Nova Scotia Utility and Review Board

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August 16, 2023

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Manager Regulatory Strategy
Nova Scotia Power Inc.
1223 Lower Water Street
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Dear Ms. Ross:

M11052 – Nova Scotia Power Inc. re 2022 Annual Performance Standards – (E-R-22)

On March 16, 2023, pursuant to the *Public Utilities Act*, Nova Scotia Power Inc. (NS Power) filed its 2022 Annual Performance Standards Report. The Nova Scotia Utility and Review Board invited comments from stakeholders and reply comments from NS Power. On April 27, 2023, comments were received from the Small Business Advocate (SBA) and reply comments were filed by NS Power on May 18, 2023.

BACKGROUND

In 2015, the Government of Nova Scotia added ss. 52A to 52F to the *Public Utilities Act* to include certain performance requirements for NS Power. At that time, s. 52A of the *Public Utilities Act* required the Board to establish performance standards for NS Power for reliability and the utility's response to adverse weather conditions, while s. 52B required the Board to establish performance standards in respect of "such areas of Nova Scotia Power Incorporated's customer service as it determines appropriate". Sections 52C to 52E addressed reporting on NS Power's performance compared to the standards, and the Board's oversight of NS Power's compliance. This included a requirement for NS Power to file annual reports on its performance in respect of the established standards.

In accordance with the *Act*, the Board established performance standards for NS Power for reliability, response to adverse weather, and customer service. The Board's Order dated December 20, 2016, identified 13 performance standard metrics, as well as targets for those metrics. In its decision in Matter M07387, the Board set a five-year period, concluding December 31, 2021, to review the performance standards to ensure they remained relevant and effective.

In the Board's decision about NS Power's 2017 Performance Standards Report (M08574) NS Power was directed to expand its reliability reporting in subsequent years to include all-inclusive SAIFI and SAIDI indices, and to include a year-over-year comparative analysis of planned outages.

On October 4, 2021, NS Power filed an application proposing amendments to nine of the thirteen performance standards for implementation in 2022 and a new standard for reports for weather related outages affecting 30,000 or more customers. This was followed by a Board Order directing that the matter (M10279) proceed by way of a paper hearing and a timetable for that process was provided.

The Board's decision was issued on February 22, 2022. Following a review of NS Power's revised Compliance Filing, a Board Order was issued on April 7, 2022 approving a revised set of performance standards for the 2022 to 2026, as well as metric targets for 2022 as noted below.

Reliability

- System Average Interruption Frequency Index (SAIFI) ≤ 4.29
- System Average Interruption Duration Index (SAIDI) ≤ 2.05
- Circuit Average Interruption Frequency Index (CKAIFI) ≤ 19.81
- Circuit Average Interruption Duration Index (CKAIDI) ≤ 5.45

Response to Adverse Weather

- Customer notification of an oncoming severe weather event within 4 hours of opening the Emergency Operations Centre (EOC)
- A minimum of 85% of calls answered within 45 seconds during a severe outage event
- Polite disconnect rate of 10% or less annually for all outage calls
- Estimated Time to Restore (ETR) updates communicated to customers without delay during outages
- Percentage of customers restored within 48 hours of a severe weather event:
  - Extreme Event Days (EEDs) ≥ 78.38%
  - Major Event Days (MEDs) ≥ 91.98%
  - Significant Event Days (SEDs) ≥ 95.05%
- Outage Report for Events Impacting 30,000 Customers or more:
  - File Report Within 45 days of the event, or within 75 days in the case of a MED or EED

Customer Service

- Percentage of calls answered within 30 seconds ≥ 70%
- Percentage of customer bills that can be estimated ≤ 2%
- Customer notification of outages as soon as known to NS Power
- New service connection times
  - Service Installation -- No Poles ≤ 3.0 days
  - Service Installation -- Pole or Transformer ≤ 4.9 days
  - Service Installation -- Temporary to Permanent ≤ 3.2 days
  - Service Installation -- Line Extension less than 10 Poles ≤ 6.2 days
  - Service Installation -- Line Extension ≥ 10 Poles ≤ 18.1 days

Under the *Act,* the Board has authority to take measures to ensure NS Power's compliance with the performance standards, including ordering NS Power to pay an administrative penalty or to develop and file a plan for bringing itself into compliance with a performance standard, or both.

