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Transmission Development Forum

Generation Interconnection Project (GIP) Upgrades
and Transmission Planning Process (TPP)
Upgrade Status

July 29, 2026



Presentation Summary

- PG&E workbooks capturing Generator Interconnection Projects (GIP) and Transmission Planning Process (TPP) project statuses. The Excel Workbook contains projects that have been triggered by Interconnection Agreements while it may not show all upgrades not yet triggered by an interconnection agreement, **we have made effort to show projects Not Triggered in the workbook as of this issuance.**
- This presentation provides updates and the opportunity for discussion on the status of GIP and TPP projects that are highest priority to immediate generation interconnection. This is a technical discussion on the projects.
- **PG&E requests that stakeholders save questions until the completion of each slide. Projects have been grouped to enable efficient and productive discussion.**



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PG&E Projects Status Summary

25-26 Transmission Plan Updates/In-Service

Project No.	Project	Transmission Plan Approved	ISD at TPP Approval	Previous TDF Report Dated	Planned * In-Service	Comments
2223-R-08	Lone Tree – Cayetano – Newark Corridor Series Compensation	2022-2023	12/31/27	08/30/28	08/30/28	Q3-26: Placed On Hold in 25-26 CAISO Transmission Plan
2526-R-03	DeAnza 115 kV Substation	2025-2026	12/1/31	N/A	12/1/31	Q3-26: New Addition, Placed On Hold in 26-26 CAISO Transmission Plan
1011-R-30	Vierra 115 kV Looping Project	2010-2011	05/01/14	06/24/26	05/20/26	Q3-26: In-service
1011-R-01	Cascade 115/60 kV No.2 Transformer Project and Cascade - Benton 60 kV Line Project	2010-2011	03/01/14	04/15/26	04/26/26	Q3-26: In-service
2122-R-03	Contra Costa PP 230 kV Line Terminals Reconfiguration Project	2021-2022	05/01/25	02/27/26	02/24/26	Q3-26: In-service
1819-R-06	Moraga-Sobrante 115 kV Line Reconductor	2018-2019	12/31/23	N/A	N/A	Q3-26: Cancelled in 26-26 CAISO Transmission Plan
1920-R-02	East Shore 230 kV Bus Terminals Reconfiguration	2019-2020	12/31/24	N/A	N/A	Q3-26: Cancelled in 26-26 CAISO Transmission Plan
2223-R-12	Metcalf 230/115 kV Transformers Circuit Breaker Addition	2022-2023	12/31/26	N/A	N/A	Q3-26: Cancelled in 26-26 CAISO Transmission Plan
2425-P-02	New Helm 230/70 kV Bank #2	2024-2025	05/01/34	N/A	N/A	Q3-26: Cancelled in 26-26 CAISO Transmission Plan
* In-Service Date is subject to change through the design process as more information becomes available.						



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PG&E Projects Status Summary

TPP Projects with Improvements

Project No.	Project	Transmission Plan Approved	ISD at TPP Approval	Previous TDF Report Dated	Planned * In-Service	Comments
2324-P-07	Tesla - Newark 230 kV Line No. 2 Reconductoring	2023-2024	05/01/34	12/29/34	03/31/30	Q3-26: Improve due to recalibrated portfolio.
2223-R-07	Garberville Area Reinforcement - Fort Seward Scope	2022-2023	12/31/32	12/07/28	04/30/28	Q3-26: Improved due to data error with 12/26 in-service date
2324-R-06	Diablo Canyon Area 230 kV High Voltage Mitigation	2023-2024	05/01/27	04/30/30	07/31/29	Q3-26: Improved due to determination of breaker type and shorter long lead material production.
2425-P-01	Eagle Rock- Fulton- Silverado 115 kV Line Reconductor	2024-2025	05/01/34	08/09/29	04/28/29	Q3-26: Improved due to project scoping. During scoping it was discovered that a portion of the existing conductor was sufficient ampacity. Also, CAISO reduced capacity requirement on east/west section. Now only ~7mile reconductor.
2122-R-06	Cortina 230/115/60 kV Transformer Bank No. 1 Replacement Project	2021-2022	05/01/27	12/29/28	12/21/27	Q3-26: Improved due to schedule/construction sequencing adjustments.

