



February 27, 2015

Hon. Steve Thomson
Minister of Forests, Lands and Natural Resource Operations
PO Box 9049 Stn Prov Govt
Victoria, BC V8W 9E2

Hon. Mary Polak
Minister of Environment
PO Box 9047 Stn Prov Govt
Victoria, BC V8W 9E2

Re: Recommendations for improved Environmental Stewardship on Run-of-River Hydroelectric Projects

Dear Minister Thomson and Minister Polak:

The Energy Forum is a collaboration of British Columbian power producers, industry associations, and non-government organizations that are working together to address the challenges and opportunities presented by the nexus of energy, climate and ecosystems. Our organizations share an interest in promoting environmental stewardship of healthy rivers and abundant salmon as an important means of enhancing social license and overall support for sustainable clean energy development in our Province.

The Energy Forum's members believe our vision and work can be best accomplished through rigorous and adaptive application of best environmental management practices, provincial and regional planning, environmental and cumulative effects assessment, and regulatory decisions and monitoring. With these issues in mind, we think it is timely to highlight for the Province the results of (and opportunities stemming from) an independent review of Run-of-River (RoR) power projects recently completed by the Pacific Salmon Foundation (PSF). This review is the most comprehensive analysis of its kind and provides an objective critical analysis of the available information on potential impacts of the RoR industry on salmonids, successful approaches for avoiding and/or mitigating such impacts, and the status of operational monitoring programs for evaluating effects over the operational life of hydro facilities. The review, which synthesized the results of monitoring from 44 projects constructed over the past two decades, concluded that "run-of-river hydroelectric facilities have the potential to negatively affect salmonids and their habitat," a conclusion in part linked to "data limitations or inconclusive monitoring programs."



While this less than definitive result might be viewed as disappointing, we believe it also presents an opportunity. The Energy Forum would like to engage the Province on three key actions items identified in the PSF RoR report:

1. Refinements to the regulatory approach to monitoring (both effectiveness and compliance) to provide clarity to industry and government on areas that specifically require managing and monitoring, foster accountability, demonstrate transparency in monitoring and enforcement, and to determine necessary baseline assessments;
2. Engage with the in-progress cumulative effects pilots to address the uncertainty associated with the role industry plays in cumulative effects assessments and in this context develop a formalized Best Management Practice (BMP) for monitoring Instream Flow Requirements (IFR) and assessing ramping;
3. Planning initiatives to identify priority areas for RoR development; and identify High Conservation Value Aquatic habitat that should be protected.

We believe that attention to these issues could substantially improve our collective stewardship efforts, and thus public support for clean energy in B.C., and we thus offer some brief commentary on each of these items below

Refinements to the regulatory approach to monitoring: To improve compliance and effectiveness monitoring, we encourage the Province to develop and implement a more transparent monitoring process that fosters accountability. We recommend a central database be established to track ongoing monitoring, receive annual monitoring reports, and make available to the public the monitoring results for all projects. Development of a monitoring compliance scorecard with an annual scoring of each project would provide a compliance incentive by highlighting non-compliant projects before regulators, BC Hydro, and the public. This transparent approach would create a strong incentive to comply, raising the performance of the industry as a whole, with minimal regulatory complexity and administrative burden.

Address uncertainty associated with cumulative effects: The PSF study recommends targeted research to “evaluate the cumulative impacts of multiple pathways at a single facility, or (across multiple facilities) the consequences of site and facility variability on the magnitude and form of impact.” Considering that the project development and monitoring process takes a decade to complete, the urgent need for information to support better decisions on project siting will not be achieved by initiating brand new studies of new projects. However, the intensive monitoring of



some existing projects, combined with widespread monitoring of the environmental effects of other industries, creates an opportunity for an integrated study, one well-informed by existing data. We recommend that an appropriate watershed be selected and a plan developed for an intensive cumulative effects study, one with multiple projects at different stages in the project life cycle (planning, construction, commissioning, and operation), through collaboration between the Province, the Energy Forum, other stakeholders.

Stakeholders from other industrial sectors active in the landscape should be involved, as the effects of hydroelectric projects combine with those from other sectors. Effective environmental stewardship requires consideration of the all potential effects in a watershed; moreover, the collaborative process will benefit from the guidance and resources that can be offered from these sectors. We request that the Province identify two experienced representatives, one from MFLNRO and the other from the EAO, to work with the Energy Forum and other stakeholders to develop a cumulative effects study plan in a watershed affected by RoR development, and identify candidate study areas.

The PSF report identified uncertainty in the current understanding of the significance of downstream effects and the efficacy of mitigation such as flow ramping. Given that the effects of RoR projects can extend for many kilometres downstream of the powerhouse, overlapping with the effects of other projects and a myriad of other developments, downstream effects are an ideal candidate for study in a coordinated cumulative effects framework. Downstream effects should be a key study element of the cumulative effects study.

Planning initiative: Sustainable development of RoR projects can be better achieved through a coordinated planning process that considers the economic, social, and environmental effects over a larger scale than a single project. Existing regulatory processes provide some potential for coordinated large-scale planning across the Province; small but strategic changes in the scale and scope of these processes may provide an effective mechanism to consider the wider effects of these projects when selecting new projects for development. We recommend that the Province work with the Energy Forum to develop the terms of reference for a pilot Provincial planning initiative, to define how better planning might be achieved within the existing regulatory framework. Stakeholders concerned with this issue would be invited to participate in development of the terms of reference, providing an inclusive and well-supported initiative.

In summary, the PSF RoR report provides support for renewed regulatory efforts by the Province to improve the monitoring and regulation of RoR projects. A multi-stakeholder approach is an effective and efficient approach to improving the environmental stewardship of the valuable habitats potentially impacted by these projects. The Energy Forum is committed to working with



the Province to solve key challenges to sustainability in this industry, thereby supporting the renewable power sector within British Columbia, while protecting our natural heritage. We look forward to further dialogue with the Province and will be following up with you in the near future to discuss these three recommendations.

Yours truly,

The Energy Forum



cc: Tim Sheldan, Deputy Minister, Ministry of Forests, Lands and Natural Resource Operations

Wes Shoemaker, Deputy Minister, Ministry of Environment