

NOVA SCOTIA ENERGY BOARD

IN THE MATTER OF: *The Public Utilities Act, R.S.N.S. 1989, c. 380*

-and -

IN THE MATTER OF: an application by **NOVA SCOTIA POWER INCORPORATED (NS POWER)** for approval of approximately \$284.0 million of its **ANNUAL CAPITAL EXPENDITURE (ACE) PLAN** for 2026 which totals \$702.1 million

CLOSING SUBMISSIONS OF THE CONSUMER ADVOCATE

May 29, 2026

These are the closing submissions of the Consumer Advocate following the hearing of Nova Scotia Power Inc's ("NS Power") application for approval of its 2026 Annual Capital Expenditure Plan.

Overview

In this Application, NS Power seeks approval from the Nova Scotia Energy Board (the "Board") for capital projects and routine capital spending totaling approximately \$284 million.¹

On review of the evidence presented in this matter, the Consumer Advocate does not object to any specific projects proposed by NS Power. However, the Consumer Advocate's expert witness, John Wilson of Grid Strategies, has identified various cost minimization opportunities related to distribution routines, projects without risk matrices, and reliability-related projects.² Mr. Wilson also provided recommendations regarding NS Power's Capital Expenditure Justification Criteria (CEJC) and other matters.³ Our submissions primarily comment upon these issues, while also addressing the cost-effectiveness of NS Power's reliability plan projects.

Cost Minimization – Distribution Routines

In his report, Mr. Wilson raises various concerns regarding how NS Power manages routine distribution work, including:

¹ Exhibit N-1, *2026 ACE Plan*, p. 14

² Exhibit N-9, Wilson Report, p. 5-19

³ Exhibit N-9, Wilson Report, p. 19-24

- 1 • NS Power does not adequately track person-hours and overtime across many routines;⁴
- 2 and
- 3 • NS Power does not use a Basis of Schedule (or equivalent) for many routine projects that
- 4 are not reactive in nature.⁵
- 5

6 Mr. Wilson suggests that these process deficiencies may result in increased costs and
7 inefficiencies. In particular, several of the distribution routines “have substantial overtime labour
8 forecasts,”⁶ and accordingly it would therefore seem prudent to properly track use of overtime
9 labour to ensure scheduling is being done in an efficient manner. Proper tracking of labour hours
10 could be achieved through the use of a Basis of Schedule, or an equivalent practice that is not
11 simply “reactive in nature.”⁷ As noted by NS Power in response to CA IR-8, the Basis of Schedule
12 builds the “project schedule to help ensure that timelines are met and resources are planned in
13 advance of the work commencing.”⁸

14
15 Based on these observations, Mr. Wilson recommends that (1) NS Power should revise its
16 reporting requirement for the Work Management and Scheduling & Dispatch project by directing
17 NS Power to estimate quantified benefits to specific capital projects (including routines) and
18 operating expenses and extending the annual reporting requirement by one year; (2) NS Power
19 should provide a report on whether the Maximo/Salesforce capabilities could be extended to
20 improve operational efficiency and cost minimization in areas where it is not currently scoped for
21 use; and (3) NS Power should adopt the use of an equivalent to the Basis of Schedule for routines
22 in which the work is not “reactive in nature.”

23
24 NS Power, in its Rebuttal Evidence, rejected each of these recommendations, noting that the
25 “current reporting for the Work Management and Scheduling & Dispatch project encompasses
26 benefits realized for capital projects and operating expenses,” and “provides the insight to the
27 benefits estimated to be realized at the project level,” making revisions to reporting unnecessary.⁹
28 At the hearing, however, the NS Power witness panel confirmed that it currently has the capacity
29 to estimate quantified benefits to specific capital projects (including routines) and operating
30 expenses. Specifically, NS Power acknowledged that the software tracks “transactions per labour
31 hour” as a measurement of efficiency. The “transactions” refer to standard work units referred to
32 as “compatible units.”¹⁰ The compatible units (CUs) each have a labour rate and a material rate,
33 which defines all the individual tasks and materials to perform a unit of work. The compatible units
34 are tied to work orders, and the work orders are “assigned to either a GL account or a capital
35 budget.”¹¹ NS Power confirmed that it would be possible, on a go-forward basis, to prepare a table
36 showing the number of transactions for each capital program and each expense account.¹² NS
37 Power also confirmed that it did not object to extending reporting by one year, if the Board felt
38 that was necessary.¹³

