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Upper Harrison Water Power Project Environmental Assessment Certificate Application - Issues Tracking Table and Responses Issues Raised by Agencies

Name/Organization and Issue	Comment	Proponent Response	Application Section (if applicable)	Current Status	Proposed Action
Dr. Bala Balachandran/Ministry of Environment Water Stewardship					
Instream flows	<i>Instream flow requirements and downstream licensee requirements will have to be satisfied first before water will be available for diversion for power production. And The 7-day and 30-day low flows would be useful to compare with, and in determination of minimum instream flow releases</i>	Letter response of April 19, 2006. Additional information has been provided to the Ministry of Environment (see Amnis Engineering's response to Scott Babakaiff's comments) to assist with determination of instream flow releases, including 7-day and 30-day low flow information.	Appendix 5	Response is acceptable to MOE (May 1, 2006 Wkg Grp mtg)	No further action
Backwater effects	<i>Information on backwater effects or any potential impacts at upstream locations for the different flow conditions</i>	A detailed backwatering effect analysis will be carried out for the Upper Stave facility and Lamont Creek facility during detailed design to determine potential effects upstream of the headponds. The other facilities have been analysed further and backwater effects determined to be negligible.		Response is acceptable to MOE (May 1, 2006 Wkg Grp mtg)	Backwater effects analysis for Upper Stave and Lamont Creek facilities to be provided to MOE as a result of detailed design (post-licencing)
Terrain stability	<i>A terrain stability analysis of the penstock route will have to be completed before beginning construction</i>	Golder Associates was retained to carry out terrain hazard assessments to identify the existing terrain hazards that could affect project facilities. Cloudworks will retain a qualified professional to complete a terrain stability analysis of the penstock route before beginning construction of the penstock.	Sections 3.4.3 to 3.4.7, and Appendix 4	Response is acceptable to MOE (May 1, 2006 Wkg Grp mtg)	Cloudworks will retain a qualified professional to complete a terrain stability analysis of the penstock route before beginning construction of the penstock.
Independent Engineer	<i>Recommended that the owner retain an engineering consultant to ensure that any commitments made by the proponent are fulfilled and any conditions imposed by an Environmental</i>	In addition to the Independent Engineer reporting to the Comptroller, we will be retaining a qualified Owners Engineer to oversee the implementation of the EPC contract. Cloudworks will ensure that the EPC Contract will bind the design-build contractor to meet those conditions imposed by the EAC that the owner chooses to delegate.	Appendix 1 (LWBC Appendix G)	Response is acceptable to MOE (May 1, 2006 Wkg Grp mtg)	No further action.

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	<i>Assessment Certificate (EAC) are satisfied by the design-build contractor during the design and construction of the project</i>				
Dam Safety Regulation	<i>Reference to provincial dam safety regulations is necessary to check if the regulations would apply to the design of these structures</i>	The Upper Fire facility is submerged in Fire Lake and does not impound any additional water, therefore Cloudworks presumes that the Dam Safety Regulation does not apply. (see Proposed Action)	Section 3.4.4	Response is acceptable to MOE (May 1, 2006 Wkg Grp mtg)	Cloudworks will confirm which facilities will meet these characteristics after detailed design is complete, and discuss the results with the dam safety officer in the Ministry.
Upper Fire Lake Levels	<i>Impact of Upper Fire operation on Upper Fire Lake levels is not given. It is not clear if there would be any fluctuation of the lake levels during project operation</i>	The Upper Fire Facility has not been designed to utilize storage in the lake. It is conceived that discharge from the lake will be accurately measured so as to ensure that at a minimum and at all times the prescribed IFRs are released over the natural invert of the lake's outflow. Increased spill over the natural invert of the lake's outflow would occur when natural flows are greater than the design flow of the facility.	Section 3.4.4	Response is acceptable to MOE (May 1, 2006 Wkg Grp mtg)	No further action.
Heather Davis/INAC					
INAC Permit Requirements	<i>A number of permits are required for project components on Douglas IR8</i>	Letter response April 24, 2006. Cloudworks committed to pursue the appropriate permits with INAC.		Response is acceptable to INAC (May 1, 2006 Wkg Grp mtg)	Permit applications with INAC to be submitted post-EA Certificate
Dr. Carl Alleyne/Health Canada					
Noise of Transmission Lines	<i>The transmission line will run through the Douglas Tipella IR8 reserve. A safe distance from housing should be maintained. When the transmission lines are installed, and if there is</i>	Letter response expected by May 12, 2006. Lines will be placed at a safe distance from housing. The 69 kV transmission lines from the project would have a lower noise levels than the existing BC Hydro line. No mitigation is planned.	Section 5.3.7		No further action.

