

March 1, 2012

California Energy Commission  
Sacramento, CA

Re: Docket number 11-RPS-01

To the California Energy Commission:

The California Hydropower Reform Coalition (CHRC) and its member signatories submit these comments regarding the British Columbia (BC) hydroelectric project study component of the Renewable Portfolio Standard (RPS) program. CHRC is a statewide coalition comprised of conservation, fishing, and recreation organizations. Our mission is to protect and restore rivers impacted by hydropower facilities. CHRC was the lead environmental organization that opposed the importation of hydro from BC for RPS purposes.

The California Energy Commission (CEC) is charged with determining whether BC hydropower facilities “*are*, or should be considered eligible renewable electrical generation facilities for California’s RPS.” It is established fact that hydro from BC is not currently eligible because it does not meet the RPS hydro definition and does not meet the CEQA equivalency requirement for out-of-country resources.

The Pacific Gas and Electric Company’s June 20, 2008 report to the California Public Utilities Commission titled “BC Renewable Study Phase 1 acknowledges this by saying:

- 'BC ROR (run-of-river) hydro facilities would not be qualified as RPS eligible resources" in California.
- "BC ROR hydro facilities would not meet any of these criteria," i.e. California regulations.

Hydro from BC should not be “considered eligible renewable electrical generation facilities for California’s RPS” because irrefutable evidence has been presented several times from 2009 to 2011, during the RPS legislative processes and the California Air Resources Board’s Renewable Electricity Standards rulemaking that the importation of hydro would result in catastrophic impacts to BC’s rivers and watersheds. This is so because the vast majority of the hydropower would be newly developed in pristine areas and BC’s weak regulatory mechanisms do not protect the environment.

**CHRC; 436 14<sup>th</sup> Street, Suite 801; Oakland, CA 94612; Tel: 510-251-0164, Fax: 510-251-8234**

---

**CHRC Steering Committee:**

**American Rivers, American Whitewater, California Outdoors, California Sportfishing Protection Alliance,  
California Trout, Foothill Conservancy, Friends of the River, South Yuba River Citizens League,  
Trout Unlimited, Water and Power Law Group**

The comments below are consistent with the documentation most recently provided to the CEC by NGOs from BC for this study process (and previously submitted by CHRC and BC NGOs from 2009 to 2011).

### **Significant Adverse Environmental and Recreational Impacts of Hydropower Development in British Columbia**

The proponents of hydro from BC use the misleading term “run-of-river” to imply hydropower from free-flowing rivers. This is completely inaccurate. BC facilities should be called “river diversion” projects. These projects require dams to impound water and divert it via big pipes, called penstocks, which carry water to powerhouses where electricity is produced. The distance between dams and powerhouses is often miles. The amount of water diverted is often up to 99 percent of total river flow, which almost completely dewateres the stretches of rivers between dams and powerhouses.

If California were to weaken its regulations to allow hydro from BC to be RPS-eligible, then hundreds of projects would be built in BC and the power exported to California. California would be directly responsible for the destruction of BC’s rivers and watersheds. Essentially, we would be importing hydropower and exporting environmental impacts. This would undermine our deserved reputation for having the strongest environmental protection in the country. Moreover, we would do so only for the benefit of one company in California and to greatly increase profits for several private power producers in BC, and to the detriment of the BC public.

The following are examples of adverse impacts from hydro development in BC:

- Streamflow diversions up to 99 percent of total streamflow.
- Decreased fish populations.
- Degraded fish habitat.
- Impaired fish passage.
- Decreased populations of other aquatic organisms.
- Poor water quality from increased turbidity.
- Decreased natural stream channel maintenance.
- Decreased riparian vegetation.
- Reduced revenues to local economies because of decreases in tourism from impaired recreational opportunities and aesthetic values.

The environmental impacts are not just limited to rivers. As most projects would be built in pristine areas, there are adverse impacts from the construction of new roads and transmission lines. The impacts include:

- Impaired habitat for endangered species and other wildlife species.
- Clear-cut old-growth forests.
- Increased erosion.

