

1 **Q. Facility Rehabilitation (Pooled), set out in Tab 1.1, is made up of the following:**  
2 **Hydro Dam Rehabilitation:**

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4	<b>Port Union Long Pond Spillway</b>	<b>\$212,000</b>
5	<b>Tors Cove Forebay Spillway Rehabilitation</b>	<b>\$191,000</b>
6	<b>Paddy's Pond Dam and Spillway</b>	<b>\$381,000</b>
7	<b>Generation Equipment Replacements Due to In-Service Failures</b>	<b>\$578,000</b>
8		

9 **Has NP undertaken a separate engineering review of each of the projects included**  
10 **under Hydro Dam Rehabilitation? If so, please provide a summary of each of the**  
11 **reports.**

12  
13 A. Newfoundland Power has assessed each of the structures included under Hydro Dam  
14 Rehabilitation in the project *2012 Facility Rehabilitation*, set out at Tab 1.1, under the  
15 Company's dam safety program.<sup>1</sup> The most recent inspections and engineering reviews  
16 of each structure are summarized below.

17  
18 *Port Union Long Pond Spillway*

19 During repairs after Hurricane Igor, a thorough inspection of this structure was completed  
20 by Newfoundland Power's engineering staff. This inspection revealed that the condition  
21 of the timber cribbing was deteriorated and that additional work would be required to  
22 protect the abutment, beyond the extent of Hurricane Igor repairs. It was determined that  
23 replacing the damaged timber cribbing was not feasible and that a new structure would be  
24 required to maintain adequate dam safety.

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26 *Tors Cove Forebay Spillway Rehabilitation*

27 A consultant dam safety review identified that the dams at Tors Cove Pond do not have  
28 adequate freeboard.<sup>2</sup> This review also indicated that Tors Cove Pond Spillway does not  
29 meet Canadian Dam Association criteria for overturning stability. Replacing the stoplog  
30 spillway with an improved design is required to address dam safety deficiencies and  
31 remove an operating safety hazard.

32  
33 *Paddy's Pond Dam and Spillway*

34 Newfoundland Power's dam safety inspection of the Paddy's Pond Dam and Spillway  
35 structure showed that the timber facing and timber crib are deteriorated and seepage  
36 through the structure is evident. The consultant dam safety review also showed that the  
37 amount of freeboard is insufficient for this structure, meaning the dam would be  
38 overtopped during the design flood. Recent overtopping of the dam from wave action  
39 has caused erosion of the rock fill in the timber cribbing and poses a risk to the stability  
40 of the dam.

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<sup>1</sup> Generation equipment replacements due to in-service failures is discussed in response to Request for Information PUB-NP-011.

<sup>2</sup> Newfoundland Power's dam safety program includes comprehensive dam safety inspections with reviews of stability, hydrology and freeboard analysis conducted on an 8-year cycle.