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	<i>a noise (ie., buzzing) from the transmission lines then what kind of mitigation measures does the proponent suggest.</i>				
Air Quality Effects	<i>Further clarification on any potential air quality effects, mitigation measures, or residual effects from the temporary use areas, staging, spoil, concrete batch plant. If these are near residential areas, will there be any air quality effects to the residents in the short term, particularly for individuals with chronic respiratory illnesses, given that the construction work will be ongoing for 3 years.</i>	Letter response expected by May 12, 2006. Air quality effects, mitigation measures and residual effects are discussed under traffic effects (Section 5.2.11.4). The EMP (Section 3.1) requires that all vehicles and machinery be maintained to reduce air pollution. Other than the powerline installations, none of the facilities are near residences.	Sections 5.2.8.2, 5.2.11.4, and 5.3.7	No further action.	No further action.
Mike Willcox/Ministry of Environment					
Harlequin Ducks	<i>Aerial Harlequin Duck surveys may be inappropriate for forested streams.</i>	CW verbal response on May 1, 2006. Harlequin duck surveys are appropriate if visibility on the streams is good, which is the case for the Upper Harrison streams.			No further action.
Northern Goshawk	<i>Confer with Recovery Team as to whether further goshawk surveys are required and a plan if a nest is found.</i>	Cloudwork's biologist has discussed this with the Recovery Team leader and a written outline of the approach was provided. Nest surveys were already conducted, but will be conducted as well prior to construction, and the plan implemented if a nest is found.		Recovery Team head has responded to CW biologist.	One further goshawk nest survey will be conducted prior to construction.
Mountain Goats	<i>Industrial operations within 500 metres of a Goat Winter Range (GWR) boundary near the Lamont Creek powerhouse should be confined to an operations window from May 1 to October 31 of a calendar</i>	CW will restrict some construction activities (blasting) where possible, however It is impractical to apply this window given the nature of the project and the potential of extending the construction period, thereby impacting other wildlife for a longer period of time. To address potential disturbances to goats that may come near the construction site, the Independent Environmental Monitor will direct spotting prior to the start of construction each			The Independent Environmental Monitor will direct spotting prior to the start of construction each day that work is planned in the

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	<i>year.</i>	day that work is planned in the window; if goats are present within the GWR area closest to the construction site, the Monitor will use their authority to stop work until the goats are no longer present.			window; if goats are present within the GWR area closest to the construction site, the Monitor will use their authority to stop work until the goats are no longer present.
Grizzly Bears	<i>Need to ensure adequate mitigation is in place to offset potential impacts to grizzly bears. A stand-alone bear management plan is recommended.</i>	CW provided bear management activities in the EMP, these will be drawn out into a stand-alone plan. A plan will also be provided for the plant operator prior to the commencement of operations.			CW will provide a stand-alone bear management plan, based on the actions identified in the EMP, and will provide a plan for the plant operator to follow.
Scott Babakaiff/MOE Hydrology					
RIC Standards	<i>No clear explanation of how RIC standards were adapted, and conclusions in OEI (2005) regarding fish distribution and habitat use are speculative. OEI (2005) includes little discussion of fish periodicity or factors limiting fish abundance in the diversion reaches.</i>	OEI's approach was consistent with the level of detail required for an EAO review, where the focus is on impacts that cannot be mitigated or compensated for by known and proven methods. The link between the methods used, the data collected, and the conclusions drawn is not always clear, however, the overall conclusion that impacts can be mitigated by instream flow releases and residual impacts can be compensated for remains valid, given the low-impact nature of run-of-river hydro projects and the value of the habitat and fish stocks present. Additional data have been collected and will be analyzed to provide the level of detail necessary to supporting the permitting phase of approvals, when DFO will be issuing a HADD authorization, if required.			Analysis of data which is in the process of being collected will be provided to agencies during the permitting process. This will provide the level of detail necessary to supporting the permitting phase of approvals.
Operating Parameters and Procedures	<i>Outline and general content for the Operating</i>	CW has provided a reasonable level of information for the Operating Parameters and Procedures and for the	Section 3.5 and		Cloudworks will develop and

