DECISION **2024 NSUARB 115**
M11169

NOVA SCOTIA UTILITY AND REVIEW BOARD

IN THE MATTER OF THE *PUBLIC UTILITIES ACT*

- and -

IN THE MATTER OF an application by **NOVA SCOTIA POWER INCORPORATED** for approval of authorization to overspend for 2022 ACE Plan Distribution Routines D008 – Provincial Storm, in the amount of $108,048,218 and D061 – New Customers Residential, in the amount of $9,699,868

BEFORE: Stephen T. McGrath, K.C., Chair
Steven M. Murphy, MBA, P.Eng., Member
Richard J. Melanson, LL.B, Member

APPLICANT: **NOVA SCOTIA POWER INCORPORATED**
Lana Myatt

INTERVENORS: **CONSUMER ADVOCATE**
David J. Roberts, Counsel
Michael Murphy, Counsel

SMALL BUSINESS ADVOCATE
E. A. Nelson Blackburn, K.C.
Melissa MacAdam, Counsel

INDUSTRIAL GROUP
Nancy Rubin, K.C.
Brianne Rudderham, Counsel
Dylan MacDonald, Counsel

NOVA SCOTIA DEPARTMENT OF NATURAL RESOURCES AND RENEWABLES
Daniel Boyle, Counsel
Jeremy Smith, Counsel

BOARD COUNSEL: William L. Mahody, K.C.

FINAL SUBMISSIONS: April 1, 2024

DECISION DATE: **June 27, 2024**

DECISION: **The application is approved. The net book value of assets retired due to Hurricane Fiona will be addressed under Accounting Policy 6350, subject to the directions set out in this decision.**

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1.0 INTRODUCTION

[1] Nova Scotia Power Incorporated applied to the Nova Scotia Utility and Review Board on June 7, 2023, for authorization to overspend (ATO) for its 2022 ACE Plan Distribution Routines D008 – Provincial Storm (in the amount of $108,048,218) and D061 – New Customers Residential (in the amount of $9,699,868). Hurricane Fiona, an extreme weather event in September 2022, caused extensive damage to the electrical infrastructure across Nova Scotia and was the main driver for the overage in both these routines.

[2] This application has garnered attention and input from various stakeholders, including interventions from the Industrial Group, Consumer Advocate, Small Business Advocate, and the Department of Natural Resources and Renewables (NRR). As part of its regulatory oversight, the Board initiated a comprehensive review process, involving information requests (IRs), intervenor evidence and submissions. EA Technology Limited (EA) and Grant Thornton were engaged as Board Counsel Consultants to provide evidence in this matter.

[3] This decision aims to address the key issues raised through this proceeding, assess the reasonableness and prudence of the incurred costs, and determine the appropriate regulatory treatment of the retired assets.

[4] The Board approves the ATO amounts for the 2022 ACE Plan for D008 Provincial Storm Routine, in the amount of $108,048,218 and for D061 – New Customers Residential Routine, in the amount of $9,699,868.

[5] The Board finds that the asset retirement costs of approximately $10 million for the provincial storm routine should be retired through Accounting Policy 6350 and

approves the creation of a regulatory asset for this amount. The Board directs that this regulatory asset be amortized over a period of ten years, beginning July 1, 2024.

2.0 BACKGROUND

[6] Hurricane Fiona, an extreme weather event in September 2022, caused extensive damage to NS Power's electrical infrastructure, necessitating substantial repair and restoration efforts by the company. The damage caused by Hurricane Fiona and the associated costs of replacement assets were the main drivers for the increased spend on the Provincial Storm Routine, accounting for $89 million worth of the $108 million overage. NS Power advised that the assets decommissioned due to storm damage, as detailed in the D008 – Storm Routine ATO application, were retired under Accounting Policy 6420 – Retirement and Disposal of Capital Assets.

[7] The New Customers Residential Routine spending overage was due to a significantly higher average unit cost per customer. NS Power advised that the unit cost was notably impacted by work completion delays due to the exceptional number of days allocated to storm response in 2022. Consequently, there was a substantial rise in overtime labour costs for internal NS Power crews (more than double what was estimated in the 2022 ACE Plan) and for contracted power line technicians to finish the tasks associated with the D061 routine.

3.0 DISCUSSION AND ANALYSIS

3.1 D008 - Storm Costs Routine - $108,048,218

3.1.1 Amount Claimed

[8] On June 9, 2022, the Board issued its decision approving NS Power's 2022 ACE Plan [2022 NSUARB 93]. The decision included approval of NS Power's 2022 D008 Storm Costs Routine in the amount of $3,901,717. This approved amount was based on the average of the prior five years' historical storm costs under this routine (excluding costs for storms classified as extreme events) plus an annual inflation increase of 2%. In the current ATO application, NS Power indicated that its actual D008 storm routine costs were $111,949,935, resulting in a ATO approval request to the Board of $108,048,218.

[9] In explaining the variance from the approved costs, NS Power stated that it experienced an unprecedented number of impactful storm events in 2022. This resulted in 9 Significant Event Days, 16 Major Event Days and 3 Extreme Event Days. The largest storm event in 2022 was Hurricane Fiona, which accounted for all the Extreme Event Days, four of the Major Event Days and one of the Significant Event Days. The D008 cost associated with Hurricane Fiona alone was $89,043,204.

[10] On June 29, 2023, the Board issued a letter to NS Power, noting that the evidence filed in the application was limited, and there was very little information to assess the reasonableness and prudency of the requested overspending. As such, the Board directed the utility to provide: a costing breakdown of all expenditures, with both capital labour and expenses broken out; a costing breakdown, by storm event, of actual capital expenditures, compared to the ACE Plan Budget; and explanations for variances over 10% in actual compared to budgeted amounts. NS Power filed the additional information with the Board on July 28, 2023.

[11] A summary of NS Power's 2022 D008 storm costs, by storm event, is presented as follows:

Project	Total Cost ($)	Internal Labour Cost ($)	Contractor Cost ($)
D008 Provincial Storm Routine	(128,503)	146	0
Jan 7, 2022 Storm (Major Event Day)	3,734,468	1,126,341	1,243,734
Jan 14, 2022 Storm (Major Event Day)	7,090,272	1,844,257	2,915,585
Jan 29, 2022 Storm	1,634,100	436,733	646,028
Feb 4, 2022 Storm (Major event Day)	8,402,146	1,707,545	4,241,092
Feb 18, 2022 Storm	1,144,696	340,958	486,298
Sept 23, 2022 Storm (Hurricane Fiona)	89,043,204	9,401,137	63,705,621
Dec 1, 2022 Storm	418,693	173,840	109,010
Dec 24, 2022 Storm	438,766	127,922	188,037
Metro Capital Storm Routine	79,616	28,285	15,552
Northeast Capital Storm Routine	243,524	96,800	34,110
West Capital Storm Routine	29,930	9,299	3,575
Sydney Capital Storm Routine	48,792	20,443	5,818
Nov 23, 2021 Storm	(229,768)	0	0
Total	**$ 111,949,936**	**$ 15,313,706**	**$ 73,594,460**

Regarding the negative dollar amounts for the November 23, 2021, storm, these are attributed to miscellaneous amounts over-accrued by NS Power at December 31, 2021.

