

3 NOVA SCOTIA UTILITY AND REVIEW BOARD4
5
6 IN THE MATTER OF: *The Public Utilities Act*7
8 -and-9
10 IN THE MATTER OF: AN APPLICATION by NOVA SCOTIA POWER
11 INCORPORATED (NS Power) for approval of the 2023
12 ANNUAL CAPITAL EXPENDITURE (ACE) PLAN
13 (M11017)
14
15
1617 **OPENING STATEMENT OF JOHN D. WILSON, GRID STRATEGIES, LLC**18
19 **June 28, 2023**
2021 I have reviewed NS Power's Rebuttal Evidence as it relates to the ten recommendations made in
22 my pre-filed testimony and wish to provide the Board with the following comments.
2324 At the outset, I note that in my view, NS Power has adequately addressed Wilson
25 Recommendations 6 and 7, as well as a substantial portion of Recommendation 4.
2627 Of the eight remaining Wilson Recommendations, I offer the following comments.
28

- 29
- 1. Engage directly with stakeholders during the modeling and analysis process for the**
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- 30
- Eastern Clean Energy Initiative (ECEI) projects prior to filing applications. (Wilson,**
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- 31
- pp. 6, 10)**
-
- 32

33 NS Power Response: "*NS Power continues its commitment to ensuring stakeholders and the*
34 *NSUARB have an opportunity to provide input to modeling and planning efforts.*" (Rebuttal, p.
35 11) "*NS Power has been committed to robust stakeholder engagement related to its long-term*
36 *planning, and the selection by the IRP modeling of resource types aligned with the ECEI projects*
37 *has been shared and reviewed in workshops with interested stakeholders.*" (Rebuttal, p. 13)
3839 I agree that NS Power has engaged in "robust stakeholder engagement related to its long-term
40 planning." In particular, the Evergreen IRP update addresses one of the concerns that Mr. Athas
41 and I raised in the 2022 ACE Plan proceeding by updating the IRP assumptions and methods to
42 reflect current circumstances. Nonetheless, NS Power should commit to or be directed to engage
43 further with stakeholders in advance of filing the ECEI projects.
44

- 45
- **Reliability tie** – The final model results indicate that this project is likely needed by
46 2027-2028. Public engagement is a necessity in any new transmission project and I

1 recommend that NS Power engage stakeholders in regular updates as the planning for
2 this project progresses.

- 3 • **Coal conversion projects** – The final model results indicate that at least two such
4 projects (up from one in the 2022 ACE Plan) are scheduled to come in-service in the
5 2028-2030 time period. While there have been over a hundred coal-to-gas conversion
6 projects in North America over the past decade, there have been few coal-to-oil
7 conversion projects. Furthermore, some converted plants have been retired soon after
8 the project. Because these projects are never standard, NS Power should engage with
9 stakeholders as it evaluates alternative project designs.
- 10 • **Battery storage** – Stakeholder engagement in NS Power’s planning process has
11 already significantly improved the approach taken on battery storage. Because this
12 resource provides both capacity and reliability services, it has characteristics of both
13 generation and transmission. Its evaluation will require novel methods, and advance
14 discussion of the evaluation methods will benefit from stakeholder engagement prior
15 to filing an application.
- 16 • **Wind assets** – It appears that these resources may be primarily procured by the
17 province through the Green Choice Program. If so, then NS Power would not be
18 responsible for stakeholder engagement.

19
20 While the Evergreen IRP update provides further support for progressing investments in each of
21 these four resources, the four ECEI applications should not be evaluated on a stand-alone basis
22 using the EAM. The ECEI projects are too large and directionally significant for the Board to be
23 informed with what could be a poorly constructed EAM with just one round of discovery for the
24 Board’s consultants and parties to try and construct an alternative analysis.

25
26 **2. Recognize its obligation to plan prudently for approaching regulatory deadlines,**
27 **notwithstanding the 2022 rate case decision. (pp. 7, 11)**
28

29 NS Power Response: *Despite a reassessment of the ECEI and other non-reliability, non-sustaining*
30 *capital projects that resulted in “deferral of the ECEI projects, NS Power notes that it continues*
31 *to consider the ECEI Projects in line with the Company’s 2030 decarbonization requirements and*
32 *agrees with the Wilson Evidence that time is of the essence for completion of these projects on a*
33 *schedule that aligns with the legislated 2030 requirements.” (Rebuttal, p. 13) “All ECEI*
34 *investment forecasts will be provided during the 2024 ACE Plan filing.” (Rebuttal, p. 33)*
35

36 While NS Power’s commitments are welcome, they fall short of an unequivocal statement that the
37 applications for the ECEI projects will be submitted prior to the next rate case, with thorough
38 review, unconstrained by urgency resulting from the decision to defer these projects.
39

