
Nova Scotia Energy Board

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

M12550

CI C0051815 – RTU Replacements Program – Phase 6 Review

**NS Power
Rebuttal Evidence**

April 10, 2026

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1.0 INTRODUCTION

As part of its 2025 Annual Capital Expenditure (ACE) Plan, Nova Scotia Power Incorporated (NS Power, Company) sought approval of capital project CI C0051815 – Remote Terminal Units (RTU) Replacements Program – Phase 6, estimated at that time for \$5,959,915. As outlined in NS Power’s Five-Year Reliability Plan, the Company’s overall Advanced Grid Modernization program includes RTUs as part of its Connected Assets sub-program, which focuses on enabling real-time visibility and control of field devices and SCADA integration. RTUs enhance substation reliability by enabling real-time monitoring and remote control, supporting quicker isolation and restoration of service during outages. These devices support improved system visibility, control, and operational resilience throughout the grid.

In the Nova Scotia Energy Board’s (NSEB, Board) decision pertaining to the 2025 ACE Plan, the Board, as outlined in Section 2.1 of the decision, stated that it intended to engage an expert to review the scope of the aforementioned project and provide an opinion on the reasonableness of the estimated project costs. The Board initiated its review via letter dated November 19, 2025, indicating that it had engaged Protech Engineering Inc., acting as a subcontractor to Midgard Consulting Inc. (Midgard) to undertake the review, and establishing a tentative timeline for the proceeding.

Since the filing of the 2025 ACE Plan application, NS Power completed some work under CI C0051815, and as a result, via letter dated December 9, 2025, the Company reduced its overall project estimate by approximately \$900,000, resulting in a revised total project estimate of \$5,058,726.

NS Power responded to information requests (IRs) from the Board’s consultant Midgard on January 28, 2026. In accordance with the Board’s updated timeline, Midgard submitted its evidence on February 18, 2026 (Midgard Evidence).

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1 In its evidence, Midgard provided its analysis and assessment of NS Power’s application, and
2 found that the Company’s material procurement practices were competitive and justified and
3 indirect costs methodologies were transparent. However, Midgard ultimately recommended a 30%
4 reduction in the project’s labour estimate, and enhanced future reporting to support future phases
5 of this work.

6
7 Midgard responded to IRs from the CA,¹ SBA,² and IG³ regarding their evidence on March 25,
8 2026. In the IRs, intervenors explored Midgard’s assumptions, conclusions and recommendations
9 regarding execution sequencing, labour costs, contingency, governance, and prudence.
10 Specifically regarding prudence, in Midgard’s response to IG IR-1, Midgard confirmed that its
11 review and analysis was “structured to provide the Board with an objective, evidence-based record
12 to facilitate Board decision making and its adjudication of prudence” as opposed to applying a
13 specific test or standard to assess prudence directly.

14
15 The following is submitted as NS Power’s Rebuttal Evidence in this matter, addressing the
16 conclusions and recommendations provided by Midgard.

¹ Exhibit N-4, Midgard (CA) RIRs 1-9.

² Exhibit N-6, Midgard (SBA) RIR 1.

³ Exhibit N-5, Midgard (IG) RIRs 1-3.

2.0 NS POWER RESPONSES TO MIDGARD KEY CONCLUSIONS

2.1 Project Execution and Prioritization

The Midgard Evidence provided the following conclusion regarding NS Power’s project execution and prioritization:

Prioritization is driven by asset criticality and risk mitigation, rather than complexity or learning-curve opportunities. The schedule lacks the low-to-high complexity sequencing required to facilitate crew efficiency, and the absence of historical productivity metrics prevents verification of claimed process improvements.⁴

The Midgard Evidence suggests that rather than utilizing NS Power’s standard, strategic asset management strategy to identify and prioritize work under this program, the Company’s execution strategy should instead be structured for learning-curve efficiency, and should sequence installations from low-complexity to high-complexity sites, enabling work crews to refine techniques, standardize procedures, and achieve productivity gains on simpler installations before moving to more complex installations, noting that “such an approach would front-load productivity improvements, reducing unit costs for later installations while compressing overall project duration”.