On March 22, 2023, the Province introduced Bill No. 263 which repealed section 52E and substituted new clauses. Bill No. 263 received Royal Assent on April 12, 2023. The clauses substituted for 52E(1) and 52E(2) state the following:

> 52E (1) The amount of any administrative penalty to be paid by Nova Scotia Power Incorporated is the amount determined by the Board or prescribed by the regulations to be

> appropriate in order to promote future compliance with the performance standards and not for a punitive purpose or effect or for redressing a wrong done to society at large.
>
> 52E(2) The cumulative total of administrative penalties levied against Nova Scotia Power Incorporated in a calendar year must not exceed twenty-five million dollars.

Although these amendments significantly increase the cumulative total of administrative penalties, they only came into force upon Royal Assent on April 12, 2023. Earlier amendments to ss. 52A to 52F, which came into force upon Royal Assent on April 22, 2022, made no substantive change to the Board's authority to order NS Power to pay an administrative penalty, other than to provide that the Governor in Council may prescribe in regulations the amount of the penalty and how and to whom penalties are to be paid. At this point, there are no such regulations.

The 2023 amendments do not specifically state that they are intended to have retroactive effect; therefore, the Board will adhere to the maximum permissible penalty of one million dollars that applied at the time when NS Power's performance was being measured against the 2022 standards. The new penalties will apply to performance results beginning in 2023.

PERFORMANCE RESULTS FOR 2022

Based on the results filed in its annual report, NS Power failed to fully satisfy 5 of the 14 performance standard targets established for 2022. Three of those performance standards are reliability targets, one is an adverse weather target, and one is a customer service target, all of which are identified below:

- SAIFI -- the system average outage frequency result for 2022 was 2.19, which did not satisfy the target value of ≤2.05

- SAIDI -- the system average outage duration result for 2022 was 5.16, which did not satisfy the target value of ≤4.29

- CKAIDI -- the circuit average outage duration target for 2022 was ≤19.81, which was not satisfied for one of the six problem circuits

  - Keltic Drive circuit 11S-411 had a performance result of 22.84

- Percentage of Customers Restored within 48 hours of a severe weather event:
  (Note that Hurricane Fiona made landfall in Nova Scotia during late evening of September 23, 2022)

  - Extreme Event Days (EEDs) results for September 23 was 65.42% and for September 24 it was 60.98%, both of which did not satisfy the target value of ≥ 78.38%
  - Major Event Days (MEDs) results for September 26, 27, 28, and 29 were 86.39%, 74.88%, 77.53%, and 90.20%, respectively, all of which did not satisfy the target level of ≥ 91.98%
  - Significant Event Days (SEDs) result for September 30 was 85.48%, which did not satisfy the target level of ≥ 95.05%

- New Service Connection Times:

  - Service Installation -- Pole or Transformer result for 2022 was 5.09, which did not satisfy the target value of ≤ 4.9 days
  - Service Installation -- Temporary to Permanent result for 2022 was 3.73 days, which did not satisfy the target value of ≤ 3.2 days
  - Service Installation -- Line Extension less than 10 Poles result for 2022 was 6.38 days, which did not satisfy the target value of ≤ 6.2 days

All other 2022 annual performance targets were achieved; however, certain results during specific months fell short of the corresponding annual targets.

Regarding the Percentage of Customers Restored within 48 hours of a severe weather event, NS Power failed to satisfy the targets on seven occasions but stated on page 44 of 173 of its report:

> NS Power considers the Percentage of Customers Restored within 48 hours standard for 2022 to be met because the timing of restoration events spanning September 23-30 during Hurricane Fiona was strongly influenced by the priorities of the Provincial and Regional Emergency Management Offices.
> …
>
> In some cases, teams of crews worked for hours to remove trees blocking roadways so that they could access areas with prioritized restoration for critical infrastructure such as hospitals, medical facilities, care homes, water pumping and treatment stations, emergency communications stations, and cell sites. NS Power agrees that these were the appropriate places to prioritize early restoration efforts, but focusing on these individual locations does impact overall outage restoration pace.

Also, due to the impact that Hurricane Fiona had on calculation of event day thresholds, NS Power asked the Board to consider the impact of changing weather patterns in the province and proposed maintaining the 2022 thresholds in 2023. Those thresholds are based on the IEEE 1366 guideline which results in MED and EED thresholds increasing in a year when a utility experiences an increase in the average daily customer hours of interruption. Consequently, certain storms which would previously have been categorized as MEDs or EEDs may no longer be classified as such and would be counted in the “blue sky” SAIFI and SAIDI metrics.

