2022: remove 23 miles conductor 11/87 to 33/266, Tower removals (192) to follow	2022-2024	High
Caribou Table Mtn - Guest	ETL.4440	230 kV	049/349 to 049/351 (sharing tower on Caribou-Table-Mtn circuit)	0.13	004-Butte County	Remove Guest conductor between 049/349 to 049/351 (Note: sharing tower on Caribou-Table-Mtn circuit)	2022-2024	Low
Caribou-Westwood 60kV	ETL.6300	60 kV	019/399 to Mt Lassen Power Sub, 3 spans deenergized on June 11, 2020	0.07	018-Lassen County	Remove conductor and 2 poles (3 spans) from 019/399 to Mt Lassen Power Sub.	2022-2024	Low
Christie Franklin #1 & #2	ETL.6350	60 kV	A003/51 to A004/069	1.6	007-Contra Costa County	Remove 1.6 miles of conductor from A003/51 to A004/069 and top 12 wood poles (1.5 miles) (A003/51-55) and (A004/63-69), double circuit with #2 from A003/57-62.	2022-2024	Medium
Chualar Tap	ETL.8012	60 kV	000/001 through 001/030 (between 14/261 Soledad #2 through 14/277 Soledad #1)	1.43	027-Monterey County	Remove 1.4 miles of Conductor and Top Wood Poles (30) from 000/001 thru 001/030 (between 14/261 Soledad #2 thru 14/277 Soledad #1). Once complete, transfer new asset to Distribution.	2022-2024	Low
Cic Tap	ETL.6971	60 kV	000/001 (Green Vly-Watsonville 003/072) to 000/003	0.13	044-Santa Cruz County	Remove Conductor and Top Wood Poles between 000/001 (3/72 Green Valley-Watsonville) thru 00/03 Cic Cogen. Once complete, transfer new asset to Distribution.	2022-2024	Medium

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Circuit Name	ETL	Design Voltage	Idle Line Section of Structures (numbering sequence)	Miles of the Idle Section for Removal	County Location	Scope of Work	Forecasted Scheduled Work (by years)	Execution Complexity Assessment
<b>Contra Costa - Moraga #2</b>	ETL.5453	230 kV	The unnumbered structure (Contra Costa-Moraga #1 - Tower 000/001B) has energized conductors that run to the Contra Costa Moraga #2 000/001A and Contra Costa PP Sw STA.	0.12	007-Contra Costa County	Remove Contra Costa-Moraga #1 circuit from Tower 000/001B through 000/001A to Contra Costa PP SW STA and remove Tower 000/001B.	2022-2024	Low
<b>Contra Costa-Du Pont</b>	ETL.6530	60 kV	002/0021 to 002/024	0.32	007-Contra Costa County	Remove circuit and 5 towers from 002/0021 (or start 002/0020 (001/041 CC-Balfour)) to 002/024. Bundle removal with Dupont Tap and GWF #4 (all same towers)	2022-2024	Medium
<b>Contra Costa-Shell Chemical #1</b>	ETL.6550	60 kV	A009/006A - (on circuit Willow Pass Contra Costa), 000/020 to 010/126	9.55	007-Contra Costa County	Remove conductor from A009/006A (Willow Pass-Contra Costa) to 010/126. Conductor removal only, double circuit - shares structures with Willow Pass-Contra Costa. Has Distribution Underbuild	2025-2031	High
<b>Cordelia Interim pumps tap</b>	ETL.8183	60 kV	000/001 (Switch 45) to 000/008	0.36	048-Solano County	Remove conductor from 002/055 (Cordelia #1 Tap) thru 00/01 to 00/08, remove poles 00/01 to 00/08	2022-2024	Low
<b>Dean Foods Tap</b>	ETL.6972	60 kV	SW's 65,67,69 - poles 001-005 (topped), 006-011 removed	0.45	044-Santa Cruz County	Remove conductor and Top Poles from 000/001 to 000/005, remove conductor and poles from 000/006 to 000/011. Remove SW's 65,67,69	2025-2031	Medium
