

MEMORANDUM

TO: Nova Scotia Utility and Review Board

FROM: Mel Whalen, Multeese Consulting Inc.

SUBJECT: NSPI's Proposed Modifications to Regulation 3.6 (Net Metering)

DATE: February 9, 2011

I have reviewed NSPI's November 1, 2010 application to the Board for approval to modify its existing Regulation 3.6 – Net Metering. The proposed changes are necessary to comply with the *Amended Electricity Act* which became effective on October 15, 2010.

I support NSPI's proposed Regulation 3.6 and recommend its approval.

NSPI's current Regulation 3.6 has been in place since 2005. It allows:

- Net metering of generating units whose capacity is 100Kw or less;
- Excess generation to carry from one month to another within a twelve month period, with a resetting of any excess generation to zero at the end of the twelve month period, without compensation to the generator;
- Net metering to be applied against more than one meter only if the meters are all located on the same parcel of land.

The proposed Regulation 3.6 reflects the *Amended Electricity Act* which modifies all of the above as highlighted below:

- Net metering of generating units whose maximum capacity is **1000Kw** or less;
- Excess generation to carry from one month to another within a twelve month period, with a resetting of any excess generation to zero at the end of the twelve month period, **with** compensation to the generator;
- Net metering to be **applied against multiple meters within the same distribution zone.**

Each of these changes is discussed in the following paragraphs.

Maximum Generating Unit Capacity

The *Amended Electricity Act* specifies a maximum generating unit capacity of 1MW.

NSPI proposes to divide this into two classes:

- Class 1 up to and including 100Kw
- Class 2 100Kw to 1MW

NSPI's two-class proposal reflects the fact that its current interconnection standards, which govern the addition of generation on its distribution system, include a 100Kw break point beyond which the interconnection process becomes much more onerous. Keeping projects that are 100Kw or less in a separate class permits this easier interconnection procedure for these smaller generators to continue. I support this distinction. My only recommendation is that the lower limit for Class 2 should be set at 101Kw to avoid any confusion of where the break point is.

NSPI proposes that the total capacity eligible for net metering be initially limited to 20MW, with a review, if and when that limit is reached. The Company proposes that 5MW of this be assigned to Class 1 and 15MW be assigned to Class 2. The 5MW limit in Class 1 is approximately ten times the currently installed capacity in this class, so it allows for significant growth. The remaining 15MW is available for the larger generators who are just becoming eligible for net metering. I support these limits.

The legislation requires that the capacity of the generator be sized to meet the customer's expected annual consumption¹. It also limits the maximum capacity to 1MW². Either of these could be the limiting factor, as is clear from NSPI(Multeese) IR-1. NSPI has some discretion with respect to the annual consumption limit, and in cases where it is the limit, proposes to work with the customer to size a generator that respects the spirit of the

¹ Section 3A(2)(c)

² Section 3A(4)

legislation, while at the same time allowing reasonable flexibility for the customer. I support this approach.

Compensation

The *Amended Electricity Act* specifies that a customer who installs generation to supply his own needs may sell any excess generation to the utility “at a rate equivalent to the rate paid by the customer for electricity supplied to the customer by the public utility”³. This is somewhat ambiguous.

The first question relates to the frequency of determining excess generation, and whether this should be on a monthly or annual basis. NSPI proposes to determine this annually and I support this for several reasons:

- a) It is consistent with Section 3(A)(2)(c) of the *Amended Electricity Act* which links the size of the generator to the customer’s annual consumption.
- b) It is consistent with the current practice in Regulation 3.6.
- c) It reduces the administrative burden associated with this Regulation.
- d) NSPI has received verbal assurance from NSDOE that its proposed Regulation 3.6 is consistent with the provisions of The Amended Electricity Act.⁴
- e) Stakeholders appear happy with the annual payments, as none of them has proposed modifying this provision of the proposed Regulation.

The second question relates to the price to be paid for excess generation, and what is the appropriate interpretation of the phrase “at a rate equivalent to the rate paid by the customer for electricity supplied to the customer by the public utility”. This could be interpreted as the average rate paid by the customer (i.e.; the total dollars paid over some period such as a year, divided by the kwh supplied during that same period) or it could be interpreted as the rate paid by the customer for incremental energy consumption. NSPI’s proposal, which appears to be supported by NSDOE, is based on the incremental

³ Section 3A(1)

⁴ NSPI(Multeese) IR-4.

approach. I support this interpretation as it is most consistent with the concept of sizing a generator to supply the customer's own consumption and supplying excess (incremental) generation to NSPI.

NSPI's pricing proposal includes the following:

- In any rate class where there is a single energy charge, the rate paid for excess generation will be that energy charge.
- In any rate class where there are declining block energy charges, the excess generation will be priced "only at the energy charge applicable to the additional kilowatt hours" (NSPI Direct Evidence, page 11, Lines 14-16)⁵.
- The energy charges which determine the payment for excess generation in each class will include FAM charges (AA and BA) but will not include Energy Efficiency charges (DCRR and DCRR BA) since these are charges collected by NSPI on behalf of a third party, and the total revenue requirement which drives these charges, is not affected by excess generation.
- In the Residential Time of Use Rate Class, excess generation will be tracked by appropriate time period and compensated at the rate appropriate to that period.

It could be argued that there are inconsistencies in NSPI's approach. For example, in the Residential class, the energy charge includes charges that in other classes are included in a demand charge, and because of this, residential customers receive a "demand component" in their payments for excess generation. While this may be true, I support NSPI's proposal because it is simple, straight forward and easy to apply, and because it is expected to be applied to small amounts of energy only⁶.

⁵ It appears from NSPI(Multeese) IR-3 that this is expected to be the energy rate that applies to the last block. Only three rates have declining energy charges. In all cases, there are two blocks and few customers who would have no consumption in the second block. Those who do not have second block charges will be unlikely to be able to economically justify installing their own generation.

⁶ All customers who install generation to meet their own consumption will reduce their billing determinants and receive the benefits of doing so. NSPI's compensation applies to excess energy only, which will be small, given the requirement to match the generator to the customer's consumption.

Aggregated Metering

NSPI's current Regulation 3.6 allows customer to aggregate metering if meters are on the same parcel of land. The *Amended Electricity Act* allows aggregation within a "distribution zone"⁷, but does not define this. NSPI proposes to allow customers to aggregate accounts where the meters associated with those accounts and the customer generator supplying any portion of their consumption are located on distribution feeders which emanate from a single distribution supply transformer within a substation. Where this is the case, customers may designate the portion of the energy supplied to be associated with each account. The legislation and NSPI's proposal recognize that allowing customer generation to be moved from one distribution zone to another would involve the transmission system and raise Open Access Transmission Tariff (OATT) issues, and neither permits this. NSPI's proposal is in compliance with the legislative requirements and allows customers significant flexibility in the use of generation to meet supply their own consumption. I support NSPI's proposal.

⁷ Section 3(A)(2)(d).