

GridLiance West Project Proposal for the 2022-2023 TPP Reliability Request Window

September 28, 2022

GLW Upgrade 500 kV Conversion

 Issues: CAISO's preliminary 2022-2023 TPP assessment showed overloading on the GLW and surrounding transmission system. The GLW Upgrade is being proposed to address a combination of reliability, economic, and policy needs.

Proposed Project:

- Rebuild existing 230 kV circuit from Innovation to Desert View to match the second circuit project approved in the 2021-2022 TPP.
- Replace 2021-2022 TPP 230 kV double circuit rebuild project from Pahrump Gamebird Trout Canyon with a project that replaces the same line to 500 kV double circuit.
- Replace 2021-2022 TPP 230 kV double circuit rebuild project from Trout Canyon Sloan Canyon with a project that replaces the same line to 500 kV double circuit.
- Add a 2nd Sloan Canyon Eldorado 500 kV line
- Add a 500/230 kV transformer bank at Trout Canyon
- Add 500/230 kV transformer bank and 500 kV switching station at Gamebird
- Add 500/230 kV transformer bank and 500 kV switching station at Pahrump



GLW Upgrade 500 kV Conversion

- Proposed In-Service Date: 12/31/2026
- Estimated Cost Range: \$305MM
- Benefits (Reliability + Economic + Policy):
 - The GLW Upgrade addresses a variety of overloads observed in the 2032 Spring Off-Peak and will see more benefits upon completion of the policy study when modeling the full GLW area renewable portfolio.
 - Interconnecting Sloan Canyon to Eldorado with a 2nd 500 kV line increases the GLW-CAISO capacity to allow for higher renewable interconnection needed by the 30 MMT CPUC IRP.
 - These upgrades are needed under the 30 MMT sensitivity portfolio for 2035



GLW Upgrade Map