In addition, as the ATO relates to all storms in 2022 (including Hurricane Fiona), the capital related work involved removal of trees from lines due to high winds, and heavy wet snow and/or freezing rain accumulation. The work also included repairing equipment damage caused by falling trees, high winds, and excessive wet snow and/or ice accumulation.

[12] According to NS Power's response to NSUARB IR-2, for storm events in 2022 where more than 30,000 customers were affected per event, there were a total of 1,791,898 customer power interruptions and 36,983,979 customer hours of power interruptions. These account for approximately 58% of all customer interruptions and 93% of all customer hours of interruption in 2022. From 2017 to 2021, the average annual number of customer power interruptions and customer hours of power interruption for all outage events was 1,763,654 and 8,311,433, respectively.

[13] In response to NSUARB IR-4(a), NS Power provided a comparison of Hurricane Fiona distribution system storm costs to those of Post-tropical Storm Dorian, which occurred in September 2019. Hurricane Fiona resulted in roughly $89 million in D008 storm costs, while Dorian related capital distribution system storm costs were approximately $23 million. In terms of assets affected by Hurricane Fiona, NS Power provided the following summary table in response to NSUARB IR-4(a):

Class	**Amount ($)**
Additions:	
Poles, Towers and Fixtures	17,209,262
Overhead Conductors and Devices	29,188,227
Line transformers	19,972,208
Services	6,382,082

Street Lighting and Signal Systems	1,017,285
Removals:	
Poles, Towers and Fixtures	3,563,238
Overhead Conductors and Devices	6,043,524
Line transformers	4,135,315
Services	1,321,432
Street Lighting and Signal Systems	210,632
Total	**$ 89,043,204**

[14] A summary of NS Power's 2022 D008 actual storm costs per account category compared to 2022 ACE Plan budget costs is presented as follows:

Account	2022 ACE ($)	2022 Actuals ($)	Variance ($)	Variance Explanation ($)
Salvage	(36,934)	(20,378)	16,556	Salvage for Fiona of approx. $236k was allocated in 2023.
Regular & Term Labour	265,911	2,187,406	1,921,495	Increase due to increased storms, primarily due to the number of large storm events that occurred in 2022. Approx. 87% of Regular Labour is attributed to Jan 14th Storm, Feb 4th Storm and Hurricane Fiona, with Fiona accounting for approx. 61% of the total 2022 Labour costs.
Overtime Labour	716,508	13,126,300	12,409,793	Increase due to increased storms, primarily due to the number of large storm events that occurred in 2022. Approx. 92% of Overtime Labour can be attributed to Jan 7th Storm, Jan 14th Storm, Feb 4th Storm and Hurricane Fiona, with Hurricane Fiona accounting for approx. 61% of the total 2022 Overtime costs.

Account	2022 ACE ($)	2022 Actuals ($)	Variance ($)	Variance Explanation ($)
Meals & Travel	115,093	6,464,274	6,349,181	Driven by the accommodations and meals required for the significant amount of contractors required for the large storms, with Hurricane Fiona accounting for approx. 85% of the total 2022 Meals &Travel costs.
Materials	729,560	8,090,657	7,361,097	Increased use of materials due to broken equipment from storms, which is primarily driven by the large events, with Hurricane Fiona accounting for approx. 80% of the 2022 Materials costs.
Contracts	1,255,655	73,594,460	72,338,806	Increase due to the need to bring in additional Powerline Technicians and Vegetation Management contractors, primarily driven by Hurricane Fiona, which accounts for approx. 87% of the total 2022 Contract spend.
Other	7,537	1,971,323	1,963,786	Primarily due to the allocation of a Contractor invoice of $1.4M to Rentals, where the invoice should have been included in Contracts.
Administrative, Vehicle, Contractor Overheads	916,929	11,225,252	10,308,323	See variance explanation for Regular and Overtime Labour and Contracts.
Capital Contributions	(68,541)	(4,689,359)	(4,620,818)	Due to increased capital contributions from third parties for work completed as a result of the number of large storm events that occurred in 2022.
Total	**$ 3,901,717**	**$ 111,949,935**	**$ 108,048,218**	

[15] EA was retained to review the prudency of the costs associated with NS Power's D008 storm routine ATO application. The scope of EA's review focused on three main areas:

a. NS Power's planning for adverse weather events;

b. NS Power's responses during adverse weather events that included customer power restoration and repair activities; and

c. NS Power's stewardship of its electrical network and the impact that its existing asset management practices have on the resilience of the electrical network to withstand adverse weather events.

3.1.1.1 Planning and Response to Adverse Weather Events

[16] EA concluded that NS Power's planning and preparation for reactive events is broadly consistent with the contingency planning approaches and operational deployment practices and processes employed by other utilities and electrical system operators around the world. EA also found that NS Power appears to have an acceptable range of available resources and provisions to facilitate storm response delivery. EA noted that NS Power has reciprocal arrangements with other system operators to provide mutual assistance, framework agreements with key service providers and an established, trusted logistical support capability. EA also considered that NS Power's arrangements for ensuring that materials, plant and equipment were available for restoration activities in response to adverse weather conditions were also broadly consistent with best practices. EA stated that these are both necessary and prudent. EA further concluded that NS Power's processes for responding to unplanned system failures, reactive incidents, and adverse weather events appear to be complete, scalable, adaptable, and

contain both the facilities and opportunities for self-check. If these processes are implemented effectively and compliant with the financial accounting practices, EA noted that related costs will be incurred in a prudent manner.

[17] EA also concluded that the sequence of activities employed by NS Power to formulate a reactive response to adverse weather events forms a logical and comprehensive suite of provisions. EA further noted that the related evidence provided in this proceeding appears to be aligned with established practices found in other leading utilities. It considered the decision making and actions taken by NS Power were broadly consistent with typical best practices, its assessment of potential weather impacts adequate, and its assessment and mobilization of the resources necessary to respond to a weather event appropriate. EA also felt that NS Power's damage assessment practices and its prioritization of restoration work were appropriate. It found NS Power appropriately executed its restoration plans and reviewed them in post-storm assessments. However, EA questioned whether contractor costs were adequately reconciled against invoices and completed work. If these activities are implemented effectively and compliant with the financial accounting practices, EA noted that related costs will be incurred in a prudent manner.

[18] EA noted that NS Power's service restoration efforts after Hurricane Fiona were necessary. When placed in the same position, and faced with the same set of circumstances, EA said that any other proficient electrical system operator responding to an event of a similar magnitude would have been required to undertake a similar scale of restoration activity, and therefore required a similar magnitude of response resource and financial commitment.

3.1.1.2 Stewardship and Resilience of the Electrical Network

[19] EA's conclusions about NS Power's stewardship of the electrical network and the impact of asset management practices on its resilience were not overly positive. EA noted that data about NS Power's distribution feeder sections presented a growing concern, suggesting needed investment and intervention. EA did not consider that NS Power's prioritization of investment decisions aligned with best practice, and it recommended that it should be reviewed.

[20] EA does not believe the information provided in this proceeding clearly indicates whether poor performance issues relate specifically to the underlying condition of the primary power system, issues residing within line corridor environments or inappropriate construction specifications. EA said it is questionable whether NS Power's investment programs can deliver sustainable system performance improvement at an acceptable cost. EA noted that the evidence received in this proceeding provides little support to prove that NS Power truly understands the root causes of its electrical system and asset related component failures. EA stated that this understanding is an essential and prudent linkage when optioneering and developing enduring investment solutions as opposed to programs of reactive work.

