SENATE THIRD READING
SB 17 (Padilla)
As Amended July 8, 2009
Majority vote

SENATE VOTE: 38-0

UTILITIES & COMMERCE	14-0	APPROPRIATIONS	17-0

Ayes:	Fuentes, Duvall, Tom Berryhill, Carter, Fong, Fuller, Furutani, Huffman, Krekorian, Skinner, Fletcher, Swanson, Torrico, Villines	Ayes:	De Leon, Conway, Ammiano, Charles Calderon, Coto, Davis, Fuentes, Hall, Harkey, Miller, Nielsen, John A. Perez. Skinner, Solorio, Audra Strickland, Torlakson, Hill

SUMMARY: Requires the California Public Utilities Commission (PUC), in consultation with other state agencies and key stakeholders, to determine the requirements for a smart grid deployment plan and requires the utilities to submit smart grid plans to PUC. Specifically, this bill:

1) Requires PUC, in consultation with the California Energy Commission (CEC), the California Independent System Operator (CAISO) and other key stakeholders, to determine the requirements for a smart grid deployment plan and adopt standards and protocols to ensure functionality and interoperability developed by public and private entities, by July 1, 2010.

2) Requires each electrical corporation to develop and submit a smart grid deployment plan to PUC for approval by July 1, 2011.

3) Requires PUC, in consultation with CEC, CAISO, and electrical corporations, to evaluate the impact of smart grid technology deployment on major initiatives and policies.

4) Requires PUC to annually report to the Governor and the Legislature on PUC's recommendations for a smart grid, including the costs and benefits to ratepayers.

5) Requires each publicly owned electric utility with more than 100,000 service connections to develop a smart grid deployment plan, by January 1, 2011.

6) Permits the PUC to modify or adjust the requirements for any electrical corporation with fewer than 100,000 service connections as individual circumstances merit.

FISCAL EFFECT:

1) Absorbable costs to PUC, as the commission indicates it has already commenced a proceeding on this issue.

2) The CEC will incur $200,000 annually for two positions for ongoing consultation with PUC on the impact of deploying smart grid technology on related programs and policies. [Energy Resources Programs Account].

3) Any costs to local publicly owned utilities to adopt smart grid plans will be recovered in rates charges to utility customers.

COMMENTS: Smart grid technology is two-way communication and is intended to improve the efficiency, reliability and safety of power delivery and use. To truly be smart, the grid needs ancillary components to fully derive the benefits of the investment. For example, for a smart grid to be able to provide real-time price information, the grid must be coupled with smart meters, smart appliances, smart thermostats, and/or plug-in hybrid vehicles, or other customer-funded "add-ons." This bill requires PUC to identify the protocols that define what the smart grid will be for California and provide direction on its development and when it will be operational.

The federal Energy Independence and Security Act of 2007 requires the National Institute of Standards and Technology to be the lead agency to develop standards and protocols for the smart grid. It creates a research, development, and demonstration program for smart grid technologies at the Department of Energy, provides federal matching funds for portions of qualified smart grid investments.

The federal American Reinvestment and Recovery Act of 2009 (ARRA) authorizes the Department of Energy to award $4 billion in grants ranging from $500,000 to $20 million for smart grid technology deployments and grants of $100,000 to $5 million for the deployment of grid monitoring devices.

PUC has a rulemaking underway to consider policies for California's IOUs to develop a smarter electric grid in the state. The proceeding will consider setting policies, standards and protocols to guide the development of a smart grid system and facilitate integration of new technologies such as distributed generation, storage, demand-side technologies, and electric vehicles.

CEC funded a smart grid research project under the Public Interest Energy Research program. The research identified new and emerging technologies that would impact a smart grid, concerns about ensuring incompatible systems and/or large capital investments with short-term benefits, and the need to foster open access, competition and commercial growth of cost-effective, new technologies. Preliminary research shows the state could play a key role in defining the smart grid of the future for California and if left alone, many systems most likely will not be compatible. Future smart grid research planned by CEC includes assessing smart grid technologies and functional areas through micro-grid demonstration projects.

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