ORDER **2019 NSUARB 34**
M08966

NOVA SCOTIA UTILITY AND REVIEW BOARD

IN THE MATTER OF THE PUBLIC UTILITIES ACT

- and -

IN THE MATTER OF THE APPLICATION by **NOVA SCOTIA POWER INCORPORATED** for approval of the Annually Adjusted Rates for 2019

BEFORE: Steven M. Murphy, MBA, P.Eng., Member
Jennifer L. Nicholson, CPA, CA, Member

ORDER

WHEREAS Nova Scotia Power Incorporated (NS Power) made application to the Board on November 7, 2018, for approval of its 2019 Annually Adjusted Rates for the following tariffs:

- Generation Replacement and Load Following (GRLF) Tariff;
- One Part Distribution Voltage Real Time Pricing Tariff;
- One Part High Voltage Real Time Pricing Tariff;
- One Part Extra High Voltage Real Time Pricing Tariff;
- Shore Power Tariff;
- Wholesale Market Back-up/Top-up (BUTU) Tariff;
- Wholesale Market Non-Dispatchable Supplier Spill Tariff;
- Energy Balancing Service (EBS) Tariff;
- Standby Service (SS) Tariff; and
- Renewable to Retail Market Transition Tariff (RTT)

AND WHEREAS by Board letter dated November 14, 2018, a timeline was set out for this proceeding;

AND WHEREAS Board Counsel Consultant, Multeese Consulting Inc. (Multeese), the Consumer Advocate, and Small Business Advocate, issued Information Requests to NS Power on November 27, November 28 and November 30, 2018, respectively, and NS Power provided responses on December 20, 2018;

AND WHEREAS Submissions by Multeese and Intervenors were filed with the Board on January 14, 2019;

AND WHEREAS NS Power's Reply Evidence was filed with the Board on January 28, 2019;

AND WHEREAS the Board's Decision dated March 1, 2019, directed NS Power to submit a Compliance Filing with rates as amended in that Decision, by March 8, 2019;

AND WHEREAS the amended rates are to be effective from March 1, 2019;

AND WHEREAS NS Power submitted its Compliance Filing on March 8, 2019, with amendments as directed;

IT IS THEREFORE ORDERED that NS Power's 2019 Annually Adjusted Rates be approved by the Board for the period March 1, 2019 to December 31, 2019, or until such date as future rates are approved, and are attached as the following Schedules:

- Schedule A - Generation Replacement and Load Following (GRLF) Tariff;
- Schedule B - One Part Extra High Voltage Real Time Pricing Tariff;
- Schedule C - One Part High Voltage Real Time Pricing Tariff;
- Schedule D - One Part Distribution Voltage Real Time Pricing Tariff;
- Schedule E - Shore Power Tariff;
- Schedule F - Wholesale Market Back-up/Top-up (BUTU) Tariff;
- Schedule G - Wholesale Market Non-Dispatchable Supplier Spill Tariff;
- Schedule H - Energy Balancing Service (EBS) Tariff;
- Schedule I - Standby Service (SS) Tariff; and
- Schedule J - Renewable to Retail Market Transition Tariff (RTT)

DATED at Halifax, Nova Scotia, this 12th day of March, 2019.

Karen Friis

Clerk of the Board

GENERATION REPLACEMENT AND LOAD FOLLOWING TARIFF

SERVICE DEFINITION

Service under this tariff consists in delivery of supplemental power to partial requirement customers who operate their own dispatchable generation equipment, as approved to be connected to the grid by the Company. The Service has three components.

Generation Replacement Service - Backup supply of power on a best efforts basis where the customer's generation equipment is removed from service due to scheduled maintenance, forced outage, or loss of fuel supply.

Optional Load Following Service – Energy delivery in respect of imbalance between load and generation where customer's generation falls in any given hour below the lower of the established net operating capability or customer's load. Energy delivery under this service is defined as top-up energy.