<b>Divide-Zaca-Lompoc (Distribution)</b>	ETL.8631	70 kV	001/005 to 012/005	10.52	042-Santa Barbara County	Energized at Distribution, Transfer assets only	2022-2024	Low

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Circuit Name	ETL	Design Voltage	Idle Line Section of Structures (numbering sequence)	Miles of the Idle Section for Removal	County Location	Scope of Work	Forecasted Scheduled Work (by years)	Execution Complexity Assessment
<b>Drum-Higgins 115 kV</b>	ETL.4393	115 kV	013/127 to B009/088	4.03	029-Nevada County	Remove 4 miles of conductor and 22 towers from 013/127 to B009/008. Located in Tier 3 area.	2022-2024	Medium
<b>DU PONT TAP</b>	ETL.8421	60 kV	002/021 to A002/048	0.52	007-Contra Costa County	Remove circuit only from 002/021 (or 002/020) to A002/048, double circuit with Contra Costa - Du Pont. 6 Towers. Bundle work with GWF #4 and Contra Costa-Du Pont	2022-2024	Medium
<b>Eagle Rock-Fulton-Silverado</b>	ETL.4392	115 kV	003/16 to 003/016C; Energized 003/016-003/016B; De-energized 003/016B-003/016C	0.34	049-Sonoma County	Remove conductor only from 003/16 to 003/016C, remove 2 Towers 003/16B to 003/16C. Shares towers with Geysers #17 where that conductor and towers will be removed.	2022-2024	Low
<b>Fulton Molino Cotati</b>	ETL.6910	60 kV	004/080 to 008/134	0.36	049-Sonoma County	Remove conductor and poles from 04/080 tap from Fulton-Santa Rosa #1 to 8/134 Tap, 6 poles to be removed 004/017 thru 004/022	2022-2024	Low
<b>Fulton-Lakeville-Ignacio 230kV</b>	ETL.2823	230 kV	010/054 to 025/127	15.8	049-Sonoma County	Remove 15.8 miles of 230kV conductor only from 010/054 to 025/127 (shares towers with the Fulton-Ignacio #1 230kV circuit).	2022-2024	Medium
<b>Geysers #17-Fulton 230 kV</b>	ETL.4770	230 kV	003/016-003/016C	0.34	049-Sonoma County	Remove conductor from 003/16 to 003/016C, remove 3 Towers 003/16A to 003/16C.	2022-2024	Low
<b>Gish Tap</b>	ETL.4031	115 kV	000/005 to 000/023	0.8	043-Santa Clara County	Remove 1 mile of conductor and 23 poles from 000/001 to 000/023. 0/016 0/017 Public exposure and tags	2022-2024	Medium

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Circuit Name	ETL	Design Voltage	Idle Line Section of Structures (numbering sequence)	Miles of the Idle Section for Removal	County Location	Scope of Work	Forecasted Scheduled Work (by years)	Execution Complexity Assessment
<b>GWF #4 TAP</b>	ETL.6531	60 kV	000/003 to 002/022 (Contra Costa-Du Pont)	0.25	007-Contra Costa County	Remove circuit starting at 002/022 (Contra Costa-Du Pont) through 000/003 and 3 towers (000/001 - 000/003). Bundle work with Contra Costa-Du Pont and Du Pont Tap.	2022-2024	Medium
<b>GWF Hanford Cogen Tap</b>	ETL.8723	70 kV	000/001 (SW55) to 000/007	0.32	016-Kings County	Remove circuit from 001 -007. Remove 2 Poles (001 and 007). Double circuit with Armstrong Tap 003-006.	2025-2031	Medium