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Report	<i>Parameters and Procedures report and operational monitoring plan is described in a very cursory manner</i>	monitoring plan for this stage of review – the information provided is based on existing operating projects, where these procedures and plans were required by the Comptroller (in the water licence) to be provided prior to commissioning.	Appendix 3, Appendix 13		implement an instream flow effectiveness monitoring program to the satisfaction of ESD
Instream Flow Methodology	<i>The Application does not follow recommended practices in two documents of the BC Instream Flow guidelines for fish. Instream flows proposed are not based on clearly defined, objective methodology</i>	Onstream Environmental (OEI) proposed instream flow releases based on a combination of data analysis, site observation, an extrapolation of approved IFR's from nearby streams, and professional judgment. This process was not explicitly defined, did not completely follow guidelines, and relied heavily on professional judgment (which is allowed for in the guidelines). Nevertheless, the recommended IFR's are consistent with others proposed and approved for streams in the region. In the context of an EAO review, where the purpose is to evaluate whether impacts can be mitigated and/or compensated, sufficient information has been provided to demonstrate the impacts are likely to be low and can be avoided. Recognizing that more quantitative data will be required for permitting purposes, Cloudworks retained Ecofish Research in September 2005 to design and implement a data collection program to support project permitting. Briefly, this program consists of establishing a minimum of 5 transects per stream reach on each of the project streams and collecting physical data as per the Assessment Methods (Lewis <i>et al.</i> 2004) to allow an analysis following steps 2 to 10 referenced above. The transects were sited on flow-sensitive habitats as discussed in OEI 2005, and will provide information that can be used to assess how habitat changes with flow for both fish and invertebrates. The results of these assessments can inform the refinement of mitigation measures and allow the development of a quantitative compensation plan to be used in the issuance of federal Fisheries Act authorizations.		May 27, 2006 MOE/EAO Meeting	Cloudworks will provide additional supporting hydraulic data and habitat assessment data prior to licensing so the data can be used to determine IFR requirements for the water licence.
Fish Periodicity	<i>No clear definition of fish periodicity</i>	OEI does provide fish periodicity information implicit to the windows of discrete instream flow releases.	Appendix 7		During subsequent analyses to

