DECISION

2016 NSUARB 33
M06214

NOVA SCOTIA UTILITY AND REVIEW BOARD

IN THE MATTER OF THE ELECTRICITY ACT

- and -

IN THE MATTER OF a hearing concerning the Sale of Renewable Low-Impact Electricity generated within Nova Scotia by a Retail Seller to a Retail Customer pursuant to the Electricity Act

BEFORE:	Peter W. Gurnham, Q.C., Chair Roland A. Deveau, Q.C., Vice-Chair Kulvinder S. Dhillon, P.Eng., Member
APPLICANT:	**NOVA SCOTIA POWER INCORPORATED**
INTERVENORS:	See Paragraph 9 of Decision
BOARD COUNSEL:	S. Bruce Outhouse, Q.C.
HEARING DATE(S):	January 18 and 19, 2016
FINAL SUBMISSIONS:	February 26, 2016
DECISION DATE:	**March 23, 2016**
DECISION:	**Renewable to Retail tariffs approved, as amended in this Decision.**

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1.0 INTRODUCTION

[1] This is a decision of the Nova Scotia Utility and Review Board ("Board") respecting an application by Nova Scotia Power Inc. ("NSPI" or "Company" or "Utility") for approval of tariffs relating to the sale of renewable low-impact electricity generated within Nova Scotia pursuant to the *Electricity Act,* S.N.S. 2004, c.253 ("*Act*").

[2] The *Electricity Reform Act*, S.N.S. 2013, c. 34, amended the *Electricity Act* to enable the purchase and sale of renewable low-impact electricity generated in Nova Scotia from licensed "retail suppliers" to "retail customers", which are terms defined in the *Act*.

[3] However, the establishment of this new "Renewable to Retail" ("RtR") market is subject to two important guiding principles set out in the *Act*:

> **3G(2)** In reviewing and approving the tariffs, procedures and standards of conduct required to be developed or amended pursuant to this Section, the Board shall be guided by the following principles:
>
> (a) customers of Nova Scotia Power Incorporated and persons who, at the coming into force of this Section, are independent power producers or hold feed-in tariff approvals within the meaning of the regulations are not to be negatively affected if some retail customers choose to purchase renewable low impact electricity from a retail supplier;
>
> (b) retail suppliers and their customers are to be responsible for all costs related to the provision of service by retail suppliers to their customers that would otherwise be the responsibility of Nova Scotia Power Incorporated and its customers.

[4] Section 3G(1) of the *Act* directs NSPI to develop, in consultation with stakeholders, and to file with the Board for approval, any tariffs, procedures and standards of conduct and any amendments to existing tariffs, procedures and standards of conduct that are necessary to facilitate the purchase and sale of renewable low-impact electricity in the RtR market.

[5] After conducting an extensive consultation, NSPI filed its Application on September 1, 2015, requesting Board approval of the following components ("Application"):

- The Distribution Tariff ("DT");
- The Licenced Retail Supplier ("LRS") Participation Agreement and the LRS Terms and Conditions;
- The Energy Balancing Service Tariff ("EBS");
- The Standby Service Tariff ("SS");
- Amendments to the Open Access Transmission Tariff ("OATT");
- The Renewable to Retail Market Transition Tariff ("RTT");
- Amendments to the NSPI *Regulations*; and
- Amendments to the Generator Interconnection Procedures ("GIP"), including amendments to the Standard Generator Interconnection and Operating Agreement.

[6] In its Application, NSPI submitted that these tariffs are cost-based and will provide an appropriate level of flexibility as the Utility gains experience with the growth and scope of RtR market. NSPI submitted that the tariffs are also consistent with the enabling legislation, including the two fundamental principles that customers of NSPI are not to be negatively affected if some retail customers choose to purchase electricity in the RtR market, and that retail suppliers and their customers are to be responsible for all costs related to the provision of the renewable low-impact electricity in this new market.

[7] Further, NSPI's Application included proposed amendments to the Wholesale Electricity Market Rules. While these amendments to the Market Rules ultimately require adoption by the Nova Scotia Power System Operator ("NSPSO"), rather

than by the Board, they were submitted for Board review to ensure the amendments proposed will align with the approved RtR design framework.

[8] This Application is the culmination of a consultation process which began in early 2014. Further to the new legislation, and at the request of NSPI, the Board issued an Order dated May 2, 2014, directing NSPI to initiate a consultation process with stakeholders in connection with the sale of renewable low-impact electricity generated within Nova Scotia as part of an RtR market.

[9] Notice of the proceeding initiated by the Board was advertised in the Chronicle Herald and the Cape Breton Post on May 10 and May 17, 2014, which provided an opportunity for Interested Parties to participate. Various Notices of Intervention were filed, including from the following: the Consumer Advocate ("CA"); the Small Business Advocate ("SBA"); The Industrial Group; Cape Breton Explorations Ltd.; Minas Energy; Lahave Renewables Inc.; Highland Energy (N.S.) Inc.; Fundy Tidal Inc.; ENERCON Canada Inc.; Bullfrog Power; Watts Wind Inc.; Natural Forces Inc.; the Nova Scotia Department of Energy ("NSDOE"); George LeBlanc Consulting Ltd.; Scotian Windfields Inc.; SWEB Development Inc. ("SWEB"); Paul Lewis; Alternative Resource Energy Authority ("AREA"); Port Hawkesbury Paper LP ("PHP"); Auley Carey; Dalhousie University, Office of Sustainability; Endurance Wind Power Inc.; Lower Power Rates Alliance of Nova Scotia ("LPRA"); Progressive Conservative Caucus of Nova Scotia; Crannog Developments Limited; Lighthouse Route Energy Ventures; and 3291324 Nova Scotia Limited.

[10] A draft Code of Conduct for Renewable Low-Impact Electricity Sales in Nova Scotia and draft *Board Electricity Retailers Regulations* ("*Board Retailers*

Regulations") under the *Act* were prepared by Board consultant, Energy Consultants International, Inc. ("ECI"), and filed with the Board and distributed to Intervenors on May 12, 2015.

[11] The draft *Board Retailers Regulations* and Code of Conduct were circulated to Stakeholders and Stakeholder comments were received by the Board on June 3, 2015 and June 10, 2015.

[12] Revised draft *Board Retailers Regulations* and draft Code of Conduct were issued by the Board on July 15, 2015.

[13] A public hearing was held commencing January 18, 2016, following a timeline to accommodate Information Requests ("IRs") and the filing of evidence by the Intervenors.

2.0 SETTLEMENT CONFERENCE AND REPORT

[14] On December 15, 2015, NSPI hosted a Settlement Conference with the Intervenors with the objective of achieving consensus on the outstanding issues, and reducing the number and complexity of the issues at the upcoming hearing. The Settlement Conference was well attended, with 15 Intervenors accepting the invitation to attend in person or by teleconference.

[15] On December 21, 2015, NSPI filed a Settlement Report with the Board providing information on the outcome of the Settlement Conference and outlining the status of the various issues raised in the evidence by the Intervenors with respect to NSPI's Application. While no formal settlement agreement was reached with the Intervenors, NSPI was pleased with the progress to date and considered that the focus of the evidence as a result of the settlement process was on a narrow range of issues.

[16] The Board noted as well that, at various points in this proceeding, some of the Intervenors had expressed support for the view that the consultation process carried out by NSPI was constructive and helpful.

[17] NSPI's Settlement Report outlined the Utility's understanding of the issues that it anticipated would be contentious during the hearing, as well as those issues it expected would not be contentious. The Board notes that a number of the issues raised by the Intervenors were addressed satisfactorily by NSPI, as confirmed at the hearing, or in submissions. These various issues include:

- The requirement for regular reporting by NSPI;
- Certification and qualification requirements, which are already contained in the legislation or *Board Retailers Regulations*;
- A separate accounting by NSPI for EBS energy;
- Confirmation that the RTT will recover generation-related fixed costs not recovered through the Top-up energy charge in the EBS;
- Inclusion of the fuel portion of RtR revenues, including the fuel portion of ancillary services, into the Fuel Adjustment Mechanism ("FAM"), with necessary adjustments to NSPI's FAM reports;
- Agreement that the revenue requirement should be reduced by the $30.7 million 2014 portion of the deferral in the DT, EBS, SS and RTT Tariffs, and agreement on apportionment of the reduction; and
- Amendments to certain provisions of the LRS Terms and Conditions.

[18] To the extent that consensus on the above issues has been addressed in the various tariffs and related rules or terms, the Board accepts the revisions as appropriate, and has accounted for them as part of its approval of the Application as a whole. The amendments will be confirmed in a Compliance Filing to be filed by NSPI.

The Board also approves the noted reporting requirements, which will be addressed elsewhere in this Decision.

3.0 ANALYSIS AND FINDINGS

[19] The Board's findings on the following outstanding issues will be canvassed, in turn.

3.1 Energy Balancing Services (SBA-01, CA-02, Multeese-01) Generation Energy Charges (CA-02) Differential between Top-up and Spill Rates (Multeese-03)

[20] The EBS provides for electricity supply (top up) to the LRS when the LRS' load exceeds its generation supply and payment for energy (spill) when the LRS' generation supply exceeds its load. In the RtR market there will be times when LRS generation will not equal the LRS load. In those circumstances, energy may be purchased from NSPI and sold to NSPI when the LRS has surplus energy. The EBS includes an administration charge and when purchasing energy a fixed charge per kilowatt hour and a fuel charge per kilowatt hour. With respect to the spill rate, the Company proposed a rate in cents per kilowatt hour which would apply to all amounts that are within 10% of the annual LRS load. If the spilled energy is greater than 10% of the annual LRS load, the rate would be discounted by increasing increments.

3.1.1 Real-Time Pricing

[21] Mr. Athas, on behalf of the SBA, disagreed with the pricing proposal for the EBS and recommended NSPI adopt real-time pricing where "prices vary hourly accordingly to the actual hours marginal cost of generation". Mr. Athas explained how the top-up / spill would be calculated to, in his view, ensure fairness:

> NSPI should produce a forecast that is a good faith estimate of the upcoming month(s) marginal costs or credits for EBS or spill energy purchases. The actual charges and credits

> to an LSR [LRS] should be based on a specific real time estimate of actual marginal costs for each hour that that specific LSR utilizes EBS purchasing or provides spill energy. This will ensure an accurate pricing signal is sent to the LSR over time and it will minimize if not eliminate the potential for NSPI to have underpriced these services.
>
> [Exhibit N-33, p. 18]

[22] The SBA's principal concern appears to be that if real-time pricing is not adopted, amounts charged for the EBS will be either too high or too low versus marginal cost.