<b>Heinz Tap</b>	ETL.2193	115 kV	00/01 to SW 115 (5 spans de-energized at transmission on 06-30-2020); SW115 to 000/018 (12 spans Energized by Distribution on Transmission Assets) (18 total spans)	0.8	039-San Joaquin County	Top Poles and remove conductor from 00/001 to 00/006 (SW 115). 00/006 (SW115) to 00/018 Energized at Distribution - transfer assets.	2022-2024	Low
<b>Herdlyn Balfour</b>	ETL.7050	60 kV	AA005/117 to AA008/204	4.14	007-Contra Costa County	Remove 4 miles of transmission conductor from AA005/117 to AA008/204 and topping poles. Has Distribution Underbuild.	2022-2024	Medium
<b>JR WOODS TAP</b>	ETL.1034	115 kV	000/011A to 000/001 to 000/008	0.23	024-Merced County	Remove conductor and poles starting from 000/011A (Atwater-Cressey) thru 000/001 (SW 125) thru 000/008	2022-2024	Low
<b>KERMAN (HWY 145 &amp; CHURCH AVE)</b>		60 kV	001/012 to 001/014	0.1	010-Fresno County	This is on distribution circuit Kerman-1103. This structure underbuild SAP_ID is 100648064.	2022-2024	Low

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<b>Kern Oil- Mt Poso.</b>	ETL.1212	70 kV	001/001 to Pole inside Kern Oil Substation (No observed Structure Number)	1.08	015-Kern County	Remove 1.1 miles of conductor and 14 poles from 001/001 (Live Oak SW Sta) to 00/001 (Kern Oil Substation)	2022-2024	Low
<b>Kern-Kern Oil-Famoso</b>	ETL.8870	70 kV	000/001 - A018/293	24.69	015-Kern County	Remove .7 miles of conductor and 11 poles from 000/001 (Kern PP) to 000/011, remove 4.7 miles conductor from 000/011 - 004/032 (Kern-Famoso/Kern-Live Oak, remove 14.5 miles of conductor and 254 poles from A004/039 (004/032) to A018/293 (Famoso Sub) and 1.6 miles conductor 004/032 - 006/051 (Kern-Famoso / Kern Live Oak) and .8 miles conductor 006/051 to 024/002(Kern-Famoso/Lerdo-Kern) and 2.71 miles conductor and 19 poles from 024/002 to 027/002 (Kern Oil Sub)	2025-2031	High
<b>Kilarc-Deschutes</b>	ETL.7300	60 kV	A026/553 to A024/501; 022/468 to A022/469	3.91	045-Shasta County	Topping poles A026/553 to 022/468. Transfer to Distribution.	2022-2024	Low
<b>Lawrence-Livermore Labs #2 115kV Phase 2</b>	ETL.3981	115 kV	000/002 - 006/045	6.4	001-Alameda County	Remove 6.4 miles of conductor and 40 towers/2 poles from 000/002 - 006/045. Do in 2022.	2022-2024	Medium
<b>Lee Tap Idle Removal</b>	ETL.7461	60 kV	000/000 to 002/061	3.24	039-San Joaquin County	Remove conductor and Top Poles 000/001 to 003/007, transfer to Distribution.	2022	Medium

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<b>Lightner Tap</b>	ETL.8542	70 kV	000/001 to 003/056 (de-energized)	3.06	015-Kern County	Remove 3 miles of conductor and Top Wood Poles (56) from 000/001 to 003/056. Has Underbuild, transfer to Distribution	2022-2024	Low
<b>Llagas-Hollister</b>	ETL.2911	115 kV	SW 185 to 027/176 (Section converted for Distribution); 020/126B to Tower 027/174	21.56	035-San Benito County	Transfer circuit to Distribution from 000/00A (SW 185) to 027/176. From 000/00C (029/186) to 027/174, shares Towers with Metcalf-Salinas #1. Remove or Transfer from 020/126B to 027/174 - this section shares Towers with Metcalf-Salina #2. Verify scope from 000/0001 to 011/183.	2022-2024	Medium
