

2024 Annual Progress Report to WECC Pacific Gas and Electric Company

Waiver of “Significant Transmission Project” Status

Table 1 and 2 update the planned transmission and generation projects, respectively, in PG&E service area that were presented in PG&E’s previous year’s Annual Progress Report. These projects were granted the waiver of “Significant Transmission Project” status for the purpose of Project Coordination Review Process.

Table 3 and 4 list the planned transmission and generation projects, respectively, in PG&E service area requesting waiver of “Significant Transmission Project” status. The purposes of these projects are for serving local load, to enhance or maintain local reliability, and/or to reduce local capacity requirements. These projects are not expected to have significant impacts on the operation of the Western Interconnected System.

PG&E requests waivers of the “Significant Transmission Project” status for the purpose of Project Coordination Review Process.

Table 1
Planned Transmission Projects
Waiver of “Significant Transmission Project” Status Granted in years up to and including 2023¹

PROJECT NAME	PROJECT DESCRIPTION	DATE IN SERVICE
Estrella Substation Project	Construct a new Estrella 230/70 kV substation, with Breaker and a Half (BAAH) bus configuration, approximately 5 miles east of the existing Paso Robles Substation.	Jul-2029
Glenn 230/60 kV Transformer No. 1 Replacement Project	Replace the existing 230/60 kV Transformer No. 1 and regulator at Glenn with a new 3-phase, 230/60 kV with a Load Tap Changer.	Jul-2024
Midway-Kern PP 230 kV #2 Line Project	Reconductor the Midway-Kern #1 230 kV Line and reestablish as two circuits, Midway-Kern #1 and #2 230 kV Lines. In addition, perform minor modifications at Kern and Midway Substations.	Dec-2027
Wheeler Ridge Junction Substation	Construct a new 230/115 kV Substation with Breaker and a Half at Wheeler Ridge Junction, Convert 15.5 miles of the Wheeler Ridge – Lamont 115 kV Line to 230 kV	May-2029

¹ Facilities indicated “In Service” will be removed from the 2020 annual progress report.

PROJECT NAME	PROJECT DESCRIPTION	DATE IN SERVICE
Monta Vista 230 kV Bus Upgrade Project	Install bus-sectionalizing and bus-parallel breakers on the Monta Vista 230 kV bus and replace the 230kV control building with an MPAC building	Aug-2025
Moraga-Castro Valley 230 kV Line Capacity Increase Project	Upgrade the limiting substation equipment (jumper conductors and wave traps) at Moraga and Castro Valley substations	Jun-2027
Morgan Hill - Watsonville Area Reinforcement (formerly the Spring Substation Project)	Rebuild Metcalf - Green Valley 115 kV into the Green Valley - Morgan Hill 115 kV, Rebuild Morgan Hill 115 kV into a BAAH configuration	Feb-2029
Pittsburg 230/115 kV Transformer Capacity Increase	Install 3rd 230/115 kV Transformer at Pittsburg Substation with a rating of 420 MVA	Jan-2027
Rio Oso 230/115 kV Transformer Upgrades	Replace the Rio Oso 230/115 kV transformers (Nos. 1 and 2) with two 420 MVA rated transformers. .	Dec-2024
Rio Oso Area 230 kV Voltage Support	Install a new Static Var Compensator (SVC) at Rio Oso Substation.	Sep-2025
Martin 230 kV Bus Extension Project (Egbert Switching Station)	Relocate the Jefferson-Martin 230 kV Line and one of the Martin-Embarcadero 230 kV Lines into a new 230 kV switchyard near Martin Substation.	Oct-2028
Lockeford-Lodi Area 230 kV Development	Construct new 15-mile 230 kV DCTL from Eight Mile Substation to Lockeford Substation	Nov-2027
Warnerville – Bellota 230 kV Line Reconductoring	Reconductor the Bellota – Warnerville 230 kV Line with a larger capacity conductor	Apr-2024
North of Mesa Upgrade	Build Andrew 230/115 kV substation, energize Diablo – Midway 500 kV line at 230 kV and connect to Andrew substation, and loop-in the SLO – Santa Maria 115 kV line to Andrew and Mesa substations.	Cancelled
Sobrante Bank 1 Replacement	Replace Sobrante 230/115 kV Transformer Bank 1	Jan-2028
Coburn Banks 1 and 2 Replacement	Replace Coburn 230/60 kV Transformer Banks 1 and 2 with higher capacity transformers	May-2032
Gates 500kV Bank 11 Replacement	Replace Gates 500/230 kV Transformer Bank 11	Jun-2023
Rio Oso 230 kV BAAH Bus Upgrade	Convert Rio Oso 230 kV bus to a 6 bay gas insulated Breaker and a Half (BAAH).	Dec-2024