[23] No other party supported the SBA's position. Mr. Chernick, on behalf of the CA, stated that he does not believe Mr. Athas' approach would be feasible until NSPI is better connected to robust energy markets.

[24] Board Counsel consultant, Mel Whalen, also took the position that it was premature to move to real-time pricing:

> THE CHAIR: ... [T]here's a couple of recommendations made that I wouldn't mind just getting your thoughts on. And we can do it in one of two ways. I think the easiest thing is to go to the Reply evidence for Nova Scotia Power, which is Exhibit 42, and go to first to page 8.
>
> There Nova Scotia Power comments on -- the suggestion's made by the Small Business Advocate. And the only one I want to get any comments that you have is number one, the:
>
> "Energy balancing services should be priced on a real-time basis." (As read)
>
> Do you have anything -- any help you can add to that debate?
>
> MR. WHALEN: No, other than the fact that I think it's too early to do that before you have some idea of what the loads and what the generation would be. I mean, certainly you could look at real-time pricing; the company, I believe, already calculates that for other purposes. But whether that would be appropriate to renewable to retail market I think would be a function of what load and generation the LRS has online.
>
> When I say whether or not it would be appropriate, I mean the actual numbers as opposed to the concept.
>
> THE CHAIR: So do you think that's something we may look at in the future, assuming this market evolves?
>
> MR. WHALEN: Yes, certainly. I think that piece of that charge certainly would -- should be reviewed when there's some real generation and load that is known and can assist with the simulation of this.
>
> [Transcript, pp. 376-377]

[25] NSPI argued that the pricing methodology for the EBS should remain as proposed due to its administrative simplicity, lower cost to administer and the uncertainty concerning the pace and composition of the RtR market.

3.1.1.1 Findings

[26] The Board agrees with NSPI, who was supported on this point by Mr. Whalen, that it is premature at this time to move to real-time pricing for the EBS. It is very uncertain how much participation there is going to be in the market. It may be appropriate to revisit this issue in the future once more information is known. The Board also agrees that administrative simplicity, lower costs of administration and predictability are important considerations as we embark on the RtR market.

3.1.2 Fuel Cost Adder

[27] In its calculation of the rate, NSPI included a 1.38 cents per kWh fuel cost adder as an incremental cost of topping up the LRS generation. This is proposed to cover costs over and above fuel to account for other factors such as load following. Mr. Whalen, in his evidence, questioned whether the fuel cost adder of 1.38 cents per kWh had been justified:

> c) The 1.38 cents per Kwh adder that is included in the top-up rate needs further justification. In NSPI (Multeese) IR-7(c), the Company explains that this incremental adder is to cover the cost of ramping dispatchable generation up and down to follow the LRS net load and the cost of sometimes having to operate units at sub-optimal heat rates. However, costs such as these should already be captured within the Plexos simulations. An alternative explanation for this adder is provided in Section 5.5.2 of the Cary report, where it is proposed that a spread be created between the top-up and spill rates as a simple way to address any systematic variances in LRS loads and generation. In my view, such refinement is premature, and the approach used by the Company to assess it is based on an unlikely assumption of an LRS load that is the same in all hours. Once the RtR market develops and there are actual LRS loads and generation sources, this could be revisited.
>
> [Exhibit N-31, pp. 9-10]

[28] On cross-examination by Mr. Dalgleish, Mr. Whalen confirmed he is not opposed to the adder at some point but does not believe it has been justified:

> ... I'm not opposed to the adder at some point but I believe it's premature at this point unless there was some additional justification, which at this -- up till now I've not really heard anything that would cause me to say that that differential adder is required at this point.
>
> [Transcript, p. 382]

[29] NSPI argued that the cost of top-up energy due to system conditions may be higher, for example, because energy spill from wind generation is expected to coincide with high wind generation on NSPI's systems and delivery of top-up energy would coincide with low levels of wind generation.

3.1.2.1 Findings

[30] The Board is not satisfied that NSPI has responded adequately to Mr. Whalen's concern which was made clear in his original evidence. He confirmed his concern on cross-examination by Mr. Dalgleish. The Board agrees with Mr. Whalen that this refinement is premature and, in the circumstances, is not prepared to approve the 1.38 cents per kWh adder as part of the EBS.

3.1.3 Energy Portion of the EBS

[31] Mr. Whalen also questioned whether the energy portion of the top-up and spill rates were appropriately calculated:

> b) The other components of the top-up rate and the spill rate are inappropriately calculated from avoided costs that are levelized over ten future years, the first of which is 2018. These could be recalculated for 2016. However, I do not believe this is necessary. Given the developing nature of the RtR market, and given NS Power's proposal to annually adjust components of rates such as those based on avoided costs, I would suggest setting both the portion of the top-up rate that is dependent on avoided costs, and the spill rate to be equal to the Load Following rate.
>
> [Exhibit N-31, p. 9]

[32] NSPI resisted this suggestion to use the Load Following rate for a couple of reasons. The Load Following rate is priced based on the assumption of a 25 MW decrement and the top-up / spill amounts could be higher or lower than that. Secondly, when NSPI is providing top-up energy from additional generation that energy, NSPI believes, will on average be more expensive than the average marginal cost; thirdly, when NSPI takes energy it cuts back on generation which, NSPI believes, on average will be lower than the average marginal cost.

3.1.3.1 Findings

[33] The Load Following rate has been in place for many years. It has provided generation to those customers who have their own load generating capability, but require load following service in circumstances where their load exceeds their own generating capacity or for other reasons their own capacity cannot supply all of their load. NSPI, under this rate, provided service to relatively large loads, for example the 14 MW supplied to Bowater Mersey for many years under the Mersey System Rate, and to smaller loads to other customers. Its essential design has not changed over those many years and provides some comfort to the Board that it provides a reasonable proxy for the costs incurred rather than a calculated rate estimating future avoided costs. Much of this is uncharted territory and the Board is attracted by Mr. Whalen's suggestion to use the Load Following rate, a rate which has been tested over time and forms, in his view, a reasonable proxy to rely on rather than another uncertain calculation. The Board finds the portion of the top-up rate that is dependent on avoided costs and the spill rate will be equal to the Load Following rate.

3.1.4 Declining Spill Rate

[34] As noted above, the energy credit for the spill rate, as proposed by NSPI, is subject to a discount depending on whether the annual energy spill exceeds the customers load by increments of 10%, 25% or 50%. The rate declines as follows:

> 2. The year-end refund to NS Power on monthly compensation in respect of annual excess spill energy above annual consumption of the LRS's RtR Customers recognized without discount as set out in the following table:

Annual Excess Spill Quantity in the range	Discount Applied	Cents per kWh
from 0% to 10% of Annual LRS Load	0%	5.270
greater than 10% up to 20% of Annual LRS Load	10%	4.743
greater than 20% up to 30% of Annual LRS Load	25%	3.953
greater than 30% of Annual LRS Load	50%	2.635

[Exhibit N-16, Appendix 19, p. 3 of 4]

[35] Under questioning from the Board, NSPI, and its consultant Rob Cary, was asked to explain this:

> THE CHAIR: And I had one other -- it's kind of a detailed question, but could you -- Jeff, could you go to Exhibit N-16, Appendix 19, page 3 of 4?
>
> And I read through the tariffs but there's one feature of one tariff that I didn't understand.
>
> So it's Exhibit N-16, Appendix 19, page 3 of 4. Okay. There it is.
>
> And I wasn't sure why the -- what this chart was telling me with respect to zero to 10 percent of annual load, greater than 10 percent, and how that flowed through on the charges and cents per kilowatt hour. And if you want an undertaking, that's fine.
>
> MR. GRUS: So ---
>
> THE CHAIR: Take a minute to look at it because it's right off the wall.
>
> MR. GRUS: I see it right now. Nova Scotia Power thought it appropriate to give an incentive to generators not to oversize its capacity and produce a declining scale of spill rates commensurate with the amount of excess spill at the year end. We haven't done detailed calculations in support of this, but directionally that aligns with the notion that the more spill there is in the system the smaller value it commands.

So here is a declining scale which says that if your excess spill at the year-end is less than 10 percent the utility will credit that spill at the regular monthly spill rate. However, if that spill exceeds the threshold 10 percent then it's subject to a declining scale.

So, for example, if generator spills 25 percent -- if a spill at the end of the year represents 25 percent of the -- of customers loads -- so it overproduced by 25 percent -- then what the utility will do it will price the first 10 percent of this excess at regular rate, then next 10 percent at a lower rate of 4.743 cents and the last five percent at 3.953 cents per kilowatt hour.

THE CHAIR: But do those numbers represent in any way the value to you of those kilowatt hours at the time they're being spilled, or is it just a technique to punish the generator for billing too big a generator?

MR. GRUS: It's a technique to provide incentive to matching generation with load so that full service FAM customers are not negatively affected by it.

For us not to do this would be to provide a credit that exceeds savings to the company and the -- to the detriment of the FAM customers.

THE CHAIR: Mr. Cary, is it your opinion that that's proper ratemaking?

MR. CARY: Sorry; what was the question?

THE CHAIR: Is it your opinion that's proper ratemaking?

MR. CARY: Well, I -- my understanding of this was that it was more than just the incentive that there is an expectation that there will be reduced avoided cost arising from increased spill. That is proper rate-making. The challenge is to put values against it. And I think that Nova Scotia Power is acknowledging that there is not a lot of science in coming up with those particular numbers. There is art in that. But that those are probably reasonable numbers. That's what I have heard.

THE CHAIR: So in other words, you're not aware of any cost basis for those numbers; they're an approximation?

MR. CARY: That's my understanding of it, that there is no detailed analysis behind those numbers. They are conceived as directionally appropriate.

[Transcript, pp. 279-282]

[36] Although no party raised this in evidence, Mr. Chernick, in his opening statement, shared the concerns raised in questioning from the Board regarding the arbitrary adjustments:

MR. CHERNICK: … And one final point raised in the Chair's questions yesterday, I share your concern that the reduction in spill price for excess spill is an arbitrary penalty without any cost basis. The base spill price was computed for 25 megawatt decrement of load with perhaps 65 megawatts of wind capacity. So it already has a lot of spill built into in, and given the small size of the likely RTR participation, at least in the next couple of years, it's unlikely that aggregate spill levels will be much greater than those that NSP has modelled, or that the value of spill will decline dramatically with the amount spilled by any individual LRS. This provision does not seem to be justified at this point.