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		<p>However, the presentation can be made more clear and some of the periods are not directly addressed (e.g. migration). During subsequent analyses to support project permitting, fish periodicity data will be addressed more explicitly, and the flows that may be required for migration will be quantified more accurately. Migration flows can be provided in discrete 48 hours long pulses of flow, rather than continuous releases of higher flow. This approach has been approved by the regulatory agencies in the operations of BC Hydro projects (e.g. Ash River, Puntledge River) and can be implemented here.</p>			<p>support project permitting, fish periodicity data will be addressed more explicitly, and the flows that may be required for migration will be quantified more accurately.</p>
Sediment Transport	<p><i>There is no data presented regarding sediment generation in the watersheds upstream of (or adjacent to) proposed diversion reaches, and transport of sediment or large woody debris past the dams at the intake locations.</i></p>	<p>IPP intakes are designed to sluice sediment and pass large woody debris. In general, existing IPP's effectively deal with this issue, though admittedly there are problems at some facilities. Details regarding how to pass sediment and woody debris will be developed during project permitting in a facility operating plan.</p>			<p>The Operating Parameters and Procedures will address how to pass sediment and woody debris</p>
Benthic Samples	<p><i>The TOR indicates that RISC standards would be followed for fish sampling, but do not specify what "accepted protocols" will be adopted to collect (or analyze) benthic invertebrate samples.</i></p> <p><i>The Application does not include any benthic invertebrate samples collected regarding lower trophic levels (e.g. macroinvertebrates). Appendix 7 introduces the benthic index of biotic</i></p>	<p>Macroinvertebrate data have not been collected from the study streams. Such data are available for Stokke, lower Fire, and Douglas creeks, illustrating the species composition for streams in the region. Impacts from flow reduction on benthic production will be limited by the physical characteristics of the stream reaches affected, which are confined and show little change in wetted area with flow change over most of their length (habitat values in pools and cascades are typically insensitive to flow change). There are riffle and glide habitats in some areas of the stream reaches – these habitats are sensitive to flow change, such that invertebrate production may be reduced by flow change. However, these areas are limited in extent and unlikely to be critical to aquatic production downstream or in the affected reaches. Although the adequacy of the instream flows to maintain all invertebrate production</p>			<p>Cloudworks will work with DFO on determining whether further work is required during the permitting stage, on benthic invertebrates.</p>

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	<p><i>integrity (the B-IBI system), but does not include any onsite data for the proposed diversion reaches. In addition, no calibration has been developed for streams comparable to the proposed diversion reaches (i.e. small & steep watersheds with glacier cover), so any conclusions based on the assumed B-IBI score relative to an assumed calibration would be purely speculative.</i></p>	<p>was not demonstrated by OEI, residual impacts, if any, can be addressed through compensation. Accordingly, at this stage of review, we conclude that potential impacts to lower trophic levels can be mitigated and/or compensated for. Additional instream flow modeling, using wetted width or invertebrate HSI curves can be used to predict habitat changes in riffles habitats in the affected reaches, and the total habitat lost or gained can be calculated to support compensation plans, if required.</p>			
Monitoring Activities	<p><i>The Application does not include any specific proposed monitoring activities. The commitment expressed in Appendix 7 to ongoing monitoring with a "concomitant response to alter operating procedures should impacts be shown to rise to an unacceptable level during operations" (p. 108) will be of little value if operational impacts cannot be reliably quantified.</i></p>	<p>Appendix 13 contains the proposed elements of a monitoring program which are consistent with two other operating monitoring programs in this region. A post-construction monitoring program will be designed during the permitting phase of the project. Cloudworks proposed program will also include a plan to collect pre-impact data on fish abundance in the affected reaches.</p>			<p>Cloudworks proposed monitoring program will include a plan to collect pre-impact data on fish abundance in the affected reaches.</p>
Climate Change	<p><i>The Application does not consider the proposed impact of climate change at a project-specific scale. Conclusions made in Appendix 5 (e.g. earlier melt of ice, lower summer flow volume, increased winter</i></p>	<p>A project-specific scale of assessment for global climate change is difficult to provide given the uncertainties and time scales involved. Water temperature monitoring in the study streams and regional streams support the conclusion that stream temperatures are currently below optimal levels for rainbow trout. The characteristics of the study streams (elevation, prolonged spring freshet, confined and well shaded stream reaches) will tend to</p>			<p>No further action.</p>