4 Exhibit N-9, Wilson Report, p. 5

5 Exhibit N-9, Wilson Report, p. 6

6 Exhibit N-9, Wilson Report, p. 5

7 Exhibit N-9, Wilson Report, p. 6

8 Exhibit N-3, CA IR-8

9 Exhibit N-12, NS Power Rebuttal Evidence, p. 5

10 Undertaking U-1

11 Transcript, April 21, 2026, p. 84, lines 6-7

12 Transcript, April 21, 2026, p. 85, lines 6-11

13 Transcript, April 21, 2026, p. 86, lines 1-3

1 Based on the above, the Consumer Advocate submits that Mr. Wilson's recommendation to revise
2 the Work Management and Scheduling & Dispatch reporting requirement to include estimated
3 quantified benefits by projects and operating expenses, and to extend the reporting requirement
4 by one year, should be adopted by the Board.

5
6 In its Rebuttal, NS Power also stated that any consideration as to whether Maximo/Salesforce
7 capabilities could be improved "is already embedded in the Company's ongoing operational and
8 system optimization efforts, and no additional reporting is warranted."¹⁴ Moreover, at the hearing,
9 the NS Power witness panel advised that adding this reporting requirement would not provide
10 value where NS Power is "potentially just reporting on what may or may not be very small
11 incremental improvements to the system. But in all cases, we would take direction from the Board
12 if they saw otherwise."¹⁵

13
14 The Consumer Advocate appreciates that NS Power already makes efforts to leverage
15 Maximo/Salesforce capabilities. In the circumstances, it would therefore seem appropriate for NS
16 Power to report on those efforts, and particularly to give specific consideration to how the software
17 could be leveraged to improve efficiencies in areas where it is not currently scoped for use, as
18 Mr. Wilson recommends. For example, NS Power stated at the hearing that projects that are
19 heavily contractor-based, such as vegetation management, would not get the same level of
20 benefits from the WAM software.¹⁶ During cross-examination on another topic, NS Power
21 acknowledged significant increases in contractor costs but confirmed it does not have a
22 "breakdown" "comparing actual contract labour rates and machine rates versus additional work
23 being completed."¹⁷ NS Power states that it is working "closely with contractors to ensure that
24 they're completing this work as efficiently and productively as possible while still doing it in a very
25 safe manner."¹⁸ However, NS Power did not provide any explanation of how the company is
26 measuring efficiency and productivity. To the extent that the Maximo/Salesforce software could
27 help with that (and other areas), it would seem prudent for NS Power to investigate and report on
28 its findings.

29
30 Finally, with respect to the use of an equivalent Basis of Schedule approach, NS Power took the
31 position in its Rebuttal that such an approach would not be appropriate as a blanket requirement
32 for non-reactive routine work, given the purpose of the Basis of Schedule does not readily conform
33 to work completed under the routine program.¹⁹ The Rebuttal appears to have glossed over the
34 fact that Mr. Wilson was not recommending wholesale adoption of the Basis of Schedule
35 approach for non-reactive routine projects, but had instead recommended development of an
36 "equivalent" practice, i.e. something that may closely resemble the Basis of Schedule, but need
37 not be identical and accordingly could be adjusted as needed. This discrepancy was addressed
38 at the hearing; however, NS Power maintained that "even in that context, the Basis of Schedule
39 is really intended to allow for complex projects where multiple individuals and multiple groups are
40 involved to fully understand all the necessary scheduling components of the capital projects." The
41 Panel went on to explain that the "routine programs, even the non-reactive ones, are all typically
42 very repetitive in nature, they're smaller in nature, and they're managed by a smaller group of
43 people on each individual initiative."²⁰

