REQUESTOR NAME:	BCOAPO
INFORMATION REQUEST ROUND NO:	1
TO:	BRITISH COLUMBIA HYDRO & POWER AUTHORITY
DATE:	December 16, 2015
APPLICATION NAME:	W.A.C. Bennett Riprap Upgrade Project

1.0 Reference: Exhibit B-1, page 1-2 (lines 11-13)

1.1 What would be the implications of an emergency reservoir drawdown in terms of electricity output (both kWh and replacement costs), safety and any other relevant issues?

2.0 Reference: Exhibit B-1, page 1-14 (lines 15-20)

2.1 Why was the original riprap layer of dam not constructed to sustain the high wind & storm events, ice loading and freeze-thaw action that has been experienced?

3.0 Reference: Exhibit B-1, page 1-5 (footnote #7))
Exhibit B-1, page 3-26, Figure 3-4

3.1 Does the rate impact analysis set out in Figure 3-4 include the ongoing cost of the civil maintenance program described in footnote #7?

3.1.1 If not what is the anticipated cost of the civil maintenance program and resulting implications in terms of the project's overall impact on future revenue requirements and rate increases?

4.0 Reference: Exhibit B-1, page 1-5 (lines 7-9)

4.1 Given the unexpected deterioration of the current riprap what is the basis for the "expectation" that the new riprap will meet performance expectations for 75-100 years?

5.0 Reference: Exhibit B-1, page 1-7 (lines 23-26)

5.1 After the riprap upgrade project is completed what will be the average levelized cost of energy from GMS?

6.0 Reference: Exhibit B-1, page 2-12 (lines 16-17)

6.1 What would be the impact on the output from GMS if the reservoir had to be drawn down permanently in order to address the deteriorated riprap condition?

7.0 Reference: Exhibit B-1, page 2-12

7.1 The Application states that there are no viable alternatives to undertaking the Project. Why isn't short-term remediation of the immediate erosion, similar remediation of any future erosion as it occurs and continued reliance on the Upstream Riprap Emergency Plan a viable alternative?

8.0 Reference: Exhibit B-1, page 3-7

8.1 What is the basis for selecting the performance criteria set out in section 3.2.1.6?

9.0 Reference: ExhibitB-1, page 3-21

9.1 What is the level of contingency costs that is included in each of the three project cost estimates?

10.0 Reference: Exhibit B-1, page 3-22

10.1 The Application states that no escalation factor has been applied to the Project beyond the B.C. Consumer Price Index. Has B.C. Hydro reviewed the various elements of the project and satisfied itself that the BC CPI is appropriate in all cases?

10.2 When contingencies are excluded, how much of the Project's Implementation Phase costs are labour vs. non-labour?

10.3 What has been BC Hydro's recent (e.g., 5-years) experience with respect to labour cost inflation for the Project's types of labour requirements? Has it exceeded or tracked general inflation?

11.0 Reference: Exhibit B-1, pages 5-5 to 5-11

11.1 Sections 5.3.1.1 through 5.3.1.4 indicate that the Project Cost range includes allowances for a number of different contingencies. Does the level of contingency allowance vary as between the P10, P50 and P90 cost estimates?

11.2 The contingency for construction delays (page 5-11) provides for loss of up to two full construction seasons due to reservoir elevations? Does this mean that all three Project Cost estimates (P10, P50 and P90) include the cost of two years of construction delay and thereby, effectively, represent the cost associated with a later in-service date than planned?

12.0 Reference: Exhibit B-1, Appendix E-3

12.1 Please provide a copy of the full report prepared by MWH Global Inc..

12.2 The Executive Summary (page 6) contains five suggested action items. Has BC Hydro undertaken all five recommended actions?

12.2.1 For those is has not undertaken, please explain why not.

12.2.2 For those it has undertaken, have the results been incorporated into the current Application?