Other Reporting

In addition to the 14 performance standard metrics established for 2022, NS Power was also required to report on its “all-inclusive” SAIFI and SAIDI results, as well as its performance regarding planned outages.

Although “all-inclusive” SAIFI and SAIDI indices are not formally included as performance standards, these results provide a broader portrayal of overall service levels being experienced by customers. Results for 2022 were 5.82 for SAIFI and 74.87 for SAIDI, which is significantly worse than the 2021 results of 2.56 for SAIFI and 5.603 for SAIDI, and the 2020 results of 2.71 for SAIFI and 6.57 for SAIDI.

Regarding planned outages, NS Power was previously directed to include a year-over-year comparison, and to provide a summary of steps taken to reduce the number and duration of planned interruptions. Like the “all-inclusive” SAIFI and SAIDI performance, standards for planned outages have not been formally established.

During 2022, the planned outage indices for SAIFI and SAIDI were 0.39 and 0.63, respectively. Although the number of planned outages decreased from 572 in 2021 to 467 in 2022, the frequency and duration indices for planned outages increased by 39% and 54%, respectively. In addition, about 39% of customers experienced a planned outage in 2022 and the overall duration of those outages was 2.98 hours, an increase of 15%. The average number of customers impacted by a planned outage increased from 258 in 2021 to 440 in 2022.

It is worthy to note NS Power's statement that during regular business operations, crews directly reach out to customers with a knock on their door to coordinate a short outage to facilitate reliability and upgrade work in real time. Those outages are not coded as planned outages.

Customer-Level Reliability Data

In Matter M10279, the Board directed NS Power to include an update in the 2022 Performance Standards Report on its progress in developing customer-level reliability data. NS Power reported a five-year average value of 10.2% for CEMI-5 (Customers Experiencing Multiple Interruptions), indicating that 10.2% of customers experienced five or more sustained outages on average from 2017-2021 (with MEDs, EEDs and planned outages removed). The preliminary five-year average value for CEMI-4 (four or more interruptions) is 18.7%.

NS Power also reported the preliminary five-year average value for CELID-8 (Customers Experiencing Long Interruption Duration) as 28.9% (with MEDs, EEDs and planned outages removed). This metric indicates that over the same 2017-2021 period, 28.9% of customers experienced an average of eight cumulative hours of interruption annually.

Recognizing that establishing customer-level reliability standards is still under development, NS Power considers the preliminary values for CEMI and CELID to be "first operational values" for those metrics. Further consideration is required in determining a baseline for comparison, ensuring accuracy of reported data, and gaining perspective about how best to interpret and make sound investment decisions based on the resulting customer level reliability trends.

To assist in determining comparator values in other utilities or to establish benchmarks, NS Power undertook an analysis of 32 Electricity Canada member utilities. Of those 32 utilities, only BC Hydro reports on the CEMI-4 customer-level reliability metric. However, NS Power does not consider BC Hydro to be an appropriate comparator for benchmarking or target setting, since its operating conditions, such as exposure to severe weather events and hurricanes, are significantly different than in Nova Scotia. NS Power intends to continue monitoring and reporting on the use of customer-level reliability metrics.

SMALL BUSINESS ADVOCATE COMMENTS

The SBA focused on NS Power's failure to meet certain reliability performance standards, the increased volume of work which coincided with a slight decline of powerline technicians, failure to meet the standard for Percentage of Customers Restored within 48 hours of an SED, MED, and EED, and the apparent ineffectiveness of vegetation management associated with circuit 11S-411.

In its letter of April 27, 2023, the SBA also stated:

> NSP has been consistently saying that storms and winds are becoming more severe. It is imperative that, while we may not build to withstand the most severe storms that affect us, we can expect NSP to be able to respond quickly and effectively to the damage they do cause.
> …

The SBA is very concerned that NSP has yet to have a year in which all the Performance Standards were met. The targets are set in coordination with NSP and are based on what is considered reasonable to achieve. A continuing inability to meet those targets raises significant concerns for the SBA, including for the SBA's rate classes that rely on safe and reliable energy for their businesses, and for the communities that rely on those businesses for their needs.

BOARD REVIEW

i) Reliability Performance

In addition to reviewing NS Power's performance during 2022, it is important to also view a comparison of results for the previous years since the performance standards were established. Information extracted from the reports for each of 2017, 2018, 2019, 2020, 2021 and 2022 is presented in the tables that follow.

