April 5, 2013

California Energy Commission
Sacramento, CA

Re: Docket number 11-RPS-01, RPS proceeding

To the California Energy Commission,

The signatories of this letter thank the Energy Commission for the March 2013 draft report, “Analysis of regulatory requirements for including British Columbia run-of-river facilities in the California Renewables Portfolio Standards”, and for the opportunity to comment on the report.

Although the report contains much useful information and context, it has three major flaws that should be addressed to ensure clarity and accuracy. The following provides a perspective on those and other issues, and suggests changes.

1. **Report ignores the Legislature’s direction**
   SB X1 2, which increased the renewable energy requirement to 33 percent by December 31, 2020, also required CEC to “provide a report to the Legislature that analyzes run-of-river hydroelectric generating facilities in British Columbia, including whether these facilities are, or should be, included as renewable electrical generation facilities…” (emphasis added).

   CEC, however, ignored the Legislature’s direction. The report’s Title, Abstract, Executive Summary and Conclusions are evidence of this. The abstract says: “The report concludes that additional requirements are necessary if California is to allow British Columbia (BC) run-of-river (ROR) hydroelectric resources to be RPS-eligible.” The Legislature did not direct CEC to determine how hydro from BC could be RPS-eligible, it directed CEC to determine if hydro from BC is eligible.

   The only conclusion that can be made from California’s hydropower RPS regulations is that hydropower from BC is not RPS-eligible. That is a fact and stating it will make the report clearer and comply with the Legislature’s direction.

   The report lists the relevant California RPS hydropower regulations, but omits part of the regulations, which limits the interpretation. The report says the project:
   a. Must be less than 30 MW.
   b. Must not cause an adverse impact on instream beneficial uses or cause a change in the volume or timing of streamflow.
   c. Must be developed and operated in a manner that is as protective of the environment as a similar facility located in California.

   The report should cite the complete version of “a” and “b” (above) from Sec. 14. Section 399.12, (e) (1) (A) of the Public Utilities Code, which reads:
• “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 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.”

Further support of this conclusion comes from the Pacific Gas and Electric Company (which supported weakening the RPS hydro regulations so that it could import hydro from BC for RPS purposes). In a 2008 report submitted to the California Public Utilities Commission, PG&E says “BC hydro facilities would not be qualified as RPS-eligible resources.” Regarding “a” and “b” above, PG&E says “BC ROR hydro facilities will not meet any of these criteria.”

Recommendations
1. The report’s Abstract, Executive Summary, and Conclusions should be changed to clearly state that hydro from BC is not RPS-eligible.
2. The title of the report should be changed by deleting “regulatory requirements for including.”
3. The report should quote the entire portions from Sec. 14. Section 399.12, (e) (1) (A) of the Public Utilities Code as described above, in the Executive Summary; Chapter 1, Run-of-River Hydro, page 6; and the Conclusions.

2. Conclusion regarding comparison of BC/Canada and CA/US hydropower laws, ordinances, regulations, and standards is extremely inaccurate
The report’s second major flaw are the erroneous statements in the Executive Summary and Table 10, which compares the laws, ordinances, regulations, and standards (LORS) regarding hydropower facilities development and operation in BC/Canada and California/U.S. Regarding regulations, impact analysis, fish habitat and migration, water quality, and monitoring, the report says BC/Canada and California/U.S. LORS are “comparable.”

That conclusion is extremely inaccurate. One fact alone contradicts it. In BC, environmental impact assessments are not required for hydropower projects that are less than 50 megawatts in size. Environmental assessments for projects less than 50 megawatts are voluntary. “As a result, a large proportion of ROR projects do not undergo environmental assessments.”

