GRID RESILIENCE AND INNOVATION PARTNERSHIPS PROGRAM

Established by the Bipartisan Infrastructure Law, the U.S. Department of Energy’s Grid Deployment Office is administering a historic $10.5 billion investment via the Grid Resilience and Innovation Partnerships (GRIP) program to enhance grid flexibility, improve the resilience of the power system against growing threats of extreme weather and climate change, and ensure American communities have access to affordable, reliable, clean electricity when and where they need it.

CREATING A HOLISTIC ECOSYSTEM TO REDUCE OR MITIGATE WILDFIRES

Through its Resiliency Enhancement for Fire mitigation and Operational Risk Management (REFORM) project, PacifiCorp will enhance control center capabilities by establishing a holistic ecosystem of interoperable technologies that significantly enhance situational awareness to reduce or mitigate wildfires and improve grid flexibility, reliability, and resiliency. This approach will include distribution fault anticipation devices, advanced relays with wildfire protection features and communicating fault circuit indicators to analyze real-time system health using disturbance and fault data. Project REFORM will also enhance situational awareness through sophisticated weather forecasting models and wildfire detection network artificial intelligence-enabled cameras.

Anticipated Outcomes and Benefits

› Reduce the average power outage in the impacted circuits, by five minutes, in part through improved visibility of the electrical system for grid operators.
› Significantly enhance advanced forecasting capabilities for wildfire risk management. Project REFORM will utilize high-performance computing clusters to run weather research forecast models four times faster than the current approach, enabling quicker utility response to wildfire incidents.
› Prevent faults that may lead to wildfire or other system disturbances and measurably improve wildfire risk metrics.
› Anticipate the impacts of extreme weather to decrease the frequency of instances where customers are warned of potential Public Safety Power Shutoff events less than 48 hours before the event.
› Support for union jobs with over 50% of PacifiCorp’s employees represented by six local labor unions under International Brotherhood of Electric Workers (IBEW) and Utility Workers Union of America (UWUA).
› Accelerate workforce development programs in collaboration with the Crater Lake Electrical Joint Apprenticeship Training Center, where 100 graduate pre-apprentices will be trained.
› Increase engagement with communities that have not traditionally participated in utility planning processes through Oregon Community Benefits and Impacts Advisory Group.
› Direct over 50% of benefits to disadvantaged communities (DACs), and promising work with localities and tribes.
› Distribute at least 75% of allocated workforce development funds in DACs.
› Improve air quality by mitigating wildfire incidence.

HELPFUL LINKS

› Grid Resilience and Innovation Partnerships Program
› About the Grid Deployment Office

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