> If, in aggregate, the LRSs are spilling large amounts of energy or someone's planning a very large renewable project without load to use it up, NSPI would be in a position to come in and ask for an adjustment based on actual cost calculations.
>
> THE CHAIR: How would you fix it?
>
> MR. CHERNICK: Excuse me?
>
> THE CHAIR: How would you repair it? How would you make it ---
>
> MR. CHERNICK: For right now I would just take out that provision and say the 5.27 cents, if it's okay for spill equal to the amount of top-off, if it's spill that's 10 percent higher, if it's spill that's 50 percent higher, it's a reasonable price to pay. I don't think it's enough to motivate anyone to build renewable facilities for the purpose of spilling. But it would certainly soften the blow to an LRS that built, say, a 1 megawatt turbine and didn't immediately have the customers to use it, and that problem of coordinating customer uptake with construction of renewables is a fairly demanding issue in any case for the LRSs, and being paid, perhaps half their cost, is certainly better than being paid a quarter of the cost for any power they spill. And it seems like it should be worth it to the ratepayers; the 5.72 cents is not a very high price to pay.
>
> [Transcript, pp. 299-301]

[37] In its Final Submission, SWEB indicated that it does not support the diminishing spill rates proposed as NSPI has not provided any basis for the values proposed. SWEB goes on to say, "By its nature, spilled energy is already the lowest value energy produced by an LRS or its generators. There is already a significant commercial incentive to arrange for supply contracts for all energy generated."

[38] This matter was not addressed in NSPI's Final Argument.

3.1.4.1 Findings

[39] The Board is concerned with what appears to be an arbitrary discount applied by NSPI to the spill rate which does not appear to the Board to have a cost justification. NSPI described it as an incentive to generators not to oversize capacity, but provided no comfort that these calculations in any way represent the value of the kilowatt hours at the time they are being spilled. Mr. Cary acknowledged that there is "not a lot of science in coming up with these particular numbers", "there is an art in that". In the circumstances, the Board finds that NSPI has not justified the discounts and the amount

for the spill rate, 5.27 cents per kWh applied for by NSPI (as adjusted in this Decision), will be the same regardless of the amount spilled in excess of annual LRS load.

3.1.5 Other

[40] There were other comments on the EBS, most specifically from Mr. Chernick, on behalf of the CA. The CA did not extensively pursue Mr. Chernick's recommendations in final argument and a number of Mr. Chernick's concerns are resolved (albeit perhaps not as Mr. Chernick would have preferred) by the Board's findings with respect to the calculation of the rate and, in particular, using load following and the elimination of the 1.38 cents per kWh charge.

3.2 Unbundling

[41] The CA, and his expert Mr. Chernick, recommended that NSPI prepare unbundled rate tariffs for the next general rate application for the functions of distribution, transmission and generation.

[42] The CA argued that in order to have transparency for both customers remaining with NSPI and customers transferring to an LRS, unbundling is required. The CA went on to say:

> NSPI currently functionalizes costs to four functions: generation, transmission, distribution and retail, and has indicated that it would have no difficulty determining the distribution and retail portion of the allocated cost for each class. NSPI does not explain what "scope" of unbundling would introduce special problems for NSPI, but it cannot be suggesting that NSPI cannot do for generation and transmission that it has proposed for distribution. Once NSPI has completed that step, the Board can decide whether any additional unbundling is necessary for any ratemaking purpose.
>
> For example, NSPI is essentially claiming that it has stranded generation costs, which must be recovered from RtR customers through the transition tariff. At a convenient time, the Board could decide to unbundle the generation function into two components: stranded costs and those that are still competitive and useful. Indeed, it would be in NSP's interest to make that showing sooner rather than later, so that it is not stuck with stranded costs as a result of some future government policy initiative.
>
> [CA Closing Submission, pp. 3-4]

[43] The SBA supported this recommendation. The SBA acknowledged that work needs to be done on how the tariffs might be unbundled but that does not mean the Board should not order unbundling. In Undertaking U-1, NSPI identified a number of challenges and concerns associated with breaking out service into functional areas.

[44] NSPI went on to say:

> The Company submits that such a process would require stakeholder consultation, particularly with respect to the vetting of the Company's underlying assumptions, and has the potential to become a complicated and time consuming regulatory exercise. Such a process is unwarranted and would be premature given the pace and scope of the market uptake at this stage is still unknown. As noted by the SBA in his Opening Statement, "the RtR market may be slow to develop and even drop back after an initial opening".
>
> [NSPI Closing Submission, pp. 25-26]

[45] Mr. Chernick argued unbundling permits customers who are thinking of becoming an RtR customer to look at their current tariff and compare it to the charges on the RtR rate. He argued that it promotes transparency. However, NSPI cautioned in Undertaking U-1 that may not be possible because LRS rates are based on what the market will bear for all services and there is no certainty they will be broken out like regulated rates. NSPI also stated:

> (2) Generation and Transmission costs are proposed to be recovered from the LRS through the OATT and a suite of generation-related tariffs (EBS, SS, RTT) applicable to the aggregated load of the LRS' end-use customers. All of these tariffs have different rate structures and billing determinants from those implicitly embedded in the individual bundled service class rates. In addition, the generation services provided in the RtR market differ markedly from those in the full service market. In the RtR market, the Company provides only ancillary generation services complementary to the primary renewable generation services of the LRS. In NS Power's view, a direct comparison of generation and transmission costs, under the two markets, for individual end-use customers, is not possible.
>
> [NSPI Closing Submission, p. 27]

3.2.1 Findings

[46] Intuitively, the Board observes that unbundling seems a logical step, particularly as we evolve to a more competitive market. However, the Board acknowledges the evidence and submissions of NSPI concerning complications with respect to unbundling. The Company submitted that such a process would require a stakeholder consultation. Given the provisions of the *Electricity Plan Implementation (2015) Act*, the next rate case at which unbundling could reasonably be considered is several years away.

[47] In the circumstances, the Board directs that NSPI convene its recommended stakeholder consultation and report back to the Board on or before April 28, 2017, with respect to whether, and how, unbundling should occur, the timing associated with unbundling and any other matters the Company and stakeholders think may be relevant. Thereafter, the Board will provide further direction.

3.3 Revenue/Cost ratios - Distribution and Transmission Rates (CA-01)

[48] In the CA's pre-filed evidence, Mr. Chernick recommended that there be consistency between full bundled service NSPI customers and RtR customers in terms of the application of Ratios of Revenues to Allocated Costs ("R/C ratios"). Specifically, he suggested the following for the Board's consideration:

> Ensure that the distribution and transmission rates charged to customers within any tariff are the same, regardless of whether a customer is a full service NS Power customer or an RtR customer, and reflect the R/C ratios in generation charges, to make the RtR transition revenue-neutral.
>
> [Exhibit N-34, p. 3]

[49] In his Rebuttal Submission, the CA submitted:

> In Section 5.0 NSPI attempts to defend ignoring the R/C ratio by claiming that it cannot deal with a mix of customers served by an LRS. Using a sales-weighted average of the R/C ratios by class for the customers served by the LRS would solve this problem for generation simply and elegantly, avoiding the random pattern of rewards and penalties to RtR that NSPI proposes. If NSPI provides the transmission service, there is no reason to

> change different transmission rates for RtR and full-service customers. NSPI admits that it can change the OATT to conform to whatever the Board orders. Revisions to the Company's RtR market framework may necessitate 16 further amendments which the NSPSO would undertake in accordance with the 17 procedures laid out in the Market Rules. (p. 6)
>
> [CA Rebuttal Submission, p. 2]

[50] NSPI did not support this proposed change. NSPI submits the most appropriate approach is to set the various RtR tariff rates directly at cost without R/C adjustments. In addition to noting that the full bundled service and RtR markets are outcomes of two separate ratemaking processes (which it said differ in terms of total revenue requirement, costing methodology and rate design), it stated in its Rebuttal Evidence that the RtR charges are applied on the basis of aggregate LRS load and generation. Thus, NSPI argued that they are not customer-class specific and are incapable of adjustment in respect of individual class R/C ratios. Moreover, it submitted that any adjustments to the OATT to account for these issues "could undermine the non-discriminatory foundation of the OATT" (Exhibit N-42, p. 14).

[51] In questioning by the Board Chair, Mr. Whalen, the Board Counsel's consultant, was asked about the application of R/C ratios in the context of the RtR tariffs:

> MR. WHALEN: It's quite difficult, and it's not a concern for me from this perspective that you're breaking the different functions apart, generation, transmission and the distribution, including retail.
>
> <u>On the generation side</u>, the -- there's some of the fixed costs that are being reflected. <u>But they're being applied, as the company points out, to the total integrated load of the LRS. They're not being applied on a class-specific basis. So it's very challenging, perhaps impossible, to be able to apply revenue/cost ratios on the generation side.</u>
>
> <u>On the transmission side, the application of the OATT is, again, a very different approach from the cost of service</u>, and essentially divides the cost of the transmission across the users of the transmission and does it on the basis of considering all those costs to be demand and designing them on the cost -- on the basis of a non-coincident demand. So wholesale users are assigned a certain portion, NSPI is assigned a certain portion, renewable to retail would be assigned a certain portion.
>
> Now, when NSPI take sale portion back into their cost of service and choose to classify a piece of that as energy and let it flow through the cost of service the way it does that's kind

> of internal to the cost of service. Other people who are using the transmission may do something different in the way that they recover the transmission from their customers.
>
> So if I take the generation and the transmission away and I'm looking only at distribution there are a couple of issues with that. One is if you apply the revenue/cost ratios only to the distribution revenue requirements you won't get back to the full revenue requirement of the distribution system, it'll be different. So there's -- you have to sort out what to do with that differential, either plus or minus. One option would be to put it over in the RTT or something like that, but there's an issue there.
>
> The second issue, and this one probably overrides it all for me, is that the distribution piece is roughly 20 percent of the total revenue requirement, and the maximum difference in the revenue/cost ratio is about 4 percent, so the maximum difference you'd be talking about would be .8 percent. [Emphasis added]
>
> [Transcript, pp. 378-380]

3.3.1 Findings

[52] The Board accepts the evidence of NSPI and Mr. Whalen that it would not be appropriate to make R/C adjustments to the RtR tariffs. First, as noted by both, the application of R/C ratios in terms of generation and transmission is challenging, if not impossible. The full service and RtR rates are based on two different rate setting processes. The development of the RtR tariffs are not developed using the same cost of service approach which applies to the development of full-service rates. Further, in relation to generation and transmission, the RtR tariffs are not applied on a class-specific basis.

[53] With respect to distribution, the Board accepts Mr. Whalen's testimony that the application of R/C ratios would not reflect the full revenue requirement (because generation and transmission would not be accounted for as explained above).