NS Power's capital investment decisions are grounded in asset management principles, as outlined in Section 6.2 of the Board-approved Capital Expenditure Justification Criteria (CEJC). This framework prioritizes projects based on factors such as asset condition, criticality, and risk mitigation, ensuring investments are aligned with the delivery of safe, reliable, and cost-effective service to customers. Site selection for the RTU Replacement program follows this framework, and identifies the sites with the highest risk, which are prioritized for replacement regardless of site complexity. By contrast, delaying high-risk, obsolete equipment replacement would not necessarily result in reduced unit costs for later phases, which are dependent on many factors such

⁴ Exhibit N-3, Midgard Evidence, February 18, 2026, page 38.

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1 as system reliability concerns, resource availability, outage constraints, site access (i.e. seasonal
2 access limitations), and the condition of assets being replaced.

3
4 The Midgard evidence states:

5
6 The absence of Program-level productivity metrics obfuscates whether Phase 6
7 estimates incorporate efficiency gains from prior Program Phases and whether the
8 installation sequence has been structured to achieve such gains. Without empirical
9 tracking of hours-per-task across RTU projects, NSPI cannot demonstrate that
10 repetitive work (e.g., project management, standard design elements) benefits from
11 compounding learning, nor can it substantiate claims that process improvements
12 have been systematically captured and applied in the estimation of Phase 6 costs.⁵
13

14 NS Power acknowledges that specific data to demonstrate productivity or learnings from prior
15 phases was lost as part of the cyber incident. However, learning curve benefits are captured
16 through other mechanisms, such as standardized work packages, improved labour category
17 definitions, quality assurance enhancements, and technology standardization via RFP, and directly
18 influenced NS Power's estimates for this project (both original and amended). Access to systems
19 with detailed labour hours by task is expected to be restored and available for field activities (such
20 as site visits, installation, and testing per RTU/site) going forward; however, it is more
21 difficult/complex to track engineering work in the same way, particularly as work is executed in
22 parallel across multiple sites rather than sequentially on a per-site basis. Additionally, it is
23 important to consider the variability across sites; no two locations are identical, with some sites
24 being relatively simple, and others being more complex, with potential disparity between
25 requirements for preparation/planning work, making it challenging to consider productivity on a
26 site by site basis. Midgard suggests that program-level productivity metrics would provide insight
27 into NS Power's execution efficiency; however, as stated above, sites are highly variable, not
28 uniform or repeatable as implied. Accordingly, any program-level average metric for productivity
29 comparison would blend a variety of site complexity, resulting in seeming precision without
30 corresponding accuracy, and obfuscating a site by site comparison.

31

⁵ Exhibit N-3, Midgard Evidence, February 18, 2026, page 14, lines 16-21.

1 Although key personnel as compared to Phase 1 work are no longer with the Company, consistent
2 personnel have been assigned to this work for the past several Phases; this ensures that learnings
3 and execution efficiencies are maintained through building institutional knowledge and succession
4 planning.

5
6 Ultimately, NS Power submits that its project execution and prioritization reflect prudent
7 sequencing guided by its asset management framework, and learnings and productivity gains are
8 inherently incorporated into each subsequent phase of work.

10 **2.2 Process Standardization & Cost Reduction**

11

12 The Midgard Evidence provided the following conclusion regarding NS Power leveraging pre-
13 Phase 6 experience to standardize designs, streamline processes and reduce costs:

14
15 NSPI states it applied prior experience to standardize vendors, technology, labour
16 roles, and quality processes, improving execution consistency and predictability.
17 However, the absence of materials demonstrating formal lessons-learned reviews,
18 limited quantitative productivity metrics, and the post-filing material budget
19 reduction indicate that efficiency gains were not empirically validated and have not
20 translated into unit cost reductions where appropriate.⁶

21
22 The Midgard evidence states:

23
24 ... NSPI offers no empirical data to quantify efficiency gains or benchmark prior
25 performance. Without the historical baseline data (lost during the cyber incident),
26 NSPI cannot empirically demonstrate that Phase 6 estimates incorporate efficiency
27 gains derived from Phases 1 through 5, or that process improvements were tracked
28 or memorialized for any of the prior Phases of RTU work. This absence of verifiable
29 metrics undermines claims of process maturity and challenges the reliability of the
30 Phase 6 cost estimates.⁷

⁶ Exhibit N-3, Midgard Evidence, February 18, 2026, page 38.