[21] EA noted in its report that NS Power is making investments in vegetation management to address issues with overhead line tree contacts. It said the information provided in this proceeding suggested clearance corridors may be insufficient but acknowledged that stakeholder agreement would be necessary to address that issue.

[22] EA said that overhead line system performance improvement interventions would be expected to include a range of options including tree cutting and vegetation management, line deviation, line refurbishment (either partially or fully), construction

specification modification, and undergrounding. Although it noted that NS Power believes it is seeing benefits from its eight-year vegetation management program, EA suggested that storm hardening progress in relation to capital investment delivery plans and budgetary expectations was unclear. It considered it vital that NS Power be able to demonstrate "not just the perceived technical benefits afforded by interventions, but also the quantifiable financial returns on investment".

[23] In concluding its report in this matter, EA stated:

> There appears to be an emerging cycle developing within which the same responses and solutions are being applied, and the same outcome is achieved. The electrical system infrastructure is damaged, repaired and restored, no additional resilience is being introduced, and when the next weather event takes place, the cycle is being repeated.
>
> This in turn implies that the current regulatory framework may not be arranged (i.e. contain sufficient incentive or motivation) to deliver in line with current customer expectation, and would therefore be considered to be in need of review.
>
> All parties involved should recognise that without change, the continued costs associated with maintaining the same approach to storm recovery is only set to continue and present a more demanding financial burden as event response progresses into disaster recovery.
>
> The heart of the issue is that the electrical network lacks the resilience and progress in improving the situation has not been demonstrated.
>
> This could be considered to result from a number of factors that include:
>
> - A lack of a strategic asset management plan that strives to achieve the desired levels of system performance and considers the financial trade-offs between Capital and OM&G expenditure over the asset life cycle.
> - The current regulatory mechanisms, associated drivers and incentives, are not delivering the system performance that meets stakeholder expectations. Any review would include appropriate incentives and penalties to deliver:
>   - The desired electrical system performance
>   - Quantifiable future investment returns in the form of system reliability improvement
>   - Appropriately transparent and granular system performance metric related reporting systems
>   - Improvements in investment and intervention justification.
>
> [Exhibit N-16, p. 32]

[24] NS Power disagrees with EA on this issue. In its Reply Evidence, NS Power said EA's comments were limited to information in the proceeding and did not reference other information available from other sources, including past ACE Plans, Performance Standards Reports, and the recent Property and Assets Inquiry (Matter M11067). NS Power believes that a review of this material would be appropriate and necessary to make an informed finding on NS Power's Asset Management Program. NS Power's Reply Evidence goes on to describe its approach to asset management, as well as its existing work programs, capital investment process, storm hardening progress, and construction specifications.

[25] NS Power said its Reliability Team uses a variety of criteria and data sources to assess the condition of its assets. It said that best practices from industry groups such as Electricity Canada and the Centre for Advancement through Technological Innovation inform its approach.

[26] In terms of construction specifications, NS Power noted that the province is surrounded by cold, salt water and that regional weather patterns that contribute to failures, such as salt contamination, are considered when developing construction standards. NS Power said as new standards are developed by the Canadian Standards Association they are reviewed for applicability and adopted as appropriate.

[27] NS Power said it understands the root cause of failures impacting its electrical system, noting that each outage event it experiences is identified with a cause code. It submitted that during Hurricane Fiona, only approximately 0.3% of outages were attributed to unknown causes. NS Power said it also conducts root cause analyses when appropriate to understand deeper causes of component or systemic failures.

[28] NS Power said that tree contacts are one of the most common causes of outages in adverse weather events and, since Post-tropical Storm Arthur, it has increased its focus on vegetation management. However, it submitted that preventing tree contacts entirely was not reasonable or feasible, given significant impacts to landowners, the environment and costs. NS Power also referred to efforts to bring lines running through wooded areas to the roadside to reduce the likelihood of damage and improve access to respond to any damage.

[29] NS Power also took issue with EA's suggestion that the benefit of its reliability investments was unclear. As it has argued in several recent proceedings before the Board (NS Power specifically referred to the evidence it filed in the 2024 ACE Plan Proceeding (M11458, Exhibit N-3)), NS Power said when the impact of increasingly high winds is "normalized" its program is shown to have lessened the impact of tree contacts.

[30] NS Power also noted that its investments in system performance have been and continue to be disclosed and reviewed by the Board and stakeholders in other proceedings. These include NS Power's annual ACE Plan applications, annual Performance Standards Reports, Storm Outage Analysis Reports, annual Emergency Services Restoration Plan and Drill Reports, capital approval applications, and the recent Property and Asset Review proceeding (M11067). NS Power specifically referenced its 2024 ACE Plan, which included $85.5 million in investment related to improving the reliability of its distribution system.

[31] NS Power's Closing Submission noted that even with its concerns, EA did not make any recommendations about whether the D008 ATO request should be denied.

NS Power, therefore, submitted that the EA's evidence does not support a finding of imprudence.

[32] The Consumer Advocate considered there was no evidence before the Board that should cause it to refuse to approve the recovery of NS Power's additional spending on storm-related distribution costs in 2022, but submitted conditions should be attached to the approval. These are addressed later in this decision.

[33] The Small Business Advocate did not request a disallowance in his submissions in this proceeding. Additionally, the Small Business Advocate's consultant, Melissa Whitten, of Daymark Energy Advisors, Inc., did not oppose the full recovery of the additional storm-related distribution system capital costs requested by NS Power, but again, raised other issues addressed later in this decision.

[34] NRR submitted that the Board should consider whether the concerns EA raised warranted a disallowance, but stopped short of submitting that the Board should disallow the recovery of any of the additional capital costs incurred by NS Power. Instead, it said the Board must "judiciously weigh" these concerns and make disallowances "should the Board have any doubt about the prudency of NS Power's efforts to mitigate costs".

3.1.1.3 Findings

[35] Storm costs are inherently difficult to estimate. These costs, and their impact on the utility's financial results, can vary greatly depending on a variety of circumstances. The budget forecasting method used by NS Power for the D008 routine is reviewed annually by the Board and stakeholders in ACE Plan proceedings, and accounts for the changing electrical system and climate to the extent that such factors

are foreseeable. As such, the Board agrees with NS Power's Closing Submission that variation from the budget amount is not indicative of imprudence.

[36] In its Closing Submission, NS Power also stated that in the relevant time period of the 2022 adverse weather events, its processes for responding to unplanned system failures were implemented effectively and the accounting treatment of the associated costs was compliant with accounting practices. The company also submitted that its response during the 2022 adverse weather events was implemented effectively and was also compliant with the relevant financial accounting practices. Therefore, given EA's findings related to NS Power's planning for adverse weather events and its responses during adverse weather events, NS Power argued that the associated costs were incurred in a prudent manner.

[37] EA did not make any recommendations concerning whether the D008 ATO request should be denied or even partially disallowed. Further, no parties to this proceeding have suggested or provided any evidence that the dollar amount requested by NS Power for the D008 storm routine ATO is inappropriate. Therefore, the Board finds no reason to dispute the calculation of the amount of the requested ATO amount. The question that remains outstanding is whether these costs were imprudently incurred because of inadequate system resilience.

