

NOVA SCOTIA ENERGY BOARD

IN THE MATTER OF: THE PUBLIC UTILITIES ACT

- and -

**IN THE MATTER OF: AN APPLICATION by NOVA SCOTIA POWER INCORPORATED
(NS Power) for Subsequent Approval of a 2024 ACE Plan Capital Item**

CI C0032664 – Energy Control Centre – Optimization Tools

NON-CONFIDENTIAL INFORMATION REQUESTS

To: **Lana Myatt**
Senior Regulatory Analyst
By e-mail: Lana.Myatt@nspower.ca

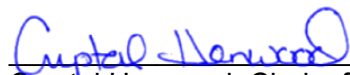
From: **Nova Scotia Energy Board**
Board Staff

Responses Due: **Friday, February 6, 2026**

Copies: 1 electronic copy (PDF searchable)

Contact Person: **Chris Jiang, P.Eng.**
Senior Advisory, Electrical
Nova Scotia Energy Board
T 902 424 1024
TF 1 833 809 0040
F 902 424 3919
chris.jiang@novascotia.ca

Issued at Halifax, Nova Scotia, this 16th day of January, 2026.



Crystal Henwood, Clerk of the Board

1 **Request IR-1:**

- 2 a) Please explain the detail functions of the three new interrelated software solutions in plain
3 language and the reason they are required.
- 4 b) Please describe NS Power's current operational process without the software.
- 5 c) Please explain any regulatory requirements and restrictions that may apply to the proposed
6 automation system, such as those from FERC, NERC, NPCC, etc.
- 7

8 **Request IR-2:**

9 In the Description, NS Power noted that "The third technology solution is an Outage Request
10 Platform that will automate the process for requesting, analyzing, and prioritizing planned outages
11 related to the NS Power Transmission, Substation, Generation and Telecommunications assets.
12 The current management of planned outages is a manual process utilizing limited SharePoint
13 functionalities. This implementation will help to support anticipated future system complexities."

- 14 a) Please explain the possible impact to customers and NS Power's overall reliability
15 performance.
- 16

17 **Request IR-3:**

18 Please explain how the proposed new technology solutions correlate to the Evergreen IRP and
19 NS Power's progress to the 2030 renewable electricity target.

20

21 **Request IR-4:**

22 In the Description, NS Power mentioned that the 2018-2019 Fam Audit Dispatch Study (M09548)
23 recommended the development of the tools. NS Power noted that "This project includes
24 deliverables designed to support the implementation of those recommendations through the noted
25 software, as well as the development of new and enhanced interfaces, business processes, and
26 stakeholder communications."

- 27 a) Please provide a detailed explanation of the deliverables and describe how each of the
28 proposed technology solutions support the deliverables.
- 29 b) Please provide a list of the Matter numbers for each update to the Board about the FAM Audit
30 Dispatch Study and the Dispatch Study Action Plan.
- 31

32 **Request IR-5:**

33 Please explain the operational challenges encountered by NS Power ECC and why the proposed
34 new technology solutions are the most effective solution.

- 1 a) Compare the current process with the proposed combination of “new technology solutions”
2 and “revised business processes” and explain how the portal resolves existing system issues.
3 b) Please provide a copy of all reports or other documents that provide support for this project.
4

5 **Request IR-6:**

- 6 a) Please explain the differences between the proposed optimization tools in the current
7 application and C0053696, Energy Control Centre Wind Integration Project (M12593).
8 b) Please explain whether the two optimization tools/systems referenced in part (a) are
9 interconnected. If so, how would they work together? If not, why not? How are the readings
10 and data from the two respective tools considered and applied in an efficient manner?
11 c) Please confirm that the two proposals are not duplicated. In other words, should both
12 components of the two applications have been part of one project?
13 d) Please explain why NS Power did not combine both capital applications.
14

15 **Request IR-7:**

16 Has a Request for Proposals (RFP) been issued for the supply of the proposed system?

- 17 a) If so, please provide a summary of the results.
18 b) If not, when will an RFP be issued?
19 c) Or please explain why an RFP is not required.
20