There is also much more evidence that the LORS of BC/Canada and California/U.S. are not comparable. The report (and proponents of BC ROR projects) cites 50 provincial and

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1 California Public Utilities Code, Sec. 14. Section 399.12, (e) (1) (A)
2 Ibid.
3 Pacific Gas & Electric Company, BC Renewable Study Phase 1, 2008
4 Ibid.
5 Environmental Assessment Act, S.B.C. 2002, c. 43
6 Devlin Gailus, Barristers and Solicitors, Testing the Waters: A Review of Environmental Regulation of Run-of-River Projects in British Columbia, 2010
federal permits in BC and Canada for ROR projects. The number cited, however, is very misleading. The following is from an analysis of purported BC and Canadian regulations regarding BC ROR projects by the law firm of Devlin Gailus, based in Victoria, British Columbia:

“In a recent letter to the California State Assembly, BC Minister of Environment, Barry Penner, asserted that a typical ROR project requires more than 50 permits, licenses, reviews and approvals from 14 regulatory bodies. The following report canvases the provincial and federal environmental regulations that apply to ROR projects in BC. It focuses on those statutes and regulations that are most relevant to environmental issues, including each piece of provincial legislation and most of the federal legislation cited in Minister Penner’s letter. This review suggests that many of the laws and approvals referred to by ROR advocates have little if any application to the environmental impacts of a given project. Further, this report identifies significant shortcomings in the key legislative provisions and review processes that do address environmental concerns. These include inadequate access to public information, a lack of clear and balanced legislative mandates to guide decision-makers, reduced regulatory thresholds for environmental assessments, as well as ineffective monitoring and compliance measures. Despite the numerous laws and agencies involved, the current regulatory regime does not afford adequate environmental protection in the context of ROR development in BC.”

Furthermore, the CEC report didn’t assess the significant weakening of federal environmental laws that previously applied to river diversion projects in BC. Bill C-38, introduced April 26th 2012, rewrote and weakened key provisions of the Fisheries Act pertaining to habitat protection, and completely rewrote and significantly weakened the Canadian Environmental Assessment Act.

The rewritten Fisheries Act removes the requirement to protect fish habitat and narrowly focuses on supporting “commercial, recreational and aboriginal fisheries.” These changes will remove protection for most freshwater fish in Canada. When fully implemented, Bill C-38 will replace the ban on any activity that results in “harmful” alteration, disruption or destruction of fish habitat with a much weaker prohibition against actions that cause ‘serious’ harm to only the newly specified fisheries. Serious harm is defined as the killing of fish, or permanent alteration or destruction of those specified fisheries.

Additionally, the federal government can now declare that habitat protection and some other provisions of the Act simply don’t apply to some waters. The federal government can also hand over power to provincial governments, such as British Columbia, to authorize destruction of fish habitat.

In summary, the weakening of the Fisheries Act, accompanied by significant staff reductions, including the recent loss of one third of the Department of Fisheries and Ocean (DFO) habitat biologists in BC, means less protection for the majority of freshwater fish in Canada, significantly reduced habitat protection for all fish; creating a

7 Ibid.
hierarchy of fish protection—prioritizing fish of particular value to humans and providing significantly less ecosystem protection to all other fish species. Likewise, recent changes to the Navigation Protection Act (formerly the Navigable Waters Protection Act) remove protection for lakes, streams and rivers identified as “non-vital” or “minor waters,” which is the vast majority of water bodies in Canada.

The federal government also created an entirely new Canadian Environmental Assessment Act which bears scant resemblance to the former Act. The new Act expressly permits political interference, eliminated federal environmental assessments for 492 projects in BC, including river diversion projects, and reduces the number of federal departments that can conduct an environmental review from 40 to just three. Additionally, the new Act arbitrarily shortens timelines, constrains public participation and allows the federal Minister of Environment or cabinet the discretion to remove projects from an assessment.

Even prior to the weakening of federal environmental laws, existing provincial and federal laws and regulations provided inadequate oversight of river diversion projects in BC as evidenced by the analysis of Devlin Gailus, which was quoted above.

The delegation of environmental oversight to the provinces is of great concern in British Columbia where a decade of environmental cuts has reduced the budget and staffing of the BC Ministry of Environment by 50 per cent since 2001.

