

1 **Information Systems**

2

3 **Q. Reference: "2025 Capital Budget Application," Newfoundland Power Inc.,**

4 **June 28, 2024, Supporting Materials, Information Systems: 6.1.**

5 **a) What was the total cost of the original implementation of the Outage**

6 **Management System ("OMS")?**

7 **b) Were the additional required upgrades identified in the original project**

8 **application in 2019?**

9 **c) Without returning to the market to obtain estimates, how did**

10 **Newfoundland Power determine the replacement of the OMS with a new**

11 **product was not a viable option?**

12 **d) How were the costs of the minor and major upgrades determined? Was a**

13 **third-party vendor engaged in the process?**

14 **e) Provide the list of the assumptions utilized in the Net Present Value**

15 **Analysis. Please provide any detailed calculations to support the numbers**

16 **presented in Tables A1 and A2.**

17 **f) In the Net Present Value analysis, Alternative 2 shows software costs of**

18 **\$250,000 in 2028. Please provide a detailed breakdown of what these**

19 **costs include.**

20 **g) What new functionality will be delivered as part of this upgrade, and have**

21 **all associated costs been included in the estimate provided?**

22

23 **A. a) The original implementation cost of OMS was \$3,736,000.**

24 **b) The OMS project costs approved as part of Newfoundland Power's 2018 Capital**

25 **Budget Application were associated with its implementation and did not include**

26 **future upgrade costs. At that time, implementation of a new OMS was necessary to**

27 **address the functional obsolescence of the Company's existing system.**

28

29 **c) The upgrade of the existing OMS will leverage existing software licenses purchased**

30 **for the original implementation. It would also include components of the existing**

31 **configuration and integrations with other systems. Replacing the current OMS with a**

32 **different product would require full implementation of a new software product,**

33 **including purchasing new software licenses, retraining of employees, and**

34 **re-establishing integration with many of the Company's current technology solutions**

35 **such as the website, SCADA and Workforce Management Systems.**

36 **In preparation for the proposed upgrade, Newfoundland Power held cost discussions**

37 **with the existing OMS and SCADA vendors to determine the least cost approach. It**

38 **was determined that the vendor specific costs of moving to a new product was more**

39 **than 200% of the cost of completing the upgrade with the current vendor.**

40

41 **d) Costs for the minor upgrades were derived from discussions with the existing OMS**

42 **vendor and the SCADA vendor regarding software and implementation services**

43 **costs. The OMS vendor completed a detailed estimate and timeline for the major**

44 **upgrade which provided the basis for the proposed project. As well, the major and**

1 minor upgrade costs were derived from the Company’s experience in completing the
 2 2019 OMS project and the 2021 OMS upgrade project.¹

3
 4 e) The assumptions used in the net present value analysis include the following:

- 5
- 6 • depreciation of the software capital costs is 10 years;
- 7 • capital cost allowance (“CCA”) for software is 100%;
- 8 • weighted average incremental cost of capital is 6.65%;
- 9 • inflation is calculated using the GDP Deflator for Canada;² and
- 10 • present worth year is 2025.

11
 12 The net present value analysis resulted in total present worth of -\$3.6 million for
 13 Alternative 1 and -\$3.3 million for Alternative 2. Alternative 2, completing the major
 14 upgrade in 2025-2026, is the least-cost alternative to maintain the OMS with full
 15 vendor support. See Attachment A for the calculations that support the alternatives
 16 in the net present value analysis.

17
 18 f) Table 3 provides the breakdown of the software costs in 2028 for Alternative 2.

Table 3: Cost Breakdown (\$000s)	
Item	Amount
Internal Labour	75
Vendor Services	75
Software Licensing ³	100
Total	\$250

19 g) No new functionality is planned to be delivered as part of this upgrade, and no
 20 costs for additional functionality is included in the project estimate.

¹ The 2019 OMS project was approved in by the Board in Order No. P.U. 037 (2017) as part of the Company’s 2018 Capital Budget Application. The OMS upgrade was approved in Order No. P.U. 37 (2020), as part of the Company’s 2021 Capital Budget Application.

² Based on the GDP Deflator for Canada provided by the Conference Board of Canada in its data release in February 2024.

³ Current licensing costs for OMS and GIS are approximately \$200,000 per year. It is assumed the upgrade project would take six additional months to complete, resulting in licensing costs of \$100,000 ($\$200,000 \times 6/12 = \$100,000$).

ATTACHMENT A:

Newfoundland Power Inc. Supporting Calculations for the Net Present Value Analysis

Newfoundland Power Inc.
Supporting Calculations for the Net Present Value Analysis
(\$000s)

Alternative 1: Minor Upgrade in 2026 and Major Upgrade in 2027-2028

	New Capital Cost	Cumulative Capital Investment	Percentage of Revenue Requirement¹	Total Revenue Requirement	Present Worth²	Cumulative Present Worth	Present Worth of Sunk Costs³	Total Present Worth⁴
2026	507	507	0.1190	60	-57	-57	-426	-483
2027	0	507	0.1522	77	-68	-124	-358	-483
2028	3,685	4,192	0.1278	536	-442	-566	-3,039	-3,605

Alternative 2: Major Upgrade in 2025-2026

	New Capital Cost	Cumulative Capital Investment	Percentage of Revenue Requirement¹	Total Revenue Requirement	Present Worth²	Cumulative Present Worth	Present Worth of Sunk Costs³	Total Present Worth⁴
2026	3,270	3,270	0.1190	389	-365	-365	-2,749	-3,114
2027	0	3,270	0.1522	498	-438	-803	-2,312	-3,114
2028	250	3,520	0.1449	510	-421	-1,223	-2,103	-3,326

¹ Revenue requirement is the portion of overall revenue requirement applicable to each year. It considers costs such as depreciation, income taxes and the Company's returns.

² Present worth is the present worth of each year's net benefit based on a discount rate equal to Newfoundland Power's approved weighted average cost of capital of 6.65%.

³ The present worth of sunk costs is the cost of capital expenditures that have not been recovered from customer rates.

⁴ Total present worth is the combination of the cumulative present worth and the present worth of sunk costs that have not been recovered from customer rates.