SENATE THIRD READING
SB 338 (Skinner)
As Amended August 28, 2017
Majority vote

SENATE VOTE: 25-13

Committee	Votes	Ayes	Noes
Utilities	11-2	Holden, Burke, Chávez, Eggman, Cristina Garcia, Eduardo Garcia, Muratsuchi, Quirk, Reyes, Santiago, Ting	Patterson, Fong
Appropriations	12-4	Gonzalez Fletcher, Bloom, Bocanegra, Bonta, Quirk, Chau, Eggman, Friedman, Eduardo Garcia, McCarty, Muratsuchi, Reyes	Bigelow, Brough, Fong, Obernolte

SUMMARY: This bill requires the consideration of distributed energy resources (DERs), including energy efficiency, existing renewable generation, energy storage, and grid operational efficiencies as part of the integrated resource planning (IRP) process for load-serving entities (LSEs) and publicly owned utilities (POUs). Specifically, **this bill**:

1) Requires the California Public Utilities Commission (CPUC) to consider the role of DERs, 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 DERs, 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.

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

COMMENTS:

Integrated Resource Planning Process – Among the new policies of SB 350 (De León) Chapter 547, Statutes of 2015 was the requirement that all LSEs – electric service providers, community choice aggregation, IOUs, and the 16 largest POUs – file IRPs. The plans are intended to show how the LSEs will achieve greenhouse gas (GHG) reduction targets and Renewables Portfolio Standard (RPS) mandates. The plans must also at the same time: fulfill the obligation of just and reasonable rates, minimize ratepayer impact, ensure system and local reliability; strengthen the diversity, sustainability, and resilience of the bulk transmission and distribution systems, and local communities; enhance distribution systems and demand-side energy management; and

minimize localized air pollutants and other GHG emission, with early priority on disadvantaged communities.

Meeting the Challenges of Peak Demand – The Independent System Operator, which operates 80% of the state's electric grid, performed an analysis to determine when surplus and limited supplies might occur. It showed that throughout the year, on both weekdays and weekends, supply is expected to be constrained during the peak hours from 4 p.m. to 9 p.m. when the sun is setting and solar output is declining. During the months of July and August, the supplies are even more limited during peak hours, and higher demand begins as early as noon. More interesting, however, is the amount of time that supply is expected to be plentiful or in surplus. With the exception of July and August, on the weekends, supply surplus is expected to occur during "super off-peak" hours from 10 a.m. to 4 p.m. when solar generation is at its highest. Similarly, surplus conditions are expected during this same time period on March and April weekdays, when weather is mild and air conditioning use is at a minimum. Additionally, supply is projected to be generally plentiful starting at 9 p.m. through the next morning or afternoon, depending on the month.

There are several strategies available to address what is now commonly referred to as the "Duck Curve" and specifically the neck of the duck when intermittent renewable resources fall in production and demand increases. These include time-of-use rates (in development by the investor owned utilities [IOUs]) using lower prices and incentives to drive consumers to shift electric consumption to off-peak periods, energy storage, demand response, energy efficiency (particularly targeted for time and location), and large hydroelectric generation which, although not RPS eligible, is a GHG-free resource and can at times be plentiful such as this year.

Purpose – The bill requires the agencies, utilities, and other LSEs to consider the role of DERs, including energy efficiency, existing renewable generation, energy storage, and grid operational efficiencies to address peak as part of the IRP process to avoid the need for new electricity generation and new transmission. The IRP process is still under development. The degree to which procurement planning to meet peak will be separately considered as part of the IRP process is not clear at this time.

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