

STATE OF CALIFORNIA

Public Utilities Commission  
San Francisco

**M e m o r a n d u m**

**Date:** March 18, 2013

**To:** The Commission  
(Meeting of March 21, 2013)

**From:** Lynn Sadler, Director  
Office of Governmental Affairs (OGA) – Sacramento

**Subject:** **AB 762 (Patterson) –**  
**As introduced: February 21, 2013**

**RECOMMENDED POSITION:** OPPOSE

**SUMMARY OF BILL**

This bill would qualify all hydroelectric generation facilities as RPS-eligible resources regardless of size, provided that other existing eligibility criteria are met.

Specifically, this bill would allow hydroelectric facilities greater than 30 megawatts in size to create renewable energy credits (RECs) if the facility is located in a California balancing authority area; or, if the facility is interconnected to a transmission network outside California, but within the Western Electricity Coordinating Council (WECC), the facility must commence operation after January 1, 2005, comply with California environmental quality act and be registered with the Western Renewable Energy Generation Information System (WREGIS).

AB 1771 (Valadao, 2012) proposed the same modification to the RPS eligibility requirements in a similar manner as AB 762 (Patterson, 2013).

**CURRENT LAW**

- Public Utilities Code 399.12(e)(1)(A), generally limits RPS-eligible status to hydroelectric generation facilities of 30 megawatts (MW) or smaller.
- The Federal Government pursuant to the Public Utility Regulatory Policy Act (PURPA) limits the total capacity size to 80 MW for hydroelectric generation facilities that may certify as Qualifying Facilities (United States Code, Title 16, Chapter 12, Subchapter I, § 796).

**AUTHOR'S PURPOSE**

To change the law so that electricity generated by hydroelectric facilities greater than 30 megawatts counts toward RPS requirements.

## **EXPLANATION OF BILL'S IMPACT ON CPUC PROGRAMS, PRACTICE & POLICY**

### Reduced RPS Requirement and Impact on AB 32 Goals

This bill would reduce the overall statewide level of new renewable capacity needed to meet the 33% by 2020 RPS goal required by Public Utilities Code Sections 399.12 - 399.31. The 33% RPS goal is a key component of the state's efforts to meet the AB 32 (Nunez, Stats. 2006, ch. 488) greenhouse gas reduction goals. Reducing the overall renewable energy capacity will mean the state may need to achieve incremental greenhouse gas reductions in sectors other than the electricity sector.

Additionally, reducing the demand for new renewable capacity at this stage of the RPS program when numerous renewable generation projects are in various stages of development would cause market uncertainty regarding the long-term market signal (demand) for new renewable capacity in California and throughout the Western Electricity Coordinating Council (WECC). In response to the state's long-standing objective to achieve a 33% RPS by 2020 (e.g., Energy Action Plan adopted by the CPUC and California Energy Commission) investor-owned utilities have made significant financial commitments on behalf of California ratepayers to achieve the 33% RPS goal. The reduced RPS requirement caused by this bill could result in having ratepayers incur unnecessary costs.

### Inconsistent with California Law

This bill would attribute additional value to hydroelectric generation facilities that are not eligible for the RPS program and incentivize the development of new large hydroelectric facilities. Attributing additional value to hydroelectric generation and incentivizing new large hydroelectric generation potentially conflicts with the RPS statute's exclusion of these resources from being RPS-eligible for the purpose of compliance with the state's RPS program.

Because this bill would reduce the overall statewide level of new renewable capacity needed to meet the 33% by 2020 RPS goal, this bill contravenes the legislative objectives of the RPS including the RPS's effectiveness at reducing emissions of greenhouse gases associated with electrical generation. Additionally, a reduced RPS requirement would likely result in a reduction in total California jobs created by the RPS program.

### Asymmetric Impact on Load Serving Entities

This bill would also have an asymmetric effect on RPS-obligated load serving entities. This bill would benefit only a small subset of California load serving entities (LSEs), specifically those that contract with or own hydroelectric generation facilities that are not currently RPS-eligible under the current RPS statute. These LSEs are largely located in Northern California. The LSEs in Southern California do not procure as much

hydroelectric generation and consequently would be required to procure a disproportionately larger share of renewable generation.

### **SAFETY IMPACT**

The safety impact is not clear. Safety impacts to individual facilities (hydroelectric generators, dams and impoundments) might result from this statutory change.

### **RELIABILITY IMPACT**

None.