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	<i>flows)</i>	minimize summer temperatures. Continuous monitoring of water temperature has been committed to and will provide information that can be used to adaptively manage flows if necessary.			
Level of Assessment	<i>Disagreement that the Application is sufficient to assess impacts and that they can be mitigated</i>	In the context of a BCEAA review, where the purpose is to evaluate whether impacts can be mitigated and/or compensated, sufficient information has been provided to demonstrate the impacts are likely to be low and can be avoided, mitigated or compensated for by know and proven methods. The recommended IFR's are consistent with others proposed and recently accepted by agencies for streams in the region. The affected reaches are short in length – the sensitive riparian habitat that does exist is isolated and limited in extent. Most of the affected reaches are highly confined, with negligible riparian-aquatic connection, few side channels, and no wetlands. Given the low-impact nature of run-of-river hydro projects and the value of the habitat and fish stocks present, the conclusions of the Application are valid.			No further action.
David Ingleson/Land Officer					
Integrated Land Management Bureau					
Water Access	<i>Water access to North Stave Lake is through an existing Lease or a BC Timber Sales reserve.</i>	Cloudworks is aware of the reserve and discussions are taking place between their forestry consultant and BC Timber Sales.		Response is acceptable to ILMB (May 1, 2006 Wkg Grp mtg)	Cloudworks will take the necessary steps to secure appropriate water access in coordination with BC Timber Sales or the existing Lease holder.
Tenure Areas	<i>Some works appeared outside tenure areas.</i>	Cloudworks provided adjustments to tenure areas on May 25, 2006 to scope in additional roads, laydown and spoil areas.		Response is acceptable to ILMB (May 1, 2006 Wkg Grp mtg)	
Road Standards	<i>Appropriate Road Standards must be used for</i>	Cloudworks agreed to add commitment that design criteria, construction and mitigation for the access roads		Response is acceptable to	More detailed discussion of road

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	<i>road development on Crown land</i>	will meet all standards and codes established by relevant authorities.		ILMB (May 1, 2006 Wkg Grp mtg)	standards will occur with MOF, MOE and ILMB during permitting.
Creation of Private Road	<i>ILMB is concerned that roads are not gated unless necessary and that key public or industrial access is not limited.</i>	Cloudworks has proposed to work with MOF and ILMB during the licensing and permitting stage to address access issues.		Response is acceptable to ILMB (May 1, 2006 Wkg Grp mtg)	More detailed discussion of access controls to occur during permitting.
Reclamation of Spoil and Aggregate Removal Sites	<i>ILMB is concerned that previously forested aggregate and spoil sites are properly reforested after their use.</i>	Cloudworks has committed to reforesting sites if they possess sufficient material to support tree growth. Areas will be assessed by a professional forester for their suitability for tree growth. Unsuitable areas will be re-vegetated with appropriate reclamation seed mixture.		Response is acceptable to ILMB (May 1, 2006 Wkg Grp mtg)	Reclamation plans will need to be incorporated into tenure and EMP requirements.
Harpreet Gill Transport Canada					
Operation EMP	<i>More detail on emergency shutdown and potential for ramping</i>	A draft version of the Operation Environmental Protection Plan Overview has been developed by Cloudworks and will continue to be modified as required. The Operating Parameters and Procedures will describe the control systems in the plant, the supervisory control and communication procedures.		Response is acceptable to NavCda July 27 e-mail	Changes made to Owner's Commitments Table, to address ramping from Nav Waters perspective
Debra Hughes/ Habitat Biologist/Fisheries and Oceans Canada					
Location of Project Components	<i>Requires more detailed design and site plans than provided in the Application to determine whether HADD is likely in each reach</i>	At the meeting on May 1, 2006, Cloudworks representative confirmed that all project components' designs are now fixed. The Application assesses the now-confirmed locations of all intakes, tailraces and other project components that are part of the scope of this project. Should there be any proposed amendments to the locations of instream works, Cloudworks will provide assessments of the new locations, for review and approval by the appropriate agencies.		Confirmation received at May 1, 2006 Working Group meeting and June 1, 2006 Fisheries Working Group	Should there be any proposed amendments to the locations of instream works, Cloudworks will provide assessments of the new locations, for review and approval by the appropriate agencies.

