IOUs Push for Restrictions on PV RAM Map Use

Utility executives are pushing the California Public Utilities Commission to consider restricting public access to their photovoltaic Renewable Auction Mechanism maps, after noticing an uptick in cybersecurity threats to the data. The publicly available maps include information on utility transmission lines, distribution lines and substations to help developers identify sites to locate potential projects. Investor-owned utilities, however, are pushing to heighten security around the maps to prevent the data from being accessed by bad actors.

At an Oct. 18 meeting at the CPUC, executives from Pacific Gas & Electric said they have noticed an increase in cybersecurity threats to the PV RAM map data since 2011. Along with representatives from Southern California Edison, they urged regulators to update the protocols for map users, suggesting they be required to register on a secure web portal and sign a nondisclosure agreement.

CPUC representatives at the meeting included President Michael Picker, as well as staff from the Energy Division and the Safety and Enforcement Division.

The meeting was part of a larger conflict at the CPUC over the availability of the maps. A 2011 resolution requires the utilities to ensure the maps are publicly available, but in September, PG&E, Edison and San Diego Gas & Electric shifted the maps to a confidential portal based on their interpretation of a July ruling from CPUC Administrative Law Judge Robert Mason III that addressed the confidentiality of utility distribution-system planning data.

After the issue was brought the CPUC’s attention, the ALJ issued a second ruling criticizing the utilities’ move and instructing them to make the maps publicly available again.

As of the Oct. 18 meeting, all three utilities had restored their maps to public access. However, PG&E and Edison executives said that imposing more restrictions on the maps’ accessibility would align better with approaches adopted by other state and federal agencies.

PG&E declined to provide specific details on the cybersecurity threats it had noticed. Utility spokeswoman Kristi Jourdan said in an email that the PV RAM maps have been restored to public access, but that PG&E is still looking into potential physical and cybersecurity risks that could arise from them.

“We recognize that this is very useful information for developers and stakeholders and do not wish to restrict access to legitimate users. However, we remain focused on balancing the priorities of data access, and protecting critical energy infrastructure from potential physical and cyber-attacks,” she added.

Edison also did not address the PV RAM maps specifically, but said it uses a multilayered cybersecurity strategy to protect its systems.

“We always partner with federal, state and local law enforcement and conduct regular cybersecurity drills and exercises. Our highly skilled and trained engineers constantly study and evaluate grid security, risks and threats,” Edison said in an email.

Sahm White, director of policy and economic analysis at Clean Coalition, criticized the utilities’ suggested restricted access, largely because the maps depict infrastructure that is in full public view.

“It would be like having AAA not publish road maps—you can’t hide the roads,” he said in an email.

All parties agree that data that could pose a security threat to the utilities should be subject to restrictions, but the utilities have not identified any specific information that they deemed sensitive, White said.

He also expressed skepticism that a nondisclosure agreement could prevent bad actors from accessing information.

“It should also be noted that an NDA does not provide security, it only means that you can sue someone for sharing the information,” he said. “The cybersecurity threat applies to the control systems used in grid operations, not to information about the static infrastructure.”

—Kavya Balaraman