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## Reference: 2024 Capital Budget Application – Intervenor Evidence, Utility Management Responsibility Report, Midgard Consulting Incorporated, page 27.

"As utilities mature their asset management capabilities, they are able to progress along the prioritization strategy scale from subjective and/or asset health-based prioritization strategies towards risk and value-based prioritization strategies. It is worth noting that none of the utilities reviewed by Midgard has fully implemented a value model prioritization yet. Utilities like Manitoba Hydro and BC Hydro are gradually moving in that direction as their asset management capabilities mature, but they are not at that level yet."

- (a) In Midgard's review of Canadian jurisdictions, was Midgard able to determine how long it typically takes utilities to progress along the prioritization strategy scale for their capital investments, and how much time utilities typically spend in each stage? If so, please provide details of the timelines experienced by the utilities.
  - (b) In Midgard's review, has Manitoba Hydro or BC Hydro indicated an intention to fully implement value model prioritization? Have any other utilities indicated any intention? If so, please provide the list of utilities
- The duration of progress along the prioritization strategy scale for capital 23 A. (a) investments varies and is largely dependent on the utility's senior leadership 24 25 commitment to advance progress. Utilities without senior leadership commitment will exhibit a slower pace of advancement. Such utilities will exhibit slower 26 progression along the prioritization strategy scale. Similarly, in cases where 27 regulatory bodies issued specific filing requirements and set deadlines for utilities 28 (i.e., Ontario's Chapter 5 requirements), utilities advanced their progress more 29 quickly as part of a continuous improvement process. Quantifying how much time 30 utilities spend on each stage is therefore difficult because it is dependent on senior 31 leadership commitment and regulatory board direction. 32 33
- As an example, Midgard is aware of Manitoba Hydro's quantified progress from 2016 when it scored 1.50 to 2021 when it scored 1.81.<sup>1</sup> A score of 3 is considered competent in asset management practices.
- As another example, the Ontario Energy Board ("OEB") required utilities to
  implement an asset management process that strategically planned, prioritized, and

<sup>&</sup>lt;sup>1</sup> Manitoba Hydro, 2023/24 & 2024/25 General Rate Application, Tab 7, Appendix 7.4, p. 5. Link.

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1		optimized capital expenditures, as discussed in Appendix C.4 and C.4.1 of
2		Midgard's evidence:
3		
4		"In Ontario, a distribution utility must employ an asset management
5		process to strategically plan, prioritize, and optimize its capital
6		expenditures while offering various stakeholders' insight into the
7		distributor's asset management process.
8		
9		An overview specifically of the assets managed by the distribution utility is
10		presented, detailing service area characteristics and providing asset data
11		by type (e.g., capacity, condition, performance, risks, demographics) to
12		justify capital investments and consider economic alternatives. The
13		overview also identifies any prior transmission or high voltage assets
14		deemed as distribution assets and any such assets currently under
15		consideration for such designation" <sup>2</sup>
16		
17	<b>A</b> \	
18	(b)	Manitoba Hydro has already indicated its intention to implement and mature
19		its value model prioritization. As stated in evidence:
20		
21		"Manitoba Hydro is in the early stages of implementing prioritization
22		based on a value framework model. It is not currently achieving that
23		objective in practice but has updated plans to become competent in
24		the future." <sup>3</sup>
25		
26		Manitoba Hydro is implementing its value model through the industry-
27		recognized Copperleaf C55 asset investment planning software. Manitoba
28		Hydro has already completed its initial implemented of Copperleaf C55 and
29		is currently working to improve its implementation:
30		
31		"The capital optimization process within Manitoba Hydro is a multi-
32		step process to achieve a capital project portfolio that maximizes
33		investment value and minimizes risks to the organization, within
34		funding, resource, and timing constraints. The ontimization process
35		is a yearly initiative that establishes and communicates the project
36		and program portfolio
37		
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 <sup>&</sup>lt;sup>2</sup> Midgard Evidence, P0688-D003-RPT-R01-EXT, Appendix C.4 & C.4.1, p. 75-76.
 <sup>3</sup> Midgard Evidence, P0688-D003-RPT-R01-EXT, Section 4.1, p. 27.

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1	The [Corporate Value Framework] is core to the optimization process
2	and investment evaluation. Investment evaluation and
3	comparison/optimization takes place within the industry recognized
4	Copperleaf asset investment planning software. Software is necessary
5	to support the optimization process due to the magnitude and
6	complexity of Manitoba Hydro's portfolio of investments. Copperleaf
7	houses the Corporate Value Framework and the portfolio of capital
8	programs and projects." <sup>4</sup>
9	
10	In compliance with various Directives in BCUC Order Nos. G-91-23 and G-
11	154-23, BC Hydro has expressed an intention to implement value model
12	prioritization: <sup>5</sup>
13	1
14	"BC Hydro has been investigating potential improvements to its
15	enterprise-wide framework for capital prioritization, with a focus on
16	transitioning towards [Value-based Decision Making ("VDM")]. A
17	fundamental part of VDM is developing a value framework to provide
18	a consistent means to assess the costs, benefits, risks, and
19	performance of investments under consideration. This value
20	framework is then used to compare investments using a common
21	economic scale so that trade-off decisions can be made with increased
22	consistency, transparency, and confidence. Consideration of other
23	factors such as labour resources and outage constraints will continue
24	to play an important role in determining the final portfolio of
25	investments that are included in the capital plan." <sup>6</sup>
26	
27	Another example is Alectra Utilities Corporation ("Alectra") which is
28	implementing a value model similar to Manitoba Hydro's. Alectra is also
29	using Copperleaf C55 software:
30	
31	"Information for all ongoing and proposed capital projects resides in
32	a common repository within the Copperleaf C55 capital management
33	system. The use of a single system to enter and track information
34	relating to project costs and benefits is a critical feature of Alectra's
35	capital planning process, as the assumptions and methods used to

 <sup>&</sup>lt;sup>4</sup> Manitoba Hydro, 2023/24 & 2024/25 General Rate Application, Tab 7, Section 7.4.3, p. 46, l. 3-12. <u>Link</u>.
 <sup>5</sup> At the time of preparing the response to this information request, BC Hydro's compliance filing is still under review by the BCUC.

<sup>&</sup>lt;sup>6</sup> BC Hydro, BC Hydro Compliance with Directive 20 and 87 of G-91-23, Section 3.2.2, p. 44, l. 10-18. Link.

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1	determine project value and need are consistently applied, thereby
2	avoiding potential biases associated with processes based on
3	judgement or inconsistent project evaluation methods.
4	
5	Copperleaf's C55 suite of investment planning modules is used by
6	Alectra to manage capital projects and to produce an optimized
7	investment portfolio over five years
8	
9	The need for such a tool and structured approach to investment
10	planning is underscored by the large number of projects in Alectra's
11	capital portfolio – over 1000 in the DSP. One of the key features of
12	C55 is its ability to evaluate and rank dissimilar projects, including
13	those in each of Alectra's four investment categories, on a common
14	economic scale." <sup>7</sup>

<sup>&</sup>lt;sup>7</sup> OEB, EB-2022-0013, Alectra Utilities Corporation, Incremental Capital Module (ICM), Application, Section 1.10, p. 11-12. <u>Link</u>.