¹⁴ Exhibit N-12, NS Power Rebuttal Evidence, p. 5-6

¹⁵ Transcript, April 21, 2026, p. 71, lines 1-4

¹⁶ Transcript, April 21, 2026, p. 83, lines 7-12

¹⁷ Transcript, April 21, 2026, p. 153, lines 8-10

¹⁸ Transcript, April 21, 2026, p. 154, 5-8

¹⁹ Exhibit N-12, NS Power Rebuttal Evidence, p. 6

²⁰ Transcript, April 21, 2026, p. 68-69

1 The Consumer Advocate appreciates NS Power's desire to avoid unnecessary additional
2 "paperwork" that does not provide value "to the people completing that work."²¹ However, the
3 Consumer Advocate submits that NS Power's response does not really address Mr. Wilson's
4 observation that:

5
6 But for direct schedule activities such as general work and site prep, a practice that
7 requires pre-planning of resources could be useful to avoid unnecessary overtime, delay-
8 related costs due to unavailable equipment, and procurement inefficiencies.
9

10 In the aggregate, particularly for distribution routines where immediate response is not
11 typically required, the use of an equivalent practice to the Basis of Schedule could help to
12 either reduce overtime labour or identify an opportunity to schedule labour on an
13 alternate shift to meet the requirements for this work.²²
14

15 The Consumer Advocate maintains that Mr. Wilson's recommendation for improvement to NS
16 Power's scheduling practices is reasonable, and should be further explored by NS Power.
17

18 **New Customer-Driven Work Volumes** 19

20 Mr. Wilson states in his report that NS Power has failed to follow through on earlier commitments
21 to collect better data on new customer-driven work volumes. He states that the company should
22 distinguish categories of customer work more clearly (e.g., single-family, multi-unit, commercial,
23 unmetered services) and monitor external cost drivers such as supply chain issues and overtime
24 pressures. He further opines that collecting better data would improve the following:
25

- 26 • budgeting,
- 27 • long-term load forecasting,
- 28 • distribution planning,
- 29 • cost allocation,
- 30 • and rate design.²³
31

32 In its rebuttal, NS Power states the following in response to Mr. Wilson's recommendation to
33 revise internal work orders to identify customer type:
34

35 NS Power disagrees with this recommendation. Based on NS Power's experience, having
36 more granular information on customer type would not materially change the forecasting
37 methodology used for New Customer routines. The current approach of applying an
38 inflationary factor to the current year Q3 Forecast proved effective in 2025 and is currently
39 trending to provide similarly beneficial results in 2026. In light of these factors, NS Power
40 believes the existing methodology is appropriate.²⁴
41

42 Further, at the hearing, NS Power confirmed that it's concern about having to gather this
43 information is that "there would be a certain level of effort and likely costs to make a change in
44 approach to gather that information. And today, we feel confident and we're very pleased with the
45 results of the 2025 forecasting methodology we used and how it ended up with a much more
46 accurate budget. Based on the results of 2025 and what we've seen to date in 2026, it appears

²¹ Transcript, April 21, 2026, p. 69, lines 14-15

²² Exhibit N-9, Wilson Report, p. 6-7

²³ Exhibit N-9, Wilson Report, p. 10

²⁴ Exhibit N-12, NS Power Rebuttal Evidence, p. 7

1 to be very much the same.”²⁵ In response to an undertaking, NS Power further addressed the
2 question of whether this information could still be useful for the other purposes identified by Mr.
3 Wilson in his report.²⁶ In particular, NS Power stated that “insight into this type of detailed annual
4 work order may, in principle, help inform the Company’s understanding of cost drivers and
5 emerging trends,” but for the foreseeable future “cost allocation and rate design will continue to
6 rely on established methodologies.” Accordingly, NS Power concludes “that the proposed
7 granular customer-type data would not materially improve cost allocation or rate design outcomes
8 at this time.”²⁷

9
10 On review, the Consumer Advocate states that NS Power’s response fails to address the intent
11 of gathering these data to support rate design, namely differentiating costs based on service
12 voltage/phase, undergrounding, shared service lines, and master meter, as well as a need for
13 updated customer weighting factors (i.e. how many customers per transformer, etc). It is the
14 Consumer Advocate’s view that this information could be useful to inform rate design, and further
15 would appear to require a relatively modest amount of effort to simply code new customers by
16 customer type, service voltage/phase, and so on.