[54] Accordingly, the Board concludes that the RtR tariffs should not be adjusted for R/C ratios.

3.4 Effect of Generator Location on Line Losses (CA-05)

[55] NSPI in its Application stated that the hourly top up and spill quantities are to be adjusted for transmission and distribution losses based on the averages across its entire system. It noted that:

> The RtR framework designed by NS Power assumes that the proposed RtR tariffs and associated cost recovery are applicable to the entire load of a customer opting for RtR service. This is irrespective of the location of the generator relative to the load, whether at opposite ends of the province, within the same distribution zone or the RtR generation is downstream (i.e. behind) NS Power's metering point. To do otherwise would either require a separate set of RtR tariffs be developed to apply in these scenarios or risk contravening the fundamental principles of the enabling RtR legislation – that NS Power's existing customers not be negatively affected by the introduction of RtR competition and customers or LRSs active in this market bear all costs associated with this market opening
>
> [Exhibit N-16, pp. 34-35]

[56] In his pre-filed evidence, Mr. Chernick did not agree with NSPI that it was appropriate to use the Province-wide average for line losses. He stated:

> A. ... When a renewable generator is added to serve RtR customers, transmission losses change depending on the location of the generator. This ignores the importance of generator location, since the change in losses due to the addition of generation varies from an additional 11% on Cape Breton to negative values in the Halifax and Annapolis Valley regions, with some western sites showing negative losses of more than –10% (CA IR-1 Attachment 1). NS Power's approach would do nothing to discourage LRSs from locating generation in the east, or encouraging construction near Halifax and in the west. Nor would it properly reward or penalize generators based on location.
>
> … Section 28.5 of the existing Open Access Transmission Tariff addresses real power losses associated with the Network Integration Transmission Tariff. It requires that the Network Customer be responsible for replacing losses associated with all transmission service as calculated by the Transmission Provider in accordance with Schedule 9 of the Tariff. Schedule 9 specifies that for Network Service, the Transmission provider will apply the system average loss factor, which will be calculated annually. (NSPI (CA) IR-1(a) (i)) So far as I can tell, this response amounts to "this is way we do it in the OATT." Since NS Power has proposed other changes to the OATT to accommodate its proposed design of the RtR program, it could propose a similar change for the treatment of losses.
>
> Q: How should losses be computed for the RtR program?
>
> A: The imputed losses should be the losses allocated to the customer's class in the cost of service study, plus the incremental transmission costs for the renewable generator's location.
>
> [Exhibit N-34, pp. 11-12]

[57] In its closing submission, NSPI stated that Network Integration / Transmission Service (Network Service), which is recommended for the RtR Market, uses average loss factor as per the OATT. If locational losses are to be used, an amendment to the OATT is required. The only other alternative identified by NSPI under the existing OATT is to use the Point-to-Point Service option for the RtR market instead of the Network Service, which is more costly. NSPI concluded that the Network Service option is appropriate for RtR service. Upon questioning by Board Counsel, NSPI stated that an LRS could take Point-to-Point Service for transmission connected generation and load.

[58] In his testimony, Board Counsel Consultant Mr. Whalen noted that:

> I think there are several issues. One relates to the OATT, for example. The OATT was put in place when the market was initially opened, and there was some contemplation at that point that the market could open further at some point, which is now what we're discussing. And the application of the OATT to an open market makes some sense, it's what has been used in different jurisdictions; it has its roots in the FERC opening of markets some years back.
>
> And the OATT basically assigns the cost of the transmission to the parties who use the transmission. It offers two kinds of services; a point-to point service and a network service. The question is for a retail -- renewable to retail, you know, what is most appropriate. The company indicated network service is most appropriate, and I certainly agree with that.
>
> OATT specifies that with network service average losses are appropriate. For point-to point service, losses get calculated on a path-by-path basis, but there are other parts of point-to point service, like needing to make a reservation and reserve on a regular basis, and just the aspects of that that would not apply. So there's the question of using the average losses with respect to transmission.
>
> Having said that, there is a question of should you or can you create some incentive or send some signal for a generator to put -- to be put in one location versus another. And the company has done some work in the past that indicated that there would be some advantage of putting it closer to the load centre.
>
> [Transcript, pp. 370-372]

[59] SWEB in its Final Statement recommended that:

- Loss factors based on location of the generator need to be considered in the calculation of energy provided by the LRS. These factors may be higher or lower than the system average currently proposed. These factors have been calculated in the past by NSPI, including as part of the RFP for renewable energy issued in 2011.
- If generation is located on distribution grid, then the distribution losses should be removed.

- In Appendix 14 of the Application distribution losses for the month of February used. SWEB assumes it is the intent for the losses applicable to the actual month will be used in practice.
- SWEB questions the notion suggested by NS Power during the Hearing that some level of critical mass is required to achieve benefits. If any generation is installed at an interconnection point that has losses lower than the system average there will be a net benefit to the system.

[SWEB Final Statement, p. 4]

[60] The Industrial Group in its submission recommended that:

> An average line loss approach places all potential generators anywhere in the Province on an equal footing without reflecting the system advantages of location. The Industrial Group supports the recommendation of the CA whereby losses accurately reflect the location of the renewable generator. As the Board is intended to be a substitute for a competitive market, it makes economic sense that the tariffs should be set to operate like an efficient market. In other words, the rates should fully reflect all known information. By averaging the transmission line losses, it artificially levels the entry point for generators, wherever sited.

[Industrial Group Submission, p. 2]

[61] The CA recommended that:

> In Section 7 NSPI attempts to confuse the computation of location losses, which NSPI had no problem computing for the Renewable RFP or providing in this proceeding. The estimates exist and can be updated over time. The locational differences in losses are very large, and should not be ignored.

[CA Rebuttal Submission, p. 2]

3.4.1 Findings

[62] The Board has reviewed the evidence of NSPI, the Intervenors and the Board Counsel consultant and considers that it is feasible to take into account the effect of generator locational losses.

[63] NSPI's proposal is based on the assumption that RtR will be a Network Service and the OATT requires that system average loss factors be used for this service. NSPI also noted that the RtR service could be provided on the Point-to-Point basis, which will require amendments to the OATT.

[64] Three Intervenors, the CA, Industrial Group, and SWEB, recommended that generator location be considered in the determination of line losses and that system average loss factor not be used.

[65] The CA also noted that system average loss factor was not used in the RFP evaluation by the Renewable Energy Administrator ("REA") for the Province in evaluating the IPPs for the procurement of renewable energy. The Board understands that the above reference by the CA is to the REA's decision in which the South Canoe and Sable Wind projects included consideration of generator locational losses. In that review, the NSPI system was divided into four zones and points were awarded to a generator facility based on its location in any one particular zone.

[66] The Board is of the view that if it can be done in the Provincial renewable RFP noted above, NSPI should also be able to take into account the effect of generator locational losses in this case. In addition, by considering the losses in the calculation of the EBS, it will encourage the siting of renewable generation at the most cost effective locations and also increase the efficient use of the transmission and distribution systems. The Board agrees with the Intervenors and directs that the effect of generator locational losses be part of the EBS calculations. For this purpose, the Provincial electrical system shall be divided into four zones similar to that used in the Provincial RFP for the procurement of renewable energy. The Board directs that the generator locational losses be calculated based on the generator location for each individual zone. NSPI is to provide values for these losses for 2017 in its Compliance Filing. These values are to be updated by NSPI each year. If it wishes, NSPI may provide its comments related to the boundaries of four zones in the Compliance Filing.

3.5 Capacity Contribution Factors (CA-06)

[67] Mr. Chernick, the CA's consultant, questioned NSPI's approach to charge for standby capacity. A charge of $5.37/kW per month is based on the coincident load over three winter months of an LRS, net of that LRS's estimated capacity. Mr. Chernick recommended that this charge be adjusted for the R/C ratio; to increase wind contribution from 17% to 25%-30% as recommended in the GE Energy Nova Scotia Renewable Energy Integration Study; and to include capacity contribution from other renewable resources. He also noted that the value of $64/kW/year used by NSPI for renewable generation is higher than the short-term value of the capacity. Mr. Chernick recommended that all these issues require additional analysis and consultation.

[68] NSPI, in its Rebuttal Evidence, provided two commonly used methodologies for assessing capacity factors and noted that the capacity values of wind generation of 17% for NRIS and 0% for ERIS are reasonable and are the same as used in the 2014 IRP. NSPI proposes to update wind generation studies in the coming year to assess capacity value for wind with 2015 data and include its results in its 10 year System Outlook Report, which is filed annually with the Board.

[69] NSPI proposed to continue work with stakeholders on the issue of capacity contribution of wind and avoided capacity-related costs. Any changes to the wind generation will be included in the next Annually Adjusted Rates ("AAR") application to the Board.

3.5.1 Findings

[70] Both NSPI and Mr. Chernick agree that additional work and consultation is required to finalize any change to the NSPI's proposal.

[71] The Board has considered the evidence and approves NSPI's proposal on this point, as presented. The Board supports the stakeholder consultation and the consultation report is to be filed with the Board prior to the next GRA.

3.6 RtR Language on Non-Power Charges in Distribution Tariff (CA-07)

[72] Mr. Chernick, on behalf of the CA, identified concerns with the language in the DT that does not exist in the bundled rate customers' tariffs and requested that unless NSPI can justify the language it should be deleted. This language, while not written into each bundled customer's tariff, exists in the Regulations that apply to all customers.

[73] During the opening statement of Mr. Chernick, the Board heard a willingness to accept a commitment from NSPI to deal with this concern in the next GRA.

3.6.1 Findings

[74] The Board agrees, unless there is sufficient justification for varied language, it should be reconciled. This, however, is not vital to the market opening and the Board directs NSPI to work with stakeholders to arrive at an agreeable solution prior to the next GRA.

3.7 Generation behind the Meter (CA-09)

[75] NSPI's proposed RtR framework and tariffs are designed so that the RtR tariffs apply to all RtR transactions regardless of the physical location of the generator and the customer's meter. Therefore, NSPI's position is that behind the meter transactions are caught by the provisions of the *Electricity Act* and are subject to the tariffs applied for by NSPI. The relevant provisions under the *Electricity Act* are:

> **Interpretation**
> **2(1)** (b) "retail customer" means a person who uses, for the person's own consumption in the Province, electricity that the person did not generate;

(c) "retail supplier" means a person who is authorized to sell renewable low-impact electricity in accordance with this Act and the regulations, but does not include a wholesale customer;

...

