



GRID RESILIENCE AND INNOVATION PARTNERSHIPS PROGRAM

Deploying Advanced Transmission Technologies to Accelerate Equitable Renewable Energy Access

Established by the Bipartisan Infrastructure Law, the Grid Resilience and Innovation Partnerships (GRIP) Program is a \$10.5 billion investment to enhance grid flexibility, improve the resilience of the power system against extreme weather, and ensure American communities have access to affordable, reliable, electricity when and where they need it. GRIP funding is administered by the U.S. Department of Energy's Grid Deployment Office (GDO). This project was selected through the second round of GRIP funding.

The California Harnessing Advanced Reliable Grid Enhancing Technologies for Transmission (CHARGE 2T) project is a public-private partnership that will drive large-scale expansion to transmission capacity and improvements to interconnection process to increase and accelerate equitable access to renewable energy across California. CHARGE 2T will reconductor more than 100 miles of transmission lines with advanced conductor technologies and deploy dynamic line ratings (DLR) to quickly and significantly increase the state's system capacity to integrate more renewable energy onto the grid. CHARGE 2T also supports transmission interconnection reform through process improvements, an interconnection portal, workforce investment, and educational resource development.

Anticipated Outcomes and Benefits

Statewide collaboration: The California Energy Commission will partner with the California Independent System Operator (CAISO), the California Public Utilities Commission, Pacific Gas & Electric, and Southern California Edison to collaboratively address the state's transmission challenges.

Unlocked renewable energy: Deploying advanced conductors and DLR across the system will increase transmission capacity of the targeted lines to allow more than 1 GW of incremental renewable energy interconnection. Further, improvements to the transmission interconnection process can accelerate renewable energy project deployment and improve transparency in the CAISO queue.

Justice40: Nearly 70% of project investments will directly benefit disadvantaged communities, in line with the **Justice40** initiative.

Job creation: The project will create more than 300 direct jobs and deploy an end-to-end workforce development plan that will train the next generation of energy and utility workers, in collaboration with the International Brotherhood of Electrical Workers (IBEW) and Engineers and Scientists of California. The CHARGE 2T consortium will deliver new energy and engineering curriculum at California colleges and universities to provide students with the opportunity to earn certifications relevant to careers in power system and energy management.

Project Details



- **Project:**
CHARGE 2T: California Harnessing Advanced Reliable Grid Enhancing Technologies for Transmission
- **Applicant/Selectee:**
California Energy Commission
- **GRIP Program:**
Grid Innovation Program
(Bipartisan Infrastructure Law, Section 40103(b))
- **Federal cost share:**
\$600,561,319
- **Recipient cost share:**
\$900,841,978
- **Project location:**
California
- **Project type:**
Transmission

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