21 **Request IR-8:**

22 Please indicate whether NS Power or NSIESO, or both, will ultimately be the user of each new
23 technology.

- 24 a) Please explain whether NSIESO has been notified or involved in the proposed project and the
25 nature of its involvement.
26 b) If it is shared by both, please explain the method and the associated costs.
27 c) If NSIESO is the only user, please explain NS Power’s plan to transfer the assets and indicate
28 any training requirements for NSIESO.
29 d) If NS Power is the only user, please explain why.
30

31 **Request IR-9:**

- 32 a) What is the expected lifespan of each technology solution?
33 b) Please explain the ongoing maintenance activities of the new technology solutions and the
34 expected lifecycle.

- 1 c) Please indicate who would perform these maintenance tasks, whether they would be
2 performed internally by NS Power or by external consultants.
- 3 d) Please explain the operational costs for the proposed automation software, including but not
4 limited to maintenance and support costs, software hosting costs, licensing costs, third party
5 services, administration fees, etc.

6

7 **Request IR-10:**

- 8 a) Will the new systems in this application reduce the overall operational costs of the Energy
9 Control Centre? If a financial analysis has been prepared on the impact of the new
10 optimization tools, please provide it.
- 11 b) Please explain whether additional recruitment is required for the new solutions and specify
12 the number of new staff.

13

14 **Request IR-11:**

- 15 a) Please quantify the expected benefits associated with this project (i.e., decreased congestion,
16 improved reliability, and improved capacity) in terms of the expected NPV in cost savings and
17 describe how this cost savings will outweigh the project's estimated NPV of capital and
18 operating costs.
- 19 b) Please provide a time frame over which these cost savings will occur.

20

21 **Request IR-12:**

- 22 a) Please explain if there are contingency plans in place to mitigate the impact of the proposed
23 system becoming unavailable during operation, considering that the former system was a
24 manual system.
- 25 b) If yes, please describe how the Energy Control Centre would operate during the absence of
26 the system to avoid deterioration of economic optimization and system reliability concerns.
- 27 c) If contingency plans are not in place, please explain why and whether there are plans to adopt
28 a contingency strategy.

29

30 **Request IR-13:**

31 What other optimization tools were considered compared to the proposed tools? Please explain
32 why the proposed tools were the preferred option and provide any economic analysis that was
33 prepared.

Request IR-14:

- a) Please compare the current operation process and each of the new technology solutions on system commitment, operational planning, and dispatch functions at the Energy Control Centre.
- b) Please explain the compatibility of the new technology system and indicate any upgrades needed for the NS Power control system.
- c) If the upgrades are not included in the current application, please explain the estimated costs to upgrade the overall system and why these upgrades were not included in the current application.

Request IR-15:

Please identify other Canadian or US utilities that have successfully implemented comparable automated systems.

Request IR-16:

In “Why do this project?”, NS Power stated the following:

Currently, real-time dispatch optimization of the power system relies on optimized plans provided by NS Power Marketing several hours in advance, combined with operator subject matter expertise. However, with the planned growth in both volume and variability of renewable resources over the next 2-3 years, maintaining an effective dispatch optimization and managing both planned and unplanned outages using existing technologies and manual processes will become unsustainable.

... from the system operator to NS Power Marketing and other market participants via OASIS postings, email, and phone calls will become increasingly unsustainable. As system variability grows, this manual approach will exceed the capabilities and capacity of system operators. Suitable tools enabling automation of system analysis, status updates (online/offline), reporting, and communications must be incorporated to accommodate the planned increase in variability of system conditions that will occur. This capability is vital to maintain the economic optimization of day-ahead and intraday dispatch, as well as overall grid reliability.

Continuing to rely on manual processes in an increasingly complex, variable, and labour-intensive operating environment could result in inefficient real-time dispatch and may lead to deterioration of economic optimization and increased system reliability concerns.