Table 1 – Overall System Reliability Performance

	TARGET	ACTUAL
SAIFI		
2017	2.05	1.73
2018	2.05	2.00
2019	2.05	2.58
2020	2.05	2.05
2021	2.05	2.27
2022	2.05	2.19
SAIDI		
2017	4.29	3.40
2018	4.29	4.43
2019	4.29	5.99
2020	4.29	3.98
2021	4.29	5.23
2022	4.29	5.16

Table 1 presents NS Power's annual system-wide SAIFI and SAIDI reliability performance indices, excluding MEDs, EEDs, and planned outages. The results show a deteriorating trend in the initial years, which improved in 2020 to the point that the established targets were achieved but deteriorated again in 2021. However, due to insufficient improvement, the target levels continue to remain constant at the level initially established in 2017.

In the recent 2022-2026 Performance Standards proceeding (Matter M10279), the Board accepted that Hurricane Dorian in 2019 had a significant impact on the MED and EED thresholds used to determine NS Power's SAIFI and SAIDI results. However, as noted by NS Power on page 47 of its report, the Board's decision in matter M10279 stated "NS Power should not assume that data from any future hurricanes or severe weather events will receive similar treatment."

The Board also accepted that, in certain cases, the second day of a two-day severe outage event should be removed from the calculation of NS Power's reliability metrics.

All-Inclusive SAIFI and SAIDI

Table 2 presents comparative results over the past six years as extracted from appendices to NS Power's filings for 2022, 2021, 2020, 2019 and 2018.

All-Inclusive SAIFI and SAIDI indices provide a broader perspective of the customer outage experiences. From an outage frequency and duration perspective, customer experiences initially deteriorated, but then improved in 2020 and 2021. That improvement is likely due to no EED events occurring during 2020 or 2021, and no MED events occurring in 2021. However, storm events in 2022, particularly Hurricane Fiona, resulted in greatly deteriorated results in 2022.

Table 2 – All-Inclusive SAIFI and SAIDI Results

	All-In SAIFI	All-In SAIDI
2017	2.81	8.57
2018	4.56	16.26
2019	4.52	43.88
2020	2.71	6.57
2021	2.56	5.603
2022	5.82	74.87

Planned Outages

Like the All-Inclusive classification, planned outages are not formally included as approved performance standard metrics. However, this information provides valuable insight into operational activities and potential opportunities to improve overall outage performance. Historical results over the past six years are summarized in the following table:

Table 3 -- Planned Outages

	Number of Planned Outages	Average Customers per Planned Outage	Percentage of Customers Experiencing a Planned Outage	Average Duration per Outage
2017	429	409	35%	2.3
2018	420	354	29%	1.9
2019	402	356	28%	3.34
2020	490	257	24%	2.76
2021	572	258	28%	2.59
2022	467	440	39%	2.98

It should be noted that the above durations are averages for planned outage events, regardless of the number of customers affected, which is different from the system duration index SAIDI. As can be seen from Table 3, the number of planned outages decreased in 2022, however, the average number of customers per planned outage increased, as did the percentage of customers experiencing a planned outage, and the average duration per outage.

Regarding distribution circuit reliability performance, all three CKAIFI problem circuits satisfied the performance target for 2022. However, one of the six CKAIDI problem circuits (11S-411) failed to achieve the performance target.

A “problem circuit” is one which has been identified as being among the worst 5% of all NS Power’s distribution circuits for two consecutive years, whereas a “chronic circuit” is one which has been in that category for three consecutive years.

The following table provides an annual listing of the problem circuits.