### **RATEPAYER IMPACT**

It is difficult to quantify the ratepayer impacts of this bill. In general, this bill would provide RPS compliance benefits to only a subset of California load serving entities, specifically those that contract with or own large hydroelectric generation facilities that are not eligible for the RPS program under current law. If the intent of this bill is to minimize the cost of complying with the RPS program the legislature should consider more equitable and effective methods to achieve this objective.

Since 2002, the CPUC has approved more than 225 contracts for over 19,000 MW of renewable capacity for the three large investor-owned utilities (PG&E, SCE and SDG&E), the vast majority of which are long-term contracts with new renewable capacity, in accordance with the long-standing RPS eligibility rules in the Public Utilities Code and Public Resource Code. PG&E contracts with or owns approximately 4,300 megawatts of hydroelectric generation facilities that are not eligible for the RPS program. In 2010, PG&E received approximately 12,000,000 megawatt hours (MWh) of generation from these facilities (almost as much as the amount of RPS-eligible generation that PG&E received in the same year). Assuming the same amount of large hydroelectric generation during the first RPS compliance period (2011-2013), approximately 80% of PG&E's RPS procurement quantity requirement (20% of retail sales for 2011-2013) would be met with existing large hydroelectric resources. The effect of this would be to vastly diminish the value of reasonable cost RPS contracts that PG&E has undertaken on behalf of its ratepayers to date.

### **FISCAL IMPACT**

None.

### **ECONOMIC IMPACT**

The specific economic impact of this bill is difficult to quantify. This bill would reduce the statewide demand for new renewable capacity, much of which could be developed within the state of California. Thus, any forecast of expected job growth and associated local economic benefits associated with RPS-driven development will be reduced.

### **LEGAL IMPACT**

None.

### **LEGISLATIVE HISTORY**

AB 1771 (Valadao, 2012) in the same manner as AB 762 (Patterson, 2013), AB 1771 would have allowed hydroelectric generation facilities of any size to qualify as an RPS-eligible resource, changing the long-standing law that only hydroelectric generation facilities less than 30 megawatts in size may contribute to California's RPS goals.

SB 971 (Cannella, 2012) would have changed the methodology used to calculate RPS procurement requirements for retail sellers and publicly owned electric utilities. Specifically, this bill would have set RPS procurement requirements based on "net program retail sales," where "net program retail sales" equaled total retail sales minus those retail sales where the load was met by hydroelectric generation facilities greater than 30 megawatts in size.

SB 297 (Cannella, 2011) would have allowed hydroelectric generation facilities of any size to qualify as an RPS-eligible resource, changing the long-standing law that only hydroelectric generation facilities less than 30 megawatts in size may contribute to the RPS. SB 297 would have increased the numerator portion of the RPS percentage calculation (i.e., RPS procurement in megawatt hours), where SB 971 would decrease the denominator; thus, the two bills would have a similar effect.

Current state and federal law allows hydroelectric facilities to retain RPS status if efficiency improvements result in capacity increases above the RPS eligibility threshold.

- Public Utilities Code Section 399.12.5, small hydroelectric generation facility that satisfies the criteria for an eligible renewable energy resource pursuant to Section 399.12 shall not lose its eligibility if efficiency improvements undertaken after January 1, 2008, cause the generating capacity of the facility to exceed 30 megawatts, and the efficiency improvements do not result in an adverse impact on instream beneficial uses or cause a change in the volume or timing of streamflow. The entire generating capacity of the facility shall be eligible.
- Pursuant to Federal Power Act, a hydroelectric generation facility that is certified as eligible for the RPS as of January 1, 2010, shall not lose its eligibility if the facility causes a change in the volume or timing of streamflow required by license conditions approved on or after January 1, 2010 (Chapter 12 [commencing with Section 791a] of Title 16 of the United States Code).

### **BACKGROUND INFO ON IMPACTED PROGRAMS, PRACTICE OR POLICY**

The RPS program, as set forth in Public Utilities Code Sections 399.11- 399.31, requires that California retail sellers and publically owned utilities increase the portion of retail sales that comes from RPS-eligible resources so that by 2020 and for each year thereafter 33% of California's retail electricity sales is supplied by RPS-eligible resources.

California's RPS program is mature and has successfully led a dramatic and beneficial change to the electricity infrastructure and market throughout the state and the WECC. The RPS program was adopted in SB 1078 (Sher, Stats. 2002, ch. 516), and subsequently modified by SB 107 (Simitian, Stats. 2006, ch. 464), SB 1036 (Perata, Stats. 2007, ch. 685) and SB 2 (1X) (Simitian, Stats. 2011, ch. 1). The CPUC is statutorily responsible for 1) requiring each utility to submit an RPS Procurement Plan, 2) establishing a RPS cost limitation, 3) adopting a process that utilities must use to evaluate renewable energy projects proposed by independent power producers in response to the utilities' RPS solicitations, 4) adopting RPS compliance rules, 5) reviewing and approving or rejecting utilities' RPS contracts, and 6) reporting to the Legislature on various aspects of the RPS program.