⁷ Exhibit N-3, Midgard Evidence, February 18, 2026, page 16, lines 15-20.

1 NS Power acknowledges that the absence of material lost during the cyber incident resulted in
2 difficulty evidencing the Company's baseline data and resulting project efficiency gains.
3 However, as demonstrated by NS Power's response to Midgard IR-2, estimating for these projects
4 has been relatively accurate, resulting in the majority of prior projects not requiring usage of
5 contingency. This demonstrates that projects have been executed largely as planned, clearly
6 demonstrating process maturity and expertise. The cost estimate for Phase 6 would have been
7 completed prior to data loss due to the cyber incident, and therefore with the benefit of metrics and
8 data from prior phases being used to inform the estimate. As discussed in prior ACE Plan
9 proceedings, cost minimization is ingrained into each step of capital project development and
10 execution under NS Power's capital plan, and this program is no different. As learnings are
11 identified, they are shared and embedded into NS Power's processes at the early scope definition
12 and design phases of projects, and considered when developing future similar projects. In this
13 way, overall project efficiencies and budgeting strategies are incorporated into project cost
14 estimates, resulting in continuing improvement.

15
16 Additionally, NS Power's amended cost estimate filed in December 2025 clearly demonstrates
17 adaptive and responsive cost management. It reflects actual execution experience from the first
18 two completed sites in this phase, and shows prudent and transparent evolution from initial
19 estimates. Lessons learned from the first two sites completed are more practical and operational,
20 reflecting additional site-specific data that was previously generalized across all sites, allowing for
21 more streamlined and accurate data per site, as evidenced in NS Power's response to Midgard IR-
22 14 Attachment 1.

23 24 **2.3 Use of Internal Resources**

25
26 The Midgard Evidence provided the following conclusion regarding the cost effectiveness of NS
27 Power utilizing internal resources compared to external alternatives:

28
29 NSPI acknowledges that no formal make-versus-buy analysis was conducted for
30 Phase 6. Although materials and civil works were competitively tendered, core
31 technical work was assigned internally without market testing, and no quantitative

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1 evidence was provided to demonstrate that higher internal overhead rates were
2 offset by productivity gains.⁸
3

4 Where available and appropriate, NS Power utilizes internal resources to complete projects such
5 as this. The allocation of work for Phase 6 was based on the nature of the tasks required, the
6 specialized skills associated with each labour category, and the availability of internal resources
7 to perform the work. External contractors were engaged where required to support project delivery,
8 including engineering support and civil activities, while all associated
9 telecommunications/networking and installation/commissioning services were performed by
10 internal resources.
11

12 Internal resources provide strategic value beyond “productivity gains”, including specialized
13 familiarity with NS Power’s existing systems, standards and delivery practices, coordination with
14 internal and external project participants, and continuity in the execution of RTU replacement and
15 related substation work. In addition, utilizing internal labour includes benefits not captured in
16 contractor rates, such as improved predictability of time required, reduced clarification questions
17 from field crews, better alignment of work activities with the appropriate specialized roles required
18 for RTU replacement projects, and improved troubleshooting support for reactive maintenance
19 once RTUs are in service. For example, NS Power stated that, over time, work activities have been
20 increasingly aligned with the appropriate specialized roles, that the labour categories in Phase 6
21 are more clearly defined, and that assigning tasks to resources with the appropriate expertise has
22 improved task execution efficiency and supported a more optimized use of labour. The use of
23 internal resources also supports continuity of internal technical capability and organizational
24 knowledge across RTU replacement work and associated reactive maintenance once in service,
25 and avoids the need for broader familiarization of external resources with NS Power’s existing
26 systems, standards, and delivery practices. Further, for installation, commissioning and testing
27 activities at existing operating substations, contracting out the majority of field execution would
28 not necessarily eliminate internal labour requirements, as internal technical presence and
29 coordination may still be required to supervise and support the work at site due to the familiarity

⁸ Exhibit N-3, Midgard Evidence, February 18, 2026, page 38.

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1 of internal resources with NS Power's systems, standards and delivery practices. There is
2 additionally a requirement for all external resources to be escorted on NS Power premises by
3 internal personnel. In that respect, greater reliance on external field labour could result in
4 duplicated internal and external labour and associated overheads, rather than a full substitution of
5 internal costs.