[38] Any discussion about resiliency would be somewhat one dimensional without considering cost. This was noted by EA in its evidence when it highlighted the inherent challenge associated with efforts to achieve high system performance at a low cost:

> NS Power's commitments to safety, customer service, technological innovation, and environmental protection are openly stated on the organisation's website. NS Power's

> focus and drive to reduce costs is also evident and contained within the information responses supplied.
>
> These two distinct delivery objectives are often found to conflict, in that the best performing systems are rarely the ones delivered for the lowest possible cost. [Footnote omitted]
>
> [Exhibit N-16, p. 28]

[39] This highlights the need for open and frank dialogue between NS Power, its customers and government about the level of performance that is desired and how much ratepayers are willing to pay for it. This is not to suggest that investments in resilient systems cannot be cost effective. Many likely are. But rate impacts must also be considered. A significant investment in system resiliency may cause immediate rate increases, whereas a business-as-usual option that may cost more in the longer term could result in more gradual, even if ultimately higher, rate increases.

[40] Additionally, no system can be built to withstand every possible threat. This is an unrealistic expectation. Resilience should be understood more as a question of degree. Investments in resiliency will not necessarily eliminate damage from disruptive events but could help to reduce damage and could also facilitate the recovery from a disrupted state to normal operations.

[41] In this case, it is also important to note that Hurricane Fiona was an extreme weather event. In its related application for the recovery of operating, maintenance and general costs associated with Hurricane Fiona (M11411), NS Power notes that this storm brought extended periods of extreme winds and heavy rain. NS Power cites sustained winds of over 100 km/h and peak gusts of about 160 km/h. It said that, at landfall, the storm was the equivalent of a Category 2 hurricane with a reported barometric pressure of 931 hPa, the lowest pressure reported for any storm in Canadian history. NS Power

said, “Fiona is the tenth most costly extreme natural disaster to occur in Canada and is among the most intense and damaging storms in Canadian history.”

[42] It would be unreasonable to expect that the extensive linear infrastructure owned and maintained by NS Power throughout the province would be immune to damage from such an event. NS Power noted:

> While NS Power invests $20 to $25 million on average each year in tree trimming and clearing trees from rights-of-way, which, over the last five years, has totaled approximately $100 million, the damage from Fiona was extensive. Areas along the Atlantic coast and Northumberland Strait experienced extreme prolonged winds resulting in unprecedented damage to the distribution infrastructure. Trees from outside cleared rights-of-way were uprooted and blown into rights-of-way, tearing down power lines. In some cases, the diameter of fallen trees exceeded three to four feet and required heavy equipment, cranes, and hours of work to be removed. There were additional cases of uprooted trees whose diameters exceeded five feet.
>
> [M11411, Exhibit N-1, p. 4]

[43] The Board generally defines prudence as follows:

> …As stated by the Illinois Commerce Commission, "prudence is that standard of care which a reasonable person would be expected to exercise under the same circumstances encountered by utility management at the time decisions had to be made....Hindsight is not applied in assessing prudence....A utility’s decision is prudent if it was within the range of decisions reasonable persons might have made. ... The prudence standard recognizes that reasonable persons can have honest differences of opinion without one or the other necessarily being imprudent.
>
> [2005 NSUARB 27, para. 84]

[44] In the present case, the question is whether NS Power was imprudent because it had not introduced additional resilience to its electrical system infrastructure before Hurricane Fiona. It is not clear from the evidence what that additional resilience would have been, what it would have cost to add, and what rates would be now had that been done.

[45] That aside, whether the additional capital costs would have been lower if additional resilience had been added to the electrical system is speculative. The Board accepts that, with additional resilience, Hurricane Fiona may not have caused as much

damage to the system. Given the nature of the storm, it is, however, unreasonable to expect that a more resilient system would not have been damaged at all. Furthermore, some of that damage may very well have involved the new “hardened” infrastructure, which would then have had to be replaced, potentially at a higher cost than less “hardy” infrastructure of that type.

[46] As NS Power noted in its Reply Evidence, it has focused on increased vegetation management since Post-tropical Storm Arthur in 2014. But it also noted in its evidence in this proceeding, that this is not the only system hardening measure it takes (e.g., relocating lines from wooded areas to roadside, replacing poles, adopting new pole standards and automated equipment).

[47] There is little evidence in this proceeding to suggest that a “reasonable person” in NS Power’s position would have added a specific type of more resilient infrastructure at some point before Hurricane Fiona. Indeed, in NS Power’s ACE Plan proceedings before the Board over the years, there had been little suggestion from participants, before Post-tropical Storm Dorian and Hurricane Fiona, that NS Power’s annual capital programs (and subsequently its rates) should be increased for specifically identified investments of this nature.

[48] The Board does not consider that the test for imprudence has been met in respect of a failure to invest more, or to invest differently, to introduce additional resilience before Hurricane Fiona. But, the Board does have concerns about whether NS Power’s investment in reliability and resilience is optimal. These concerns were raised by the Board in various proceedings, including its decision on NS Power’s 2023 ACE Plan:

> [76] The Board shares some of the concerns raised by the intervenors about NS Power’s reliability efforts. The Board notes that the last two Performance Standards reviews have resulted in administrative penalties. While NS Power’s reliability statistics

> are comparable with those in Atlantic Canada, it is a small sample. As well, conditions are evolving rapidly in this changing climate environment.
>
> [77] The appointment of a Director, Reliability Implementation is an important first step. The Board further understands that NS Power is obtaining some third-party assistance through its involvement with Electricity Canada in its development of a Climate Adaptation Framework. In its recent GRA decision, the Board also directed NS Power to engage in a consultative process to develop a Climate Change Adaptation Plan. The Board is aware that NS Power's Asset Management systems are being reviewed in another proceeding [M11067]. Given that the 2024 ACE Plan should be filed within the next two months, the Board will not direct NS Power to retain a third party to conduct a review at this time.
>
> [78] The Board directs NS Power to do the following in the 2024 ACE Plan:
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> - Provide an update on the progress of the Director, Reliability Implementation and his team.
>
> - Provide an update on any reliability initiatives, strategies, and programs developed through its work with Electricity Canada or any other organizations.
>
> The Board will reassess this issue in the 2024 ACE Plan proceeding.
>
> [2023 NSUARB 159]

[49] Concerns about whether NS Power is optimizing its investments aimed at improving reliability or resiliency are warranted. However, debating whether there were specific investments in resiliency that NS Power should have undertaken before Hurricane Fiona is a matter of speculation. Whether these investments would have been technically feasible and affordable, might have made a difference in a significant weather event, and have been more cost effective than the additional capital costs incurred restoring service after Hurricane Fiona is simply unknown. At present the Board concludes that these concerns are better addressed in other processes (discussed in more detail later) rather than through what the Board considers would be a rather arbitrary and somewhat tenuous disallowance in this proceeding. The Board, therefore, finds that there is no evidence before it to justify a disallowance of the requested D008 ATO cost. The Board finds that the costs were prudently incurred and approves the D008 ATO in the amount of $108,048,218.

3.1.2 Addressing Resilience Concerns

[50] As noted above, although none of the intervenors expressly submitted that a specific disallowance should be made in this proceeding, concerns were expressed about NS Power's stewardship of its electrical network and investments in resiliency. These concerns led to other specific recommendations.