Table 4 – Annual Listings of Problem Circuits

	2017	2018	2019	2020	2021	2022
CKAIFI	Weymouth 16V-314 Pt. Tupper 1C-411 North Sydney 3S-301 Trenton 50N-410	Pugwash 7N-302 Whycocomagh 67C-411	Wreck Cove 85S-401 Upper Burlington 18V-413 SW Margaree 58C-403 Martins Brook 78W-302	Wreck Cove 85S-401 Upper Musquodoboit 88H-402 SW Margaree 58C-403	Wreck Cove 85S-401 Ruth Falls 96H-412 Port Hastings 2C-402 St Peter’s 59C-402 Middlefield 91W-411	Port Hastings 2C-402 Dickie Brook 24C-442 St Peter’s 59C-402
CKAIDI	Weymouth 16V-314 Wreck Cove 85S-402 Weymouth 16V-315 Parrsboro 37N-312	Wreck Cove 85S-401 Wreck Cove 85S-402 Port Hastings 2C-402	Wreck Cove 85S-401 Wreck Cove 85S-402 Upper Burlington 18V-413	Wreck Cove 85S-401 Upper Musquodoboit 88H-402 Aberdeen 9C-303 Whycocomagh 67C-411 Parrsboro 37N-413	Upper Musquodoboit 88H-402 Whycocomagh 67C-411 Wreck Cove 85S-401 Ruth Falls 96H-412 Upper Musquodoboit 88H-401	Cape Porcupine 100C-421 Whycocomagh 67C-411 Dickie Brook 24C-442 Conway 77V-401 Port Hastings 2C-402 Keltic Drive 11S-411

ii) Response to Adverse Weather

NS Power’s customer restoration performance results regarding Significant Event Day, Major Event Day and Extreme Event Day storms for 2022 and the five previous years are summarized in the table below:

Table 5 – Annual Service Restoration During SEDs, MEDs and EEDs

	TARGET	ACTUAL
SED		
2022	95.05%	85.48% (1 event day)
MED		
2017	86.5 %	99.31% (4 event days)
2018	87.44%	99.86% (6 event days)
2019	88.41%	90.93% (6 event days)
2020	88.41%	98.45% (3 event days)
2021	88.41%	No events
2022	91.98%	74.88% to 100% (16 event days)
EED		
2017	65.3 %	98.41% (1 event day)
2018	66.28%	99.9% (2 event days)
2019	68.71%	76.06% (2 event days)
2020	68.71%	No events
2021	68.71%	No events
2022	78.38%	60.98% to 82.67% (3 event days)

iii) Customer Service

There are four primary customer service performance targets established in the customer service category. On an annual basis, NS Power was able to achieve performance targets in three of those categories. However, when considering the performance during each individual month, several results were below the established annual target levels. For example,

- 70% of Calls Answered Within 30 seconds was not achieved during April, May, June, August, October, and November
- New Service Connection Time (no poles) was not achieved during March, April, July, August, October, and November
- New Service Connection Time (pole or transformer) was not achieved in March, April, July, August, October, and November
- New Service Connection Time (temporary to permanent) was not achieved in March, April, May, June, July, August, November, and December
- New Service Connection Time (line extension <10 poles) was not achieved in April, July, August, October, and November.

As stated in previous Board decisions, these customer service targets are annual targets, but the Board expects NS Power to work towards achieving the target levels during each month of the year, not just on a 12-month basis.

NS Power's performance results for 2022 and the five previous years in each of the five categories for New Service Connection Times are shown in the following table:

Table 6 – New Service Connection Performance (Days)

	TARGET	ACTUAL
2017		
No Poles	2.8	2.2
Pole or Transformer	5.9	4.2
Temporary to Permanent	2.9	2.3
Line Extension <10 Poles	8.8	5.2
Line Extension ≥10 Poles	31.7	12.1
2018		
No Poles	2.4	2.0
Pole or Transformer	5.2	4.0
Temporary to Permanent	2.8	2.1
Line Extension <10 Poles	7.4	5.1
Line Extension ≥10 Poles	26.9	12.2
2019		
No Poles	2.4	2.3
Pole or Transformer	5.2	4.6
Temporary to Permanent	2.8	2.5
Line Extension <10 Poles	7.4	6.3
Line Extension ≥10 Poles	26.9	21.5
2020		
No Poles	2.2	2.1
Pole or Transformer	4.4	4.3
Temporary to Permanent	2.8	2.6
Line Extension <10 Poles	5.8	5.6
Line Extension ≥10 Poles	25.8	14.6
2021		
No Poles	2.2	2.18
Pole or Transformer	4.4	4.39
Temporary to Permanent	2.5	2.41
Line Extension <10 Poles	5.8	5.45
Line Extension ≥10 Poles	25.8	9.70
2022		
No Poles	3.0	2.98
Pole or Transformer	4.9	5.09
Temporary to Permanent	3.2	3.73
Line Extension <10 Poles	6.2	6.38
Line Extension ≥10 Poles	18.1	12.02

FINDINGS

This past year is the sixth consecutive year that NS Power has failed to meet certain of its performance targets.