Authority to act as retail supplier
3D (1) No person shall act or purport to act as a retail supplier unless the person has been issued a retail supplier licence pursuant to Section 3E.

(2) Subsection (1) does not apply to a person who is

(a) deemed to be a public utility by the regulations; or

(b) a member of a class or category of retail suppliers prescribed by the regulations.

...

Retail supplier licence
3E (1) A person may apply for a retail supplier licence in the form and manner prescribed by the regulations.

(2) Subject to any qualifications prescribed by the regulations, the Board may issue a retail supplier licence to an applicant, subject to any terms and conditions the Board considers appropriate and any terms and conditions prescribed by the regulation.

[76] The relevant provisions of the *Public Utilities Act* are:

Interpretation
...

2 (e) "public utility" includes any person that may now or hereafter own, operate, manage or control

...

(iv) any plant or equipment for the production, transmission, delivery or furnishing of electric power or energy, water or steam heat either directly or indirectly to or for the public,

...

(f) "service" includes

...

(iii) the production, transmission, delivery or furnishing to or for the public by a public utility for compensation of electrical energy for purposes of heat, light and power,

[77] NSPI argued that if the generating entity is supplying renewable low-impact electricity to its customer in the province, that entity falls within the definition of retail supplier and the customer will fall within the definition of retail customer for purposes of the *Act*. With that interpretation NSPI argued that any entity selling or purporting to sell

renewable low-impact electricity, whether behind the meter or otherwise, must obtain a license unless it is exempted by Section 3D(2) of the *Electricity Act*. NSPI went on to say:

> Whether or not a sale behind the meter to a single customer is subject to the Public Utilities Act will depend upon a number of factors, including the particulars of the configuration, and would have to be determined on a case by case basis. Assuming, however, that such a sale is not within the ambit of regulation under the Public Utilities Act, Section 3D(1) of the Act states that "a person who acts or purports to act as a Retail Supplier" (i.e. engaged in the sale of renewable low-impact electricity) **must** be licensed. As such, even a person selling to a single customer would require a license regardless of whether it is otherwise encompassed under the Public Utilities Act or not, unless the person is exempted under Section 3D(2). Section 3D(2) expressly releases certain retail suppliers from the requirement for a retail supplier license. This is consistent with the Company's view that the legislation was intended to apply broadly to all such sales of renewable low-impact electricity, while leaving the Province with the discretion to enact regulation to grant relief to such application if it determined that certain suppliers were unintentionally affected.
>
> [NSPI Closing Submission, p. 37]

[78] NSPI concluded its submission by stating that if the Board ultimately determines that NSPI's interpretation of the *Act* is not correct then the Board must assess and determine whether such transactions behind the meter are still subject to the scrutiny of the *Public Utilities Act* which applies to sales to or for the public.

[79] PHP noted that the definition of retail supplier includes the phrase "in accordance with this Act and the regulations". PHP argued that if a retail supplier does not require and, therefore, does not seek a retail supplier's license under the *Electricity Act*, then that supplier is not authorized to sell low-impact electricity in accordance with the *Act* and would not fall within the definition of retail supplier. PHP argued that the *Electricity Act* does not otherwise alter the existing definitions of public utility and service in the *Public Utilities Act* for suppliers that do not need to be authorized by the *Electricity Act*. PHP argued that there is no requirement that suppliers must be considered retail suppliers under the *Electricity Act* simply because they supply renewable low-impact electricity. PHP went on to say:

> However, the Board can and should confirm in its decision in this case that transactions that are behind-the-meter and are not carried out by a licensed "retail supplier" do not fall

> within the RtR framework. Otherwise, the introduction of the RtR framework, which was meant to increase customer choice, will have had the perverse effect of limiting the opportunities that may have been available to Nova Scotia customers prior to the introduction of the RtR framework. PHP submits this would be contrary to the express legislative intent to "open and improve the electricity market" and "permit greater competition and choice for electricity ratepayers."
>
> [PHP Closing Submission, pp. 4-5]

[80] NSDOE agreed in their Final Submission that "the RtR framework was not intended and should not apply to any private [behind the meter] arrangements if they would not otherwise have been restricted under the *Public Utilities Act*". The Industrial Group essentially agreed with the positions put forward by PHP. The Industrial Group made the following additional point:

> If NSPI's interpretation is correct, such that the RtR tariffs apply to BTM transactions, then it creates a perverse disincentive for a retail customer to secure non-renewable electricity rather than renewable electricity. Given the Provincial mandate to encourage renewable electricity, this interpretation seems inconsistent with the stated policy intent. It is also commercially unreasonable to treat non-renewable electricity sales differently – and more favourably – than renewable electricity sales behind the meter.
>
> [Industrial Group Closing Submission, p. 3]

[81] The SBA seems to take the position that behind the meter transactions are not authorized by legislation in Nova Scotia.

3.7.1 Findings

[82] Under the *Public Utilities Act,* the test for determining whether an entity is a public utility is whether it provides service to or for the public. Thus, an arrangement whereby a person generates electricity for their own use behind the NSPI meter is not subject to regulation by the Board under the *Public Utilities Act*. Likewise, if a third party constructs a generator on or adjacent to the property of that person, and supplies that customer exclusively, that transaction is not subject to the *Public Utilities Act* so long as it occurs behind the meter.

[83] Under NSPI's interpretation a transaction behind the meter would not be subject to regulation and its tariffs if the sale of energy was for brown (non-renewable) energy, but would be subject to regulation and the tariffs if the energy sold to the customer was renewable low-impact electricity. An odd result.

[84] The scheme of the *Act* was clearly to enable a retail supplier to sell electricity to a retail customer in circumstances where the supplier required services supplied by NSPI and, in particular, the use of its transmission or distribution system and backup energy. The *Electricity Act* definition of retail supplier, which includes the phrase "in accordance with this Act and the regulations", must be interpreted having regard to the purpose of the *Electricity Act*.

[85] It seems unlikely that the framers of the legislation intended to impair the current ability of a generator to generate power and energy behind the meter. It also seems unlikely that they intended to disadvantage the sales of renewable low-impact energy by making only those sales subject to tariffs and regulation.

[86] In the circumstances, therefore, the Board agrees with the interpretation put forward by PHP, and supported by the Industrial Group and NSDOE, that transactions behind the meter are not distinguished from the current regulatory scheme simply because it is the sale of low-impact renewable energy.

[87] The Board agrees with NSPI that if the RtR framework does not apply to all behind the meter scenarios then the Board must assess and determine whether future transactions are subject to the scrutiny of the *Public Utilities Act,* which applies to sales to or for the public. That has always been the case, and will continue to be the case in the future, whether the energy is green or brown.

3.8 Calculation of RtR Tariffs and elimination of the RTT (SWEB-01)

[88] In its pre-filed evidence, SWEB submitted evidence which contained its analysis of the impact on NSPI's total revenue requirement resulting from the transition of full-service customers to the RtR market. Using the results of this analysis, SWEB argued that under the full suite of RtR tariffs NSPI would receive "more non-fuel revenue", compared to the current full-service scenario, if all of NSPI's customers moved to the RtR market. SWEB submitted that this showed a "fatal flaw" in the development of the RtR tariffs because NSPI had calculated the tariffs:

> ... in such a way to ensure that NSPI non-fuel revenue remains constant, rather than the cost-based approach proposed in the legislation.
>
> [Exhibit N-35, p. 2]

[89] SWEB submitted that particular attention should be paid to the RTT as there is no service associated with this tariff.

[90] While NSPI did not specifically address SWEB's mathematical analysis in its Rebuttal Evidence, NSPI's witness panel at the hearing suggested that SWEB's analysis had not taken into account the $30.7 million amount of deferred costs from the cost of service, as identified by Mr. Whalen. In their view, if this deferral were taken into account the "fatal flaw" identified by SWEB would be more or less rectified.

[91] In its Closing Submission, SWEB maintained its view taken at the hearing that the Board should address the RTT. While SWEB acknowledged the Board's mandate under the *Public Utilities Act* to permit NSPI's recovery of its prudently incurred costs, it submitted that there should be significant adjustments to the RTT:

- Renewable Transition Tariff (RTT)

  SWEB has consistently taken issue with the nature and calculation of the RTT since its introduction to the stakeholder process in August 2015. It is recognized, that based on the legislation in its current form, or without further clarification from the Province, that the complete removal of the RTT is not within the mandate of

> the Board. However, there are still a number of changes to the calculation of the RTT that SWEB suggests.
>
> - Currently NS Power has a surplus of generation capacity. This surplus will grow with the completion of the Maritime Link and the introduction of new market participants. NS Power should be required to clearly articulate a plan for the efficient disposal of assets that are deemed surplus.
> - With the introduction of new generation to serve the RTR Market, the amount of surplus NS Power generation assets will increase. LRS's will pay for the standby service for generation needed to back up their new generation, if any, therefore the costs proposed to be recouped by the RTT truly reflect that value and expenses due to assets becoming surplus.
> - All fossil fuel assets have a reasonable predicable economic life. As assets become surplus due to market competition, the depreciation of their value will accelerate.
> - Since the costs of generation assets are much more predicable that the fuel, it should be reasonable for NSPI to provide a forecast of the future value of assets that are made surplus due market uptake. As assets depreciate, the RTT associated with those assets should decrease towards zero over time.
> - Further to consideration of the value of assets made surplus due to RTR update, is the cost to operate, maintain, finance and insure these assets. Almost every value from Exhibit 5 of the COSS (Appendix 11A) used in the calculation of the RTT will be lower for a surplus asset that an economically active asset.
> - **SWEB Recommends that the Board consider significant adjustment of the RTT based on the decreased value and costs of operating those assets becoming surplus, and to provide a forecast of the RTT as it trends towards zero over time.** [Emphasis in original]
>
> [SWEB Closing Submission, pp. 3-4]

[92] NSPI opposed any adjustment to the RTT. It noted that the purpose of the RTT is to comply with the guiding principles in s. 3G(2) of the *Act* by ensuring there is no transfer of costs to NSPI's customers as a result of the introduction of the RtR market into Nova Scotia. In its Closing Submission, it stated:

> The Company submits that this position is untenable for three reasons. First, as noted above, Section 3G(2) of the Act provides NS Power customers are not to be negatively affected by the introduction of the RtR market and that all costs related to the provision of this service that would otherwise be the responsibility of NS Power and its customers are to be recovered from the LRS and its Retail Customers. Generation-related fixed costs that would be transferred to bundled service customers are a direct cost related to the introduction of the RtR market and are therefore the responsibility of the LRS and its Retail Customers and not NS Power and its customers.
>
> Second, NS Power is entitled under the Public Utilities Act to recovery of and a return on the prudent investments it makes in its regulated assets. This is also a generally accepted principle of utility rate-making. …
>
> …