[51] The Consumer Advocate highlighted the concerns EA raised about NS Power's asset management practices and noted NS Power's response that it follows best practices and understands the root causes of system failures. The Consumer Advocate submitted that NS Power's stewardship is fundamental to the interests of all stakeholders. He said given that EA identified areas where stewardship "is, or at least may be wanting", NS Power should undertake a stakeholder engagement process to thoroughly review its asset management practices to ensure that they provide the maximum resilience to adverse weather events. This submission is similar to the suggestion EA made in an IR response to the Consumer Advocate, although EA referenced the need for agreement on the costs of providing resilience as well:

> NS Power may benefit from a program of stakeholder engagement to confirm the service expectations of Nova Scotians. All future investments and asset interventions would be expected to deliver the performance and resilience expectations in line with these expectations, both in accordance with agreed regulatory requirements and costs.
>
> [Exhibit N-18, IR-5(d)]

[52] The Consumer Advocate also noted EA's comments about whether there were demonstrated benefits from NS Power's reliability investments. Referring to an IR response, the Consumer Advocate said EA expected to see the potential benefits from reliability investments identified and quantified before approval but did not see evidence of this in this proceeding. Repeating a recommendation made by his consultant, John Wilson, in the 2023 and 2024 ACE Plan proceedings, the Consumer Advocate submitted

the Board should direct NS Power to retain a third party to review its reliability investments.

[53] The Small Business Advocate's consultant, Ms. Whitten, said NS Power should "strive to find additional metrics to evaluate the efficiency of these [storm related capital] investments in view of the trend in more frequent major and extreme weather events." Referring to the "normalized" SAIDI metric that NS Power says demonstrates its investments are having a positive impact on resiliency, she felt that the average duration of interruptions was a necessary metric, but it was not enough because the implementation of coastal standards and right-of-way widening is ongoing (from which the Board infers that system performance in those areas cannot be extrapolated from the system average used by NS Power) and NS Power will need to make further investments across the province to storm-harden its system. She recommended that NS Power develop and report on key resiliency metrics to be used to evaluate the capital efficiency of expenditures and present these metrics as part of future ACE plans.

[54] In the evidence she filed in this proceeding, Ms. Whitten also suggested that NS Power consider conducting an undergrounding benefits study (or updating an earlier study if one has been conducted).

[55] NS Power said the benefits of undergrounding are well documented and publicized and do not require a special study. It considers a broad use of undergrounding to be cost prohibitive and does not consider a study is necessary given its understanding of high-level cost differences. It said it was open to considering undergrounding when feasible, but cautioned the benefits from this option must be weighed against its costs. It also said it would continue to work with developers to underground new subdivisions

where the incremental costs are not prohibitive or are borne by those developers and not by NS Power customers who would not see the benefit of these underground lines.

[56] In his closing submissions, the Small Business Advocate emphasized that Ms. Whitten's recommendation was focused on the strategic use of undergrounding and considered an updated study was necessary to understand the benefits and costs. At a minimum, the Small Business Advocate said NS Power should be looking at the 425 km of lines it currently has buried to assess the impact on maintenance costs, storm response and outages.

3.1.2.1 Findings

[57] As noted above, the Board finds that concerns about whether NS Power is optimizing its investments aimed at improving reliability and resiliency are better addressed in other proceedings rather than through a rather arbitrary and somewhat tenuous disallowance in this proceeding. These other processes include NS Power's ACE Plan proceedings (or other capital applications), proceedings relating to NS Power annual performance standards reports, storm outage analysis reports, annual emergency services restoration plan and drill reports, and annual storms reports.

[58] In capital approval processes, including ACE Plan proceedings, investments such as undergrounding may be raised as an alternative to some projects, and NS Power must ensure that it is able to properly assess this and other resiliency enhancing alternatives in appropriate cases. The Board notes that if NS Power has not appropriately assessed undergrounding in cases where that assessment is warranted, project approvals may be delayed.

[59] Any implications arising from any failure to meet performance standards, notwithstanding existing or enhanced resiliency investments, are best addressed in NS Power's annual performance standards report proceedings.

[60] The Board also notes there are two other proceedings that will likely touch upon issues raised in this proceeding, and these are both likely to include additional stakeholder and intervenor processes.

[61] The first stems from the Board's recent review of the extent, condition and value of NS Power's property and assets under s.30(5)(a) of the *Public Utilities Act*. In that matter, EA also made several asset management recommendations that NS Power agreed to pursue. In its decision, the Board also directed NS Power to undertake several initiatives to improve its asset management activities. These include implementing a process to review its actions resulting from risks and opportunities to determine whether they have been effective or can be improved. The Board also ordered the company to better define and document its process for reviewing its asset management plans, and to develop and implement a management review process that conforms to ISO55001:2014. The Board directed NS Power to file an action plan update related to those recommendations by September 30, 2024.

[62] The second proceeding where issues related to this proceeding are likely to arise comes out of the Board's decision about NS Power's most recent general rate application, where it directed NS Power to engage in a consultative process to develop a Climate Change Adaptation Plan to be filed with the Board no later than the end of 2025. The plan is intended to be a comprehensive analysis about what climate change impacts and risks NS Power faces, and what potential technically feasible alternatives are

available to adapt the electricity grid, to the extent possible, in response to the identified climate change impacts. NS Power was provided with sufficient time to prepare a detailed plan, including developing and prioritizing actions items, while also considering and addressing affordability issues.

[63] The Board anticipates that these existing and pending processes, already provide opportunities for stakeholders to engage on the issues raised in this proceeding and expects NS Power to do so. As noted already, there is a need for open and frank dialogue between NS Power, its customers and government about the level of performance that is desired and how much one is willing to pay for it. However, the Board continues to be of the view that a third-party review of NS Power's reliability investments would not be efficient at this time. Many of the issues that would be addressed in such a review will likely be considered in these other processes and the further engagement with stakeholders that is contemplated.

[64] Finally, the Board agrees with Ms. Whitten that NS Power needs to develop better metrics and analysis to evaluate the cost-effectiveness of resiliency investments. These should be capable of both quantifying the expected benefits of a resiliency investment and measuring the effectiveness of that specific intervention once it is in place. The Board directs NS Power to consider this issue and provide a report to the Board in its 2025 ACE Plan application.

3.1.3 Evidence to Support Relief from Storm Costs

[65] In its closing Submission, NRR recommended that any time NS Power requests relief from the Board relating to storm costs, and which will potentially impact ratepayers, regardless of the mechanism, the company should be directed to include

evidence of its efforts to mitigate costs to ratepayers. NRR suggested that this information would clearly have been helpful in this proceeding. NRR also recommended that the Board direct NS Power to file evidence of its prudence in preparing for storms, thereby mitigating costs the company seeks to be borne by ratepayers, in any form of application for recovery of storm related costs. NRR argued that this would represent an extension of the direction given by the Board in NS Power's most recent general rate application (Matter M10431) regarding storm rider applications.