## Weak Regulatory Mechanisms in British Columbia and Canada regarding Hydropower Development

Examples of BC's weak regulatory mechanisms include:

- “Testing the Waters” is a comprehensive review of (purported) BC and Canadian environmental regulations for hydropower development in BC. The following is from the report's Introduction: “The promotion of run-of-river (“ROR”) projects<sup>1</sup> has been a key feature of the British Columbia government's plan to increase reliance on renewable sources of energy. Yet a great deal of controversy has arisen concerning the environmental footprint of these projects and whether sufficient regulatory oversight is currently in place. Government representatives and ROR proponents have defended existing regulatory processes by pointing to the large number of approvals required. In a recent letter to the California State Assembly (refers to a 2009 letter), 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.<sup>2</sup> The following report canvasses 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.<sup>3</sup> 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.<sup>4</sup> 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.”
- BC has no comprehensive planning for hydropower development. For example, there is no regional or provincial planning and cumulative impacts are assessed in a superficial manner which does nothing to mitigate their occurrence.

---

<sup>1</sup> Run-of-River projects are just one type of Independent Power Project (“IPP”) in British Columbia. IPPs such as wind power, solar power, and geothermal energy projects, for example, are subject to a similar but not identical regulatory regime. This report examines the regulatory framework for ROR projects, although the term IPP is used in some cases where it is more appropriate.

<sup>2</sup> Scott Simpson, “British Columbia Green Power Faces Battle in California,” Vancouver Sun, April 1, 2009, online: <http://communities.canada.com/vancouver/print.aspx?postid=326740>. See also the Independent Power Producers Association of British Columbia, Run of River Fact Sheet, online: <http://www.ippbc.com/media/Run%20of%20River%20Fact%20Sheet.pdf>.

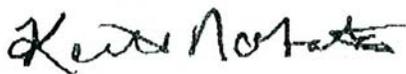
<sup>3</sup> As reported by Simpson, *ibid*.

<sup>4</sup> The figure above concerning the number of regulatory approvals required for a typical project incorporates various approvals, such as warning sign placements, which have little bearing on environmental protection. In addition, a number of the statutes cited by Minister Penner do not address environmental impacts. See, for example, discussions on the *Transportation Act*, S.B.C. 2004, c. 44, and *Navigable Waters Protection Act*, R.S.C. 1985, c. N-22., below

- In 2002, an already weak BC Environmental Assessment Act (environmental assessments were only required for projects larger than 20 MW) was further weakened by Bill 38, which increased the threshold to 50 MW. Bill 38 also limited access to project information, limited the participation of affected stakeholders, and reduced the EA timeframe from 2 years to 6 months.
- In 2003, BC passed Bill 30, which, among other things, allowed the BC provincial government to overrule local authorities on hydro project development decisions.
- The Ashlu project is an example of the repercussions of Bill 30. Local authorities twice denied the Ashlu project, but were overruled by the provincial government. Project proponents claimed the impacts would be minimal. The project was built, is operational, and a result is significant adverse impacts to fish populations, wildlife habitat, and recreation.
- The BC Environmental Assessment Office's assessment of the East Toba River and Montrose Creek hydro project says: "The Ministry of Environment is concerned that the Proponent (Plutonic Power Corporation) is proposing in-stream flow releases that are substantially lower than the minimum flows recommended in the BC In-stream Flow Guidelines." Plutonic proposed diverting 95 percent of the flows and responded to the Ministry by saying that BC's minimum flow guidelines "has a direct bearing on project finances and therefore project feasibility." The Ministry ignored its own guidelines and approved the diversions desired by Plutonic. This is a common occurrence.
- Since 2002, not a single river diversion power project met the precautionary government guidelines for in-stream flow requirements.
- On May 6, 2009, the Canadian Broadcasting Corporation reported: "Inspection reports and emails obtained by CBC News show B.C. government officials have raised concerns about environmental infractions during the construction of the rapidly growing number of run-of-river private power projects in the province." This includes "sloppy construction that could damage streams," and "overcutting old-growth forest."
- As of 2010, the budget of the Ministry of Environment had been cut by 40 percent since 2002.
- BC has no protection for areas of significant environmental value outside of pre-existing parks and protected areas.
- BC has no endangered species act.

For these reasons, hydropower from BC should not be "considered eligible renewable electrical generation facilities for California's RPS." Thank you for the opportunity to provide these comments.

Sincerely,



Keith Nakatani  
California Hydropower Reform Coalition

Dave Steindorf  
American Whitewater

Steve Rothert  
American Rivers

Nate Rangel  
California Outdoors

Chris Shutes  
California Sportfishing Protection Society

Curtis Knight  
California Trout

Pete Bell  
Foothills Conservancy

Ron Stork  
Friends of the River

Gary Reedy  
South Yuba River Citizens League

Brian Johnson  
Trout Unlimited

Richard Roos-Collins  
Water and Power Law Group