17
18 The Consumer Advocate further states that even for the stated purpose of forecasting New
19 Customer routines, a single year of evidence is not sufficient to “prove” that NS Power’s new
20 methodology is effective, as NS Power has asserted.²⁸ As trends in single-family vs multi-family
21 definitely affect the circuit-level if not system-level, these data could be useful in the future,
22 particularly should NS Power’s current methodology prove, over time, to be ineffective.

23
24 With respect to Mr. Wilson’s recommendation that NS Power monitor external factors driving costs
25 in customer-driven routines, NS Power states that it “already monitors external factors ... as part
26 of the cost-minimization practices embedded in its capital planning and oversight processes.”²⁹

27
28 The Consumer Advocate acknowledges NS Power’s existing practices, but remains concerned
29 that these practices may be insufficient to properly protect customer interests. External factors
30 can clearly drive costs, even after a project has been budgeted to a relatively high level of
31 assurance. Further monitoring of such factors would therefore seem prudent.

32 33 **Projects Without Risk Matrices**

34
35 In his report, Mr. Wilson notes that NS Power routinely includes a 15% contingency in
36 transmission line and transformer project budgets where no risk matrix is prepared. He
37 recommends the following:

38
39 I recommend that the Board reduce the contingency amount for projects filed in this plan
40 to 10% if they do not have a risk matrix filed in the application. Going forward, the Board
41 should direct NS Power to file a risk matrix with any project that has a contingency amount
42 of more than 10%. The Board should only allow NS Power to exceed a 10% contingency
43 without a risk matrix in cases where NS Power identifies a narrowly-defined risk that is

²⁵ Transcript, April 21, 2026, p. 87, lines 6-13

²⁶ Undertaking U-2

²⁷ Undertaking U-2

²⁸ Exhibit N-12, NS Power Rebuttal Evidence, p. 7

²⁹ Exhibit N-12, NS Power Rebuttal Evidence, p. 7

1 unique to the project (e.g., a specific inspection or study that is incomplete) and does not
2 otherwise necessitate a risk matrix being prepared.³⁰
3

4 In its Rebuttal, NS Power stated that a risk matrix was not necessary due to the routine nature of
5 the projects, where the risks are already well-understood. Further, at the hearing, NS Power
6 stated that there are “three to four risks that are present in these projects that drive the need for
7 a contingency, and they’re outage schedules, access, level of terrain, material pricing.”³¹ Further,
8 NS Power stated the following:
9

10 So we do understand those risks and the people completing those projects understand
11 those risks very well, which is why our position is that we don’t need a risk register. But
12 the level of impact those risks can have on the project are such that we feel it does
13 necessitate a 15 percent contingency, just because whether we have to move the
14 schedule for the project entirely because of lack of availability of transmission outages or
15 accessing the site with what is substantial equipment can add significant costs to the
16 project. We feel 15 percent is appropriate to absorb those risks if we do find them present.
17 And just the fact we don’t complete a risk register and document these very well-known
18 risks isn’t an indication that the risks themselves aren’t large.³²
19

20 The Consumer Advocate acknowledges NS Power’s stated rationale for the 15% contingency.
21 However, the Consumer Advocate maintains that each of the various risks identified could still be
22 foreseen and potentially mitigated. Regarding outage schedules (“likely the largest” risk³³) and
23 material pricing, NS Power has stated that there “are contracts with set pricing in place to control
24 the costs of executing the work,” and that while “outage windows for transmission lines can
25 fluctuate, this typically does not have a material impact on completion timelines or overall cost.”³⁴
26

27 Moreover, as was discussed in Mr. Wilson’s report, project cost increases have in the past been
28 caused by other factors, including lack of LIDAR information,³⁵ and lack of inspection of wooden
29 structures in advance of filing.³⁶ As noted by Mr. Wilson, these are “precisely the type of budget
30 risks that could be identified in advance and for which planning could ensure that procurement
31 and resource scheduling occurs after the risk has been mitigated.”³⁷ And indeed NS Power
32 testified that the company is now using LIDAR information prior to filing projects with the Board.³⁸
33 These examples illustrate that even where risks are apparently well-known, there remains some
34 room for error, which could be better mitigated through planning.
35