6
7 Midgard provides the following regarding their labour analysis:

8
9 Regular Labour costs per RTU increased by 36.8%, suggesting either greater
10 technical scope or reduced workforce efficiency. Overtime Labour rose by
11 approximately 228%, indicating a materially higher reliance on premium hours
12 relative to historical norms. Travel expenses increased by 84.1% in real terms,
13 likely driven by the separation of vehicle rental costs and the inclusion of remote
14 sites. In contrast, Materials costs per RTU increased by only 10.2%, indicating
15 relative hardware cost stability, thereby concentrating real cost growth in direct
16 labour and logistical support categories sensitive to execution practices.⁹
17

18 The labour cost variances between Phase 6 and Phase 1 are driven by expanded technical scope
19 and increased site complexity, not by a simple reduction in workforce efficiency. Phase 6 RTUs
20 incorporate expanded functionality and increased integration with SCADA, protection and control
21 devices, Intelligent Electronic Devices, and other substation equipment, and there are now over
22 four times the number of I/O points in Phase 6 as compared to Phase 1. Phase 6 also includes the
23 addition of J-Box cabinets for marshalling field device wiring, increased engineering,
24 configuration, testing and validation effort, more detailed pre-work planning and controlled
25 cutover execution, expanded commissioning and communications validation, as well as additional
26 labour associated with remote site accessibility and coordination requirements.

27
28 Accordingly, the fact that materials costs have remained relatively stable on a per-unit basis does
29 not mean that labour effort should also remain stable, as many of the additional requirements in
30 Phase 6 affect engineering, installation, testing, and commissioning efforts more directly than
31 equipment pricing. Similarly, the increase in travel-related costs is consistent with the inclusion of

⁹ Exhibit N-3, Midgard Evidence, February 18, 2026, page 18, lines 2-7.

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1 more remote sites in later phases, and the updated estimate includes more granular separation of
2 vehicle-related costs from general travel expenses.

3
4 Midgard provides the following regarding prior phase estimation accuracy:

5
6 Financial data from prior Program Phases offers mixed evidence of estimation
7 accuracy. While five of the six prior Phases were completed under budget, variances
8 were significant, ranging from an overspend of \$169,254 or 24.6% (Phase 4) to an
9 underspend of \$335,928 or 34.0% (Phase 5). Phase 5 underspend is presumably due
10 in large part to the lack of completion of the 106W Pubnico Point Windfarm RTU.¹⁰
11

12 The historical record does not support a conclusion that NS Power's estimating approach for the
13 RTU Replacement Program has been systematically imprudent. Five of the six prior phases were
14 completed below the approved amount, which is indicative of an estimating approach that has
15 generally been prudent and, in many instances, conservative. NS Power explained in Midgard IR-
16 2 that the Phase 5 underspend was due to the 106W Pubnico Point Windfarm RTU not having
17 been completed at the time of reporting. Additionally, projects initiated prior to 2020 were initiated
18 before the Company implemented more standard contingency guidelines (please refer to **Section**
19 **2.4**), and, due to the cyber incident, detailed variance explanations and older project records are
20 not available for all prior phases.
21

22 While the cyber incident has limited the availability of some historical baseline information, NS
23 Power did not rely solely on older program records in developing Phase 6. NS Power stated that
24 historical actuals from the most recent RTU Replacement project, Phase 5, were used in
25 developing the original Phase 6 estimate, and that recent experience and actuals from completed
26 RTU replacements under Phase 6 were used in developing the revised estimate. This reflects the
27 use of available historical and current project information to inform and refine the estimate,
28 notwithstanding the limitations in the older historical record.
29

¹⁰ Exhibit N-3, Midgard Evidence, February 18, 2026, page 19, lines 1-4.