<b>Los Banos Mercy Springs SW STA</b>	ETL.8929	70 kV	089/391 to 000/001 to Pacheco Wind Power	0.03	024-Merced County	Remove conductor from Tower 89/391 (shared with Los Banos-Padre Flat) to pole 000/001 to Pacheco Wind Power. Remove Pole 000/001	2022-2024	Low
<b>LOS BANOS PACHECO 70KV</b>	ETL.8960	70 kV	081/356 to 077/336	4.48	024-Merced County	Remove 4.5 miles of conductor and 20 Towers from 081/356 to 077/336	2022-2024	Low
<b>Mendocino # 1</b>	ETL.7530	60 kV	000/001 to 009/000 (009/002 on Mendocino-Philo Jct-Hopland)	9.2	023-Mendocino County	Remove 9.2 miles of conductor from 000/001 to 009/000. Remove 56 poles from 000/001 to 005/000. Double circuit at 005/001 to 009/000 with Mendocino-Philo Jct-Hopland.	2022-2024	Medium
<b>Metcalf-Hicks#1 and #2</b>	ETL.4317	115 kV	008/044 - 003/017E; 005/027 - 001/011	6.62	043-Santa Clara County	Total line to be transferred to Distribution, 008/044-00/023	2022-2024	Medium

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Circuit Name	ETL	Design Voltage	Idle Line Section of Structures (numbering sequence)	Miles of the Idle Section for Removal	County Location	Scope of Work	Forecasted Scheduled Work (by years)	Execution Complexity Assessment
						(03/017E) & Tap 005/027 to 001/011		
<b>Metcalf-Salinas #1 115kV</b>	ETL.1721	115 kV	027/174 - 029/186	1.94	035-San Benito County	Transfer to Distribution from 029/186 (000/00C) to 027/174, this section shares Towers with Llagas-Hollister (bundle same scope as Llagas-Hollister)	2022-2024	Low
<b>Metcalf-Salinas #2 115kV</b>	ETL.1731	115 kV	020/127 - 027/174	6.8	043-Santa Clara County	Transfer to Distribution from 020/127 to 027/174 - this section shares Towers with Llagas-Hollister (same section of scope section as Llagas-Hollister, bundle transfer scope).	2022-2024	Low
<b>Newark-Decoto</b>	ETL.7650	60 kV	000/001 to 100/677	6.28	001-Alameda County	Remove 6.3 miles of conductor only from 100/636 (000/001) to 100/677. Remove pole 000/001. Circuit shares structures with Newark-Vallecitos	2025-2031	High
<b>Newark-Lawrence Lab 115kV</b>	ETL.3060	115 kV	015/094 to 001/021	12.21	001-Alameda County	Remove 12.2 miles of conductor only from 001/021 (002/025) to 015/094. Double circuit with Newark-Livermore	2022-2024	High
<b>Newark-Sierra PPRBRD Tap</b>	ETL.8111	60 kV	Newark Sierra Paperboard Substation to Switch 15 (de-energized); SW 15 to Stockton A #1 60kV (1 de-energized span. Span de-energized on	0.29	039-San Joaquin County	Remove .3 miles of conductor and 6 poles from 000/023 (Stockton A #1) to 000/001 (SW 15) to 000/0006.	2022-2024	Medium

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Circuit Name	ETL	Design Voltage	Idle Line Section of Structures (numbering sequence)	Miles of the Idle Section for Removal	County Location	Scope of Work	Forecasted Scheduled Work (by years)	Execution Complexity Assessment
			06-15-2020), total of 7 spans					
<b>Pacific Oroville Power</b>	ETL.7731	60 kV	004/094 to 000/013, 13 spans energized. De-energization completed on 6/4/2021	0.77	004-Butte County	Remove .77 miles of conductor and 13 wood poles from 000/001 to 000/013	2022-2024	Medium
