M12661

NOVA SCOTIA ENERGY BOARD

IN THE MATTER OF: **THE PUBLIC UTILITIES ACT**

- and -

IN THE MATTER OF: **AN APPLICATION** by **NOVA SCOTIA POWER INCORPORATED** for approval of an Extra Large Industrial Dispatchable Above-the-Line Tariff applicable to Port Hawkesbury Paper

SYNAPSE INFORMATION REQUEST RESPONSES

To: **The Industrial Group**
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From: **Melissa Whited**
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Responses Due: **Monday, June 22, 2026**

Copies: **1 electronic copy (PDF searchable)**

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Issued at Halifax, Nova Scotia, this 22nd day of June 2026.

Request IR-1:

Please provide a complete list of all evidence, documents or other records reviewed in advance of preparing of your evidence.

Response IR-1:

Synapse reviewed the following records:

IR Responses Submitted in M12661:

- PHP (Board Staff) IR-1 through IR-2
- PHP (NSPI) IR-1 through IR-13
- PHP (Synapse) IR-1 through IR-5
- PHP (IG) IR-1 through IR-11
- PHP (BW) IR-1 through IR-4
- PHP (CA) IR-1 through IR-7
- PHP (SBA) IR-1 through IR-8
- NSPI (Synapse) IR-1 through IR-29
- NSPI (IG) IR-1 through IR-31
- NSPI (SBA) IR-1 through IR-8
- NSPI (PHP) IR-1 through IR-6
- NSPI (CA) IR-1 through IR-9
- NSPI (BW) IR-1 through IR-14
- NSPI (NSEB) IR-1 through IR-6

Evidence and Attachments in M12661:

- N-1 ELID Tariff Application
- N-2 Brubaker & Associates Evidence on behalf of PHP
- N-3 PHP Evidence

Materials from M09420:

- N-14(C) Synapse Evidence
- N-1 NSPI Application

- Board Decision

Materials from M10431:

- Evidence of Bates White

Materials from M11301:

- Board Decision and Order

Materials from M12184:

- Board Decision and Order

Materials from M12451:

- Settlement Agreement
- Undertaking U-3
- Board Decision
- 2026-2027 GRA SR-01 – SR-04

Other Materials:

- Board Decision in NSUARB-NSPI-P-878

Request IR-2:

Reference: N-21 – Synapse Evidence, p.3/pdf p.5, lines 6-7.

NS Power's proposed tariff … represents an appropriate transition from a below-the-line to an above-the-line framework for service to PHP.

(a) What, if any, significance should other ratepayers and the Board take from the reference to a "transition"?

(b) What factors does Ms. Whited believe make a transition appropriate or not appropriate.

Response IR-2:

(a) The term "transition" simply recognizes that the ELID proposal would move PHP from a below-the-line tariff to a more conventional above-the-line tariff.

(b) Factors that would make a transition to an above-the-line tariff appropriate include:

 i. the new tariff reasonably reflects the customer's use of the system and contribution to system costs;

 ii. the new tariff reduces unnecessary complexity relative to the prior tariff;

 iii. the new tariff results in a continuation or increase in the net benefits provided to other customers (such as through the provision of system services).

Request IR-3:

Reference: N-21 – Synapse Evidence, p.4/pdf p.6, lines 1-4.

> ***Instead, I recommend that the Board direct PHP and NS Power to negotiate an alternative credit value that would induce PHP's participation, while ensuring that a portion of benefits is retained for other customers***

(a) Please confirm whether Ms. Whited's position is that the interruptible credit (if any) is appropriately determined through negotiation rather than through cost-of-service analysis?

(b) If confirmed, provide a detailed explanation for this position, including:

- **i. The regulatory principle(s) relied upon to support a negotiated credit;**
- **ii. How a negotiated credit ensures compliance with the requirement that rates be just and reasonable; and**
- **iii. Any precedent decisions or regulatory guidance supporting the use of negotiation in place of cost-based determination.**

(c) Please explain how a negotiated interruptible credit would:

- **i. Avoid over-recovery or under-recovery of NSPI's revenue requirement;**
- **ii. Ensure that other ATL customers are not subsidizing PHP; and**
- **iii. Maintain consistency with cost causation principles.**

(d) Please explain why it would be appropriate, from a regulatory perspective, or PHP to receive a credit that differs from cost-based results.

(e) Please define precisely what is meant by "induce participation" including:

- **i. The economic threshold or criteria used to determine whether PHP is "induced" to participate;**

ii. Whether this threshold reflects PHP's internal economics, alternative supply options, or other non-utility cost considerations;

iii. Whether subjective inducement on the part of PHP is sufficient; and

iv. Whether and how such criteria are measured, or verified and how they are appropriate for rate-setting purposes.