In summary, NS Power’s use of internal resources for the core technical scope of Phase 6 was based on the specialized nature of the work, the familiarity of internal resources with NS Power’s systems, standards and delivery practices, and the need to coordinate execution across multiple sites and workstreams. External resources were engaged where appropriate for engineering support and civil activities, while the core telecommunications/networking and installation/commissioning scope remained with internal resources. Although no formal make-versus-buy analysis was completed, the record demonstrates that the labour and delivery approach for Phase 6 was grounded in task requirements, resource capability, and available actual project experience, rather than unsupported assumptions. Further, greater reliance on external field labour would not necessarily have resulted in a full substitution of internal costs, as internal technical presence, coordination and site support may still have been required during installation, commissioning and testing activities at existing operating substations. The evidence also shows that the increase in labour-related costs relative to earlier phases is attributable to broader technical scope, increased complexity and accessibility requirements, and expanded testing and quality practices, rather than to a simple decline in workforce efficiency.

2.4 Classification and Contingency Allowance

The Midgard Evidence provided the following conclusion regarding the NS Power estimate classification and contingency allocation:

NSPI’s Phase 6 estimate is classification-compliant but not empirically calibrated. The base unit rates and the 10% contingency are primarily judgment-based, with no quantitative linkage from the risk register to expected risk cost or to the contingency level.¹¹

Midgard provides the following regarding contingency to support its conclusion:

Contingency was reportedly unused for most Phases. NSPI could not provide specific details on contingency drivers due to the cyber incident. Contingency allowances have trended upward in recent Phases, despite NSPI acknowledging that such funds

¹¹ Exhibit N-3, Midgard Evidence, February 18, 2026, page 38.

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1 were required in only one of the five previous Phases (Phase 3). For Phase 6, the
2 contingency is set at 10%, a rate that aligns with the maximum percentage allocated
3 to any prior Phase in the history of the Program. This escalation is not consistent with
4 NSPI's assertion that its estimating methodology relies on "lessons learned" and
5 "progressively refined" experience from prior Phases.¹²
6

7 NS Power's non-binding contingency guidelines were implemented in 2020 following the Board's
8 direction in the 2020 ACE Plan (M09499). Accordingly, projects started prior to 2020 would not
9 have had the benefit of this more formalized approach to contingency application. As outlined in
10 response to Midgard IR-2, the methodology used to determine contingency requirements for this
11 project was based on the project team's experience on prior RTU replacement projects
12 (incorporating lessons learned), actual estimates received on material pricing, and anticipated cost
13 changes from increased complexity.
14

15 As outlined in the contingency statement for this project provided in NS Power's application in
16 the 2025 ACE Plan:
17

18 Risks intended to be covered by the contingency are overtime work that may be
19 required, unexpected significant increase in currency exchange rate, or material cost.
20

21 And in response to Midgard IR-2:
22

23 The use, or lack thereof, of contingency in prior phases does not have a significant
24 impact on how contingency was determined for Phase 6. The contingency in Phase
25 6 was based on subject matter expert judgement taking into consideration the added
26 complexity of RTU replacements and potential market volatility in material pricing.
27

28 Any changes to risk identification, risk allowances, and estimate methodology was
29 based on internal subject matter experts including the potential challenges related
30 to the current replacement process, not only the experience with past phases.
31

32 NS Power's risk register for this project was provided as Attachment 1 to Midgard IR-2.
33

¹² Exhibit N-3, Midgard Evidence, February 18, 2026, page 19, lines 5-10.

1 Although on its surface, the application of contingency may seem unnecessary given utilization of
2 funds were largely not required in prior phases, the timing between project estimation and
3 execution, and potential for execution risks remain, regardless of past performance. NS Power
4 applies lessons learned and cost minimization considerations when creating project estimates, and
5 where the potential for known and unknown risks exist throughout project execution, it is
6 appropriate to continue to apply a contingency commensurate with the anticipated risks. If those
7 risks ultimately do not occur, only the actual funds expended to place the asset in service are
8 incurred under the project.

10 **2.5 Labour Requirements**

11

12 The Midgard Evidence provided the following conclusion regarding NS Power's labour estimate:

13

14 While NSPI identifies valid complexity drivers, the specific magnitude of labour
15 increases remains unsubstantiated. A 33% variance exists between NSPI's filed
16 estimate and an independent allocation derived from Phase 6 technical documents.
17 This variance is driven by unresolved disputes regarding installation duration and
18 the absence of task-level traceability. Midgard recommends a 30% reduction in
19 labour hours to reflect reasonable productivity levels supported by technical
20 documentation.¹³
21

22 Respectfully, NS Power disagrees with Midgard's conclusion regarding the need to reduce its
23 labour budget for this project. Midgard's independent allocation based on RFW documentation
24 seems to contradict its own finding that there are valid complexity drivers, ignores NS Power's
25 subject matter expertise as outlined in Midgard IR-6, and assumes the RFW documentation
26 captures all labour effort required to complete the project which is inaccurate. Please refer to
27 **Section 3.1** for a more detailed discussion.