> Finally, in NS Power's view, sanctioning the Company by not allowing the recovery of the costs covered by the RTT tariff would effectively change the regulatory construct, significantly increasing the risk profile and cost of capital to be borne by customers in the RTR and bundled service markets.
>
> [NSPI Closing Submission, pp. 30-31]

[93] In its Reply Submission, NSPI added that the RTT reflects the fact that, despite the opening of the RtR market, NSPI continues to require its generation assets because it has the "obligation to serve" its customers under the *Public Utilities Act:*

> ...SWEB recommends the Board consider "significant adjustment to the RTT based on the decreased value and costs of operating those assets becoming surplus, and to provide a forecast of the RTT as it trends to zero over time." Both the extent and timing of RtR market take-up and the continued attractiveness to customers of the RtR market over time are unknown. The RTT implements the guiding principles required under the Act. Were any existing NS Power asset to become less intensively used for a period of time, this would not automatically lead to a determination that the asset is becoming 'surplus' or its costs are becoming 'stranded,' given NS Power has a continuing obligation to serve customers who may wish to take service from it, and thereby to have the required ability to provide such service.
>
> ...
>
> The Company notes the RTT design recognizes the potential for cost savings. This is the function of the tariff's annual energy/demand savings credit. To the extent that the Company can identify such savings attributable to the RtR market activity, such savings would be recognized in this credit. There is no evidence that any such savings would be significant. As stated in the Cary Report, low electricity load growth will not provide the opportunity for any investment avoidance or deferral. As such, large savings should not be expected to occur in the short to medium term. Evaluation of what such savings are possible depends on the actual quantity and technology of RtR generation available, and thus on actual market activity. [Emphasis added]
>
> [NSPI Reply Submission, pp. 15-16]

[94] The Board Counsel's consultant, Mr. Whalen, supported the RTT, with the exception that it should be adjusted to reflect the $83.3 million of deferred costs from the cost of service (the agreed 2014 portion being $30.7 million). In his pre-filed evidence, he explained the basis for the Transition Tariff:

> ...The only costs not fully recovered through other tariffs are fixed generation costs. Within the cost of service, these costs are classified in part as energy and in part as demand. A portion of the costs classified as energy is recovered through the EBS and a portion of the costs classified as demand is recovered through the SS. The RTT is designed to recover the remaining portions of those costs.
>
> ...

> When customers leave NS Power and take supply from an LRS, their total energy and demand requirements do not change. NS Power will continue to supply some energy as top-up energy under the EBS and some demand under the SS. The portions that NS Power will no longer supply will be the energy and demand being supplied by the LRS, and it is to those quantities that the RTT will apply, to ensure that the fixed costs of generation associated with these continue to be recovered from the customers who were paying them before they switched to an LRS, and are not left to be recovered from customers who remain with NS Power.
>
> [Exhibit N-31, p. 12]

[95] At the hearing, Mr. Whalen was asked by the Board whether he supported the RTT and whether he would recommend any changes:

> THE CHAIR: Obviously a point of contention in the hearing is this [transition] tariff. And firstly, as I read your evidence, you agree with the necessity of a ... Transition Tariff?
>
> MR. WHALEN: Yes, I do.
>
> THE CHAIR: Do you have any suggestions other than what have been made already with respect to how we might minimize the effect of that?
>
> MR. WHALEN: I don't really, in the near term. In the longer term I think it takes care of itself, only in the sense that as generation changes, if a unit retires the O&M will change, depreciation might change, those kinds of things, that will reflect themselves in rates. But in terms of being able to put something in the rate now in anticipation of something that will happen five years from now, I think that's quite challenging to be able to do that.
>
> [Transcript, p. 375]

[96] In their Closing and Reply Submissions, other parties addressed the need to ensure the overall fairness of the RtR tariffs, including specifically the RTT's inclusion of NSPI's fixed costs of generation levied upon parties moving to the RtR market. PHP noted:

> Development of the Market Generally
>
> ... [PHP] notes the various other recommendations made by other intervenors to support the development of the RtR market. On all these points, PHP echoes the support expressed in DOE's submission for "...any refinements that will fairly minimize the premium while avoiding an improper transfer of costs." To the extent that there are improvements that can be made to the RtR framework that will assist in the development of a robust and competitive market (without contravening the requirements of the Electricity Act), PHP believes the Board should adopt such improvements.
>
> In this regard, PHP notes that NSPI has reiterated in its closing submission at page 5 that: "...NS Power must also be available to serve Retail Customers who wish to return to NS Power's bundled service" and also at page 29 that: "...the Company's ability to mitigate these costs is limited by its ongoing obligation to serve as NS Power must maintain its

> generation capacity in the event departed Retail Customers return to NS Power's bundled service."
>
> Although NSPI certainly retains its general obligation to serve under the Public Utilities Act, PHP remains unclear as to why NS Power would be required to maintain an obligation to continue to plan to serve a customer "at a moment's notice" once that customer chooses to take service from a renewable retail supplier under a long-time contract. For example, under NSPI's existing Large Industrial Tariff, an existing customer taking service under the interruptible rider that wishes to switch to a firm service rate is required to provide a five (5) year advance written notice to NSPI "...so as to ensure adequate capacity availability." PHP raised similar comments regarding the extent of NSPI's obligation to serve under the RtR framework as part of its feedback to NSPI early on in this process.
>
> If NSPI's interpretation of the scope of its continuing obligation results in significant costs being charged under the RtR framework, this may be something for the Province, the Board, and other market participants to consider as part of the development and ongoing review of the RtR tariffs.
>
> [PHP Rebuttal Submission, pp. 4-5]

[97] While expressed in relation to his submissions on unbundling, the CA also addressed the impact of stranded generation assets on RtR tariffs:

> ...NSPI is essentially claiming that it has stranded generation costs, which must be recovered from RtR customers through the transition tariff. At a convenient time, the Board could decide to unbundle the generation function into two components: stranded costs and those that are still competitive and useful. Indeed, it would be in NSP's interest to make that showing sooner rather than later, so that it is not stuck with stranded costs as a result of some future government policy initiative.
>
> [CA Closing Submission, p. 4]

3.8.1 Findings

[98] Following its review of the evidence and the submissions, the Board is satisfied that the development of the RTT is based on sound ratemaking principles, as well as upon the guidelines set out in s. 3G(2) of the *Act*, subject to NSPI making the adjustment noted by Mr. Whalen to reflect the elimination of deferred costs from the cost of service. Accordingly, with that adjustment, the Board approves the RTT.

[99] However, the Board remains mindful of the comments of the Intervenors that there is a balance between the development of a robust and competitive RtR market and the satisfaction of the requirements in the *Electricity Act*. In the Board's view, an RtR

tariff scheme which closely reflects an accurate cost-based approach will facilitate the competitiveness of the RtR market.

[100] Accordingly, the Board will closely monitor the development of the RtR market, including the appropriate reflection of costs in the RtR tariffs based on market experience. As noted elsewhere in this Decision, the Board will require regular reporting from NSPI as this market develops.

[101] While the Board recognizes NSPI's "obligation to serve" under the *Public Utilities Act*, it notes that this obligation is not absolute in the sense that NSPI must continue to manage its generation fleet and O&M costs in a prudent manner. The Board is not prepared to accept NSPI's view, at this point at least, that savings in the system will not be significant in the medium term. It would be premature to make that determination at this stage of the market's development. In assessing NSPI's conduct in this regard, the Utility's efforts must be reasonable and appropriate in relation to its management of items like depreciation, O&M costs, and NERC reserves. The Board will continue to monitor NSPI's conduct in this respect under the FAM, ACE Plan, and its general supervision of the Utility.

3.9 NSPI Deferral and Overearnings

[102] NSPI relied on the 2014 Cost of Service ("COS") as the starting point on which to base the RtR tariffs. Multeese, in its evidence, identified a concern that the charges are likely overstated because the COS on which they are based include $83 million of deferred costs. NSPI agreed that the COS should be reduced by the difference between the 2014 revenue requirement that gave rise to the current bundled service rates and the 2014 revenue requirement on which the Cost of Service Study was based. NSPI stated the 2014 portion that will be credited to RtR totals $30.7 million.

[103] During the hearing, Board Counsel explored the concern of cross subsidization resulting from NSPI's 2014 revenue requirement causing excess earnings:

> Mr. Outhouse: Now you have based your tariffs, your RTR Tariffs, on cost of -- that – those costs that are currently in rates. And if there are overearnings, will the RTR customers benefit from those under the regime -- the legal regime that now exists?
>
> Mr. Ferguson: It's not our intention that they would be adjusted, and we are treating it and proposing that it be approached as a below-the-line tariff.
>
> Mr. Outhouse: Yeah. So like the other -- in other words, the benefits as you foresee them would be distributed through the FAM; correct?
>
> Mr. Ferguson: Yes.
>
> Mr. Outhouse: And so the RTR customers you say would not get any benefit from that?
>
> Mr. Ferguson: That's our proposal, yes.
>
> Mr. Outhouse: Has any consideration be given -- being given to giving them some break on the cost of service because they don't share in any potential over-recoveries or excess earnings?
>
> Mr. Ferguson: No, sir.
>
> Mr. Outhouse: Is there a reason why not?
>
> Mr. Ferguson: Well, the creation of the renewable to retail market, you know, it creates two separate -- a new market in the province that we are proposing to be treated separate from bundled service regulated supply. Issues like return of overearnings have been matters that have been developed between the company and its bundled service customers over time through settlement processes. They tend to be a function of the circumstances specific to the GRA.
>
> So we just -- we see the concept as something that applies in the bundled service regulated market and just not in the competitive sector as being established through the RTR market.
>
> Mr. Outhouse: So you're saying it's not practical, Mr. Ferguson?
>
> Mr. Ferguson: We just see it as -- I haven't thought about the practicality, to tell you the truth, of doing the math. It's more that the settlement agreement -- it's like the question of the deferral -- recognition of the deferral. The deferral exists because the company has agreed with its customers that a certain amount of its revenue requirement should be not recognized in current rates unless it's appropriate to defer and recover at a future period.
>
> That's a decision that really is -- it's required because of the bundled service. It's the 15 cents a kilowatt hour which drives that kind of behaviour. When you unbundle and start to segregate distribution transmission into its elements I think concepts of restabilization mechanisms like deferrals and the return of surplus earnings are less applicable.
>
> Mr. Outhouse: I guess the only – the prospect that it raises, though, is that current rates upon which the RTR rates are based are sufficient to generate excess earnings, but if that happens the RTR customers whose rates are based on those rates that have generated the surplus don't get any benefit from it?
>
> Mr. Ferguson: That's -- should the surplus earnings arise ---
>
> Mr. Outhouse: Should the surplus earnings arise. I acknowledge that.
>
> Mr. Ferguson: Yeah.

