

1    Q.    **Asset Management**

2            This is in reference to Hydro's 2015 Capital Budget Application, Appendix A; "*Capital*  
3            *Project Overview*." Explain how Hydro applies "*Probability and Confidence Factors*"  
4            into the scores and which scores when considering capital projects and explain  
5            what groups conduct the evaluations and scoring, and who leads the process.

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8    A.    Probability and confidence factors are used within Hydro's process for ranking the  
9            importance of capital projects relative to each other. These factors reflect the  
10           certainty of data being used to rank the importance of proposed capital projects.  
11           This process is further discussed in Hydro's response to PUB-NLH-336.

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13           The process is led through the Office of Asset Management and facilitated by the  
14           Projects Coordinator. Probability and confidence factors are evaluated and selected  
15           against defined criteria by Hydro's team of Long Term Asset Planning leads with  
16           input from engineering Technical Services. Hydro's Asset Owners, Chief Operating  
17           Officer and Vice President review and sign off on the capital project portfolio being  
18           brought forward from the Long Term Asset Planning team.

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20           Probability:

- 21                1. Not Likely;  
22                2. Low Likelihood;  
23                3. Likely;  
24                4. Highly Likely; and  
25                5. Near Certain.

Confidence:

1. Low;
2. Medium; and
3. High.

Project ranking elements are as follows:

- Work Classification (normal, justifiable, payback 70/40/10);
- Net Present Value (NPV \$0, NPV <\$100k, NPV <\$500k, NPV <\$1M, NPV >\$1M);
- Safety impact (none, minor, medical treatment, lost time, disabling);
- Environment impact (none, minor, moderate, significant);
- Alignment with Business Excellence, People and Community goals (none, connects but not directly linked, aligns directly);
- Risk to execution schedule (external and internal conflicts, external affecting completion, no external but with internal conflicts, no conflicts);
- Ability to continue service to customers without the project (can, can with high costs, cannot);
- Number of customers impacted by the project (<100, < 1000, <10000, >10000);
- Overall electrical system impact (none specific, system with standby unit, plant or station, entire system);
- Impact intensity (minor, moderate, significant, high);
- Loss type (none, equipment, facility, production, customer delivery); and
- Availability of options to mitigate loss (redundant unit, backup option, nothing).

Probability refers to the likelihood that something will happen. For example, when assessing the numbers of customers impacted by a project, the Probability factor reflects the likelihood of that happening.

Confidence reflects the level of certainty in an assessment/ranking. For example, the Confidence factor reflects the evaluator's level of certainty in a project's identified payback period (low, medium or high). In either case a probability or confidence factor is multiplied with the score for a particular (project ranking) element, to arrive at the total score for that element. The sum of these products for the 12 elements yields the total project score used in the ranking.

The table below provides an example of how the total project score is arrived at for the project, Upgrade Gas Turbine Plant Life Extension – Stephenville:

Ranking Elements	Impact*	Confidence Level	Probability	Score
Work Classification	Normal = 5	High = 3	-----	$5 \times 3 = 15$
Net Present Value	NPV (\$0) = 0	High = 3	-----	$0 \times 3 = 0$
Safety Impact	Treatment = 50	-----	Likely = 3	$50 \times 3 = 150$
Environment Impact	Minor = 50	-----	Likely = 3	$50 \times 3 = 150$
Alignment with other Goals	Not Directly Linked = 40	High = 3	-----	$40 \times 3 = 120$
Risk to Execution Schedule	No External but Internal Conflicts = 40	High = 3	-----	$40 \times 3 = 120$

## Island Interconnected System Supply Issues and Power Outages

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Ranking Elements	Impact*	Confidence Level	Probability	Score
Ability to Continue Service to Customers without project	Can with High Costs = 50	High = 3	-----	$50 \times 3 = 150$
# of Customers Impacted	>10,000 = 70	-----	Likely = 3	$70 \times 3 = 210$
Overall System Impact	Plant or Station = 70	High = 3	-----	$70 \times 3 = 210$
Impact Intensity	Moderate = 40	-----	Highly Likely = 4	$40 \times 4 = 160$
Loss Type	Customer Delivery = 90	Medium = 2	-----	$90 \times 2 = 180$
Availability of Options to Mitigate Loss	Nothing = 90	High = 3		$90 \times 3 = 270$
<b>TOTAL PROJECT SCORE</b>				<b>1735</b>

\*The impact is the weighting factors as presented in the Capital Budget, Appendix A.