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RISC Standards	<i>An explanation as to how the data collection protocols deviate from the RISC needs to be provided.</i>	Cloudworks data collection protocols being used to provide the detail required for the DFO authorization, do not deviate from the RISC protocols.			No further action.
Sampling Sites	<i>The fish sampling sites do not appear to be located in the Fish and Fish Habitat maps. Revised maps should be provided.</i>	Cloudworks will provide revised maps to DFO.	Appendix 7		Cloudworks will provide revised maps to DFO.
Sediment Control Plans	<i>Nonetheless, specific engineered sediment control plans should be developed for each site and phase of the project prior to construction.</i>	Cloudworks will prepare specific sediment control plans for each site, approved by a qualified professional, for each major phase of construction where the streams could be affected (e.g. intake construction, tailrace construction, commissioning). This may be part of the EMP or stand-alone at the direction of DFO.			Sediment control plans are to be submitted to DFO prior to the authorizations being issued.
By-Pass Valves	<i>The application states that the use of by-pass valves are cost prohibitive. It is DFO's preferred option to use design changes (i.e. by-pass valves) before it issues a <u>Fisheries Act</u> section 32 authorization for the destruction of fish. This issue requires further discussion and will be addressed through the UHTWG.</i>	Cloudworks has committed to equipping the Francis turbines (Upper Stave and Northwest Stave facilities) with bypass valves. The capacity of the bypass valves will be determined during detailed design based on transient flow analysis for penstocks and downstream fishery flow requirements. Cloudworks will outline the study plan at the UHTWG.			Cloudworks will conduct studies to determine the capacity of the bypass valves for Francis turbines, in consultation with DFO, prior to the authorizations being issued.
Riparian Areas	<i>When the final design plans have been completed these (riparian) areas should be reassessed to determine if any <u>Fisheries Act</u> authorizations will be</i>	Cloudworks will provide a final assessment of riparian losses to DFO when final design plans are complete.			Cloudworks will provide a final assessment of riparian losses to DFO when final design plans are

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	<i>required.</i>				complete.
Fisheries Compensation Plan	<i>Cloudworks should add a commitment to do a conceptual Fisheries Compensation Plan for any Fisheries Act authorizations prior to the completion of the EA.</i>	A conceptual Fisheries Compensation Plan has been outlined for DFO.			A conceptual Fisheries Compensation Plan will be provided to DFO prior to the authorizations being issued.
Linda Sullivan/ Senior Program Officer/ Canadian Environmental Assessment Agency					
Water Level Sensors	<i>As the headpond in the Upper Stave will be operated to maximize power ("throughput adjusted to utilize the available water. The water level sensors will be set to minimize any loss of water") it is not clear how it will also ensure a minimum required flow in the river. This comment applies to all the sites except Upper Fire.</i>	Required flows will either be released over the weir or through a dedicated instream flow release valve. A water level in the headpond will result in a corresponding flow over the weir and this can be determined with certainty. This allows the headpond water level sensors to show what flows are passing over the weir. Dedicated flow release valves will be hydraulically designed to pass specified flows regardless of plant operating settings.	Section 3.4, Page 109		No further action.
Transmission Line Effects	<i>Will the transmission line be designed to minimize impacts on wildlife, e.g. birds, small mammals?</i>	The transmission lines will be designed according to industry accepted standards. By choosing routes which are adjacent to roads we are already minimizing impacts. With respect to bird collisions with powerlines, mitigation includes identifying high risk areas where the potential for avian collision with the transmission line may be substantial. An assessment for the placement of visual markers along some sections of the transmission line will be made during routing studies and markers will be placed in appropriate line segments, where the	Section 5.2.6.6 (in particular in the section on 'Other Wildlife' - page 401) Section 5.3.6.5 Section 5.3.6.6		Cloudworks will undertake an assessment for the placement of visual markers along some sections of the transmission line, during routing studies, and markers will be placed in