28
29 Midgard states:
30

¹³ Exhibit N-3, Midgard Evidence, February 18, 2026, page 39.

1 The reduction in Project Management hours indicates an optimization of overhead
2 resources, shifting from a dedicated resource model to a shared resource model.
3 Similarly, the adjustment in Civil Construction costs reflects a transition from
4 generic assumptions to site-specific realities. These adjustments indicate that initial
5 Project cost estimates were higher than required. The necessity of such a substantial
6 adjustment early in the Project execution suggests that cost estimates have erred on
7 the side of caution, rather than stemming directly from compounded learning of prior
8 phases.¹⁴
9

10 Again, NS Power disagrees with Midgard's assertion that initial project cost estimates were higher
11 than required. Rather, the amended cost estimate with project management labour costs shifting
12 to a shared resource model reflects expected project progression and demonstrates active and
13 prudent cost control, management, and cost minimization to reduce costs for customers. This is
14 consistent with NS Power's approach across all projects in its capital program.
15

16 **2.6 Procurement Practices and Indirect Costs**

17

18 The Midgard Evidence provided the following conclusions regarding NS Power's procurement
19 processes and indirect cost components:
20

21 ...Competitive tendering for major equipment and master service agreements for
22 civil works confirmed market rates. Material cost variances relative to early Phases
23 are justified by quantified functional increases and verifiable macroeconomic
24 inflation.

25 //

26 ...Indirect cost components utilize transparent methodologies consistent with
27 approved accounting policies. The 50% reduction in overhead application on
28 overtime labour and the separation of vehicle loadings minimize undue burden.¹⁵
29

30 NS Power agrees with Midgard's conclusions on these topics.

¹⁴ Exhibit N-3, Midgard Evidence, February 18, 2026, page 20, lines 2-7.

¹⁵ Exhibit N-3, Midgard Evidence, February 18, 2026, page 39.

3.0 NS POWER RESPONSES TO MIDGARD RECOMMENDATIONS

3.1 Adjustment to Labour Estimate

The Midgard Evidence provided the following recommendation regarding NS Power's labour estimate:

Reduce the approved labour hours for the Project by 30% to reflect a technically supportable baseline consistent with RFW documentation.¹⁶

NS Power disagrees with Midgard's assertion that labour hour estimates are unsubstantiated and rejects the recommendation for a 30% reduction. The 2025 ACE Plan estimate (subsequently refined downward by \$0.90 million based on actual execution experience in December 2025) reflects the legitimate technical complexity of Phase 6 sites, realistic field installation durations, and prudent engineering practices. Midgard's recommended reduction represents their professional opinion based on assumptions, judgements, and limited knowledge of NS Power's specific sites and systems. Midgard acknowledges the limitations in their analysis, and that their signal count work is indicative and may include counting errors. NS Power's professional opinion, while also based on assumptions and judgments, has the benefit of costs incurred to date and deep internal subject matter expertise regarding the Company's specific sites, systems and assets. Respectfully, differing opinions do not represent imprudence.

As noted above, Midgard appears to accept the validity of NS Power's explanations of complexity drivers. In addition to the work categories outlined in Midgard Evidence Appendix A Table 22, there are several work categories that are not directly included in RFW documentation, but are still appropriate to include in the project estimate. Specifically, the following activities are missing from Midgard's Table 22, and drive significant labour hours:

¹⁶ Exhibit N-3, Midgard Evidence, February 18, 2026, page 39, lines 4-5.

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- SM Electrician
 - Install RTU hardware and power up RTU
 - Install wiring for RTU and field devices
- Engineering
 - Prepare SCADA drawings
 - Update existing substation drawings
 - Prepare and issue RFW (Request for Work)

The 30% reduction as recommended by Midgard is not technically supportable, and Midgard's analysis underestimates installation duration, does not account for site-specific complexity, misallocates travel time, and underestimates engineering and project management requirements; it does not reflect inefficiency or imprudence in NS Power's estimate.