(f) Please provide any regulatory precedents where an interruptible credit (or analogous rate element) for an above-the-line embedded cost-based rate, has been explicitly set based on a customer-specific inducement threshold.

(g) In recommending a "portion of benefits", what does Ms. Whited consider a reasonable portion and why?

(h) What analysis or criteria should the Board apply to assess whether a proposed negotiated credit value satisfies both recommended considerations, i.e. that is sufficient to induce participation and that it retains a portion of benefits for other customers (to the appropriate level discussed in (g), above)?

Response IR-3:

(a) Not confirmed. Ms. Whited's position is that the interruptible credit is appropriately determined through both negotiation and through cost-of-service analysis. Specifically, the credit should be capped at the avoided capacity cost associated with PHP's interruptible load, while accounting for the reduction in PHP's expected revenue contribution and the overall revenue requirement relative to a scenario in which PHP was not interruptible. Thus, the credit would be based on the marginal cost of capacity, with a negotiated amount of benefits provided to other customers. Please see Synapse response to PHP (Synapse) IR-2, subpart (a).

(b) Explanation:

i. Ms. Whited's proposal relies on the general concept that the compensation level for grid services should be designed to provide benefits to all ratepayers where possible. As stated in Ms. Whited's evidence, setting the interruptible credit equal to the full marginal cost would allocate all of the benefits of avoided capacity to PHP, leaving other customers no better off than if an equivalent amount of generation capacity had been procured. Alternatively, if PHP declines to participate in an interruptible rider, then NS Power ratepayers would lose out on the potential cost savings associated with PHP providing demand reductions for less than the marginal cost of procuring the capacity from another source. At the same time, differences in PHP revenue contributions must also be accounted for to determine the overall impact on other ATL customers' bills.

ii. Please see the response to subpart (a).

iii. The Federal Energy Regulatory Commission (FERC) Orders 745 and 745-A discuss the use of a net benefits test in determining demand response compensation. FERC ruled that compensating resources at the full avoided cost (the locational marginal price) is justified only if the demand response resource is a cost-effective alternative to generation resources and provides net benefits to other customers. Each regional transmission organization or independent system operator was directed to develop a compensation level that would be cost-effective. Negotiation is not specifically mentioned by FERC because this is not a common approach in wholesale markets. However, the general principle still applies that lower cost alternatives to generation can produce net benefits to all ratepayers if the compensation rate is less than the full avoided cost, but sufficiently high enough to induce participation by those resources, while also accounting for changes in revenue impacts.

(c) (i – iii) PHP would be charged for capacity based on embedded costs, thereby maintaining consistency with cost causation principles. Providing interruptible credits to PHP at a negotiated level that is less than the full avoided capacity cost (net of PHP's expected revenue contribution) would reduce costs to all ratepayers relative to obtaining the capacity from the marginal generator.

(d) It is appropriate to deviate from a credit at the level of the full avoided cost of capacity in order to ensure that the credits provided to PHP provide net benefits to other customers.

(e) (i – iv) "Induce participation" means a credit high enough that PHP is willing to take service on the tariff. The minimum compensation rate required to induce participation is based on PHP's internal economics (including PHP's assessment of its alternative supply options) and is not readily observable to other parties. Thus, it cannot easily be measured or verified. However, based on PHP's statement that it is unwilling to accept an interruptible credit level of $8.404/kVA in 2026 (including the 10% priority credit,) the level of compensation required to induce participation is likely to be higher than $8.404/kVA, but less than the compensation rate of $13.107/kVA, which PHP proposed. Setting the interruptible credit at the minimum level required to induce participation (but less than the full avoided cost of capacity and accounting for revenue impacts) is appropriate for rate-setting purposes because it maximizes net benefits to all ratepayers relative to the alternative of procuring alternative sources of capacity at $13.107/kVA.

(f) In Ms. Whited's experience, credits for demand response or other grid services are often set with consideration for what level of incentive would be required to induce customer participation, up to the avoided cost level. Ms. Whited is not aware of credits set with respect to an individual customer's inducement threshold, likely because it is uncommon for a single customer to represent such a large portion of the load on any one system (as is the case with PHP) and thus represent such a large capacity resource.

(g) Ms. Whited has not developed a specific recommendation. Any level that provides net benefits to customers could be considered "reasonable," but public utility commissions often seek to retain more than the minimum amount of benefits for all customers.

(h) The relevant criteria are: (1) Whether PHP agrees to take service on the tariff, (2) whether the tariff is less than the avoided cost of capacity (net of PHP's expected revenue contribution), and (3) what the rate impacts are on other customers.

Request IR-4:

Reference: N-21 – Synapse Evidence, p.9/ pdf p.11, lines 16-17.

…[T]here is no above-the-line offering that would serve as a default rate for PHP.