36 The Consumer Advocate therefore supports Mr. Wilson’s recommendation for the Board to
37 reduce the contingency amount for projects filed in the ACE Plan to 10% if they do not have a risk
38 matrix filed in the Application, and also to required NS Power to file a risk matrix with any project
39 that has a contingency amount of more than 10%.
40
41

³⁰ Exhibit N-9, Wilson Report, p. 12

³¹ Transcript, April 21, 2026, p. 93-94

³² Transcript, April 21, 2026, p. 94

³³ Transcript, April 21, 2026, p. 95, line 5

³⁴ Matter M11458, Exhibit N-5, CA RIR-17

³⁵ Exhibit N-9, Wilson Report, p. 12-13

³⁶ Exhibit N-9, Wilson Report, p. 13-14

³⁷ Exhibit N-9, Wilson Report, p. 13

³⁸ Transcript, April 21, 2026, p. 95, lines 8-14

Reliability-Related Projects

On reliability-related projects, Mr. Wilson questions whether NS Power's new distribution right of way projects are as cost-effective as they could be. Specifically, he notes that since 2016, NS Power's four reliability metrics related to tree contacts continue to remain relatively flat or even decreasing, raising concerns that the program might be ineffective. However, Mr. Wilson also acknowledges that it may be "too soon to say," given that NS Power has implemented changes to its vegetation management practices over the past two years that could have a positive effect on reliability. Mr. Wilson's recommends that the topic be examined in the ongoing third-party review of the Five-Year Reliability Plan, and also that NS Power make changes to its tree contact reliability metrics.

The Consumer Advocate supports the first recommendation, and acknowledges that NS Power's rebuttal evidence regarding tree contacts, which clarified that the "data included in Figures 65-69 of the 2026 ACE Plan only represents events coded as Tree Contacts and already excludes any events coded as being caused by Adverse Weather."³⁹ This issue was explored further on cross-examination of the NS Power panel.

While the Consumer Advocate accepts NS Power's clarification, the Consumer Advocate is concerned about NS Power's continuing use of a 7-year-old estimate that 40% of events coded as tree contacts are caused by adverse weather. This issue likely warrants additional study, given that the 40% figure is an estimate that is based on anecdotal information as opposed to verifiable tracking. Continued use of this estimate certainly poses some difficulty in assessing whether the reliability plan investments are worthwhile.

With respect to reliability-related projects, Mr. Wilson also suggests that NS Power should examine whether spare inventory pooling could be a more cost-effective alternative to owning large quantities of spare equipment itself. He recommends the Board obtain a fuller inventory of NS Power's spares to better assess that question. NS Power disagrees with that recommendation, stating that the recommendation "does not appropriately reflect the work already undertaken by NS Power." In that regard, NS Power indicates that it has previously evaluated spare inventory pooling opportunities, and determined that such arrangements were not more cost effective or operationally reliable compared to the company's existing risk-based sparing strategy.

The Consumer Advocate appreciates that NS Power has recently (as of 2024) considered the option of a pooling arrangement for spare inventory. The Consumer Advocate also accepts NS Power's assessment of the limitations on pooling programs,⁴⁰ especially the location within/outside Canada.⁴¹ However, the Consumer Advocate maintains that this does not justify refusing to provide such an inventory as requested, or considering whether other arrangements might be more appropriate in light of the information provided, particularly given potential differences in market conditions between 2024 and the present. This information would help to assess whether NS Power is correct that it needs to maintain its own spare equipment in inventory. Further, the information could be relied upon to assess whether a pooling program could be cost-effective, based on the following indicators:

³⁹ Exhibit N-12, NS Power Rebuttal Evidence, p. 14

⁴⁰ Exhibit N-12, NS Power Rebuttal Evidence, p. 10

⁴¹ Exhibit N-6, NSEB RIR-180

- a) Lead-time for procurement of spares;
- b) Frequency of replacement and replacement volumes
- c) Similarity in question to that of other Canadian utilities (and particularly utilities in Atlantic Canada)

The Consumer Advocate therefore maintains that Mr. Wilson's recommendation is reasonable, and should be adopted.