PROJECT NAME	PROJECT DESCRIPTION	DATE IN SERVICE
Bakersfield Nos. 1 and 2 230kV Tap Lines Reconductoring	Loop the Bakersfield 230kV Substation onto the Midway-Kern No. 2 230kV Line and reconductor the Bakersfield Nos. 1 and 2 230 kV Tap Lines with a larger conductor.	Dec-2027
Helm 230/70 kV Bank 1/ Regulator 1 Replacement	Replace Helm 230/70 kV Transformer Bank 1 and Regulator No. 1	May-2028
Vaca Dixon - Lakeville 230 kV Corridor Series Compensation	Install about 78 modular power flow control system devices on Vaca Dixon – Lakeville 230 kV and Vaca Dixon – Tulucay 230 kV transmission lines	Jul-2026
Ravenswood 230/115 kV transformer #1 Limiting Facility Upgrade	Upgrading of the limiting substation equipment on the Ravenswood 230/115 kV Line Transformer #1	Dec-2025
Jefferson 230 kV Bus Upgrade	Construct the third 230 kV BAAH bay at Jefferson and connect the Jefferson-Martin Line into the new bay	Dec-2026
Oakland Clean Energy Initiative	Upgrade to Moraga 230/115 kV transformer bank 3 to remove limiting elements, upgrades at Moraga 115 kV and Oakland X 115 kV substation buses	Apr-2025
Midway 230kV Bus Section D Upgrade Project (Part of Project: Midway-Kern PP 230 kV Lines Nos. 1, 3, and 4 Capacity Increase Project)	Convert the existing Bus Section D to seven bays of BAAH and improve reliability	Jun-2025
Tesla 230 kV Bus Series Reactor project	Replace the existing bus series reactors (8&16 ohms) in 230kV bus sections C, D & E with 36 ohms reactors and make the necessary connection changes.	Mar-2024
(Revised) Wilson 115 kV Area Reinforcement	Relocate lines and expand the Wilson 115 kV bus to make room for the STATCOM (Phase 1 by 2020). Convert the Wilson 115 kV and 230kV bus to BAAH, replace limiting equipment on Wilson 230/115 kV Bank 1 to obtain full bank capacity, install third 230/115 kV transformer bank, replace limiting components and rerate the Atwater-Atwater Jct 115 kV line section (Phase 2 by 2023)	Jan-2028
Cottonwood 230/115 kV Bank 1 And 4 Replacement Project (Original Project: Cottonwood 115 kV Substation Shunt Reactor)	Replace existing transformers with 2 new transformers with LTC.	Oct-2026
Moraga 230kV Bus Upgrade	Upgrade Moraga 230 kV Bus (Add sectionalizing breakers and a bus tie breaker to Moraga 230 kV bus)	Dec-2028
East Shore 230 kV Bus Terminals Reconfiguration	Swap the line terminal positions at East Shore 230 kV Substation BAAH bus	Dec-2025
Newark 230/115 kV Transformer Bank #7 Circuit Breaker Addition	Add second high-side circuit breaker to Newark 230/115 kV transformer bank #7 and change this transformer bank connection to Double Bus Double Breaker.	Dec-2026
Gold Hill 230/115 kV Transformer Addition Project	Installation of a third 420 MVA 230/115 kV transformer at Gold Hill substation	Jun-2028
Moss Landing 500/230 kV Bank 9 Replacement	Replace Moss Landing 500/230 kV Bank 9 with four (4) 500/230 kV single-phase 374 MVA transformers	Feb-2027
Contra Costa PP 230 kV Line Terminals Reconfiguration Project	The project scope is to swap Lone Tree – Contra Costa PP 230 kV line and Birds Landing – Contra Costa PP	Sep-2025