(a) Please confirm Ms. Whited's understanding that PHP would meet the Availability Clauses of the Large Industrial Tariff and could take service as a Large Industrial Interruptible Customer. If not, please explain.

(b) Please confirm Ms. Whited's understanding that PHP could also qualify for the below-the-line 1P Transmission Real time Pricing (1P-RTP) Tariff. If not, please explain.

(c) Is Ms. Whited aware that until 2003 when the Extra Large Industrial Interruptible rate (ELIIR) was approved, PHP's predecessor, Stora Enso, took service under the Large Industrial Interruptible rate?

(d) Is it Ms. Whited's understanding that the current proposal is unlikely to result in uptake by PHP based solely on PHP's own evidence? Please explain and provide a copy of any independent analysis done.

Response IR-4:

(a) Confirmed. Ms. Whited understands that PHP would meet the Availability Clauses of the Large Industrial Tariff and could take service as a Large Industrial Interruptible Customer. However, in NSPI (NSEB) IR-6, NS Power notes that this tariff has not been costed or priced with the inclusion of the PHP demand and energy forecast, nor would it enable the dispatch of PHP load.

(b) Confirmed. Ms. Whited understands that PHP would meet the Availability Clauses of the below-the-line 1P Transmission Real time Pricing (1P-RTP) Tariff. However, in NSPI (NSEB) IR-6, NS Power notes that this tariff would not enable the dispatch of PHP load.

(c) Yes.

(d) Yes. No independent analysis has been performed.

Request IR-5:

Reference: N-21 – Synapse Evidence, p. 13/ pdf 15, lines 7-10 and 14-19.

> ***Q.*** ***If PHP's proposal to assess the demand charge on only 8 MW of its demand is not adopted, it proposes that the interruptible credit be priced at NS Power's estimated marginal cost of capacity of approximately $13.107/kVA. Do you agree?***
>
> ***A.*** ***No, for two reasons. … If PHP were compensated at the full marginal cost without accounting for this avoided contribution, it would receive credit for costs that it would otherwise help pay, resulting in an over-allocation of benefits to PHP and a corresponding shift of cost responsibility to other customers. Accordingly, compensation to PHP should be capped at the avoided capacity cost net of its expected revenue contribution under firm service.***

(a) Is the theoretical net-avoided-cost figure intended to serve as an upper bound within which any negotiated outcome must fall?

(b) If yes, are you recommending that the Board pre-establish that cap as a condition of the negotiation?

(c) Have you calculated, or are you able to calculate, the value of the figure using NSPI's capacity cost data filed in this proceeding? If yes, please provide that calculation, including the avoided capacity cost used, the firm-service contribution offset applied, and the resulting net figure expressed in $/kVa. If no, what additional information would be required to perform that calculation?

Response IR-5:

(a) Yes.

(b) Yes.

(c) No, Ms. Whited is not currently able to calculate this value. The value depends on the demand-related costs for the Large Industrial (LI) class, the monthly billing determinants for each class, and the value of the interruptible credit provided to PHP.

Request IR-6:

Reference: **N-21 – Synapse Evidence, p.14/ pdf p.16, lines 7-15.**

Preamble: **You state that the interruptible credit should likely exceed the current proposed level of approximately $8.40/kVa for 2026 "given that PHP is reluctant to take service on the ELID tariff at this price".**

(a) Is PHP's reluctance to take service a cost-causation principle, a rate design principle, or neither? Please identify the regulatory or economic framework under which customer reluctance is a valid basis for setting or adjusting a credit.

(b) Is it your position that a cost-based credit should be increased whenever a customer expresses reluctance to accept it? If not, please explain what distinguishes PHP's circumstances such that its reluctance is analytically relevant here.

(c) If the interruptible credit were increased to a level PHP found acceptable through a negotiation but other disputed components remained unchanged, do you have any basis to conclude PHP would take service on the ELID tariff i.e. revision of the interruptible credit itself would "induce" PHP? Please explain.

(d) If the Board determines that a given rate is just and reasonable for the service being offered, but PHP is not satisfied and would like a lower rate, is this a reason to vary from the just and reasonable rate? Please explain.

Response IR-6:

(a) Please refer to the response to IG (Synapse) 3(f).

(b) Please refer to the response to IG (Synapse) 3(f).

(c) No. It is possible that PHP would require revisions to other aspects of the tariff as well before it would agree to take service on the ELID tariff. This would need to be determined through further discussions with PHP.

(d) Generally, no. If the Board determines that a rate is just and reasonable for the service provided, a customer's preference for a lower rate is not, by itself, a basis for setting a lower rate. However, there may be circumstances in which a lower rate is justified as a load retention measure where the alternative is the loss of the customer and retaining the load at a discounted rate would produce a better outcome for other customers than the customer's departure.