<b>PENN ZIER TAP</b>	ETL.8575	70 kV	004/000 to 003/007, 1 span energized	0.22	010-Fresno County	Remove .22 miles of conductor and 1 wood pole 004/000, to 003/007	2022-2024	Low
<b>Pit #1-Hat Creek #2-Burney (foreign section)</b>	ETL.7040	60 kV	9/169 to foreign owned poles (non PG&E idle)	0.4	045-Shasta County	Remove .04 miles of conductor from 9/169 to 1 span - and 1-2 poles.	2022-2024	Low
<b>Pittsburg #1 Tap</b>	ETL.6551	60 kV	001/016 - 005/060	1.15	007-Contra Costa County	Transfer to Distribution only, 000/001 (005/060 Contra Costa - Shell) to 001/016, double circuit with Pittsburg #2.	2022-2024	Medium
<b>Port Costa Brickyard Tap Removal</b>		60 kV	001/023 to 000/001 (21.5 de-energized spans)000/001 to 002/025 (towards Christie-Willow Pass), 1.5 spans de-energized on 06-10-2020	1.9	007-Contra Costa County	Remove 1.9 miles of conductor and 30 poles from 000/001 to 001/023, remove conductor between 000/001 to 002/025 (Christie-Willow Pass)	2022-2024	Medium
<b>Rio Bravo-Kern Oil 115kV</b>	ETL.1922	115 kV	A014/108 to 017/000 (Energized at distribution voltage); 017/000 to 019/004 De-energized (2.34 miles)	2.3	015-Kern County	Transfer to Distribution A014/108 (Midway-Tupman-Rio Bravo) to 017/000 (Energized at distribution voltage); 017/000 to 019/004 De-energized (2.34 miles) - Remove conductor and 17 lattice steel poles.	2025-2031	High



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San Francisco #2	ETL.3279	115 kV	003/030 - 006/050	3.15	041-San Mateo County	Remove 3.15 miles of conductor only from Tower 003/030 to Tower 006/050. Double circuit with Ravens Wood-San Mateo.	2025-2031	High
San Joaquin Cogen	ETL.4012	115 kV	Switch 135 to San Joaquin Cogen Substation rack	0.04	039-San Joaquin County	Remove .04 miles of conductor and 2 wood poles from 005/013 (Stockton-Lockford-Bellota) - 000/001 to 000/002 - to San Joaquin Cogen.	2025-2031	Low
Sanger-California Ave #1	ETL.9120	70 kV	000/003 to 009/007	9.23	010-Fresno County	Remove 9.23 miles of conductor and 171 poles from 000/003 to 009/007	2025-2031	Medium
Santa Maria Cogen Tap 115kV	ETL.2461	115 kV	006/117 to 000/005	0.24	042-Santa Barbara County	Remove .24 miles of conductor and poles.	2022-2024	Low
Sargent Canyon SW STA-Hollister	ETL.2870	115 kV	001/004A - 000/000C	1.54	035-San Benito County	Remove 1.54 miles of conductor and 13 poles from 001/004A to 000/00C	2022-2024	Low
Semitropic - Midway #2	ETL.3640	115 kV	C011/110 to C010/078	1.92	043-Santa Clara County	Remove the wood structure C010/078 from Goose Lake Sub C/O Kurt Rd and Corcoran Rd to structure C011/109 E/O Main Drain. Total 33 Structures. On the Towers they five spans they run from 008/077, 008/076, 008/075, 008/074, 008/073, 008/072, 072 is a tramp tower with the north side of tower is an open dead end.	2022-2024	Low
Senter #1 Tap	ETL.6841	60 kV	000/002 (SAP ID: 40665115) to 000/005, 6 spans energized	0.23	043-Santa Clara County	Remove .23 miles of conductor and 5 poles from 000/002 (Evergreen-Mabury) to 000/001 - 000/005.	2025-2031	Medium