The CPUC has adopted over 40 decisions to implement the RPS program and has approved approximately 225 RPS contracts for approximately 19,000 MW—nearly 4,500 megawatts of which have already begun delivering RPS eligible energy.

### **SUMMARY OF SUPPORTING ARGUMENTS FOR RECOMMENDATION**

This bill should be opposed for the following reason(s):

- (1) California's RPS program would be less robust if hydroelectric generation facilities of any size (i.e., large-hydro) would contribute towards meeting the state's 33% RPS commitment.
- (2) This bill could have the unintended consequence of significantly reducing the statewide demand for renewable energy from new RPS-eligible facilities and thus undermine the state's greenhouse gas goals established by AB 32 (Nunez, Stats. 2006, ch. 488).
- (3) This bill could also have the unintended consequence of having ratepayers of PG&E, SCE and SDG&E find themselves with a surplus of RPS generation, which would diminish the value of the utilities' portfolio of RPS contracts.
- (4) Finally, this bill would provide RPS compliance benefit to only a subset of California RPS-obligated load serving entities.

### **SUMMARY OF SUGGESTED AMENDMENTS**

None.

### **STATUS**

AB 762 is scheduled for hearing before the Assembly Utilities and Commerce Committee on April 8, 2013.

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**BILL LANGUAGE:**

BILL NUMBER: AB 762      INTRODUCED  
BILL TEXT

INTRODUCED BY    Assembly Member Patterson

FEBRUARY 21, 2013

An act to amend Section 399.12 of, and to repeal Section 399.12.5 of, the Public Utility Code, relating to energy.

LEGISLATIVE COUNSEL'S DIGEST

AB 762, as introduced, Patterson. Renewable energy resources: hydroelectric generation.

Existing law establishes the California Renewables Portfolio Standard Program, which requires the Public Utilities Commission to implement annual procurement targets for the procurement of eligible renewable energy resources, as defined, for all retail sellers, as defined, to achieve the targets and goals of the program. The existing definition of an eligible renewable energy resource includes small hydroelectric generation facilities of 30 megawatts or less that meet specified criteria.

This bill would revise the definition of an eligible renewable energy resource for the purposes of the California Renewables Portfolio Standard Program to include a hydroelectric generation facility of any size if it meets certain requirements. The bill would also make conforming changes.

Vote: majority. Appropriation: no. Fiscal committee: yes. State-mandated local program: no.

THE PEOPLE OF THE STATE OF CALIFORNIA DO ENACT AS FOLLOWS:

SECTION 1. Section 399.12 of the Public Utilities Code is amended to read:

399.12. For purposes of this article, the following terms have the following meanings:

(a) "Conduit hydroelectric facility" means a facility for the generation of electricity that uses only the hydroelectric potential of an existing pipe, ditch, flume, siphon, tunnel, canal, or other manmade conduit that is operated to distribute water for a beneficial use.

(b) "Balancing authority" means the responsible entity that integrates resource plans ahead of time, maintains load-interchange generation balance within a balancing authority area, and supports interconnection frequency in real time.

(c) "Balancing authority area" means the collection of generation, transmission, and loads within the metered boundaries of the area within which the balancing authority maintains the electrical load-resource balance.

(d) "California balancing authority" is a balancing authority with control over a balancing authority area primarily located in this state and operating for retail sellers and local publicly owned electric utilities subject to the requirements of this article and includes the Independent System Operator (ISO) and a local publicly owned electric utility operating a transmission grid that is not under the operational control of the ISO. A California balancing authority is responsible for the operation of the transmission grid within its metered boundaries which may not be limited by the political boundaries of the State of California.

(e) (1) "Eligible renewable energy resource" means ~~an~~ either of the following:

(A) An electrical generating facility that meets the definition of a "renewable electrical generation facility" in Section 25741 of the Public Resources Code, subject to the following:

~~(1) (A)~~

(i) An existing small hydroelectric generation facility of 30 megawatts or less shall be eligible only if a retail seller or local publicly owned electric utility procured the electricity from the facility as of December 31, 2005. A small hydroelectric generation unit with a nameplate capacity not exceeding 40 megawatts that is operated as part of a water supply or conveyance system is an eligible renewable energy resource if the retail seller or local publicly owned electric utility procured the electricity from the facility as of December 31, 2005. A new hydroelectric facility that commences generation of electricity after December 31, 2005, is not an eligible renewable energy resource if it will cause an adverse impact on instream beneficial uses or cause a change in the volume or timing of streamflow.