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PG&E Projects Status Summary

TPP Projects with Improvements

Project No.	Project	Transmission Plan Approved	ISD at TPP Approval	Previous TDF Report Dated	Planned * In-Service	Comments
2122-P-06	Reconductor Rio Oso–SPI Jct–Lincoln 115kV line	2021-2022	01/01/28	02/01/30	12/15/28	Q3-26: Improved due to schedule/construction sequencing adjustments.
1819-R-01	Christie-Sobrante 115 kV Line Reconductor	2018-2019	12/31/22	12/31/29	09/17/29	Q3-26: Improved due to schedule/construction sequencing adjustments.
2425-R-25	South Bay Reinforcement Project	2025-2026	05/01/32	05/01/34	05/01/32	Q3-26: Re-scoped in 26-26 CAISO Transmission Plan, May 2032 new Original ISD, Part G placed On Hold in 26-26 CAISO Transmission Plan. Part G Scope: Swap the connections of the Newark-Trimble and Trimble-FMC 115 kV lines at the tower line. Additionally, rebuild the KRS-Trimble section using double 795 ACSS conductors over a length of approximately 3 miles. Improved due to project rebaselining upon kickoff

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PG&E Projects Status Summary

TPP Projects with Delays (3+ months)

Project No.	Project	Transmission Plan Approved	ISD at TPP Approval	Previous TDF Report Dated	Planned * In-Service	Comments
2223-P-03	Borden-Storey 230 kV 1 and 2 Line Reconductoring	2022-2023	12/31/32	01/14/30	05/01/30	Q3-26: Delay due to cable studies and site selection analysis. ISD within CAISO TPP Original ISD.
1920-R-09	Wilson-Oro Loma 115kV Line Reconductoring	2019-2020	12/31/26	07/03/28	10/12/28	Q3-26: Delay due to Schedule/construction sequencing date adjustments.
1112-R-15	North Tower 115 kV Looping Project	2011-2012	05/01/15	11/19/29	03/20/30	Q3-26: Delay due to scope development.
2223-R-21	South Bay Area Limiting Elements Upgrade	2022-2023	12/31/27	07/29/26	11/10/26	Q3-26: Delay due to Schedule/construction sequencing date adjustment. ISD within CAISO TPP Original ISD.
2324-R-01	Atlantic High Voltage Mitigation	2023-2024	05/01/29	12/21/28	05/01/29	Q3-26: Delay due to Schedule/construction sequencing date adjustment. ISD within CAISO TPP Original ISD.

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PG&E Projects Status Summary

TPP Projects with Delays (6+ months)

Project No.	Project	Transmission Plan Approved	ISD at TPP Approval	Previous TDF Report Dated	Planned * In-Service	Comments
1718-R-13	Vaca Dixon-Lakeville 230 kV Corridor Series Compensation	2017-2018	10/01/19	11/17/27	12/31/29	Q3-26: Delay due to Schedule/construction sequencing date adjustment after project being re-kicked off. Project was previously undergoing scope redevelopment with CAISO.
2223-R-23	Tesla 115 kV Bus Reconfiguration Project	2022-2023	12/31/30	06/30/28	05/31/30	Q3-26: Delay due to clearance limitation. Construction Clearance and Sequencing related delays, project can only get clearances 6 months from October to March period during winter months, no summer peak clearances is allowed. ISD within CAISO TPP Original ISD.
2223-R-07	Garberville Area Reinforcement	2022-2023	12/31/32	12/07/28	10/31/30	Q3-26: Delay due to environmental reasons. Landslides were discovered in the area requiring additional geotechnical studies, risk evaluation, and re-design to mitigate risk. ISD within CAISO TPP Original ISD.
2223-R-11	Mesa Spare Transformer Installation	2022-2023	12/31/32	12/28/29	06/17/31	Q3-26: Delay due to scope development. PG&E is working with CAISO on Project Scope and is pending CAISO review and decision

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PG&E Projects Status Summary

TPP Projects with Delays (6+ months)

Project No.	Project	Transmission Plan Approved	ISD at TPP Approval	Previous TDF Report Dated	Planned * In-Service	Comments
1415-R-03	Martin 230 kV Bus Extension	2014-2015	12/01/21	10/27/28	12/06/29	Q3-26: Delay due to scope development. Updated GIS commissioning duration received from Siemens resulted in delay in ISD.
1112-R-10	Kern PP 115 kV Area Reinforcement	2011-2012	03/01/16	08/23/29	09/19/30	Q3-26: Delay due to recalibrated portfolio. Project to be kicked off in 27
1213-R-19	Midway-Temblor 115 kV Line Reconductor and Voltage Support	2012-2013	05/01/18	02/01/29	02/27/30	Q3-26: Delay due to Rescope of Temblor substation upgrade & clearance limitations