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<b>Sierra 115kV - # 1 &amp; 2</b>	ETL.3670	115 kV	#1: 002/018 to 003/027 #2: 002/018 to 004/030	#1: 5.47 #2: 4.86	041-San Mateo County	# 1: Remove 5.47 miles of conductor from 002/018 (San Mateo-Bay Meadows) to 020/136 thru 016/107 thru 004/030 (Ravenswood-Bair) to 003/027. Remove 30 Towers 016/107 to 020/136 # 2: Remove 4.86 miles of conductor only from 002/018 (San Mateo-Bay Meadows) to 020/136 thru 016/107 thru 004/030 (Ravenswood-Bair).	2025-2031	High
<b>Smartville-Camp Far West</b>	ETL.7970	60 kV	Portion south of Camp Far West, 015/289 to 021/406; 021/406 to 021/411; 021/411 to 022/431	7.23	031-Placer County	Remove 7.23 miles of conductor and 140 poles from 015/290 to 022/431.	2022-2024	Medium
<b>Standard #1 and #2</b>	ETL.9490	60 kV	007/047 - 007/054 (De-energized) 007/054 to 011/073 (Energized for distribution use)	4.2	043-Santa Clara County	In use by Distribution to transfer sections 011/073 to 007/054. Transfer to Distribution: 007/054 to 007/048.	2022-2024	Low
<b>Stanislaus-Newark #1 115kV - Phase 3</b>	ETL.3850	115 kV	087/578 to 095/630A	8.41	001-Alameda County	Remove 8.4 miles of conductor and 54 Lattice Steel Towers from 087/578 to 095/630A	2022-2024	High
<b>Stanislaus-Newark #1 &amp; #2 115kV Phase 4 Idle Removal</b>	ETL.3850	115 kV	095/630A to 098/648	2.81	001-Alameda County	Remove conductor from 095/630A to 098/648 and to 03/028 (Newark-Fremont), Remove 19 towers from 095/630A to 098/648	2022-2024	Medium

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<b>Stanislaus-Newark #2 115kV - Phase 3</b>	ETL.3860	115 kV	087/576 to 095/630A	8	001-Alameda County	Remove 8 miles of conductor from 087/576 to 095/630A. Remove .7 miles of towers from 088/576 to 089/580. At 89/580 circuit is joint Radum-Vallecitos 6/131 - 8/148, then join Newark-Vallecitos 91/595 - 96/627, then to 95/630A.	2022-2024	High
<b>Stockton-Newark</b>	ETL.8150	60 kV	De-energized from 056/004 to AC7/115 Energized @ distribution voltage from 065/008 to 056/004	D-Use =9.08 De-energized = 5	039-San Joaquin County	Verify if sections from 065/008 to 056/004 are still needed for Distribution - Transfer or Remove. Remove 5 miles of conductor and 38 poles from 056/003 to AC7/15.	2022-2024	High
<b>Thermal Energy Tap</b>	ETL.4011	115 kV	Whole Line (000/005 to 000/011)	0.72	039-San Joaquin County	The scope is for structures 000/001 to 000/011. Conductor to remove starts at TESLA-STOCKTON COGEN JCT ETL.4010 005/005.	2025-2031	Medium
<b>Vaca - Lakeville #1</b>	ETL.5840	230 kV	40/184A to 40/185	0.07	049-Sonoma County	Scope: removing two spans and tower 40/185 in Lakeville Substation.	2022-2024	Low
<b>Wilson-Dairyland 115kV</b>	ETL.1284	115 kV	008/000 to 019/004	11.41	020-Madera County	Remove - 11.4 miles of conductor and remove 155 poles from 008/000 to 019/004.	2022-2024	Low
<b>Wilson-Oro Loma 115kV</b>	ETL.4200	115 kV	SW 129 to 011/001L.	2.76	024-Merced County	Remove 2.76 miles of conductor and 28 poles from 008/002 (SW 129) to 011/001L	2022	Medium