[66] In response, NS Power submitted:

> This application is solely related to an ATO request for two distribution routines in 2022. The suggestion from NRR to include a full review of all storm restoration costs (including capital expenditures), storm hardening costs, and vegetation management costs during the related year with all future distribution routine ATO applications, and all applications that are related in any way to storm expenses, will clearly create regulatory inefficiencies. If this suggestion were accepted by the Board, then the efforts of NS Power, the Board, and intervenors will be duplicated, potentially many times over, each year. However, the Company is always open to regulatory efficiencies, and in future there may be an opportunity to combine the review of items such as storm distribution routine ATOs, storm reporting, and storm rider applications, which would align with this request from the NRR.
>
> In addition to this, the specific routines for which NS Power may require an ATO vary from year to year, and each routine covers a specific scope. The information required for and relevant to the storm rider is likely to be consistent, so the information required by the Board directive in M10431 is likely to be applicable to most storm rider applications. In contrast, the relevant data for each distribution routine will vary, and will depend on the scope of review required.
>
> [NS Power Reply to Closing Submissions, p. 9]

3.1.3.1 Findings

[67] The Board agrees with NS Power. Much of the information that NRR requested be submitted in future ATO applications is already provided in other Board matters, including ACE Plan applications and annual storm restoration costs reports. However, the Board expects that this reporting will include fulsome descriptions of how NS Power mitigated associated storm restoration costs.

3.1.4 Contract Management

[68] The Consumer Advocate noted that almost two-thirds of the additional D008 spending NS Power seeks to recover in this proceeding was for contracts with third parties. Highlighting concerns expressed by EA in its report about the cost of weather services and a “blinkered” focus on powerline technicians, the Consumer Advocate recommended that NS Power implement a comprehensive system of cost control and performance management for external contractors used for storm response and provide annual reports about this to the Board.

[69] In its Reply to Closing Submissions, NS Power did not appear to reject the Consumer Advocate’s recommendations. However, the company submitted that its annual storm report filing or storm rider application is a more appropriate means of reporting on this item, as the D008 ATO has a much narrower focus.

3.1.4.1 Findings

[70] Prudence requires that contracts issued by NS Power be subject to rigorous performance management and cost control measures. As such, the Board agrees with the Consumer Advocate recommendations. NS Power should include this information in its annual storm restoration costs reports filed with the Board. This information does not appear to be included in NS Power’s 2023 Storm Restoration Cost Report (filed under Matter M11692). However, the Board directs that it be included as a separate section in future NS Power Storm Restoration Costs Reports filed with the Board.

3.1.5 Estimates

[71] In her evidence, Ms. Whitten said that the 2022 ACE Plan budget for D008 is inconsistent with past historical routine spending and builds in bias towards higher ACE

budgets in the future. She noted that NS Power's ACE Plan budget for D008 is supposed to reflect an average of five years of historical storm routine costs, excluding storms classified as extreme events, plus 2% inflation. However, her review of past D008 spending for 2017 through 2021 suggests that this calculation would produce a 2022 budget closer to $9,480,613, which includes spending for 2019, a year that had two extreme events. She noted that this is nearly 2.5 times the 2022 ACE Plan budget of $3,901,717.

[72] Ms. Whitten also noted that consecutive ATOs for distribution routines due to "like-for-like" replacement investment activity suggests that NS Power does not have a good understanding of the ongoing resource requirements and costs necessary to maintain reliable service to customers following storm events. She stated that it may be reasonable for ATO requests to occur on a semi-regular basis, but that they should be relatively small in percentage terms. Ms. Whitten noted that concerns are raised about budget forecast processes and capital efficiency when routine budgets are exceeded.

[73] In its Reply Evidence, NS Power stated that Ms. Whitten was incorrect in her assertion about the D008 estimation process not being well documented and increasing the likelihood that there will be larger ATO filings in the future. The company indicated that it provides the relevant forecasting information annually as part of the ACE Plan proceeding, as well as further detail in ATO applications as necessary. NS Power also confirmed that the 2022 ACE Plan budget for D008 was calculated based on the five-year average of pre-administrative overhead costs for each account type (with extreme events removed), adjusted for inflation, and then adjusted to apply the current year administrative overhead rates. Finally, the company noted that its 2023 ACE Plan budget

for D008 was requested to be $8,513,734. However, the Board approved an adjusted D008 budget of $4,248,621 in its 2023 ACE Plan Decision, as the Board found that using a median calculation of the average was more reasonable for 2023 due to 2022 being an outlier and therefore significantly impacting the historical mean calculation.

[74] NS Power also disagreed with Ms. Whitten's conclusion that it does not have a good understanding of the ongoing resource requirements and costs necessary to maintain reliable service to customers following storm events. In its Reply Evidence, the company noted that storm activity cannot be accurately forecast a year in advance. Therefore, historic averages are used to incorporate trends in recent storm activity, with extreme events removed.

3.1.5.1 Findings

[75] With regards to Ms. Whitten's D008 concerns, the Board agrees with NS Power's related Reply. The D008 budgeting process is well documented and reviewed by the Board in NS Power's annual ACE Plan proceedings. In addition, as noted above, storm costs are inherently difficult to estimate. These costs, and their impact on the utility's financial results, can vary greatly depending on a variety of circumstances. The Board, therefore, accepts that NS Power's budgeting process for the D008 routine is currently appropriate and does not necessarily increase the likelihood that there will be larger D008 ATO filings in the future.

3.1.6 Accounting Policies 6350 and 6420

[76] NS Power stated that the net book value of assets retired because of damage caused by Hurricane Fiona has been estimated at approximately $10 million and has been accounted for under Accounting Policy 6420.

[77] NS Power's Accounting Policies include two policies related to the retirement of capital assets: 6420 - Retirement and Disposal of Capital Assets and 6350 - Assets Not Used and Useful. These policies have different impacts on the associated retirement costs of capital assets and cannot be read in isolation. Instead, they serve to provide two potential approaches for the retirement of capital assets.

[78] Grant Thornton examined these policies in its evidence, stating:

> In summary, Policy 6420 deals with routine asset retirements and results in the original cost of the asset being charged to accumulated depreciation with no immediate gain or loss recognized in earnings. The original cost of retirements charged to accumulated depreciation remain in accumulated depreciation (and therefore, in rate base) until the next depreciation study is completed. An updated depreciation study would analyze actual retirement experience since the last study and provide recommendations for changes to depreciation rates based on actual experience.
>
> NSPI has previously stated Policy 6350 is only utilized if an entire asset pool is being retired and NSPI is seeking approval to amortize any associated write off over a period of time (e.g., five years). The Board has not accepted this practice in the past and stated that it expects NSPI to apply professional judgment when considering retirements to ensure assets are retired in accordance with Policy 6350 when appropriate. Under Policy 6350, any regulatory asset created could also remain in rate base if approved by the Board.
>
> [Exhibit N-15, p. 2]

[79] In April 2020, NS Power applied for an ATO for several of its routines in its 2019 ACE Plan in Matter M09656. This ATO was made up of overspending on several routines, the largest of which was on the D008 Provincial Storm Routine. The capital cost of $23.2 million associated with the overspend was almost completely attributable to Post-tropical Storm Dorian, which, at the time of the application, NS Power said was the most damaging and costly storm in the company's history.

[80] In that matter, the Board concluded that Post-tropical Storm Dorian was significant, unforeseen, or extraordinary compared with other storm events experienced in the province, and that the retirement of the associated damaged and destroyed capital assets should be accounted for under Policy 6350.

[81] In the current matter, NS Power stated that by using Policy 6420, rate volatility is avoided on routine retirements, as losses are deferred until depreciation rates are adjusted in the future. NS Power believes this to be in the best interest of ratepayers.

