California's SB X 1-2 Law Walks Renewable Energy Tightrope

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California Governor Jerry Brown recently signed SB X 1-2 into law, marking a new milestone in California's electricity history.

California, USA -- This law, called the California Renewable Energy Resources Act, obligates all California electricity providers to obtain at least 33% of their energy from renewable resources by the year 2020. This requirement constitutes the most aggressive renewable portfolio standard in the country.

This article provides an overview of SB X 1-2, and examines its path to implementation.

When SB X 1-2 takes effect, it will be the latest in a series of California laws enacted over the last 5 years which are designed to radically change the State's energy profile, reduce its greenhouse gas emissions, and reinforce its position as a global environmental leader. At the same time, these measures are intended to attract capital to the State, drive economic activity and produce jobs here at home. These laws include California's landmark AB 32 (2006), which obligates the State to decrease its emissions to 1990 levels by 2020, and SB 1368 (2008) which prohibits the importation of electricity from plants failing to meet certain environmental standards.

The passage of SB X 1-2 is clearly a triumph for California. However, the law is also painfully complicated due to its competing priorities: on one hand, achieving the 33% target (with the intention that the bulk of projects will be generated in California); and on the other hand, minimizing rate impacts.

In an effort to resolve these conflicting interests, SB X 1-2 employs tortuous formulae that generally favor in-state development (but allow some importation of out-of-state renewables), and try to mitigate rate effects by:

1. requiring limits to be placed on the cost of renewables;
2. providing for waivers and exemptions for providers unable to reach the targets; and
3. seeking to streamline permitting for renewables projects and transmission infrastructure

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infrastructure.

The result is a dense document which is sometimes hard to decipher.

SB X 1-2 covers all electricity providers, including investor owned utilities (IOUs) and publicly owned utilities (POUs). The law contains interim targets of 20% by 2013 and 25% by 2016. It also dictates that in order to qualify, the power must come from a "renewable electrical generation facility", which means a plant that meets certain criteria.

The facility must use biomass, solar thermal, photovoltaic, wind, geothermal, fuel cells using renewable fuels, small hydro (under 30 MW), digester gas, trash conversion (not utilizing combustion), landfill gas, ocean wave, ocean thermal, or tidal current. The facility must also be either located in California (or near the border of California) with the first point of connection to the transmission network of a California balancing authority (CBA) or have its first point of interconnection to the transmission network outside California. But it must be within the Western Electricity Coordinating Council area, and satisfy certain other conditions.

The statute grandfathers contracts (including those for out-of-state power) entered before June 1, 2010. Further, SB X 1-2 contains numerous statements that embrace out-of-state power: “This electricity may be generated anywhere in the interconnected grid that includes many states, and areas of both Canada and Mexico.”

However, SB X 1-2 then presents Section 399.16, which imposes a “loading order” that requires each provider to attain a balanced portfolio of renewables under three categories called buckets:

1. Products that have a first point of interconnection with a CBA (or with distribution facilities serving a CBA), or which are scheduled into a CBA, or which have an agreement to dynamically transfer electricity to a CBA
2. Firmed and shaped products scheduled into a CBA
3. Other products (including unbundled renewable energy credits)

We will refer to the power under paragraph (1) above as “California Content” and under paragraph (3) as “REC Content."

Under Section 399.16, each provider must ensure that by the end of 2013, no less than 50% of its renewables consist of California Content, with such percentage increasing to 65% by the end of 2016, and 75% thereafter. Also, each provider must ensure that by the end of 2013, no more than 25% of its renewables portfolio comprises REC Content, with such percentage declining to 15% by the end of 2016, and 10% thereafter.

In essence, then, starting in 2017, all providers must procure no less than 75% of their renewables from California Content and no more than 10% from unbundled RECs, with the remainder from firmed and shaped products.

The loading order in Section 399.16 impacts out-of-state facilities which must now revisit their sales strategies in California.

The law’s 33% by 2020 mandate, coupled with its slant towards in-state production, make cost containment a paramount consideration, especially since in-state development is generally more expensive and time-consuming than out-of-state construction. SB X 1-2 addresses that challenge in a number of ways:

First, the law requires the Department of Fish and Game to establish an, “internal division” to perform “planning and environmental compliance services with priority given to [renewables] project.” Whether this division can simplify permitting processes and overcome the growing misuse of environmental regulations to derail renewables projects remains to be seen. What is certain is that California must reduce regulatory impediments while safeguarding environmental protections.

Second, the statute recognizes that new transmissions will be needed: “New and modified electric transmission facilities may be necessary to facilitate the state achieving its… targets.” This is a tacit acknowledgement because while distributed generation must play an essential part, it alone cannot satisfy the law’s objectives. Consistent with

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the foregoing, the statute requires the CPUC to determine applications for Certificates of Public Convenience and Necessity within 18 months. It also admonishes the California Independent System Operator IOUs and POUs to work cooperatively to interconnect renewables to the grid in an efficient and cost-effective manner.

Finally, the statute requires the California Public Utilities Commission (CPUC) to establish a limitation for each seller on procurement expenditures for renewables. In developing the cost limitation, the CPUC must avoid “disproportionate rate impacts” and must “ensure rates are just and reasonable, and are not significantly affected by the procurement requirements of this article.”

The governing bodies of POUs are accorded the right to adopt similar cost control measures. The law also provides that the CPUC shall waive enforcement as to a provider if it finds certain circumstances including inadequate transmission, permitting hurdles, or insufficiency of renewables. Additionally, a seller is given the right to reject contracts or build facilities beyond what is possible under the cost limitation. In other words, if resources or transmission prove lacking or regulatory issues arise, a provider may obtain a waiver or assert an exemption.

SB X 1-2 clearly sets a high bar. However, in positioning the 33% standard, with the added slant in favor of in-state development, SB X 1-2 must also grapple with the downside of its ambitions – namely, increased rates. The success of the law will ultimately depend on whether it has struck the right balance, and whether the provisions to contain costs, accelerate transmission, and streamline development will work in practice. It will also depend upon whether the plethora of clauses that authorize waivers and exemptions will be invoked, thus jeopardizing the realization of SB X 1-2’s laudable objectives.

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