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PG&E Projects Status Summary

TPP Projects with Delays (6+ months)

Project No.	Project	Transmission Plan Approved	ISD at TPP Approval	Previous TDF Report Dated	Planned * In-Service	Comments
2324-R-17	Tejon Area Reinforcement	2023-2024	08/01/27	04/26/29	04/30/30	Q3-26: Delay due to scope development. Expanding substation scope at Tejon and San Bernard is driving ongoing design changes. Finalization of the T-Line design remains dependent on completion of substation scope definition.
1718-R-01	Coburn-Oil Fields 60 kV system project	2017-2018	05/01/22	09/05/31	08/30/32	Q3-26: Delay due to recalibrated portfolio. Project to be kicked off in 27
1011-R-32	Wilson 115 kV Area Reinforcement	2010-2011	05/01/15	05/02/30	02/26/31	Q3-26: Delay due to Schedule/construction sequencing date adjustment after project being re-kicked off & ongoing scope development
1718-R-03	Herndon-Bullard 115 kV Reconductoring Project	2017-2018	01/01/21	02/22/28	11/14/28	Q3-26: Delay due to schedule/construction sequencing adjustments & Scope development
2122-R-12	Series Compensation on Los Esteros-Nortech 115 kV Line	2021-2022	06/01/23	04/23/26	11/24/26	Q3-26: Delay due to third party generator outages, which caused the required clearances to be canceled and rescheduled for the fall.
1314-R-18	Mosher Transmission Project	2013-2014	12/01/17	11/17/28	05/31/29	Q3-26: Delay due to land right deficiency risk being triggered

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Generation Dependent Network Upgrades In-Service Since Jan 2026

Project No.	Project	Transmission Plan Approved	ISD at TPP Approval	Previous TDF Report Dated	Planned * In-Service	Comments
GIP 20rsmt-5	Tesla 500 kV circuit breaker 612 overstress Replace Tesla Substation 500 kV CB 612 and associated switches/relays	In-Service	10/23/25	06/11/26	03/31/26	Q3 - 2026 - In-Service
GIP C11P2-ND03	North Dublin-Cayetano 230 kV Line Reconductor North Dublin-Cayetano 230 kV Line 2.63 miles OH Line & 2.82 UG cable with new UG cable 797 MVA/2000 A	In-Service	08/04/25	03/26/26	03/31/26	Q3 - 2026 - In-Service
GIP C12P1-NPT01	Gold Hill Substation 115 kV circuit breakers 172 overstress with Bank 5 Replace Gold Hill Substation 115 kV circuit breakers 172 and associated switches/relays	In-Service	03/01/24	05/29/26	04/30/26	Q3 - 2026 - In-Service
GIP C12P1-NPT04	Vaca Dixon Substation 230 kV circuit breakers 442 overstress Replace Vaca Dixon Substation 230 kV circuit breakers 442, 452 and 462 and associated switches/relays	In-Service	03/28/26	06/04/26	06/25/26	Q3 - 2026 - In-Service
GIP C14P2-FGR04	Los Banos 500 kV circuit breakers 822, 832 overstress Replace Los Banos 500 kV circuit breakers 822, 832 & 842	In-Service	10/05/25	09/01/26	05/09/26	Q3 - 2026 - In-Service (breakers were uprated)

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PG&E Projects Status Summary

Generation Dependent

LDNU Network Upgrades with Improvements (3+ months)

Project No.	Project	Transmission Plan Approved	ISD at TPP Approval	Previous TDF Report Dated	Planned * In-Service	Comments
GIP POS-Q1922-NU1	Tesla MPAC New 230kV MPAC building relocates 230kV equipment from existing Control Building	In-Flight	05/12/26	01/13/28	02/19/27	Q3 - 2026 - Project in construction
GIP 22rsmt-1	Panoche 115 kV Circuit Breaker Replacement and 230 kV Bus Upgrade project Replace 115 kV circuit breakers 132, 152, 102 and 162, install a new MPAC building for the 115 kV bus section, convert 230 kV Bus Section D to BAAH and replace overstressed breakers in Bus E to 63 kA at Panoche substation - CB102 Added to the is project	In-Flight	10/26/26	06/01/28	02/28/28	Q3 - 2026 - Minor In-Service Date changes to align with overall project.
GIP C14P1-GGR07	Newark 230 kV cap bank circuit breakers 974 & 984 overstress	In-Flight		03/31/30	04/12/28	Q3 - 2026 - Schedule in early development. Project entering scoping and early design.
GIP C14P1-GGR07	NEWARK: REPL CAP BREAKER 994 EMER	In-Flight	03/01/21	03/31/30	04/12/28	Q3 - 2026 - This project is being coordination along side and SVP MPAC building project. Schedule in early development. Project entering scoping and early design.