- In 2017, one of the targets, CKAIDI, was not achieved.
- In 2018, two of the performance targets, SAIDI and CKAIDI, were not achieved.
- In 2019, performance further deteriorated to the point that six targets were not achieved. Those metrics were SAIFI, SAIDI, CKAIFI, CKAIDI, Percentage of (regular business) calls answered within 30 seconds, and Percentage of customer bills that can be estimated.
- In 2020, NS Power failed to achieve two of its performance standards, CKAIDI and the Percentage of customer bills that can be estimated.
- In 2021, the four reliability targets, SAIFI, SAIDI, CKAIFI, and CKAIDI were not achieved.
- In 2022, three reliability targets, SAIFI, SAIDI, and CKAIDI as well as one customer service target and one adverse weather target were not achieved.

The Board notes NS Power's statements that increasingly powerful storms are impacting the province more frequently and that there has been a trend of increased investment in the T&D infrastructure over the past decade. Despite those increased expenditures, there continues to be a failure to achieve certain reliability targets in each year since the standards were established.

The Board also notes NS Power's statements that the hours of customer-driven work started to increase in the fall of 2020, continued to increase into 2021, and that there has been a 26 percent increase in the hours required for customer-driven work since 2019. Despite identifying this trend in core activities and the need to enhance staffing resources, NS Power has not been able to take the action needed to avoid failures in meeting its customer service targets.

On the issue of storm response, NS Power asked the Board to forego the standard approach in calculating MED and EED thresholds for 2023 in favour of retaining lower values from 2022. As noted by NS Power, in the recent M10279 proceeding to establish performance standards and targets for the 2022 to 2026 period, the Board permitted a modification to omit Hurricane Dorian's impact in establishing MED and EED thresholds, which addressed a concern raised by NS Power. In doing so, the Board clearly stated that "NS Power should not assume that data from any future hurricanes or severe weather events will receive similar treatment." The Board has considered NS Power's request to afford similar treatment regarding Hurricane Fiona.

The Board recognizes that the inclusion of Hurricane Fiona will likely have a significant impact on the calculation of future MED and EED thresholds for NS Power's performance standards reporting. However, the increasing intensity, severity, and frequency of adverse weather events are not new phenomena. In its 2019 Annual Performance Standards Report (M09472, Exhibit N-2), NS Power said, "Storms have increased in intensity and frequency over the last decade." It is incumbent upon NS Power to appropriately address the challenges of climate change and adverse weather events. As such, the Board finds that NS Power's proposal to maintain the 2022 MED and EED thresholds in 2023 would diminish the performance standards too much moving forward. Therefore, similar to how the Board allowed NS Power to omit certain Hurricane Dorian outage data from its MED and EED threshold calculations, the Board will allow NS Power to exclude some Hurricane Fiona outage data from its MED and EED calculations. Specifically, the Board will allow NS to exclude the three EEDs (September 23 to September 25, 2023), inclusive, from the calculations. The Board will also allow NS Power to exclude the MED on September 26, 2023, from the calculations as it resulted in a significant number of customers being interrupted on that day with a correspondingly high customer hours of interruption (CHI). Again, the Board reminds NS Power that it should not assume that data from any future hurricanes or severe weather events will receive similar treatment, particularly since these events are becoming less exceptional.

As noted earlier, the Board has the authority under the *Act* to take measures to ensure NS Power's compliance with the performance standards, including ordering NS Power to pay an administrative penalty or to develop and file a plan for bringing itself into compliance with a performance standard, or both. However, any administrative penalty that is levied must be appropriate in order to promote future compliance with the performance standards and not for punitive purposes or effects or for redressing a wrong done to society at large.

On page 10 of its report, NS Power stated that it "…welcomes Performance Standards as part of the strong regulatory oversight of the business. Performance Standards provide the transparency and accountability that customers deserve. NS Power is focused on meeting and exceeding the standards."

On page 171 of its report, NS Power stated that it "…is committed to meeting the Performance Standards as established by the Board. NS Power takes its responsibility to provide a safe, reliable power system as paramount and understands the importance of balancing investments while ensuring the lowest cost for customers."

The Board understands that NS Power has taken certain measures to improve its performance in meeting established standards and targets. The expected improvements have not been achieved. Aside from a simple year-over-year improvement as suggested by NS Power on page 171, the fundamental outcome anticipated from establishing performance standards is to produce continuous improvements in reliability, response to adverse weather, and customer service.