PROJECT NAME	PROJECT DESCRIPTION	DATE IN SERVICE
	230 kV line terminal positions at Contra Costa PP 230 kV Substation	
Vasona-Metcalf 230 kV Line Limiting Elements Removal Project	At Metcalf substation, upgrade Vasona-Metcalf line terminal conductors; At both Metcalf and Vasona Substations, replace the wave traps and any other terminal conductors to achieve an overall line summer rating of 1743 Amps.	Jun-2025
Atlantic 230/60 kV transformer voltage regulator	Add voltage regulator on Atlantic 230/60 kV transformer	Dec-2027
Cortina Bank #1 230/115/60 kV Cortina 230/115/60 kV Transformer Bank No. 1 Replacement Project	Replace the existing Cortina 230/115/60 kV transformer Bank #1 with one 230/115 kV and one 115/60 kV transformer banks.	Jun-2028
Reconductor Delevan-Cortina 230kV line	Reconductoring Delevan-Cortina 230 kV Line <ul style="list-style-type: none"> • Reconductor ~17.7 miles (full line) • Replace insulators and hardware at 122 structures 	Dec-2028
Installing 10 ohms series reactors on the PG&E's Moss Landing – Las Aguilas 230 kV line	The scope of this project is to install a 10 ohm series reactor on Moss Landing - Las Aguilas 230 kV line to mitigate the line congestion during normal and emergency condition.	Apr-2028

Table 2
Planned Generation Interconnection Projects
Waiver of “Significant Transmission Project” Status Granted in years up to and
including 2023¹

PROJECT NAME	PROJECT DESCRIPTION	DATE IN SERVICE
Proxima Solar Generation Interconnection	Interconnect a 300 megawatt (MW) (net output) solar power-based generation facility to Pacific Gas and Electric Company’s (PG&E’s) new Switching Station looped into the Quinto Switching Station - Westley 230 kV Line	Jan-2024
Scarlet Solar Generation Interconnection	Interconnect a 400 megawatt (MW) (net output) solar power-based generation facility to the PG&E-owned 230 kV Tranquility Switching Station	Online Dec-2023
Fountain Wind	Interconnect a 200-megawatt (MW) (net output) wind generation facility to Pacific Gas and Electric Company’s (PG&E’s) Pit #1 – Cottonwood 230 kV Line in Shasta County, California.	Aug-2031 ENGINEERING
Sandrini Sol 2	The project proposes to install 200 MW Solar PV generation on a 230 kV bus at Wheeler Ridge Substation in Kern County with a maximum gross output of 200 MW. The project is to accommodate EDPR CA Solar Park LLC Sandrini Sol 2, Queue Position 1398 (Q1398), which proposes to install Solar PV with a maximum gross output of 200 MW.	Jan-2024
Westlands Solar Blue	The Project is a Solar PV generation plant with a net output of 250 MW to Pacific Gas and Electric Company’s (PG&E’s) Gates 230 kV substation in Kings County, CA.	Online Jul-2023
Luna Valley	The Project is a Solar PV generation plant with a net output of 200 MW to Pacific Gas and Electric Company’s (PG&E’s) Tranquility Substation 230kV in Levis, Fresno County, CA.	Jun-24 ENGINEERING
Corby	The Project is a Battery Storage generation plant with a net output of 300 MW to Pacific Gas and Electric Company’s (PG&E’s) Vaca-Dixon Substation 230 kV Bus in Vacaville, Solano County, CA.	Jan-2026 ENGINEERING
Sonrisa	The Project is a Solar PV generation plant with a net output of 200 MW to Pacific Gas and Electric Company’s (PG&E’s) Tranquility Switching Station 230 kV Bus in Levis, Fresno County	Feb-2025 ENGINEERING
Key Storage 1	The Project is a Battery Storage generation plant with a net output of 300.1 MW to Pacific Gas and Electric Company’s (PG&E’s) Gates Substation 500 kV in Huron, Fresno County, CA.	Aug-2025 ENGINEERING