Additionally, a recent review by the Ministry of Forest, Lands and Natural Resource Operation of 16 river diversion projects operating in the South Coast region of British Columbia in 2010 found 749 instances of non-compliance. The majority of the instances are “ramping,” instream flow non-compliance and notification violations. Notably, the review found that government authorities “had a limited capacity to respond to these non-compliance incidents.” Government concerns about non-compliance at operating projects were highlighted by DFO concerns regarding the Kokish River—a high-value fisheries’ river with five species of wild salmon and two endangered runs of steelhead—where a river diversion project was recently approved. In minutes from a Fisheries Technical Working Group Meeting in July of 2011, officials remarked: “DFO has observed considerable non-compliance with managing flows for fish on operating projects.”

Concerns about inadequate provincial standards can be clearly seen in a leaked memo from Erin Stoddard, an ecosystem biologist with the BC government who has experience working with river diversion projects. His memo written on March 15, 2012 and entitled, “Management and Conservation Issues/Concerns with Hydropower Projects in the South Coast Region,” outlined a number of concerns regarding river diversion developments including inadequate oversight of projects which are increasingly situated in “sensitive” fish habitat, “biased advice” from professionals hired by the proponents and inadequate

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8 Charlene Menezes, Operational Non-Compliance of CEPs in the South Coast Region, 2012
9 Ibid.
10 Meeting minutes from the Proposed Kokish River Hydroelectric Project, Fisheries Technical Working Group, July 2011
consideration given to mitigation, instream flow requirements as well as acknowledgement that the “Ministry in the region has significantly inadequate resources dedicated to address fish issues/concerns and the review, management, monitoring and enforcement of impacts to fish and fish associated with current and future projects.”

This was also reported on by the Vancouver Sun.

The CEC report suggested that were hydropower from BC to be RPS-eligible, third-party certification by Ecologo should be obtained. This is particularly troubling as many Ecologo certified projects have had significant problems with non-compliance. Ecologo has acknowledged weaknesses in their auditing process, which includes voluntary reporting of non-compliance incidents by proponents. Ecologo is in the process of revising their hydroelectric standard after admitting their previous standard “needed improvement.” [http://www.ecologo.org/en/criteria/subpage.asp?page_id=263](http://www.ecologo.org/en/criteria/subpage.asp?page_id=263).

Ecologo had attempted to introduce a more robust hydroelectric standard in 2010, but the proposed standard was rebuffed by river diversion companies. This is described in the following statement, also from the Ecologo webpage (link above): “Unfortunately, the July 2010 draft drew a great deal of criticism from the hydro power industry, whose members said that the criteria were too difficult to meet and would prevent them from being able to provide enough electricity as promised to their buyers.”

As mentioned in the report, BC has no provincial endangered species legislation despite having over 1,500 species at risk in the province. The federal Species at Risk Act (SARA), which applies to just 10 percent of BC’s species-at-risk, is not a substitute for a provincial law. It is important to note that SARA has delayed recovery strategies for over 188 species at risk and routinely does not map or identify ‘critical habitat,’ which is the habitat needed to stabilize and recover species at risk. Moreover, listing a species under SARA occurs at the discretion of the Minister of Environment; in other words, the decision to list species under SARA is political. For example, in BC, two endangered populations of sockeye salmon (Cultus and Sakinaw) were recommended for listing under SARA by the Committee on the Status of Endangered Wildlife in Canada (COSEWIC), but the Minister of Environment chose to not list these populations due to socioeconomic concerns (i.e., impacts to commercial fisheries), and so these endangered species are not afforded any protection under SARA.

A recent report by BC’s Auditor General, *An Audit of Biodiversity in BC: Assessing the Effectiveness of Key Tools*, found the BC government was ineffective in conserving biodiversity, had gaps in legislation, as well as “poorly implemented policies and tools,” and inadequate monitoring and reporting. The Auditor General, also noted that the lack of implementation of habitat tools (habitat loss is the primary threat to 84 percent of BC’s

12 Vancouver Sun, *Critics launch court action, release email scathing BC’s environmental assessment process*, August 23, 2012
13 Cultus Lake sockeye: [http://www.sararegistry.gc.ca/species/speciesDetails_e.cfm?sid=730](http://www.sararegistry.gc.ca/species/speciesDetails_e.cfm?sid=730)
Sakinaw Lake sockeye: [http://www.sararegistry.gc.ca/species/speciesDetails_e.cfm?sid=729](http://www.sararegistry.gc.ca/species/speciesDetails_e.cfm?sid=729)
species at risk) was “troubling,” and that “significant gaps” existed in terms of the government understanding of biodiversity in BC.15

As noted earlier, the majority of river-diversion projects do not go through a BC Environmental Assessment process, as the threshold for entering that process is a project capacity of 50 MW. Proponents can choose to undergo an environmental assessment, but this happens very rarely. It is common for proponents to avoid this threshold by sizing projects accordingly, e.g. the Ashlu project at 49.5 MW.