Mr. Outhouse: There's no mechanism for that? No proposed mechanism?

Mr. Ferguson: That's correct.

[Transcript, pp. 236-239]

[104] In 2014, NSPI applied $41.3 million of non-fuel earnings to reduce the FAM deferral balance to the benefit of FAM customers.

[105] In the hearing, NSPI confirmed absent any rate application they would continue to use the 2014 Cost of Service to establish RtR rates.

3.9.1 Findings

[106] The Board observes that most of the issues identified in this matter relate to the risk that NSPI's existing customers may subsidize the RtR market and its customers. Concerns related to the deferral and a potential need for a true up related to overearnings through 2020, relate to whether the RtR market should subsidize NSPI or the bundled customers. The legislation supporting the opening of this market has imposed guiding principles that the Board believes would not permit such cross subsidization. No other "below the line" customers have such a restriction. Since the first year the 2014 Cost of Service has been used, NSPI has been in a position of overearnings. Using that COS as the starting point for setting these rates with no true up is concerning.

[107] Absent a mechanism to capture the potential for continued overearnings in the annual adjustment process, the Board finds a downward adjustment to the starting COS is necessary. NSPI is directed, in setting the initial rates, to reduce the COS by the 2014 earnings in excess of the permitted range and flow the corresponding adjustment through the RTT.

[108] The Board understands to avoid cross subsidization a one-time adjustment is not sufficient and NSPI should propose an approach to refine its AAR to ensure NSPI's actual cost to serve is captured.

3.10 Approval of RtR Tariffs

[109] As described more fully earlier in this Decision, NSPI has proposed a suite of tariffs to accommodate the opening of the RtR market, including the DT, EBS, SS and the RTT.

[110] Moreover, NSPI has requested that it be permitted to defer its recovery of direct incremental costs incurred for the development and implementation of the RtR market, including the costs of this regulatory proceeding (collectively the "RtR Market Implementation Costs"). NSPI intends to amortize these costs over a reasonable period and include that expense in the future Annually Adjusted Rate processes for RtR tariffs. The recovery of these costs is not currently reflected in the RtR tariffs.

3.10.1 Findings

[111] The Board approves the DT, EBS, SS and RTT, subject to the Board's findings elsewhere in this Decision. All such Board directed adjustments will be reflected in the Compliance Filing to be filed by NSPI, including, but not limited to, reflection of the $30.7 million amount of deferred costs from the cost of service (as identified by Mr. Whalen); reflection of the 2014 overearnings; removal of the 1.38 cents per kWh adder from the EBS; adoption of the Load Following rate for the energy portion of the EBS; removal of the declining spill rate; and the reflection of line losses.

[112] The Board notes here that the RtR market participants will have to subscribe to the full suite of RtR tariffs, although the bulk of costs incurred under those tariffs will be dependent on usage.

[113] The Board also approves the deferral and amortization of the RtR Market Implementation Costs. NSPI has indicated it will provide an updated estimate of these costs in the Compliance Filing.

3.11 Approval of LRS Terms and Conditions

[114] The LRS Terms and Conditions are designed to govern the relationship between NSPI and a LRS. Through the Participation Agreement, the form of which is adopted as an appendix to the LRS Terms and Conditions, the respective parties agree to be bound by the Terms and Conditions for various matters, including procedures for retail customer transactions, metering, load settlement and LRS billing.

[115] The LRS Terms and Conditions provide that the LRS must agree to subscribe to all the LRS tariffed services, which include the DT, EBS, SS, RTT, and OATT tariffs. The LRS must also have a Retail Supplier Licence issued by the Board.

[116] NSPI sought and received stakeholder input respecting the LRS Terms and Conditions, including the Participation Agreement, and filed draft versions with their Application in this matter. It requested the Board's approval of these provisions.

[117] Board Counsel's consultant, ECI, was the only party who recommended changes to the draft Terms and Conditions. NSPI indicated it generally accepted these recommendations, as follows:

- to be consistent with s. 30 of the draft *Board Retailers Regulations*, that the requirement in s. 9.1 for contracts to be in writing be eliminated in order to allow contracts to be executed by telemarketing or electronic means by Small Volume Customers;

- that s. 11.5 of the LRS Terms and Conditions specify a maximum timeframe for NSPI to transfer a customer to LRS-supply. However, because NSPI considered that installing a new interval meter and establishing telecommunications in order to transfer a customer could take longer than one week, it submitted that the

maximum timeframe be 14 days, rather than 7 days as suggested by ECI. NSPI indicated that this could be revisited as the RtR market develops.

- that s. 11.7 be amended to clarify that only outstanding indebtedness that is in arrears would preclude NSPI from transferring a customer to Retailer-supply. However, as more fully discussed below, NSPI suggested that it would still require the right to disconnect a customer after transfer to LRS-supply in the event that current charges fall into arrears.

- that ss. 14.5.5 of the Terms and Conditions, which requires NSPI's acceptance of the form of the LRS's bill, be removed since the issue of ensuring NSPI's DT charges are correctly reflected on the LRS's bill falls under the Board's proposed Code of Conduct.

[118] As noted above, NSPI suggested that it would still require the right to disconnect a customer after transfer to LRS-supply in the event that current charges fall into arrears. It confirmed this position during the hearing in questioning by Board Counsel:

> MR. OUTHOUSE: ... And I guess I was just puzzled by that. You're talking about a customer that's transferring to retail and you can refuse if they're in arrears. If they're not in arrears you approve the transfer, and then you say that you can disconnect.
>
> If they then be a customer of the LRS, how would you disconnect them?
>
> MR. CASEY: We would still – Nova Scotia Power would still have the ability to disconnect the meter.
>
> MR. OUTHOUSE: No, but, I mean, when they become a customer of the retail supplier, they're not your customer anymore, the LRS is your customer; correct?
>
> MR. CASEY: Correct, but what this is saying is that we'll allow them to become a customer of the LRS, despite the fact that they have current charges with us. So they're not in arrears but they have current charges.
>
> MR. OUTHOUSE: Yes.
>
> MR. CASEY: But then if they don't pay those current charges, now they are in arrears.
>
> ...
>
> MR. FERGUSON: They still -- for distribution services, they still will be a customer of Nova Scotia Power. We're proposing that the billing be all consolidated through the LRS, but they are still a distribution customer.
>
> MR. OUTHOUSE: All right, but they're now LRS's customer. Are you saying that you would retain the right to cut them off for something that they owed to Nova Scotia Power prior to leaving Nova Scotia Power as a bundled service customer?
>
> MR. FERGUSON: Yes.
>
> [Transcript, pp. 227-229]

3.11.1 Findings

[119] NSPI requested approval of its proposed LRS Terms and Conditions, including the draft form of Participation Agreement. These items were the subject of stakeholder input leading up to the hearing.

[120] In the pre-filed evidence and at the hearing, ECI was the only party who recommended changes to the filing. In their final submissions, the other parties supported the adoption of ECI's suggested revisions to the Terms and Conditions (including the Participation Agreement).

[121] Based on the Board's review, and taking into account the submissions of the parties, the Board approves the LRS Terms and Conditions (including the Participation Agreement), incorporating the changes noted above. The transfer to LRS-supply may reflect the 14 day maximum timeframe suggested by NSPI. The Board directs NSPI to reflect the revisions in its Compliance Filing.

[122] As noted above, NSPI raised an associated issue with respect to the revision which would permit NSPI to prevent a transfer of a customer to LRS-supply only in circumstances when outstanding indebtedness is in arrears. NSPI stated that it would still require the right to disconnect a customer after transfer to LRS-supply in the event that current charges fall into arrears.

[123] The Board does not accept NSPI's submission on this point. In the Board's view, after a customer has been appropriately transferred to LRS-supply, that customer is then the customer of the LRS, not of NSPI. While that customer may ultimately be disconnected if it fails to comply with the terms of its contract with the LRS, the Board finds that NSPI should no longer to be able to disconnect that customer for any arrears owing to NSPI and its only option would be another legal recourse. If NSPI considers

that the Board's finding needs to be reflected in the Terms and Conditions, it should address that point in the Compliance Filing.

3.12 Approval of Amendments to OATT

[124] The Application proposed changes to Schedule 4 of the OATT because in its current format it is not suitable for the proposed RtR market. Schedule 4 includes charges for EBS at each point of delivery and receipt. In the case of RtR, the load supplied will be at different points and in some cases the generation may also be at different points on the system. In addition, the EBS imbalance is calculated on an hourly basis between supply and demand, rather than the actual difference. NSPI is proposing that the EBS imbalance service be calculated based on hourly differences between consolidated supply and consolidated demand for each LRS. NSPI has proposed a new Schedule 4A of the OATT for RtR purposes to address the generation imbalances.

[125] NSPI has also proposed other changes to the OATT to incorporate this new Schedule 4A in the OATT text so that it can be used by both RtR as well as other wholesale marketers.

3.12.1 Findings

[126] NSPI has proposed a new Schedule 4A in the OATT to accommodate the RtR market and the changes to the OATT text to incorporate Schedule 4A. No Intervenor has filed evidence in opposition to NSPI's proposal.

[127] The Board approves the incorporation of the new Schedule 4A and amendments to the OATT text as proposed by NSPI, along with any other changes required by this Decision.

3.13 Approval of Amendments to Generator Interconnection Procedures

[128] The GIP, which is part of the OATT, applies to generation facilities which are connected to the NSPI transmission system. NSPI has proposed amendments to section 7.2 so that an LRS is qualified to be included in a System Impact Study.

[129] Section 11.4.1 of the Standard Generator Interconnection and Operating Agreement, which is Appendix 6 of GIP, is also proposed to be revised and a new section 11.4.2 is added to comply with the requirements that no cost related to the RtR is borne by NSPI customers.

3.13.1 Findings

[130] NSPI has proposed two changes to the GIP to accommodate the RtR market and comply with the *Electricity Reform Act*. The Board did not receive any evidence in opposition to these amendments. The Board approves the amendments to GIP as proposed by NSPI, including amendments to the Agreement in Appendix 6.

3.14 Approval of Amendments to NSPI *Regulations*

[131] NSPI noted, in its Final Submission, that its proposed NSPI *Regulations* are supported by Mr. Whalen and that no alternatives were put forward by any Intervenors.