[82] In its evidence, Grant Thornton stated that it believed Policy 6350 would be more appropriate in this circumstance. Grant Thornton notes that the significance of Hurricane Fiona has been clearly established, especially when compared to the costs and effects of Post-tropical Storm Dorian.

3.1.6.1 Findings

[83] The Board agrees with Grant Thornton's recommendation and directs NS Power to use Accounting Policy 6350 for the retirement of the assets associated with Hurricane Fiona.

3.1.7 Deferral

[84] In its evidence, Grant Thornton noted that any write off or regulatory amortization associated with unrecovered net book value from Hurricane Fiona would be considered a material cost to NS Power. It noted that costs incurred in addressing significant unforeseen events are inherently difficult to estimate. Considering this, and recognizing the recent introduction of a storm recovery mechanism for the recovery of significant storm related operating, maintenance and general costs, Grant Thornton said if Policy 6350 is used for retirements in the future, consideration could also be given to including actual retirement costs in the storm rider recovery mechanism.

[85] In its Reply Evidence, NS Power said if it is directed to apply Accounting Policy 6350 for the retirements of assets damaged by storms in the future, it agrees that the storm rider mechanism would be an appropriate mechanism to recover the

unrecovered costs of the assets retired because of storms. Since the recently approved storm rider only applies to costs in the 2023-2025 period, NS Power said if it was directed to apply Accounting Policy 6350 for the assets retired because of Hurricane Fiona, it would apply to defer the unrecovered net book value until it was able to include the amortization for recovery in its next GRA.

[86] None of the intervenors who filed submissions in this proceeding addressed the application of Accounting Policy 6350 or the request by NS Power for the recovery of the net book value associated with assets retired due to Hurricane Fiona through a deferral.

3.1.7.1 Findings

[87] In its related decision about NS Power's request for a deferral of operating, maintenance and general (OM&G) costs incurred by NS Power in its restoration efforts following Hurricane Fiona, the Board discussed the factors that may be considered when exercising a discretion to establish a deferral account [2024 NSUARB 116]. In the circumstances, much of that discussion would apply to this case as well. The most significant differences relate to the amount involved and the nature of the costs sought to be recovered.

[88] In this case, the net book value of the assets that are no longer used and useful because of Hurricane Fiona is approximately $10 million compared to the claimed deferral of $24.6 million in additional OM&G costs. The lower amount could be argued to make it less extraordinary or material, although taken together, the potential that approximately $35 million in unexpected extra costs relating to Hurricane Fiona would be

required to be expensed could also be argued to make matters worse. Additionally, the underlying financial position of NS Power must also be considered.

[89] Further, the costs sought to be recovered in this case relate to the undepreciated costs of capital assets that are no longer used and useful. The Board considers this to be a relevant distinction. These capital costs were always intended to be recovered over time, unlike the OM&G costs in the other matter that would normally have been expensed when incurred.

[90] On balance, the Board concludes that the recovery of the net book value of the assets, in the amount of approximately $10 million, should be amortized for recovery over a reasonable period. In this case, however, they should earn the same return as they would have immediately before Hurricane Fiona (i.e., NS Power's weighted average cost of capital).

[91] As for the amortization period, for the reasons set out in the Board's decision about NS Power's OM&G costs relating to Hurricane Fiona, the Board finds that it will begin on July 1, 2024, rather than be deferred to some unspecified point in the future. Paragraph 08 in Accounting Policy 6350 states that where the undepreciated cost of a capital asset that is no longer used and useful is allowed by the Board to be amortized, the amortization should be "over five years or over a reasonable period subject to UARB approval." For present purposes, the Board sets the amortization period at 10 years to match the period selected for the deferral of NS Power's Fiona-related OM&G costs. As in the other matter, all parties are free to argue that the period should be adjusted in NS Power's next general rate application (either shorter or longer).

3.2 D061 - New Customers - $9,699,868

3.2.1 Amount Claimed

[92] On June 9, 2022, the Board issued its decision approving NS Power's 2022 ACE Plan. The decision approved NS Power's 2022 D061 New Customers - Residential Routine in the amount of $16,353,992. The approved amount was based on the average of the prior two years' historical new customers – residential routine costs plus an annual inflation increase of 2%. NS Power used a two-year average for this routine, rather than a five-year average, to better reflect its recent significant growth in new residential customers.

[93] In the current ATO application, NS Power indicated that its actual D061 new customer – residential routine costs were $26,053,860, resulting in a ATO approval request to the Board of $9,699,868. In explaining the variance from the approved costs, NS Power stated that the 2022 cost per unit of new residential customer installs was approximately 61% (approximately $12.1 million) higher than budgeted, which was offset by higher than budgeted customer cost contributions of approximately $2.4 million. The full details of the cost variance are provided in the follow tables:

D061 - New Customers - Residential	2022 ACE	2022 Actuals	Variance
# of Units	4,469	4,472	3
Avg Unit Cost / Customer ($)	4,402	7,094	2,692
Total Cost excluding Cap. Contribution ($)	19,676,208	31,724,120	12,044,912
Customer Recovery ($)	81,310	75,498	(5,812)
Capital Contributions ($)	(3,322,216)	(5,745,758)	(2,423,542)
Total ($)	**16,353,992**	**26,053,860**	**9,699,868**

[Exhibit N-1, p. 5]

D061 - New Customers Residential	2022 ACE Plan ($)	2022 Actuals ($)	Variance ($)	Variance (%)	Explanation
Regular and Term Labour	3,939,390	4,851,231	911,841	23%	As a result of the increase in the size and complexity of new customer installs as well as an increase in unmetered service installs.
Overtime Labour	763,728	1,530,043	766,315	100%	As a result of the increased size and scope of the installs as well as the delays caused by the significant amount of storm days in 2022.
Materials	5,886,209	10,406,300	4,515,788	77%	As a result of the increased size and complexity of new customer installs, an increase in unmetered service installs as well as increased material costs, due to inflationary factors.
Contracts/Consulting	3,516,697	7,179,147	3,662,450	104%	As a result of increased scope and size of new customer installs as well as the need to use external crews to complete work due to delays caused by the significant amount of storm days in 2022.
Meals/Travel and Other	103,645	330,068	230,725	223%	As a result of the increased size and complexity of new customer installs.
Royalty, Easement, Appraisal	9,286	23,694	14,409	155%	
Vehicle Allocated Costs	1,626,342	2,078,635	452,293	28%	As a result of increases in regular and overtime labour.
Admin Overhead	3,751,386	5,331,863	1,580,477	42%	As a result of increases in regular labour, overtime labour and contracts.
Salvage	-1,783	-6,862	-5,079	285%	
Total (1)	**19,594,900**	**31,724,120**	**12,129,220**	**62%**	
Customer Recovery	81,308	75,498	-5,810	-7%	
Capital Contributions	-3,322,216	-5,745,758	-2,423,542	73%	The increases in the size in complexity of new customer installs would

D061 - New Customers Residential	2022 ACE Plan ($)	2022 Actuals ($)	Variance ($)	Variance (%)	Explanation
					have also increased the total cost to be recovered from customers as a result of installs.
Overall Total	**16,353,992**	**26,053,860**	**9,699,868**	**59%**	

[Exhibit N-8, IR-16]

[94] NS Power's application noted that the cost per customer for the routine can vary, as it depends on the number of line upgrades and extensions required to connect a customer. The number varies year over year based on the nature of new residential customer developments (e.g., an individual customer home or a multi-unit development). The company also noted that the 2022 cost per unit was significantly affected by delays in completing work due to the unprecedented number of days that were instead required for storm response in 2022. NS Power stated that this resulted in significant increases in both overtime labour for internal NS Power crews (100% increase) and contractor power line technicians (104% increase) to complete the work under the D061 routine. The size and complexity of the average install also increased in 2022, which NS Power stated is shown by the customer cost contributions increasing by 73% while the number of units remained close to budget. The company claimed that this increase in the size and complexity of projects also resulted in increases in labour (regular and overtime), contracts and materials compared to budget.