40
41 **3. Accelerate and expand its investigation into applying dynamic line ratings (DLRs)**
42 **and other grid-enhancing technologies (GETs). (pp. 7, 13)**
43

44 NS Power Response: *NS Power expects to file a revised dynamic rating project application in*
45 *2024, and while it “agrees with the Wilson Evidence regarding the importance of GETs and*
46 *DLRs,” it “submits that no further action is required at this time.” (Rebuttal, p. 14)*

1 While NS Power’s indication that it will file a project application in 2024 is welcome, its claims
2 that it has been “researching” and “working towards preparation of the next project submission”
3 are not supported by the evidence that it has spent only \$62,000 since 2020 on the project. Given
4 the gap between rhetoric and concrete evidence of progress, it would be useful for the Board to
5 endorse of my recommendation in order to create clear accountability for future progress in this
6 area.

7
8 **4. Bring forward evidence to allow a decision on whether the Mersey, Harmony, and**
9 **Roseway hydro systems, and potentially other facilities such as the Dargie Lake Dam**
10 **should be decommissioned, redeveloped, or maintained in a safe state for future**
11 **optionality. (pp. 7, 15, 17, 21)**
12

13 NS Power Response: *NS Power does not agree that any further action is required on the Mersey*
14 *recommendation, and agrees with the Wilson Evidence that any future plans with respect to the*
15 *Mersey Redevelopment Project should be intentional and provide the Board (and Intervenors)*
16 *with an opportunity for review. (Rebuttal, pp. 16,17) NS Power provided additional evidence*
17 *regarding the status of the Harmony and Roseway system projects. (Rebuttal, pp. 17-20)*
18

19 With respect to the ongoing work on the Mersey project, I respectfully suggest that the Board
20 should direct NS Power to provide a comprehensive update on the project status. As demonstrated
21 by the Gaspereau project, significant findings can occur during project planning that the Board
22 would prefer to learn about in real time, rather than after-the-fact.

23
24 With respect to the Harmony and Roseway system projects, I am satisfied with the additional
25 evidence presented by NS Power in its Rebuttal evidence.

26
27 **5. Either reassess its reliability strategies or seek a third-party review of its reliability**
28 **investments and programs, with results, including new projects or resource**
29 **reallocations, reported no later than the 2024 ACE Plan. (pp. 7, 20)**
30

31 NS Power Response: *NS Power states that its current T&D reliability investment planning,*
32 *vegetation management practices, and overall asset management strategy is based on industry-*
33 *accepted principles. (Rebuttal, pp. 21, 24)*
34

35 Because I am not an expert in these practices, I did not offer evidence of specific shortcomings in
36 planning, practices, or strategy. Instead, I recommended either an internal reassessment or a third-
37 party review. Considering NS Power’s strongly held view that it has nothing to improve, the Board
38 should consider directing a third-party review.

39
40 *NS Power “does not characterize system reliability as worsening.” (Rebuttal, p. 23)*
41

42 I considered all the facts re-stated by NS Power in its Rebuttal Evidence in forming my opinion
43 that system reliability is worsening.

44
45 *NS Power is making “substantial changes to its capital or operational practices to drive material*
46 *improvements.” (Rebuttal, p. 24)*

1 Of the three points NS Power makes in support of this claim, only the second part of the third point
2 asserts any new initiatives, as follows.

- 3 • **Enhanced vegetation condition assessment** – This appears to be a reference to a
4 general statement (ACE Plan, p. 81). Ongoing vegetation management activities are
5 described in several locations of the ACE Plan, but I was unable to locate any new
6 projects or description of new strategic approach(es) to existing projects.
- 7 • **Work and asset management (WAM) project** – I provided evidence in support of
8 the approval of this project. The WAM software upgrade was required due to
9 obsolescence of existing software, and may deliver operating cost savings and increases
10 in field safety. I do not believe NS Power claimed that this software update would result
11 in increased reliability.
- 12 • **Distribution SCADA** – It is unclear what project(s) NS Power is referencing. The ACE
13 Plan includes references to several small SCADA-related investments. None of these
14 appear to reflect substantial changes to existing practices.
- 15 • **Additional dynamic protective devices** – It is unclear what project(s) NS Power is
16 referencing, unless it is the ECC Dynamic Line Ratings project, which is deferred to
17 2024. I agree that this project could represent a substantial change to practices.

18 Thus, only one of the four “*net new* initiatives” (emphasis in original) that NS Power claims will
19 “continuously improve reliability in targeted areas” is clearly a reference to a new project, and NS
20 Power’s application for that project does not emphasize improved reliability as a project benefit.
21 (Rebuttal, p. 25)

22
23 My opinion remains that NS Power is not making any substantial changes to its capital or
24 operational practices to drive material improvements in system reliability, whether or not related
25 to weather conditions such as high winds and icing events. Considering NS Power’s strongly held
26 view that it has nothing to improve, the Board should consider directing a third-party review.