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PG&E Projects Status Summary

Generation Dependent Network Upgrades with Delays (3+ months)

Project No.	Project	Transmission Plan Approved	ISD at TPP Approval	Previous TDF Report Dated	Planned * In-Service	Comments
GIP C14P2-GGR17	Midway 230 kV reactor replacement: Replace existing 9 ohm Midway 500/230 kV reactors with 13 ohm reactors Replace existing 9 ohm Midway 500/230 kV reactors with 13 ohm reactors,	In-Flight	02/16/29	03/30/29	09/07/29	Q3 - 2026 - Construction Sequencing changes to In-Service Date. Project is dependent on other Midway project sequencing..

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Generation Dependent Network Upgrades with Delays (6+ months)

Project No.	Project	Transmission Plan Approved	ISD at TPP Approval	Previous TDF Report Dated	Planned * In-Service	Comments
GIP POS-Q1959-NU2	Morro Bay Sub: Control Building Replacement New 230kV MPAC building relocates 230kV equipment from existing Control Building	In-Flight		03/31/32	12/01/33	Q3 - 2026 - PG&E is evaluating options that could remove this project from impacts to Generation Interconnection
GIP POS-Q1932-NU1	Wilson Sub: Convert 115 kV DBSB to BAAH	In-Flight	07/26/28	05/31/30	02/26/31	Q3 - 2026 - Engineering ongoing. In-Service date subject to change as the project completes construction sequencing after Design complete.
GIP POS-Q1587-NU1	Arco 230kV New CB 2422 & 2432 & Bay + Cntrl Bldg & Relays	In-Flight	06/08/28		09/22/28	Q3 - 2026 - Triggering Queue In-Service date shifting to Q3 2028
GIP C13P1-FPT03b	MERCY SPRINGS SW STA_CONNECT 70KV LINE	In-Flight	05/09/30	06/02/28	01/29/31	Q3 - 2026 - This project depends on the completion of the new Dos-Amigos-Panoche Switching Station project before it can commence construction.
GIP C13P1-GPT08	Palo Alto 115 kV CB 412, 442, 512, & 542 overstress mitigation	In-Flight	11/29/29		07/12/32	Q3 - 2026 - Recently triggered by Generation. Project related to TPP 2425-R-02
GIP POS-Q1872-NU1	PITTSBURG PP: INSTALL 115KV BUS D MPAC	In-Flight	10/24/24		03/30/28	Q3 - 2026 - The project is in construction and planned in Service date is Q2, 2030

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PG&E Projects Status Summary

Generation Dependent Network Upgrades with Delays (6+ months)

Project No.	Project	Transmission Plan Approved	ISD at TPP Approval	Previous TDF Report Dated	Planned * In-Service	Comments
GIP 20rsmt-4	Metcalf 115kV breakers Overstress (almost all breakers), install bus reactors on 230kV banks due to existing space constraints on the 115kV Bus Install 4-3 ohm reactors at low side of Metcalf 115 kV 230kV Transformers	In-Flight	02/02/28	02/26/27	07/11/28	Q3 - 2026 - Engineering was paused to determine if project was still needed but has since resumed. Scope of project was breaker replacements and was revised to installing reactors only. Long Lead times still a critical path
GIP 20rsmt-6	20RSMTRAS-02 (Reliability) to open Bitterwater Sw Sta-Wheeler Ridge #2 230 kV Line for loss of Midway-Bitterwater 230 kV line and overload on the Midway-Wheeler Ridge #1 230 kV line.	In-Flight	12/02/27	07/13/27	02/24/28	Q3 - 2026 - Remaining install scope to install relay in new 230kV MPAC building and transfer existing connection from Old Bldg to new 230kV MPAC. Construction tentatively planned for Q4 2027 start, with ISD in Q1 2028.
GIP C14P2-FGR04	Los Banos 500 kV circuit breakers 842 overstress Replace Los Banos 500 kV circuit breakers 822, 832 & 842	In-Flight	03/01/27	09/01/26	09/21/27	Q3 - 2026 - CB has already been ordered and is on track to issue for construction this year.
GIP C14P2-FPN03	Los Banos 230 kV circuit breakers 212 & 222 overstress Replace Los Banos 230 kV circuit breakers 212 & 222	In-Flight	09/30/27	09/30/27	12/28/28	Q3 - 2026 - This CB uprate project is bundled with a larger Los Banos project to replace multiple breakers.
GIP C14P2-GPT04	Ravenswood 115 kV CB 152, 312, 322 overstress Replace Ravenswood 115 kV CB 152, 312, 322	In-Flight	07/08/32	03/31/29	01/24/33	Q3 - 2026 - Project is part of BAAH conversion at Ravenswood Substation.