RTU replacement is not a simple "unplug and replace" activity. It requires sequential execution of interdependent work packages:

- Civil Construction: Must be completed before electrical work; weather-dependent; requires external contractor coordination. Includes foundation preparation, conduit installation, J-Box mounting, cable trenching, site restoration
- Equipment Installation: Cannot commence until civil complete; requires outage coordination; heavy equipment access. Includes RTU cabinet mounting, J-Box installation, cable pulling, grounding, initial connections
- Wiring & Termination: Most labour-intensive; varies by I/O count; requires 100% accuracy. Includes point-to-point wiring (AI, DI, DO), IED connections, relay/recloser wiring, terminal verification

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- 1 • RTU Configuration: Cannot finalize until wiring verified; may require iterative
2 adjustments. Includes database setup, logic programming, communication setup,
3 parameter configuration
4
- 5 • Point Testing: Sequential testing of each point; cannot be rushed without compromising
6 safety/reliability. Includes analog input testing, digital input/output testing, control output
7 verification, alarm verification
8
- 9 • System Integration: Requires coordination with control center operations; limited timing
10 windows to minimize disruptions to operations. Includes SCADA communication testing,
11 data validation, control center integration, protocol verification
12
- 13 • Commissioning: Final validation; requires operational outages; cannot overlap with
14 installation. Includes functional testing, operational trials, documentation, cutover, spare
15 parts harvesting
16

17 Midgard's analysis appears to assume relatively uniform site conditions, allocating labour
18 proportionally to I/O points alone. NS Power's detailed cost estimate as provided in its amended
19 submission on December 9, 2025 appropriately accounts for the full range of site-specific variables
20 that materially affect labour requirements, and reflects the Company's best estimate of work
21 required for this project at this time. A reduction as recommended by Midgard is likely to result
22 in an increased risk of equipment failure (as the labour budget may not allow for appropriate
23 execution of all anticipated required tasks, resulting in potential for reduced quality assurance, and
24 compressed commissioning/testing), associated safety implications, and an understated labour
25 budget. As a result, considering Midgard's response to CA IR-4, NS Power expects that this
26 project would ultimately land in an ATO position, requiring additional regulatory review to justify
27 the labour that is already reasonably known to be required to complete the full scope of work. This
28 would be duplicative effort, and inconsistent with current practice to capture all known project
29 costs in an overall project budget. Ultimately, the project will only incur costs needed to complete
30 project scope.

1
2 **3.2 Enhanced Reporting Requirements**
3

4 The Midgard Evidence provided the following recommendation regarding future reporting
5 requirements:
6

7 Direct NSPI to (i) reconcile assumed installation durations to site-specific technical
8 documents, (ii) document the attribution methodology for Program-level project
9 management, and (iii) provide a task-level labour basis of estimate that explicitly
10 maps hours to discrete deliverables for future Phases.¹⁷
11

12 These recommendations are more appropriately characterized as forward-looking governance and
13 documentation suggestions than as findings that the current Phase 6 estimate lacked a reasonable
14 basis. The Midgard Evidence does not demonstrate that the absence of these specific reporting
15 items rendered the Phase 6 estimate imprudent; rather, Midgard identifies areas where additional
16 documentation could be provided in future phases.
17

18 NS Power generally agrees that certain information should, and has previously been, tracked and
19 collected, in order to inform future program phases. While NS Power acknowledges that specific
20 data required to respond to some of Midgard's IRs regarding comparison to prior phases was lost
21 due to the cyber incident, there were a number of data points that the Company had been collecting
22 internally, and plans to rebuild as the program continues. For example, NS Power had historically
23 tracked project spending and actual project experience at the project level, including historical
24 actuals from the most recent RTU Replacement project (Phase 5), and recent experience and
25 actuals from completed RTU replacements under Phase 6, which were used in developing the
26 original and revised Phase 6 estimates. Prior to the cyber incident, the Company also had greater
27 internal ability to query and report project spending and labour information through existing
28 internal tools, and intends to rebuild that internal reporting capability as systems are restored.
29

¹⁷ Exhibit N-3, Midgard Evidence, February 18, 2026, page 39, lines 6-9.