27
28 **8. Justify contingency costs as directed and agreed to and, if no such justification is**
29 **provided, require capital work orders to be revised and resubmitted prior to further**
30 **consideration. (pp. 7, 30)**

31
32 NS Power Response: “*As noted within Table 2 of the Wilson Evidence, NS Power has provided a*
33 *statement of basis for contingency for each capital work order submitted for approval within the*
34 *2023 ACE Plan.*” (Rebuttal, p. 29)

35
36 This is an inaccurate summary of my evidence. In response to the question, “Has NS Power
37 included a statement of the basis for the contingency with supporting evidence in each capital work
38 order included in the 2023 ACE Plan?”, my response was “No.” (Wilson, p. 26) My testimony
39 explains why the brief, boilerplate language that NS Power believes represent a “statement of
40 basis” are wholly insufficient and, without further clarification, inconsistent with each other.

41
42 *In line with the Wilson Evidence recommendation, NS Power will continue to provide its basis for*
43 *contingency values and will attempt to provide additional detail when it is warranted based on the*
44 *complexity of the project and associated risks. NS Power would also be agreeable to continuing*
45 *to discuss this topic in Stakeholder Engagement to better understand what additional detail could*
46 *be provided. (Rebuttal, p. 29)*

1 As discussed in my evidence, NS Power has committed to “elaborate on its use of expert
2 judgement” in its 2021 ACE Plan Rebuttal Evidence and provide a “statement of basis” including
3 “documented reasons for the determination” of the contingency using subject matter expert
4 judgement. (Wilson, pp. 25, 26) While there is no need to “understand what additional detail could
5 be provided,” there is a need for NS Power to do what it has said it will do.
6

7 Given NS Power’s continued resistance to providing evidence for what can be a substantial portion
8 of capital project budgets, I recommend that the Board adopt a strict policy of requiring capital
9 work orders that lack a sufficiently detailed statement of basis to be revised and resubmitted prior
10 to further consideration. The Board should be able to conduct this review fairly quickly after
11 receiving an application, and could maintain this practice only so long as to determine that NS
12 Power has demonstrated a pattern of improved practice.
13

14 **9. Take actions the Board determines to be necessary to verify that NS Power is fulfilling**
15 **its commitments to implement the Project Delivery Model (PDM) in an expeditious**
16 **manner. (pp. 7, 32)**
17

18 NS Power Response: “NS Power welcomes the Wilson Evidence recommendation, with the Board
19 providing direction it determines to be necessary related to this matter.” (Rebuttal, p. 31)
20

21 As noted in my evidence, NS Power’s evidence on its PDM implementation is thin. I encourage
22 the Board to follow up on the PDM implementation plan in this hearing as the PDM is a critical
23 component of the cost minimization strategy that has emerged from the Board’s continued
24 concerns with capital project costs.
25

26 **10. Follow through on creating processes to transfer lessons learned into broader**
27 **practice, such as consolidating tracking and reporting on both cost minimization**
28 **successes and post-project actionable recommendations, to ensure improvements in**
29 **cost minimization, schedule adherence, and risk management. (Page 38)**
30

31 NS Power Response: NS Power agreed to consider several examples of cost minimization
32 activities “when preparing future capital investment plans. As these examples are incorporated
33 into project budgets, they will not appear in future cost minimization reports.” (Rebuttal, p. 32)
34

35 While I commend NS Power’s agreement to incorporate some of its lessons learned into project
36 budgets, my recommendation is to create a process to transfer those lessons learned into broader
37 practice. It does not appear that NS Power responded to this recommendation.
38

39 *With respect to three topics that the Wilson Evidence indicates NS Power did not adequately*
40 *address, “NS Power confirms that these topics are already addressed in the post-project reviews.”*
41 *(Rebuttal, p. 32)*
42

43 As presented in my evidence, the post-project reviews provided by NS Power do not explicitly
44 address review topics 1, 2, or 6. NS Power overlooked fourth topic that my evidence shows has
45 been overlooked; as stated in topic 4, NS Power’s reviews show no evidence that a risk register
46 was used and updated during the project execution.

1 Furthermore, topics 5 (internal stakeholder review) and 9 (transition to operations) showed limited
2 or incomplete treatment of the issue. Of the ten topics that I anticipated would be covered in the
3 post-project reviews selected by NS Power for response to the Information Request, only four were
4 covered in all three reviews.

5
6 My evidence, which relies on just three examples selected by NS Power for its response, shows
7 that NS Power's post-project reviews are not addressing the full range of topics that could benefit
8 its overall cost minimization efforts.

9
10 Thank you for the opportunity to make this Opening Statement.