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PG&E Projects Status Summary

Generation Dependent

Network Upgrades In-Service Since Jan 2026

Project No.	Project	Transmission Plan Approved	ISD at TPP Approval	Previous TDF Report Dated	Planned * In-Service	Comments
GIP C9P1-F11	Re-conductor Dos Amigos PP-Panoche #3 230 kV Line Re-conductor 23.63 mi Dos Amigos PP-Panoche #3 230 kV Line with 795 ACSS	In-Service	02/18/25	05/04/26	04/15/26	Q3 - 2026 - In-Service
GIP C14P2-NPT04	Vierra 115 kV Looping Project Loop the Tesla-Stockton Co-Gen Junction 115kV Line into Vierra Substation, convert the Vierra 115kV bus into a 4-bay breaker-and-a-half (BAAH) bus configuration, add a Howland Road Co-Gen Radial Feed, install a 115kV Sustainable Modular Protection (SMP) / Modular Protection Automation and Controls (MPAC), and install battery buildings.	In-Service	06/02/25	04/30/26	05/20/26	Q3 - 2026 - In-Service

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PG&E Projects Status Summary

Generation Dependent

LDNU Network Upgrades with Delays (3+ months)

Project No.	Project	Transmission Plan Approved	ISD at TPP Approval	Previous TDF Report Dated	Planned * In-Service	Comments
GIP C14P2-NFT04	Borden-Storey 230 kV 1 and 2 Line Reconductoring Borden – Storey section(s) of the Wilson – Storey #1 and #2 230 kV lines	In-Flight	09/05/29	01/14/30	05/01/30	Q3 - 2026 - Borden Storey four-month in-service date shift driven by conductor and cable design studies needed to support material selection and engineering decisions, while remaining within the original CAISO commitment window.
GIP C12P2-LDNU1	Ripon-Manteca 115 kV Line Reconductor Ripon-Manteca 115 kV line 1.51 mi section of 2/0 CU and 0.92 mi 4/0 ACSR (2.43 mi total)	In-Flight	10/13/26	03/04/27	06/03/27	Q3 - 2026 - Construction Sequencing changes to In-Service Date
GIP C12P2-LDNU2	Stanislaus-Melones Sw Sta-Manteca #1 115 kV Line Reconductor (overlaps 2C project) Reconductor Stanislaus-Melones Sw Sta-Manteca #1 115 kV line 25.23 miles section of various conductors from 018/115-043/277. This order completes Ckt1 from #030/195 to 043/277 12.67 miles	In-Flight	08/13/27	03/31/28	07/25/28	Q3 - 2026 - Construction Sequencing changes to In-Service Date

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PG&E Projects Status Summary

Generation Dependent

LDNU Network Upgrades with Delays (6+ months)

Project No.	Project	Transmission Plan Approved	ISD at TPP Approval	Previous TDF Report Dated	Planned * In-Service	Comments
GIP C8P2-1	Re-conductor Borden-Gregg #1 230 kV Line Re-conductor 6.25 mi Borden-Gregg #1 230 kV Line with 1113 ACSS and upgrade equipment to 2000 A minimum (this is the existing Borden-Gregg 230 kV Line)	In-Flight	12/10/26	05/12/27	03/03/28	Q3 - 2026 - Project has faced land rights challenges and supply-side material delays. Construction rescheduled to start in 2027 after confirming steel poles not available on time for Q4 2026.
GIP C9P1-F12	Re-conductor Borden-Gregg #2 230 kV Line Re-conductor 6.25 mi Borden-Gregg #2 230 kV Line with 1113 ACSS	In-Flight	12/10/26	05/12/27	02/24/28	Q3 - 2026 - Project has faced land rights challenges and supply-side material delays. Construction rescheduled to start in 2027 after confirming steel poles not available on time for Q4 2026.

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