[95] As with NS Power's D008 storm routine ATO, Ms. Whitten said that the 2022 ACE Plan budget for D061 is inconsistent with past historical routine spending and builds in bias towards higher ACE budgets in the future. She noted that NS Power's ACE Plan budget for D061 is supposed to reflect an average of two years of historical new

customer – residential routine costs plus 2% inflation. However, her review of past D061 spending for 2020 and 2021 suggests that this calculation would produce a 2022 budget closer to $18,074,551. Ms. Whitten also noted that the variance for materials alone for D016 was $4,515,788, 77% over the budgeted cost.

[96] Based on her review, Ms. Whitten made the following conclusions about NS Power's D061 routine:

> 1) Because NS Power's averaging formula for estimating the D061 budget builds in an upward bias, the impact from the 2022 storms will continue to influence the D061 budget going forward until 2022 Actual results roll off the multi-year window calculation; and
>
> 2) NS Power relies too heavily on the explanation that new customer installs are inherently complex and therefore cannot be better estimated when they actually do understand the basic cost inputs and should consider how best to control them in the face of growing customer additions.
>
> 3) Consistent with NS Power's requirement to establish fair market value as part of its self-provisioning analysis, even in a growth market it should have buying power leverage to manage costs and offset inflationary trends.
>
> [Exhibit N-17, p. 22]

[97] Ms. Whitten then made three recommendations related to what she perceives as upward bias in NS Power's D061 budget estimates. First, she recommended that NS Power review its distribution routine budget estimation process to adjust for the impact of extreme events, such as it experienced during 2022, especially for D061. She also recommended that NS Power focus on reducing materials costs going forward by securing more competitive procurement terms and strive to minimize annual variances to be less than 50%. And finally, Ms. Whitten recommended that NS Power explain why the D061 New Residential Customer expense is excluded from Distribution Routines in the ACE Plan. As a more general recommendation, Ms. Whitten stated that NS Power should provide an update on the development of its Project Delivery Model (PDM) currently being piloted on new projects as a cost minimization reporting tool for future ATOs.

[98] As it relates to Ms. Whitten's concern about the amount NS Power calculated for its 2022 D061 budget (as presented in the 2022 ACE Plan application), NS Power's Reply Evidence noted that due to the timing of the 2022 ACE Plan application, the prior year total was based on the Q3 forecast amount, rather than actual spending for that year. Further, the budget was also based on pre-administrative overhead costs for each account type, and then adjusted to apply the 2022 administrative overhead rate. NS Power provided the detailed calculation of its 2022 D061 budget in its Reply Evidence to confirm the budgeted amount.

[99] In its Reply Evidence, NS Power also addressed Ms. Whitten's recommendation about what she believes is an upward bias in the company's D061 budgeting process. NS Power confirmed that the D061 routine does not include storm costs directly. As such, costs associated with extreme storms cannot be removed for the purpose of developing the routine budget. Regarding materials costs, NS Power confirmed it procures materials in a competitive manner, and materials costs are controlled by set pricing for materials negotiated by its procurement team through strategic requests for proposals which result in multi-year Service Agreements with vendors. The company also noted that demand for many of the products that it purchases has grown globally, which increases pressures on the supply chain that are not typically offset by an increase in NS Power's buying power. NS Power also noted that arbitrarily striving to minimize annual variances to be less than 50% ignores the variability of connection types included in the D061 routine.

[100] NS Power's Reply Evidence further addressed Ms. Whitten's recommendation for the company to explain why the D061 New Residential Customer

expense is excluded from Distribution Routines in the ACE Plan. NS Power agrees with Ms. Whitten that the data in Section 10.3 of the 2022 ACE Plan quantifies like-for-like costs only and excludes new customer routines, system growth and performance routines, or other routines (such as environmental assessment routines). However, NS Power stated that while that section of the report excludes this data, it does not mean those specific data types should not belong to a capital routine. The company supported this assertion by referencing its Board approved Summary Capital Expenditure Justification Criteria (CEJC) where the specific definition of capital routines includes additions to existing equipment base resulting from system growth and addition of customers to the system.

[101] In its Closing Submission, the Small Business Advocate noted that NS Power rejected Ms. Whitten's recommendation to focus on reducing materials costs going forward by securing more competitive procurement terms and strive to minimize annual variances to be less than 50%. The Small Business Advocate stated that NS Power rejected this recommendation because it already procures materials in a competitive manner and that arbitrarily striving to minimize annual variances to be less than 50% ignores the variability of connection types included in D061 routine. However, the Small Business Advocate argued that NS Power should be striving for as small a variance as possible and that the reference to 50% may be based less on a specific calculation and more about a step forward for NS Power. The Small Business Advocate stated that the 50% recommendation is about pushing for better outcomes.

[102] In its Reply to Closing Submissions, NS Power agreed that it should strive to forecast routines as accurately as possible. However, the company stated that

arbitrarily setting a target of 50% will not be effective when considering the variable nature of the D061 routine.

3.2.1.1 Findings

[103] The Board finds that Ms. Whitten's three recommendations related to what she perceives as upward bias in NS Power's D061 budget estimates have been adequately addressed in NS Power's Reply Evidence. No further Board direction concerning these recommendations is required.

[104] The Board agrees with NS Power that a 50% ATO target on materials costs would require the company to meet a standard that would be set without consideration of whether that goal is reasonably achievable within a specific routine. In addition, should NS Power submit future ATO applications for the D061 routine, the amount of each ATO will be fully vetted by the Board and stakeholders for prudence, and will remain subject to potential disallowances regardless of the percent variance from budget. This notwithstanding, the Board fully expects NS Power to minimize actual routine costs as much as possible.

[105] With regards to Ms. Whitten's recommendation that NS Power provide an update on the development of its Project Delivery Model, the Board finds that it was adequately addressed in NS Power's Reply Evidence. In addition, the Board has been canvassing this issue in recent ACE Plan proceedings. In fact, in the 2024 ACE Plan proceeding, NS Power provided a full update on its Project Delivery Model. No further Board direction is required on this issue.

4.0 CONCLUSION

[106] The Board approves the ATO requests for Distribution Routines D008 (in the amount of $108,048,218) and D061 (in the amount of $9,699,868). The Board directs NS Power to use Accounting Policy 6350 for the assets retired because of Hurricane Fiona. The undepreciated cost of these assets, which is approximately $10 million, will be amortized over 10 years beginning on July 1, 2024. The length of the amortization period may be revisited in NS Power's next GRA.

[107] An Order will issue accordingly.

DATED at Halifax, Nova Scotia, this 27th day of June, 2024.

Stephen T. McGrath

Steven M. Murphy

Richard J. Melanson