

1 Q. **Reference: Life Extension Application, Schedule 1, Attachment 1, Basis of Estimate, page 25 of**  
2 **225, Table 7.**

3 “Table 7 provides an estimate of cost for the various components of the Bay d’Espoir Unit 7 Life  
4 Extension project, which includes amounts for (i) Found Work Allowance, (ii) Contingency and  
5 (iii) Management Reserve.”

6 a) Describe in detail, including examples, the direct and indirect costs that would be  
7 included in each of the three components.

8 b) Detail the process that Hydro has implemented to ensure that costs can not be included  
9 in more than one of the three components.

10 c) What percentage of the total project cost (Authorized Budget) is attributed to Found  
11 Work Allowance, Contingency and Management Reserve? Provide the percentage of  
12 total project cost for each allowance and the total for the three allowances combined.

13 d) Will the inclusion of a found work allowance in a project budget reduce the amount in  
14 the contingency allowance or the management reserve?

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17 A. a) Found work allowance, contingency, and management reserve are defined as follows:

18 **Found Work Allowance**

19 Found work is considered to be work that is not known when preparing the initial scope of  
20 work. Unlike new construction, refurbishment or maintenance work often involves  
21 equipment or conditions that cannot be evaluated until disassembly and inspection occur.  
22 An example of found work might be discovering that a turbine shaft requires replacement.  
23 This activity is not included in the original scope, as prior inspections and engineering  
24 assessments indicated that the component could remain in service. However, once  
25 disassembled, detailed inspections, finite element analysis, and fatigue analysis may identify  
26 damage that necessitates replacement.

1 The found work allowance is therefore an allowance for additional direct work that may be  
2 discovered once refurbishment begins, but cannot be defined in advance. It generally  
3 includes costs such as additional labour, materials, and construction equipment required to  
4 complete any newly discovered work. Because found work is by definition undefined at the  
5 time of estimating, no detailed breakdown of direct or indirect costs is available. It can  
6 reasonably be expected that indirect costs such as engineering, camp operations, project  
7 management, and owner's costs will not be materially affected by found work. Accordingly,  
8 the found work allowance primarily represents a provision for direct work.

9 **Contingency**

10 Contingency represents a budget allowance for known unknowns, risks and uncertainties  
11 that are recognized but cannot be quantified precisely. Examples include variations in  
12 productivity, fluctuating material or equipment costs, or minor design changes within the  
13 defined project scope.

14 Direct costs within contingency may include labour, material or additional contractor effort  
15 arising from normal project variability. Indirect costs may include additional project  
16 management, additional supervision, or temporary facilities due to schedule extensions.  
17 Contingency values are developed statistically, based on a quantitative risk analysis process  
18 as outlined in the project Basis of Estimate.<sup>1</sup> The allocation of direct and indirect costs is not  
19 known at the time that contingency is established, and would be determined at the time of  
20 utilization.

21 **Management Reserve**

22 Management reserve is a separate budget allocation established to address unknown  
23 unknowns, events that are unforeseen and outside the identified risk profile, or strategic  
24 risk events. Examples might include regulatory or code changes, major supplier insolvency,  
25 geopolitical events, or a significant change in project execution strategy.

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<sup>1</sup> "Life Extension Application – Bay d'Espoir Unit 7," Newfoundland and Labrador Hydro, June 20, 2025, sch, 1, att. 1, sec. 12 and 13.

1 Management reserve may cover both direct and indirect impacts, depending on the nature  
2 of the event. Direct costs could include new scope or redesign work, while indirect costs  
3 might involve extended project management or additional engineering oversight. The  
4 allocation of direct and indirect costs is not known at the time that the management reserve  
5 is established, and would be determined at the time of utilization. The value of the  
6 management reserve is also determined through the statistical risk modelling process,  
7 typically representing the upper range of potential cost outcomes at a chosen confidence  
8 level (e.g., P85).

- 9 **b)** Newfoundland and Labrador Hydro ("Hydro") has implemented a clear separation and  
10 control process to ensure that costs are not duplicated between found work allowance,  
11 contingency, and management reserve.

12 **Distinct Definition and Purpose:** Each component has a specific intent and is defined  
13 separately within the project Basis of Estimate. Found work is established as a discrete work  
14 scope allowance for an undefined but likely scope, contingency is calculated for known  
15 project risks, and management reserve is held for unforeseen events.

16 **Segregated Budget Control Accounts:** Each allowance is assigned its own control account  
17 within the project cost structure. This allows Hydro to track utilization independently and  
18 prevents any overlap in cost reporting or drawdowns.

19 **Controlled Release Authority:** The utilization of contingency or management reserve  
20 follows a structured and controlled Project Change Management process. Potential changes  
21 must be evaluated from many perspectives, justified and presented to a change control  
22 committee. Once this committee agrees with the rationale for the change, the change  
23 follows a graduated and auditable authorization process through various levels of Hydro  
24 management, including Hydro Executive. In implementing the change, funds are transferred  
25 from the appropriate control account (contingency or management reserve) to the  
26 necessary project accounts in the cost and financial management systems.

27 Found work allowance drawdowns require identification and documentation of the newly  
28 discovered work, verified by engineering. The addition of found work to the project budget

would follow a simplified project change management process, where there is an approval mechanism to transfer the necessary funding from the found work control account to an appropriate work scope control account. Any control account changes, via the project change management process, would need to be completed prior to making any changes to contractor works, via the appropriate contract change management mechanisms.

- c) The percentage of the total project cost attributed to each account is presented in Table 1.

**Table 1: Total Project Cost (%)**

| Item                                                                 | Percentage<br>(Authorized Cost) |
|----------------------------------------------------------------------|---------------------------------|
| Found Work Allowance                                                 |                                 |
| Contingency                                                          |                                 |
| Management Reserve                                                   |                                 |
| Found Work Allowance, Contingency and<br>Management Reserve combined |                                 |

- d) The inclusion of a found work allowance in the project budget reduces the amount in the contingency and management reserve. If the found work allowance were not included, each scope element in the risk assessment would need to include the risk of found work. This would increase the higher-end risk range for each scope item. During the statistical modelling process, this would naturally skew the results higher for the mean value of the project outcomes (thus leading to a higher value for contingency) as well as the value associated with the recommended probability of underrun (the P85 value, in this case), for management reserve. Therefore, inclusion of a found work allowance does not increase the overall Authorized Cost of a project, as the risk and associated costs would have otherwise been incorporated within the budget in the form of contingency or management reserve.