Date of Hearing: June 20, 2018

ASSEMBLY COMMITTEE ON UTILITIES AND ENERGY
Chris Holden, Chair
SB 1136 (Hertzberg) – As Amended June 11, 2018

SENATE VOTE: 38-0

SUBJECT: Electricity: load-serving entities: resource adequacy requirements

SUMMARY: Requires the California Public Utilities Commission (CPUC), in establishing resource adequacy (RA) requirements, to additionally advance, to the extent possible, the state's goals for clean energy, reducing air pollution, and reducing emissions of greenhouse gases. This bill would additionally require the CPUC to minimize the need for backstop procurement by the California Independent System Operator (CAISO).

EXISTING LAW:

1) Requires the CPUC, in consultation with the CAISO, to establish RA requirements for all load-serving entities (LSE which includes electric, community choice aggregators, and energy service providers) to achieve specified objectives.

2) Requires each LSE to maintain physical generating capacity and electrical demand response adequate to meet its load requirements, including, but not limited to, peak demand and planning and operating reserves. The generating capacity or electrical demand response shall be deliverable to locations and at times as may be necessary to maintain electric service system reliability and local area reliability.

3) Requires each LSE to meet the most recent minimum planning reserve and reliability criteria approved by the Board of Directors of the Western Systems Coordinating Council or the Western Electricity Coordinating Council.

FISCAL EFFECT: According to the Senate Appropriations Committee, under Senate Rule 28.8 the bill was found to cause no significant reduction in revenues or additional state costs are not significant and do not require the appropriation of additional state funds.

BACKGROUND:

Resource Adequacy – The RA program has its origins in the energy crisis of 2001 and has two goals. First, it provides sufficient resources to the CAISO to ensure the safe and reliable operation of the grid in real time. Second, it is designed to provide appropriate incentives for the siting and construction of new resources needed for reliability in the future.

The CPUC adopted a RA policy framework in 2004 in order to ensure the reliability of electric service in California and the obligations are applicable to all LSEs within the CPUC's jurisdiction. The RA program guides resource procurement and promotes infrastructure investment by requiring that LSEs procure capacity so that capacity is available to the CAISO when and where needed. The RA program now has three distinct requirements: System RA

requirements (effective June 1, 2006), Local RA requirements (effective January 1, 2007), and Flexible RA requirements (effective January 1, 2015). System requirements are determined based on the each LSE's CEC electricity forecast plus a 15% planning reserve margin. Local requirements are determined based on an annual CAISO study using a 1-10 weather year and an N-1-1 contingency. Flexible Requirements are based on an annual CAISO study that currently looks at the largest three hour ramp for each month needed to run the system reliably. There are two types of filings by the LSEs: annual filings (filed on or around October 31st) and monthly filings (filed 45 calendar days prior to the compliance month).

For the annual filings, LSEs are required to make an annual System, Local, and Flexible compliance showing for the coming year. For the System showing, LSEs are required to demonstrate that they have procured 90% of their System RA obligation for the five summer months the coming compliance year. Additionally each LSE must demonstrate that they meet 90% of its Flexible requirements and 100% of its Local requirements for each month of the coming compliance year. For the monthly filings LSEs must demonstrate they have procured 100% of their monthly System and Flexible RA obligation. Additionally, on a monthly basis from May through December, LSEs must demonstrate they have met their revised (due to load migration) local obligation.

CPUC staff evaluates LSE filings annually and monthly to ensure accuracy and completeness. Commission staff also lead annual RA proceedings (R.14-10-010 is the most recent proceeding) to refine the RA program.

Over the last ten years, California has maintained adequate reserves under the CPUC's RA program to ensure reliable grid operation. However, California's electric system is undergoing – and planning for – significant structural changes that include integrating greater numbers of intermittent renewable resources, repowering or retiring over 16 gigawatts of gas-fired power plants that rely on once-thorough cooling (OTC) technology, and an increasing number of resources that will surpass their design life in the coming years. In addition to these changes, the California electric system is also witnessing rapid expansion of CCAs.

Within the past year in particular, several new challenges have arisen within the RA program. They include: (1) an apparent decrease in forward procurement; (2) LSE requests for local requirement waivers; (3) growth in CAISO back-stop procurement, including three RMR contracts and two CPM designations; (4) acceleration in load migration from the IOUs to new and existing CCAs; and (5) divergent trends in local procurement activity, notwithstanding recent waiver requests.

COMMENTS:

1) Author's Statement. Renewables now make up a major fraction of our energy supply in California, which has created the need for substantial flexible capacity [see, the famous Duck Curve]. The loss of the San Onofre Nuclear Generation Station and the once-through cooling plants, in addition to load migration from investor-owned utilities to CCA providers also creates complications for administering RA and for financing operational upgrades at power plants throughout California. As a result, there is some instability in the RA market.

Given these new goals for our electricity system, the need for flexibility to integrate renewables, our climate goals, and some market instability, it is time to reexamine the RA statute.

2) Modernize RA Statute. The original resource adequacy mandate predates the development of the Renewables Portfolio Standard (RPS). The state's procurement entities have achieved their RPS goals and electricity procurement continues to evolve requiring changes in our regulatory structures and reliability requirements. This bill updates the RA regime to specifically coordinate with the state's goals for clean energy, reducing air pollution, and reducing emissions of greenhouse gases. The bill codifies a flexible RA requirement to meet load serving requirements. Finally, the bill requires the CPUC to design RA requirements that minimize the need for backstop capacity procurement by the CAISO.

3) ISO Sounds Alarm. Under Federal Energy Regulatory Commission (FERC) rules, the CAISO, like all other balancing authorities, must ensure system reliability or face penalties by FERC. If California RA policies fail to provide sufficient resources, the CAISO may be forced to utilize centralized backstop procurement mechanisms whereby the CAISO enters into contract to address the shortfall in order to maintain electric system reliability. CAISO backstop procurement had been on the decline but in the fall of 2017, CAISO contracted for more than 1,500 megawatts of natural gas fired generation from five different plants. This is notice that RA is not working. The CPUC has initiated a thorough review of RA which is reflected in a staff white paper and an ongoing rulemaking (R.14-10-010).

REGISTERED SUPPORT / OPPOSITION:

Support

California Energy Storage Alliance
State Building and Construction Trades Council AFL-CIO
Union of Concerned Scientists
Wellhead Electric Company, Inc.

Opposition

None on file.

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