~~(B)~~

(ii) Notwithstanding ~~subparagraph (A)~~ clause (i), a conduit hydroelectric facility of 30 megawatts or less that commenced operation before January 1, 2006, is an eligible renewable energy resource. A conduit hydroelectric facility of 30 megawatts or less that commences operation after December 31, 2005, is an eligible renewable energy resource so long as it does not cause an adverse impact on instream beneficial uses or cause a change in the volume or timing of streamflow.

~~(C)~~

(iii) A facility approved by the governing board of a local publicly owned electric utility prior to June 1, 2010, for procurement to satisfy renewable energy procurement obligations adopted pursuant to former Section 387, shall be certified as an eligible renewable energy resource by the Energy Commission pursuant to this article, if the facility is a "renewable electrical generation facility" as defined in Section 25741 of the Public Resources Code.

(B) Notwithstanding subparagraph (A), a hydroelectric generation facility of any size is an eligible renewable energy resource if the facility satisfies the requirements in paragraph (2) of subdivision (a) of Section 25741 of the Public Resources Code.

(2) A facility engaged in the combustion of municipal solid waste shall not be considered an eligible renewable energy resource unless it is located in Stanislaus County and was operational prior to



September 26, 1996.

(f) "Procure" means to acquire through ownership or contract.

(g) "Procurement entity" means any person or corporation authorized by the commission to enter into contracts to procure eligible renewable energy resources on behalf of customers of a retail seller pursuant to subdivision (f) of Section 399.13.

(h) (1) "Renewable energy credit" means a certificate of proof associated with the generation of electricity from an eligible renewable energy resource, issued through the accounting system established by the Energy Commission pursuant to Section 399.25, that one unit of electricity was generated and delivered by an eligible renewable energy resource.

(2) "Renewable energy credit" includes all renewable and environmental attributes associated with the production of electricity from the eligible renewable energy resource, except for an emissions reduction credit issued pursuant to Section 40709 of the Health and Safety Code and any credits or payments associated with the reduction of solid waste and treatment benefits created by the utilization of biomass or biogas fuels.

(3) (A) Electricity generated by an eligible renewable energy resource attributable to the use of nonrenewable fuels, beyond a de minimis quantity used to generate electricity in the same process through which the facility converts renewable fuel to electricity, shall not result in the creation of a renewable energy credit. The Energy Commission shall set the de minimis quantity of nonrenewable fuels for each renewable energy technology at a level of no more than 2 percent of the total quantity of fuel used by the technology to generate electricity. The Energy Commission may adjust the de minimis quantity for an individual facility, up to a maximum of 5 percent, if it finds that all of the following conditions are met:

(i) The facility demonstrates that the higher quantity of nonrenewable fuel will lead to an increase in generation from the eligible renewable energy facility that is significantly greater than generation from the nonrenewable fuel alone.

(ii) The facility demonstrates that the higher quantity of nonrenewable fuels will reduce the variability of its electrical output in a manner that results in net environmental benefits to the state.

(iii) The higher quantity of nonrenewable fuel is limited to either natural gas or hydrogen derived by reformation of a fossil fuel.

(B) Electricity generated by a small hydroelectric generation facility shall not result in the creation of a renewable energy credit unless the facility meets the requirements of *clause (i) of subparagraph (A) of paragraph (1) of subdivision (e)*.

(C) Electricity generated by a conduit hydroelectric generation facility shall not result in the creation of a renewable energy credit unless the facility meets the requirements of *clause (ii) of subparagraph ~~(B)~~ (A) of paragraph (1) of subdivision (e)*.

(D) Electricity generated by a facility engaged in the combustion of municipal solid waste shall not result in the creation of a renewable energy credit unless the facility meets the requirements of paragraph (2) of subdivision (e).

(i) "Renewables portfolio standard" means the specified percentage of electricity generated by eligible renewable energy resources that

a retail seller or a local publicly owned electric utility is required to procure pursuant to this article.

(j) "Retail seller" means an entity engaged in the retail sale of electricity to end-use customers located within the state, including any of the following:

(1) An electrical corporation, as defined in Section 218.

(2) A community choice aggregator. The commission shall institute a rulemaking to determine the manner in which a community choice aggregator will participate in the renewables portfolio standard program subject to the same terms and conditions applicable to an electrical corporation.

