Office of Senate Floor Analyses
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UNFINISHED BUSINESS

Bill No: SB 338
Author: Skinner (D), et al.
Amended: 8/28/17
Vote: 21

SENATE ENERGY, U. & C. COMMITTEE: 8-3, 4/18/17
AYES: Hueso, Bradford, Hertzberg, Hill, McGuire, Skinner, Stern, Wiener
NOES: Morrell, Cannella, Vidak

SENATE APPROPRIATIONS COMMITTEE: 5-2, 5/25/17
AYES: Lara, Beall, Bradford, Hill, Wiener
NOES: Bates, Nielsen

SENATE FLOOR: 25-13, 5/30/17
AYES: Allen, Atkins, Beall, Bradford, De León, Dodd, Galgiani, Glazer, Hernandez, Hertzberg, Hill, Hueso, Jackson, Lara, Leyva, McGuire, Mendoza, Mitchell, Monning, Pan, Portantino, Skinner, Stern, Wieckowski, Wiener
NOES: Anderson, Bates, Berryhill, Cannella, Fuller, Gaines, Moorlach, Morrell, Nguyen, Nielsen, Stone, Vidak, Wilk
NO VOTE RECORDED: Newman, Roth

ASSEMBLY FLOOR: 46-26, 9/5/17 - See last page for vote

SUBJECT: Integrated resource plan: peak demand

SOURCE: Author

DIGEST: This bill requires the CPUC and the governing board of each local POU to each consider the role of a variety of energy technologies and resources in meeting energy and reliability needs during and around the hour of peak demand while reducing the need for new generation and transmission resources.

Assembly Amendments remove the definition of "net-load peak", and expand the types of energy resources to be considered to include energy storage and

distributed energy resources. The amendments also include language to avoid conflict with AB 759 (Dahle, Chapter 140, Statutes of 2017), which affects some of the same sections of code as this bill and conditionally exempts an electrical cooperative from the need to prepare an integrated resource plan (IRP).

ANALYSIS:

Existing law:

1) Requires electric utilities to procure 50 percent of their retail sales of electricity from renewable energy by 2030. This is known as the Renewable Portfolio Standard (RPS). (Public Utilities Code §399.11 et seq.)

2) Requires the California Air Resources Board (ARB) to ensure that statewide greenhouse gas (GHG) emissions are reduced to at least 40 percent below the 1990 statewide GHG emissions level no later than December 31, 2030. (Health and Safety Code §38566)

3) Requires the California Public Utilities Commission (CPUC) to determine appropriate targets, if any, for load servicing entities (LSEs) to procure energy storage systems. Requires LSEs to meet any targets adopted by the CPUC by 2015 and 2020. Requires publicly owned utilities (POUs) to set their own targets for the procurement of energy storage and then meet those targets by 2016 and 2021. (Public Utilities Code §2835 et seq.)

4) Directs the California Energy Commission (CEC) and the CPUC, where feasible, to authorize procurement of resources to provide grid reliability services that minimize reliance on system power and fossil fuel resources and, where feasible, cost effective, and consistent with other state policy objectives, increase the use of large- and small-scale energy storage. (Public Utilities Code §400)

5) Requires the CPUC to adopt a process for each load-serving entity (meaning each electrical corporation (often referred to as an "investor-owned utility" or "IOU"), each electric service provider (ESP) and each community choice aggregator (CCA)) to file an integrated resource plan (IRP) to ensure each meets (a) GHG emissions reduction targets for the electricity sector, (b) the RPS, and (c) other goals and obligations. Requires each LSE to submit an IRP to the CPUC for review. (Public Resources Code §454.52)

6) Requires the governing board of a local POU to adopt an integrated resource plan and a process for updating the plan at least once every five years to ensure the utility meets (a) the GHG emissions reduction targets for the electricity sector, (b) the RPS, and (c) other goals and obligations, to be submitted to the CEC for review. Requires the CEC to provide recommendations to correct the deficiencies in the IRP. (Public Resources Code §§9621 and 9622)

This bill:

1) Requires the CPUC to consider the role of distributed energy resources, including energy efficiency, existing renewable generation, energy storage, and grid operational efficiencies, in helping to ensure each LSE meets peak energy needs and reliability needs while reducing the need for new electricity generation resources and new transmission resources in achieving the state's energy goals at the least cost to ratepayers.