CEJC

Mr. Wilson's report addresses a number of issues concerning the Capital Expenditure Justification Criteria (CEJC). In this regard, Mr. Wilson recommends the following:

- Accept NS Power's clarification to the definition of "scope change," and further revise the CEJC to include a requirement for NS Power to file information when it identifies a change to deliverables, boundaries, and/or detailed tasks that may result in a budget increase above a Board-specified threshold, followed by a Board decision on whether an ATO is required;
- Revise the CEJC to reflect the Board's determination that the \$1 million capital expenditure threshold applies regardless of funding source;
- Revise the definition of "related project" to include units that can be substituted for one another in the normal course of business.

NS Power, in its Rebuttal Evidence, agreed with Mr. Wilson's recommendations regarding modifying the definition of "Scope Change," but did not agree with the requirement for informational filings whenever NS Power identifies potential changes to deliverables, boundaries, or detailed tasks that may result in a budget increase. In this regard, NS Power confirmed that it is the potential volume of applications that it finds concerning.⁴² However, NS Power acknowledges that its proposed scope change definition would have not resulted in any projects it could have identified as triggering such a requirement.⁴³ Mr. Wilson's recommendation can therefore be viewed as targeting a relatively small number of projects and, even then, NS Power may not be required to file detailed filings, where the Board determines such a filing is not required. The Consumer Advocate therefore does not agree that this requirement "would create unnecessary regulatory churn without a clear corresponding benefit."⁴⁴

NS Power also agreed to revise the CEJC definition of "related project," but did not agree with Mr. Wilson's recommendation to revise the CEJC to reflect the Board's determination that the \$1 million capital expenditure threshold applies regardless of funding source. In this regard, NS Power states:

The recommendation to revise the CEJC to reflect the Board's determination that the \$1 million capital expenditure threshold applies regardless of funding source is unnecessary. The requirement arises directly from Section 35AA(2) of the *Public Utilities Act*, and the Board has already provided its interpretation of how that provision applies. As a result, no revision to the CEJC is required to give effect to the Board's determination.⁴⁵

⁴² Transcript, April 21, 2026, p. 278, lines 5-6

⁴³ Undertaking U-6

⁴⁴ Exhibit N-12, NS Power Rebuttal Evidence, p. 12

⁴⁵ Exhibit N-12, NS Power Rebuttal Evidence, p. 13

1 The Consumer Advocate maintains its support for Mr. Wilson's recommendation, as NS Power
2 has not provided any substantive objection to this revision, other than to note that it would reflect
3 legislation and the Board's prior determination.

4 5 **Other Issues**

6
7 In his report, Mr. Wilson also addresses various other issues, but does not make any particular
8 recommendations. These issues include:

- 9
- 10 • Path to 2030: Mr. Wilson states that the updated Path to 2030 Report does not provide
11 confidence that NS Power is on track to meet 2030 milestones for coal retirements, carbon
12 reductions, or renewable energy compliance. In particular, Mr. Wilson highlights the
13 Synchronous Condenser project, which has grown significantly in scope and cost, and to
14 date has been pursued without stakeholder consultation. Unfortunately, it would appear
15 as though this project will in all likelihood experience a further increase in costs, as well
16 as delays, given that NS Power has been directed to transfer responsibility for this project
17 to IESO NS.⁴⁶ The Consumer Advocate shares Mr. Wilson's concerns as stated in his
18 report, and looks forward to learning more about NS Power's plans to transfer this project
19 to IESO NS when that information becomes available.
 - 20
21 • Mersey Project: Mr. Wilson expresses concerns regarding NS Power's plan (or lack
22 thereof) for protecting customers from excessive costs when dealing with the potential
23 development or decommissioning of the Mersey Hydro project. The Consumer Advocate
24 shares Mr. Wilson's concerns.

25 26 **Conclusion**

27
28 In summary, the Consumer Advocate does not oppose approval of NS Power's proposed 2026
29 capital projects, but supports the various recommendations made by Mr. Wilson as described
30 above. The Consumer Advocate would further reiterate our concern regarding NS Power's
31 reliability plan, and the cost-effectiveness of the distribution routines, and intends to explore those
32 issues further in the third party study of that matter.

33
34 We appreciate the opportunity to participate in this proceeding, and provide these submissions.
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⁴⁶ Hearing Transcript, April 21, 2026, p. 59-63