3.14.1 Findings

[132] The Board approves the NSPI *Regulations* as filed.

3.15 Wholesale Electricity Market Rules

[133] After having completed a formal evaluation and stakeholder consultation, the NSPSO has proposed amendments to the Wholesale Electricity Market Rules. The NSPSO has recommended that the publishing and effective date of the amended Market Rules be made subject to, and conditional upon, the Board's decision respecting NSPI's RtR Application.

[134] In its Application, NSPI stated that:

> … The Wholesale Electricity Market Rules (Market Rules) are applicable to wholesale customers, eligible customers under the OATT and the operation of the bulk electricity supply system. The Market Rules define the rights and obligations of NSPSO and market participants. The recent amendments to the Act require NS Power to create a new or amend the existing set of Market Rules to facilitate the RtR market. NS Power has sought to leverage the existing Market Rules in developing amendments for the RtR market.
>
> The amendments proposed are driven by four primary objectives:
>
> - To broaden the scope of the existing Wholesale Market Rules and Procedures to include the new RtR market while preserving the provisions applicable to the Wholesale Market;
> - To enable the LRSs who are licenced by the Board to become Market Participants under the Market Rules, and thereby eligible to obtain Transmission Service and Ancillary Services under the OATT and to receive other tariffed services through the LRS Participation Agreement with NS Power;
> - To expand the scope of the Wholesale Market Advisory Committee to include the RtR market; and
> - To provide for any unique market rule and procedure requirements and/or exclusions that are specific to the RtR market and include them in the amended Market Rules and Procedures.
>
> [Exhibit N-16, lines 4-29]

[135] The Application also noted that the NSPSO will be consulting with the Wholesale Market Advisory Committee regarding the proposed amendments in accordance with the Market Rule 2.4 and Market Procedure MP-25.

[136] NSPI provided a copy of the proposed amendments as Appendix 25 to its Application. NSPI also noted that the Wholesale Electricity Market Procedures will be reviewed after the Board's RtR Decision to assess the requirement for any new procedures or amendments to the existing procedures.

[137] NSPI provided a copy of the NSPSO report with its Settlement Report (Exhibit 40) which outlined the evaluation and stakeholder consultation on the proposed amendments to the Market Rules in accordance with the process set out in the Market Procedures MP-25. NSPSO recommended that the proposed amendments should be incorporated. NSPSO also provided a copy of the report on the NSPSO-OASIS web site.

The publishing and effective date of the proposed amendments to the Market Rules is conditional on the Board's Decision on the RtR Application.

[138] The Intervenors did not file any evidence on the proposed amendments to the Market Rules and there was little or no discussion at the hearing.

3.15.1 Findings

[139] The inclusion of the Wholesale Electricity Market Rules in NSPI's Application was not to obtain the Board's approval of the Market Rules. These Rules actually require adoption by the NSPSO. Rather, the proposed amendments were provided in the Application for the purpose of ensuring the amendments to the Market Rules align with the approved RtR framework.

[140] The Board has reviewed the evidence filed by NSPI and NSPSO to amend the Market Rules as required under the *Electricity Reform Act.* No intervenor filed evidence or objections to the proposed amendments to the Market Rules.

[141] The Board has no comment on the proposed amendments to the Market Rules. The Board understands that the publishing and effective date of these amendments are subject to the Board Decision and Order for the RtR Application by NSPI.

3.16 Approval of Board Regulations and Code of Conduct

[142] On July 15, 2015, the Board issued draft *Board Retailers Regulations* and a draft Code of Conduct prepared by ECI. They were circulated to interested parties for comment in advance of the filing of this Application. No further comments were made by Intervenors during the course of the Application.

[143] ECI proposed amendments to the *Board Regulations* based on the Application and other evidence filed in this proceeding.

3.16.1 Findings

[144] ECI is directed by the Board to file, no later than April 25, 2016, revised *Board Regulations* and a revised Code of Conduct to reflect the findings made in this Decision. Parties will be given an opportunity to provide written comments on these revised documents by May 9, 2016, before approval by the Board.

3.17 NSPI Reporting

[145] In his pre-filed evidence on behalf of the SBA, Mr. Athas recommended that NSPI be required to provide a quarterly RtR market participation report, which he stated should include, among other items: customer participation; total demand and energy participation; energy purchased by NSPI under the Spill tariff and its price relative to quarterly real time/actual marginal costs; and the energy sold by NSPI under the EBS and the real time/actual marginal cost to produce that energy, and load they are serving.

[146] The parties reached agreement on this issue as a result of the settlement conference process. In its Rebuttal Evidence, NSPI proposed as follows:

> The Company notes that the NSPSO submits an annual Wholesale Market Report to the Board covering areas of RtR market activity. NS Power proposes to include an RtR market report within the Wholesale Market Report, with a semi-annual update to the Board on the specific RtR market activity. NS Power proposes the report and semi-annual update include (for the reporting period):
>
> (1) Customer participation (i.e., number of customers by bundled service class).
>
> (2) Total demand and energy participation.
>
> (3) Energy received by NS Power as spill under the EBS Tariff. The Company will report on the estimated cost savings to NS Power of accepting this energy.
>
> (4) The energy sold by NS Power as top-up under the EBS Tariff. The Company will report on the estimated cost to provide this energy.
>
> [Exhibit N-42, p.11]

[147] The SBA abandoned Mr. Athas' recommendations that this reporting include the names and numbers of Licenced Retail Suppliers and complaints made against these suppliers. It was acknowledged by the SBA that this information would be

administered by the Board in accordance with its oversight under the *Board Retailers Regulations*.

[148] In submissions, there was agreement with these proposed reporting requirements.

3.17.1 Findings

[149] The Board considers that the information contemplated in the proposed reporting items will be useful in reviewing the operation and conduct of the RtR market. The Board directs NSPI to file the above reports, commencing with the 2018 Wholesale Market Report.

4.0 COMPLIANCE FILING

[150] NSPI is directed to file, in a Compliance Filing, including the revisions to its Tariffs, Regulations, Terms and Conditions as approved by the Board in this Decision. The Compliance Filing is to be made on or before April 25, 2016.

[151] Intervenor comments on the Compliance Filing are due by May 9, 2016.

5.0 SUMMARY OF BOARD FINDINGS

5.1 Approval of Renewable to Retail Tariffs, Rules, Regulations, and Code of Conduct

[152] The Province enacted the *Electricity Reform Act*, S.N.S. 2013, c. 34, which amended the *Electricity Act*, to enable the purchase and sale of renewable low-impact electricity generated in Nova Scotia from licensed "retail suppliers" to "retail customers". The establishment of this new "Renewable to Retail" ("RtR") market is subject to two important guiding principles set out in the Section 3G(2) of the *Act*. First, that customers of NSPI are not to be negatively affected if some retail customers choose to purchase electricity in the RtR market. Second, that retail suppliers and their customers are to be

responsible for all costs related to the provision of the renewable low-impact electricity in this new market.

[153] Section 3G(1) of the *Act* directed NSPI to develop, in consultation with stakeholders, and to file with the Board for approval, any tariffs, procedures and standards of conduct and any amendments to existing tariffs, procedures and standards of conduct that are necessary to facilitate the purchase and sale of renewable low-impact electricity in the RtR market.

[154] Based on its review, the Board approves the Distribution Tariff ("DT"); the Energy Balancing Service Tariff ("EBS"); the Standby Service Tariff ("SS"); and the Renewable to Retail Market Transition Tariff ("RTT"); subject to the Board's findings in this Decision. All such Board directed adjustments will be reflected in the Compliance Filing to be filed by NSPI, including, but not limited to, reflection of the $30.7 million amount of deferred costs from the cost of service; reflection of the 2014 overearnings; removal of the 1.38 cents per kWh adder from the EBS; adoption of the Load Following rate for the energy portion of the EBS; removal of the declining spill rate; and the reflection of line losses.

[155] The Board has also approved a Licenced Retail Supplier ("LRS") Participation Agreement and the LRS Terms and Conditions (as amended in this Decision), which are designed to govern the relationship between NSPI and a LRS.

[156] In order to accommodate the establishment of an RtR market, the Board has approved amendments the Open Access Transmission Tariff ("OATT"), the Generator Interconnection Procedures, and the NSPI *Regulations*.

5.2 Monitoring of the Developing RtR Market

[157] The Board will closely monitor the development of the RtR market, including the appropriate reflection of costs in the RtR tariffs based on market experience.

[158] While the Board recognizes NSPI's "obligation to serve" under the *Public Utilities Act*, it notes that this obligation is not absolute in the sense that NSPI must continue to manage its generation fleet and O&M costs in a prudent manner. The Board is not prepared to accept NSPI's view, at this point at least, that savings in the system will not be significant in the medium term. It would be premature to make that determination at this stage of the market's development. In assessing NSPI's conduct in this regard, the Utility's efforts must be reasonable and appropriate in relation to its management of items like depreciation, O&M costs, and NERC reserves. The Board will continue to monitor NSPI's conduct in this respect under the FAM, ACE Plan, and its general supervision of the Utility.

5.3 Behind the Meter

[159] The issue of “behind the meter” sales were also canvassed at the hearing. The Board did not accept NSPI’s view that behind the meter transactions are caught by the provisions of the *Electricity Act* and are subject to the tariffs applied for by NSPI.

[160] The Board confirmed that an arrangement whereby a person generates electricity for their own use behind the NSPI meter is not subject to regulation by the Board under the *Public Utilities Act*. Likewise, if a third party constructs a generator on or adjacent to the property of that person, and supplies that customer exclusively, that transaction is not subject to the *Public Utilities Act* so long as it occurs behind the meter. In the circumstances, therefore, the Board concludes that transactions behind the meter

are not distinguished from the current regulatory scheme simply because it is the sale of low-impact renewable energy.

5.4 NSPI Reporting

[161] The Board will require regular reporting from NSPI as this market develops. NSPI is to include an RtR market report within the Wholesale Market Report, with a semi-annual update to the Board on the specific RtR market activity, including the following: 1) Customer participation (i.e., number of customers by bundled service class); 2) Total demand and energy participation; 3) Energy received by NS Power as spill under the EBS Tariff (and the estimated cost savings to NSPI of accepting this energy); and 4) The energy sold by NS Power as top-up under the EBS Tariff (and the estimated cost to provide this energy.

[162] An Order will issue following the Compliance Filing.

DATED at Halifax, Nova Scotia, this 23rd day of March, 2016.

Peter W. Gurnham

Roland A. Deveau

Kulvinder S. Dhillon