- 1 a) Please explain the volume of tasks and how many different types of renewable resources NS
2 Power manages now with manual processes.
- 3 b) Please explain the volume of tasks and how many different types of renewable resources NS
4 Power expects to manage by 2030 by using each of the new technology solutions.
- 5 c) Please explain why the manual process is not sustainable and leads “to deterioration of
6 economic optimization and increased system reliability concerns”, in 2030 or after.
- 7 d) Please explain how the proposed new technology solutions will assist and support NS Power
8 Marketing and other market participants and ensure “economic optimization of day-ahead and
9 intraday dispatch, as well as overall grid reliability”.
- 10 e) Please explain the nature of the real time communication requirements and how the new
11 technology solutions can perform the work more effectively than the manual operation by
12 operators. Does NS Power plan to discontinue the following activities, “OASIS postings, email,
13 and phone calls” after the implementation of the new technology solutions?
14

15 **Request IR-17:**

16 NS Power noted that “Equipping System Operators and System Security Engineers with the tools
17 to manage a larger fleet of variable energy resources, more complex maintenance plans and
18 schedules, along with a diminishing fleet of coal-fired thermal generators will require investment
19 in the tools described above. These tools are essential to bring NSPSO in line with those
20 leveraged by other system operators”

- 21 a) Please describe and provide a copy of any analysis or study that was conducted to ensure
22 that the proposed optimization tools will be consistent with, and could connect and
23 communicate with, those leveraged by other system operators. If no such study was prepared,
24 what is the basis for this statement?
- 25 b) Please explain how other teams, such as System Planning and Security Engineers, would
26 use the tools to support their work, compared to working without the proposed system.
- 27 c) Please explain the overall benefits to the system reliability, cost savings, and regulatory
28 requirements.
29

30 **Request IR-18:**

31 In “Why do this project now?”, NS Power noted that “The project was deemed to be in service in
32 March 2025 when the first technology implementation (the Outage Request Platform) went live.
33 The Final Cost Date (September 2026) is listed as six months after the remaining Technology
34 Solutions go live (forecast to be in March 2026).”

1 a) Please provide an update on the status of the project and confirm whether the project has
2 already commenced.

3 b) Please provide an update on the current progress of the project.
4

5 **Request IR-19:**

6 In "Reason for Variance", NS Power noted that "The increase of approximately \$3,156,918 from
7 the 2024 ACE Plan subsequent submittal estimate of \$4,329,150 is due to changes to the
8 eligibility dates for Federal Funding which initially extended into the end of Q1 2026. Changes to
9 the funding program resulted in cost eligibility ending at the end of Q1 2025."

10 a) Please explain the Electricity Predevelopment Program (EPP).

11 b) Was the lost source of funding part of NRCan's EPP funding or was it from another source of
12 funding? In other words, did the change in cost eligibility reduce the funding received under
13 the EPP or was it a lost source of funding from a different federal program?

14 c) Please explain why the Federal funding eligibility changed, and the reasons this caused the
15 dismissal of qualification, or a reduction in the qualifying amount of the funding.

16 d) Did NS Power receive advance notice of the change in cost eligibility? If so, please explain
17 whether the utility could have accelerated the application process and/or part of the project's
18 execution to receive more funding.

19 e) What is the current NRCan funding amount for the project?

20 f) Please provide NRCan funding details, including any conditions, and indicate whether NS
21 Power has already received the funding.

22 g) Does the funding apply to all three parts of the project? Please specify which parts of the
23 project the funding relates to.

24 h) If NS Power has not yet received the funding, please provide the expected timeline.
25

26 **Request IR-20:**

27 a) Please provide the task scope, work breakdown, and responsibilities associated with each
28 component of the following categories from the project estimate table:

29 1. Contracts

30 2. Consulting

31 3. Software

32 4. Administrative Overhead

33 b) Please explain why consulting services are required and describe the selection process.

- 1 c) There are four software solutions listed. Please explain their correlation with the proposed
- 2 three technology solutions.
- 3 d) Are there any continued software subscription fees for the application? Please provide the
- 4 estimated cost for the overall life of the system