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		assessment indicates they are warranted.	(specifically page 509)		appropriate line segments, where the assessment indicates they are warranted.
Aggregate Supply	<i>Source of aggregate in Upper Fire, Lamont and Upper Stave is an environmental effect which is not discussed as such</i>	Effects of sedimentation on fish and aquatic life are discussed extensively in the Application and measures to avoid and control sedimentation are outlined in the Application and EMP. Cloudworks will ensure that the final EMP identifies that these measures must also be adhered to for any development of aggregate sources, whether from rock crushing sites or gravel pit use. Measures identified in the EMP for noise and dust control will also be specifically identified as applying to aggregate and gravel sources.	Sections 5.2.5.1, 5.2.5.2, 5.3.5.1, 5.3.5.2		No further action.
Access Road	<i>Access road to Northwest Stave site "special consideration may be required to shore up the access road." This may be a potential site for a Fisheries Act authorization which has not been considered further (i.e. either the road will need upgrading or it won't).</i>	It is unlikely that rerouting the road away from the existing one and away from the river will be practical. Therefore a DFO authorization is likely to be required. Cloudworks and the contractor will work with DFO during detailed design in order to obtain the authorization.	Section 3.4, Page 123		Cloudworks and the contractor will work with DFO during detailed design in order to include any portions of road that require an authorization.
Geotechnical	<i>The proponent notes that Golder & Associates recommends more detailed geotechnical investigation; but, they do not commit to doing this.</i>	Cloudworks commits to further and detailed geotechnical investigation, which will be carried out by qualified professionals, working with the design-build contractor or their consultants.	Section 4.1.2		Cloudworks will ensure that detailed geotechnical assessments are conducted, as recommended, prior to construction to assist with final

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					siting of project components.
ARD	<i>ARD potential is slight, however, the proponent 'recommends' visual inspection and a screening level ARD/ML. This is not a commitment.</i>	Cloudworks commits to visual inspection and screening level ARD/ML as recommended by Golder, which will be carried out by qualified professionals working with the design-build contractor or their consultants.	Section 4.1.3		Cloudworks will ensure that ARD assessments are conducted, as recommended, prior to construction.
Vegetation	<i>It is hard to believe a significance rating of 'Nil' for vegetation clearing impacts on wildlife when 18 ha (site) and 83 ha (right of way) will be removed for the life of the project.</i>	The 83 ha will be revegetated to native species of vegetation, and therefore the effects of clearing on wildlife will change the use (where the type of vegetation was trees and now reverts to grasses) but will not materially or adversely affect or impede use by wildlife. Conversion to native grasses provides more grazing land, though it reduces areas of cover. The site components (18 ha) are for powerhouse and intake/headpond sites and for minor areas of new road and surface penstock areas. This land use is dispersed over five remote facility areas with footprints that are generally not located in high value fish or wildlife habitat, in watersheds with a total area of 68,000 ha.	Table 5.6, Page 426		No further action.
Archaeology	<i>The proponent fails to acknowledge the potential for archaeology sites in Upper Fire Creek, Tipella Creek, and Upper Stave River noted in Appendix 11. The remainder of the discussion is appropriate.</i>	Cloudworks acknowledges there may be potential for archaeology sites in Upper Fire Creek, Tipella Creek, and Upper Stave River as identified in Appendix 11. Cloudworks will ensure that archaeology assessments are conducted, as recommended, prior to construction to assist with final siting of project components.	Section 5.2.9, Page 412		Cloudworks will ensure that archaeology assessments are conducted, as recommended, prior to construction to assist with final siting of project components.
Current Uses by First Nations	<i>The discussion is very generic and does not specify the level of use for hunting and fishing or</i>	Page 291 (Socio-economic setting/Public Health Infrastructure and Human Health Parameters) provides an indication that traditional food sources include various species of fish and hunted wildlife including deer, in	Section 4.11.6		No further action.

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	<p><i>whether this occurs at all sites. There is no mention of food gathering, ceremonial sites or cultural activities or the traditional uses mentioned in Appendix 11 (except hunting). There is no mention of what the First Nations currently use the land for or what they may have traditionally used the land for.</i></p>	<p>Tipella Creek watershed and other watersheds near the reserve communities. Sportfishing occurs on Fire Lake and trapping no longer occurs in any of the project facility areas. Project facility areas are generally located away from locations where fishing occurs, and hunting activities are conducted along a wide area in the Lillooet valley and other valleys as access allows.</p> <p>This was the information received from Douglas First Nation, who are the primary users of the area. It was not possible to obtain more detailed information. DFN representatives indicated at the Working Group meeting on May 1, 2006 that they do not wish the location or extent of traditional food gathering or uses to be reported.</p>			