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1 Regarding installation duration reconciliation, although a reconciliation exercise can be valuable
2 to provide context and highlight areas where installation activities were under- or over-budgeted,
3 RTU replacement installation durations across sites could differ due to a number of reasons
4 detailed in previous sections. NS Power has already outlined that site conditions and
5 implementation variability, including replacement strategy, condition of documentation, wiring
6 situation, accessibility, and the complexity of the site, limit direct comparability on a per-RTU
7 basis. It is unclear why Midgard is recommending reconciliation to technical documents, and how
8 that would result in cost savings going forward. Technical documents may inform the expected
9 field scope, but installation duration is also influenced by outage availability, sequencing of civil,
10 electrical, testing and commissioning activities, crew complement, and site-specific field
11 conditions that are not captured solely by reference to technical drawings or site packages.
12 Accordingly, while such a reconciliation could be completed where useful for internal project
13 close-out purposes, it would not necessarily provide a uniform or directly comparable productivity
14 metric across sites given the unique characteristics of each location.

15
16 Regarding documentation of PM allocation, NS Power agrees that its assumptions regarding PM
17 allocation should be clear and documented, so that similar methodologies can be applied for future
18 project detailed estimates. However, the project will ultimately only attract the project
19 management labour actually required and incurred on this project. The revised Phase 6 estimate
20 was refined based on execution experience from completed sites, including refinement of the
21 Project Manager's labour allocation where the Project Manager was determined not to be required
22 on a full-time basis for this specific project and was able to support multiple concurrent projects.
23 Positive time reporting against project codes ensures that project management labour directly
24 attributable to specific projects can be reconciled to actual labour incurred.

25
26 Regarding a task-level basis of estimate in future projects, NS Power submits that this would be a
27 departure from the typical detailed cost estimate format that is used across its submissions of
28 capital projects. NS Power does not generally file task-level labour mapping to discrete
29 deliverables as part of its standard capital project documentation, and Midgard's recommendation
30 would therefore require a level of project-specific detail beyond what is typically provided for

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1 other capital projects. This type of analysis is completed internally, and as outlined above
2 regarding various data points that are generally collected and tracked, the Company will continue
3 to build this information out for prior phases, but does not intend to submit it with project
4 documentation for approval. Rather, it would be captured, as applicable, in the internal project
5 delivery model (PDM) documentation, and utilized in supporting the creation of the standard
6 capital work order documentation. Where the complexity or risk profile of a project warrants a
7 more detailed basis of estimate internally, such information can be developed and used within the
8 Company's PDM processes without changing the standard format of evidence filed for regulatory
9 approval. Midgard's proposed requirement to file task-level labour mapping to discrete
10 deliverables would represent a level of evidentiary detail beyond what is typically required for
11 capital project approval and, in NS Power's view, would provide limited incremental value relative
12 to the additional complexity and process burden it would create.

13
14 In summary, NS Power agrees that clearer documentation of certain estimating assumptions and
15 project execution outcomes can be beneficial in informing future phases of the RTU Replacement
16 Program. However, Midgard's recommendations should be understood as potential enhancements
17 to future internal governance and reporting practices, rather than as evidence that the current Phase
18 6 estimate lacked a reasonable basis. Direct comparability across sites is limited by site-specific
19 conditions and implementation variability, available historical and current actuals were used in
20 developing and refining the Phase 6 estimate, and certain historical reporting capabilities were
21 materially constrained by the cyber incident. To the extent additional reconciliation or task-level
22 detail is useful, NS Power will continue to consider such information within its internal PDM
23 processes; however, the Company does not consider Midgard's proposed reporting requirements
24 to be necessary components of the standard capital project documentation submitted for approval.

4.0 CONCLUSION

NS Power submits that the capital expenditures outlined in this application are reasonable, prudent, and in the best interest of customers. No intervenor opposed the application through the 2025 ACE Plan proceeding, and NS Power has addressed Midgard’s recommendations in full.

This project is required to support a key tenet of NS Power’s Five-Year Reliability Plan, supporting telecommunications connectivity, improved system visibility, control, and operational resilience throughout the grid.

Ultimately, NS Power submits that Midgard’s recommendations should be dismissed, and respectfully requests that the application be approved as amended in its December 9, 2025 submission.