Projects involving multiple hydroelectric plants of less 50 MW each can be combined to form a single project with a total capacity greater than 50 MW, but are allowed to proceed without undergoing an official environmental assessment by treating each component as an individual project. The cumulative impacts of the various project components are also not assessed and projects can proceed through the permitting process with almost no public consultation and transparency. Watershed Watch Salmon Society along with Ecojustice and the David Suzuki Foundation are currently involved in a court action against the BC Provincial Government and Holmes Hydro Inc. over the government’s decision to exempt a 76 MW project from an official environmental assessment. The project is located on 10 adjacent tributaries of the Holmes River (an important salmon producer) and each facility is being treated as a separate project, despite being put forward by the proponent as a single project.16

Even if projects are assessed by the BC Environmental Assessment Office (EAO) there are serious limitations with the oversight and ability of the Office to ensure effective environmental mitigation of projects as evidenced by the 2011 BC Auditor General report “An Audit of the Environmental Assessment Office’s Oversight of Certified Projects”, which found that the EAO was not adequately monitoring industrial projects nor ensuring that environmental commitments were being met by development proponents. 17

Recommendations
4. The Executive Summary, Chapter 3: Comparison of LORS in Canada and California, and the Conclusions should clearly state the laws, ordinances, regulations, and standards are “less stringent” in BC and Canada and “more stringent” in California and the U.S.
5. In Table 10, where the term “comparable” is used, it should be deleted and replaced with “less stringent” for BC/Canada and “more stringent” for California/U.S.

3. Report does not include assessment of environmental impacts of road and transmission line development in British Columbia
The report completely ignores the environmental impacts of developing roads and transmission lines. The majority of hydropower projects in BC are developed, and are to

15 Ibid.
be developed, in pristine wilderness areas. Thus, when facilities are built, an extensive road and transmission line system are also developed. This results in tremendous adverse environmental impacts.

**Recommendation**
6. The report should describe the additional environmental impacts from road and transmission line development.

**4. Additional Comments**
- The first words of the title, “Analysis of regulatory requirements…” are also inaccurate. The Legislature did not restrict the report to regulatory requirements. SB X1 2 also directed CEC to “consider the effect that inclusion would have upon all of the following: (1) Emissions of carbon dioxide and other greenhouse gases; (2) Emissions of air pollutants; (3) Water quality, recreation, and fisheries; (4) Any other environmental impact caused by run-of-river hydroelectric.”
  **Recommendation** 7: Delete “regulatory requirements” from title.
- Chapter 1, Run-of-River Hydro, page 6:
  **Recommendation** 8: An additional bullet should be added, in reference to Figure 1, saying: between the headpond dam and downstream where the tailrace water re-enters the river is the dewatered stretch of river.
- Chapter 2, Regulations, page 16: Third bullet should be changed. It now says: “Local agency involvement/approval may be limited.”
  **Recommendation** 9: Change third bullet to: Local agency involvement/approval has been limited. (BC Bill 30 stripped the decision-making powers of local authorities for hydropower projects by allowing the provincial government to overrule them. For example, local authorities voted 8 to 1 against the Ashlu project, but were overruled by the provincial government. The project was built and is causing significant environmental problems.)
- Chapter 2, Regulations, page 16:
  **Recommendation** 10: Another bullet should be added saying: BC has no endangered species regulations.
- Chapter 3, Canadian Laws, Ordinances, Regulations, and Standards, page 18:
  **Recommendation** 11: Where Bill 30 is described, it should be added that Bill 30 allows the provincial government to overrule the decisions of local authorities for hydropower projects.

Again, thank you for the opportunity to provide these comments.

Sincerely,

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