PROJECT NAME	PROJECT DESCRIPTION	DATE IN SERVICE
Irving Storage	The Project is a Battery Energy Storage generation plant with a net output of 750.0 MW to Pacific Gas and Electric Company's (PG&E's) Moss Landing Substation 500 kV in Moss Landing, Monterey County	Mar-2027 ENGINEERING
Plano Storage	The Project is a Battery Energy Storage generation plant with a net output of 350.0 MW to Pacific Gas and Electric Company's (PG&E's) Moss Landing Substation 500 kV in Moss Landing, Monterey County	Online Mar-2023
Tanager Storage	The Project is a Storage generation plant with a net output of 200.0 MW to Pacific Gas and Electric Company's (PG&E's) Los Esteros Substation in San Jose, Santa Clara.	Apr-2027 ENGINEERING
Buttonbush Solar Hybrid Energy Storage	The Project is a PV/Storage generation plant with a net output of 800.0 MW to Pacific Gas and Electric Company's (PG&E's) Midway Substation in Unincorporated, Kern.	Nov-2026 ENGINEERING

* ENGINEERING: Engineering and design stage

Table 3
Planned Transmission Projects
Requesting Waiver of “Significant Transmission Project” Status

PROJECT NAME	PROJECT DESCRIPTION	DATE IN SERVICE
Metcalfe 230/115 kV Transformers Circuit Breaker Addition	Add parallel breakers to each of the 230/115 kV banks Nos. 1, 2, and 3 at Metcalfe 230 kV Substation so that the three Metcalfe 230/115 kV transformer banks can connect to both Metcalfe 230 kV Bus1 and Bus 2.	Feb-2026
Lone Tree–Cayetano–Newark Corridor Series Compensation	Add 6 SmartValve units (2 SmartValve 10-1800 units per phase) to the Cayetano – Lone Tree 230 kV line Add 6 SmartValves units (2 SmartValve 10-1800 units per phase) to the Las Positas - Newark 230 kV Line	Dec-2027
Equipment Upgrade at CCSF Owned Warnerville 230 kV Substation	Upgrade limiting equipment at Warnerville 230kV - Install new jumpers, switches and new relays at the Warnerville 230kV Sub	Apr-2023
Los Banos 230 kV Circuit Breakers Replacement	Replace 230 kV circuit breakers 212, 222, 252 and 262 at Los Banos substation.	Apr-2028
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	Apr-2028
Mesa 230/115kV Spare Transformer	Install spare 230/115 kV transformer at Mesa substation.	Apr-2028
Borden-Storey 230 kV 1 and 2 Line Reconductoring	Reconductoring the Borden – Storey section(s) of the Wilson – Storey #1 and #2 230 kV lines	May-2029
Henrietta 230/115 kV Bank 3 Replacement	Replace Henrietta 230/115 kV Bank 3	Jun-2027

Table 4
Planned Generation Interconnection Projects
Requesting Waiver of “Significant Transmission Project” Status

PROJECT NAME	PROJECT DESCRIPTION	DATE IN SERVICE