2) Requires the governing board of a POU, with an average annual electric demand exceeding 700 gigawatt hours, to consider the role of distributed energy resources, including energy efficiency, existing renewable generation, energy storage, and grid operational efficiencies, in helping to ensure each utility meets peak energy needs and reliability needs while reducing the need for new electricity generation resources and new transmission resources in achieving the state's energy goals at the least cost to ratepayers.

Background

Bill seeks to address the peak. California is at the forefront of efforts to increase the use of renewable energy and reduce the use of fossil fuels. The author notes the intermittent nature of the output of our most-relied upon renewable energy sources—wind and solar. The author also notes the lack of coincidence of the output of these energy sources and of demand for electricity. The result, at least on some days of the year, is a sudden, steep ramp in demand for energy that cannot be met by renewable energy sources.

Existing law provides ample direction to the CPUC and, to a somewhat lesser extent the governing boards of POUs, to achieve the state's renewable energy and GHG reduction goals, and other related objectives, at least cost. For example, Public Utilities Code §454.51 (a) requires the CPUC to identify a diverse and balanced portfolio of resources needed to ensure a reliable electricity supply that provides optimal integration of renewable energy in a cost-effective manner. Further, statute requires the CPUC to adopt a process by which each "load-serving

entity" (meaning investor-owned utility (IOU), electric service provider (ESP) and community choice aggregator (CCA)) file a regularly updated IRP. The IRP, subject to CPUC oversight, details how the entity will meet GHG emissions reduction targets and achieve a variety of environmental and performance objectives. Statute establishes a similar IRP process to be developed by CEC, applicable to the POUs.

The CPUC and CEC are developing the IRP processes now. By some point early next year, presumably, the LSEs and POUs will file IRPs with the CPUC and CEC, respectively. Statutory direction and CPUC and CEC oversight should ensure that the IRP process results in an energy portfolio that achieves the state's renewable energy and GHG reduction goals overall, among other objectives, at the least feasible cost. Such an outcome would address the author's concerns.

What the IRP process will not address, however, is the energy resources used to meet peak energy demand specifically or the costs of doing so. To remedy this perceived deficiency, this bill directs the CPUC and the governing board of each POU, in developing their respective IRPs, to consider the role of certain energy resources in helping to ensure each electric utility meets energy needs and reliability needs in "hours to encompass the hour of peak demand of electricity," while reducing the need for new electricity generation and new transmission resources in achieving the state's energy goals at the least cost to ratepayers.

FISCAL EFFECT: Appropriation: No Fiscal Com.: Yes Local: Yes

According to the Assembly Appropriations Committee, this bill requires no additional state resources for implementation.

SUPPORT: (Verified 9/6/17)

California Efficiency + Demand Management Council

OPPOSITION: (Verified 9/5/17)

None received

ARGUMENTS IN SUPPORT: According to the author:

> California's energy system is the cleanest in the nation, but it could also become the most expensive for ratepayers unless we use new technologies to reduce the need to build more power plants and energy transmission. To stop this need for double-building, California needs to

encourage renewable energy companies and utilities to utilize new technology – like demand response, demand management, energy storage, and even energy efficiency – to move energy use to different times of the day when clean energy is abundant, and to store clean energy during the day for use at night. This will reduce the need to build more natural gas-fired plants and more transmission to provide energy at night, saving money for the ratepayer.

ASSEMBLY FLOOR: 46-26, 9/5/17
AYES: Aguiar-Curry, Arambula, Berman, Bloom, Bocanegra, Bonta, Burke, Calderon, Cervantes, Chau, Chiu, Chu, Dababneh, Daly, Eggman, Friedman, Cristina Garcia, Gipson, Gloria, Gonzalez Fletcher, Grayson, Holden, Irwin, Jones-Sawyer, Kalra, Levine, Limón, Low, Maienschein, McCarty, Medina, Mullin, Muratsuchi, Nazarian, O'Donnell, Quirk, Reyes, Rodriguez, Salas, Santiago, Mark Stone, Thurmond, Ting, Weber, Wood, Rendon
NOES: Acosta, Travis Allen, Baker, Bigelow, Brough, Caballero, Chávez, Chen, Choi, Cooley, Cunningham, Flora, Fong, Gallagher, Gray, Harper, Kiley, Lackey, Mathis, Mayes, Melendez, Obernolte, Patterson, Quirk-Silva, Voepel, Waldron
NO VOTE RECORDED: Cooper, Dahle, Frazier, Eduardo Garcia, Ridley-Thomas, Rubio, Steinorth

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9/6/17 12:14:25

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