

1 Q. Further to the response to PUB-NLH-210, page 99 of Attachment 1 which states  
2 that weather risk has been mitigated by a “mega dome”, provide details on this  
3 dome including the schedule for its construction, operational experience of others  
4 with it and how it will mitigate the weather risk.

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7 A. It is Hydro’s understanding that the Integrated Cover System (colloquially referred  
8 to as a "mega dome") was included in Astaldi’s proposal for construction of the civil  
9 works for the site. The Muskrat Falls civil works Request for Proposal did not  
10 require that such a structure be provided, but was rather proposed by Astaldi to  
11 improve productivity at the Muskrat Falls site.

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13 The cover system will enclose the Muskrat Falls powerhouse and will increase the  
14 efficiency of concrete placement activities during winter conditions. By providing a  
15 controlled environment inside the cover system, the working environment for  
16 workers will be more favourable than outdoors. In addition, the requirement for  
17 insulation and hoarding to prevent concrete from freezing will be reduced. Both  
18 factors will improve the efficiency of the work site during winter conditions.

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20 Providing a controlled environment and improving productivity serves to mitigate  
21 schedule delays associated with extreme weather conditions.

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23 Completion of construction is expected by mid-2015, with progress sufficiently  
24 advanced to enclose areas of the powerhouse where concrete will be placed over  
25 the winter of 2014-15. Integrated cover systems similar to that currently being  
26 erected at the Muskrat Falls powerhouse have been successfully installed and  
27 utilised in Canada to enable construction to proceed throughout winter, for

1 example: Module Assembly Hall – Bull Arm and Shipshaw Hydroelectric Plant –  
2 Saguenay, Quebec (completed in 2012).

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4 The Independent Engineer’s Report (November 2013), Section 4.13 Schedule Risk  
5 Discussion makes reference to the mega dome as follows:

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7 The weather risk has been mitigated by a “mega-dome” that  
8 the contractor for contract CH0007 will erect to enclose the  
9 powerhouse structure which will provide a controlled climate  
10 for the concrete to be poured year round. This directly  
11 addresses a significant component of the weather risk  
12 identified at DG3 and the volume of concrete that can be  
13 placed year round. This avoids a slowdown in winter and  
14 levelizes the workforce year round.