

Bond, Nancy L EAO:EX

From: Ray Pillman [raypillman@telus.net]
Sent: Thursday, October 18, 2007 1:08 AM
To: EAOINFO EAO:EX
Subject: Klinaklini Hydroelectric Project Draft TOR

Mark,

As discussed please forward this to the appropriate EAO department.

COMMENTS ON THE DRAFT TERMS OF REFERENCE
FOR
THE KLINAKLINI HYDROELECTRIC PROJECT

I am providing these comments on behalf of the Recreation Sector of the Central Coast Plan Implementation and Monitoring Committee (CCPIMC) of which I am a member. From 1997 to 2004 I represented the Recreation Sector on the CCLRMP and participated in the planning and recommendations that included the recommendation of Protected Areas on the Upper Klinaklini and at its estuary. I have visited the latter several times. As to hydro electric project development this was a major component of my engineering career. Among other projects I had prime responsibility in the engineering design and supervision of construction for the Bersimis I project in Quebec, which was very similar in scope and size to the proposed Klinaklini project. The head was 1000 feet, the tunnel through very solid Canadian Shield rock was 8 miles in length and the power output was 750 MW.

The following are my quick comments on the Draft Terms of Reference for the Klinaklini project:

The Draft TOR are quite comprehensive. However, they need some amplification and clarification to ensure that the response to them will provide the information required for an adequate analysis.

1. Section 1.3.2 Benefits : While the Benefits provided by the Project will be listed in this section there is no similar provision for listing and describing the Risks and Negative Impacts. These would be discussed in Section 6.0 but should be summarized in Section 1.0 for ready comparison with the Benefits. It would be desirable also to identify the recipients of the Benefits and their respective shares. These would include power consumers and tax payers as well as the shareholders in the enterprise. If government or others are expected to provide infrastructure or financial incentives to the enterprise these should also be identified and quantified.

2. Section 1.3.3: Capital Cost: As cost overruns are currently common in projects of this magnitude it would be prudent to include explanations on how these would be provided for and managed.

3. Sections 2.4.1 and 2.4.2 Consultation: While the Proponent has consulted sectors whose interests might be impacted and expects to do more of this the consultation is so important that it should be defined in greater detail. For example, for Tourism and Public Recreation Visual Quality of the natural viewscape is a prime requirement. If not managed well this could become a major problem not only in the upland terrestrial environment but even more so as viewed from the marine environment, as the impact of the transmission line would be.

Other Observations:

4. An important consideration is the time frame that is taken into account in comparing impacts of the Project on recreational and other values. The current level of tourism and recreation use of the Project area, for example, may be low but the potential for this during the long life of the project could be very high, These are fast growing socially and economically important activities.

5. Looking at the Project plan, locating the intake in the protected area is sure to encounter opposition. The PA was located where it is for a reason. Other plan layout options should be provided and discussed.

6. While the Project is styled as a run-of-the-river project it would likely be much more valuable if some storage could be provided upstream. This is almost certain to be raised in the future if it has not been already. Providing storage would undoubtedly increase the environmental impact substantially, which could not be mitigated. This issue needs to be resolved now rather than later.

7. The drawings and the information provided with the Draft TOR suggest that the plans are very preliminary. Unless there are more advanced designs in existence my take on the design shown is that it is an over simplification and underestimate of what would actually be required. There is no description of the geological conditions which the rugged terrain suggests would not be ideal for tunnelling using a boring machine. The question needs to be answered: is an unlined tunnel feasible in this situation? Other such questions need to be answered before a realistic estimate of the cost of the project can be made. A further question is does it make sense to go through the costly and thorough exercise that the TOR outlines before these questions have been answered?

Who should be asked to participate in the EAO review?

To cover the Public Recreation and Tourism sectors interest I suggest that the Outdoor Recreation Council of BC and the Wilderness Tourism Association of BC be asked to participate.

Ray Pillman, P. Eng.
October 17, 2007