(3) An electric service provider, as defined in Section 218.3, for all sales of electricity to customers beginning January 1, 2006. The commission shall institute a rulemaking to determine the manner in which electric service providers will participate in the renewables portfolio standard program. The electric service provider shall be subject to the same terms and conditions applicable to an electrical corporation pursuant to this article. This paragraph does not impair a contract entered into between an electric service provider and a retail customer prior to the suspension of direct access by the commission pursuant to Section 80110 of the Water Code.

(4) "Retail seller" does not include any of the following:

(A) A corporation or person employing cogeneration technology or producing electricity consistent with subdivision (b) of Section 218.

(B) The Department of Water Resources acting in its capacity pursuant to Division 27 (commencing with Section 80000) of the Water Code.

(C) A local publicly owned electric utility.

(k) "WECC" means the Western Electricity Coordinating Council of the North American Electric Reliability Corporation, or a successor to the corporation.

SEC. 2. Section 399.12.5 of the Public Utilities Code is repealed.

~~— 399.12.5. (a) Notwithstanding subdivision (c) of Section 399.12, a small hydroelectric generation facility that satisfies the criteria for an eligible renewable energy resource pursuant to Section 399.12 shall not lose its eligibility if efficiency improvements undertaken after January 1, 2008, cause the generating capacity of the facility to exceed 30 megawatts, and the efficiency improvements do not result in an adverse impact on instream beneficial uses or cause a change in the volume or timing of streamflow. The entire generating capacity of the facility shall be eligible.~~

~~— (b) Notwithstanding subdivision (c) of Section 399.12, the incremental increase in the amount of electricity generated from a hydroelectric generation facility as a result of efficiency improvements at the facility, is electricity from an eligible renewable energy resource, without regard to the electrical output of the facility, if all of the following conditions are met:~~

~~— (1) The incremental increase is the result of efficiency improvements from a retrofit that do not result in an adverse impact on instream beneficial uses or cause a change in the volume or timing of streamflow.~~

~~— (2) The hydroelectric generation facility meets one of the following certification mechanisms:~~

~~— (A) The hydroelectric generation facility has, within the~~

~~immediately preceding 15 years, received certification from the State Water Resources Control Board pursuant to Section 401 of the federal Clean Water Act (33 U.S.C. Sec. 1341), or has received certification from a regional board to which the state board has delegated authority to issue certification, unless the facility is not subject to certification because there is no potential for discharge into waters of the United States.~~

~~—(B) If the hydroelectric facility is not located in California, the certification pursuant to Section 401 of the federal Clean Water Act (33 U.S.C. Sec. 1341) may be received from the applicable state board or agency or from a regional board to which the state board has delegated authority to issue the certification.~~

~~—(C) If the hydroelectric generation facility is the Rock Creek Powerhouse, Federal Energy Regulatory Commission Project Number 1962, the efficiency improvements have received any necessary incremental certification from the State Water Resources Control Board.~~

~~—(3) The hydroelectric generation facility is owned by a retail seller or a local publicly owned electric utility, was operational prior to January 1, 2007, the efficiency improvements are initiated on or after January 1, 2008, the efficiency improvements are not the result of routine maintenance activities, as determined by the Energy Commission, and the efficiency improvements were not included in any resource plan sponsored by the facility owner prior to January 1, 2008.~~

~~—(4) All of the incremental increase in electricity resulting from the efficiency improvements are demonstrated to result from a long-term financial commitment by the retail seller or local publicly owned electric utility. For purposes of this paragraph, "long-term financial commitment" means either new ownership investment in the facility by the retail seller or local publicly owned electric utility or a new or renewed contract with a term of 10 or more years, which includes procurement of the incremental generation.~~

~~—(c) The incremental increase in the amount of electricity generated from a hydroelectric generation facility as a result of efficiency improvements at the facility are not eligible for supplemental energy payments pursuant to the Renewable Energy Resources Program (Chapter 8.6 (commencing with Section 25740) of Division 15 of the Public Resources Code), or a successor program.~~

~~—(d) Notwithstanding subdivision (c) of Section 399.12 and subdivisions (a) and (b), a hydroelectric generation facility that is an eligible renewable energy resource pursuant to this article as of January 1, 2010, shall not lose its eligibility if the facility causes a change in the volume or timing of streamflow required by license conditions approved pursuant to the Federal Power Act (Chapter 12 (commencing with Section 791a) of Title 16 of the United States Code) on or after January 1, 2010.~~