As previously stated by the Board, customers are entitled to receive an appropriate level of service for the rates and fees they are charged by the utility. It is not acceptable that non-compliance of the performance standards has become a normal occurrence. This point was also raised by the SBA and warrants repeating:

> The SBA is very concerned that NSP has yet to have a year in which all the Performance Standards were met. The targets are set in coordination with NSP and are based on what is considered reasonable to achieve. A continuing inability to meet those targets raises significant concerns for the SBA, including for the SBA's rate classes that rely on safe and reliable energy for their businesses, and for the communities that rely on those businesses for their needs.

In its report, NS Power noted Nova Scotia is experiencing a changing climate and weather patterns, with more frequent and severe adverse weather events. The company urged the Board to consider the severe weather events in 2022 and its investment action plans already in place when evaluating its results for the year. While these are relevant circumstances, the Board also recognizes that one of the consequences of our urgent need to rapidly decarbonize, in the effort to stave off even more dire climatic changes, is an increasing trend towards electrification. This means that despite the changing climate, the need for a reliable electrical grid is at least as important (and likely more important) than ever. If more frequent and damaging storms are becoming the "new normal", NS Power needs to ensure that its performance, not just its investment plans, keeps up with these changes. The Board anticipates these issues will be thoroughly canvassed by NS Power in its Climate Change Adaptation Plan, which the Board has previously directed be developed using a consultative process and filed with the Board no later than the end of 2025.

Following the Board's review of NS Power's 2019 Performance Standards Report, an administrative penalty of $250,000 was assessed. After considering NS Power's 2021 Performance Standards Report, the Board determined it appropriate to levy an administrative penalty of $375,000 in order to promote future compliance. However, failure to meet the established performance standard targets continues to occur. Considering NS Power's latest

performance results and the points raised above, the Board has determined that a further administrative penalty in the amount of $750,000 is warranted.

PERFORMANCE TARGETS for 2023

Performance standards and targets for the 2022 to 2026 period were established in matter M10279. However, certain targets require annual updating. Accordingly, updated targets for 2023 are noted in Attachment 1.

Yours truly,

Stephen T. McGrath, K.C.
Chair

Roland A. Deveau, K.C.
Vice Chair

Steven M. Murphy, MBA, P.Eng.
Member

c: W. Mahody, K.C., Board Counsel
Participants M11052

Attachment

Attachment 1 – 2023 Performance Standards

Metrics	Targets
Reliability	
System Average Interruption Frequency Index (SAIFI)	≤2.05
System Average Interruption Duration Index (SAIDI)	≤4.29
Circuit Average Interruption Frequency Index (CKAIFI)	Cleveland 22C-402 Keltic Drive 11S-411 Bridge Ave 62N-413
Circuit Average Interruption Duration Index (CKAIDI)	Cleveland 22C-402 Keltic Drive 11S-411
Response to Adverse Weather	
Customer notification of an oncoming severe weather event within a specific time frame	Within 4 hours of opening Emergency Operations Centre (EOC) (fixed for 2022 to 2026)
Percentage of calls answered within 45 seconds during a severe outage event	85% (fixed for 2022-2026)
Polite disconnect rate for all outage calls	10% or less (fixed for 2022-2026)
Estimated Time to Restore (ETR) updates communicated to customers during an outage	Provided without delay (fixed for 2022 to 2026)
Outage Report for >30,000 customers	Within 75 days for an EED or MED and 45 days for an SED
Percentage of customers restored within 48 hours of a severe weather event ➢ Significant Event Days (SEDs) ➢ Major Event Days (MEDs) ➢ Extreme Event Days (EEDs)	 95.05% 91.98% 78.38%
Customer Service	
Percentage of calls answered within 30 seconds	70% (fixed for 2022 to 2026)
Percentage of customer bills that can be estimated	No more than 2% (fixed for 2022 to 2026)
Customer notification of outages	As soon as known by NSPI (fixed for 2022 to 2026)
New service connection times ➢ Service Installation -- No Poles ➢ Service Installation -- Pole or Transformer ➢ Service Installation -- Temporary to Permanent ➢ Service Installation -- Line Extension less than 10 Poles ➢ Service Installation -- Line Extension greater than or equal to 10 Poles	 ≤3.0 days ≤4.9 days ≤3.2 days ≤6.2 days ≤18.1 days