Spill Service - Hourly generation in excess of the customer's load absorbed by the Company. This excess energy is defined as spilled energy.

Power supplied by the Company to the customer in any given hour above the customer generation, if not below the established net operating capability, is defined as supplementary power and will be billed under applicable full requirement tariff. Customers taking this service will be referred to as "customer-generators".

RATE

Backup Service:

The actual or estimated average time coincident incremental cost of generation including transmission losses for the period service is provided plus 0.500 cents per kWh for additional Operating and Maintenance costs, service charges and Administration & General compensation.

Optional Generation Load Following:

Average incremental cost of generation expressed in cents per kWh as determined by the generation forecast for the rate year plus add on charges as defined for back-up service. This price will be 6.775 cents per kWh.

GENERATION REPLACEMENT AND LOAD FOLLOWING TARIFF

ENERGY CREDIT

The Energy Credit is equal to the average incremental cost of generation as defined under Optional Generation Load Following.

AVAILABILITY

This tariff is available to:

(a) Customers who have their own qualifying generating facility of not less than 2,000 kW of aggregate capacity, as defined under Special Condition (8), normally used to support their own load;

(b) Energy supplied to Non-Utility Owned Generation sites for purposes of startup and replacement of energy normally supplied from their own generation, where the customer has signed an operating agreement under this tariff schedule.

The following general terms and conditions will apply to the applications.

(1) Energy under the Generation Replacement Service provision will be supplied upon request by the customer. In cases where advance written notification can be given by the customer, such as planned maintenance, the Company will advise the customer in writing of the quoted price which will be based on estimated costs during the period. In an emergency situation where time does not permit advance notification the price will be based upon actual costs until the customer provides written notification of the duration of the taking following which the Company will advise the customer in writing of the quoted price for the remainder of the period.

Energy under the load following section will be supplied either through on-going communication provision such as telemetering (when load fluctuations are involved) or written requests (where application is to a specific level of load).

GENERATION REPLACEMENT AND LOAD FOLLOWING TARIFF

(2) In the event there is an interruption required by NS Power in order to avoid shortfalls in electric supply, customers taking energy under the Generation Replacement Service or Load Following Service will be the first to be called upon to interrupt energy usage from NS Power.

(3) Failure to comply in whole or in part with a requirement to interrupt load will result in penalty charges. The penalty will be comprised of two parts, a Threshold Penalty and a Performance Penalty.

The Threshold Penalty charge shall be the cost of the appropriate firm billing effective at that time for the consumption used in that billing period.

The Performance Penalty which is based on the customer's performance during the interruption event is calculated as per the formula below:

Performance Penalty = ($15/kVA x A) + ($30/kVA x B)

Where:

"A" is any residual customer demand (above that required by the interruption notice) remaining in the third interval directly following two complete 5-minute intervals after the interruption call is initiated and sent by NSPI.

"B" is the customer's average demand based on 5-minute interval data during the entire interruption event excluding the interval used to determine "A."

The total penalty will not exceed two times the cost of the appropriate firm billing effective at that time for the consumption used in that billing period.

(4) Customers must install metering equipment to monitor the output of the customer's generation. The equipment and installation must be approved by the Company and the costs will be the responsibility of the customer.

SPECIAL CONDITIONS

(1) The Company reserves the right to have a separate service agreement, if in the opinion of the Company issues not specifically set out herein, must be addressed for the ongoing benefit of the Company and its customers.

(2) The customer will make all necessary arrangements to ensure that its load does not unduly deteriorate the integrity of the power supply system, either by its design and/or operation.

Specific requirements shall be stipulated by way of a written operating agreement.

(3) In assessing issues which might unduly affect the integrity of the power supply system the following would be considered: reliability, harmonic voltage and current levels, voltage flicker, unbalance, rate of change in load levels, stability, fault levels and other related conditions.

(4) Any service requirements beyond those provided by a single step-down transformation from transmission voltage must be borne by the customer. The cost of any special metering or communication systems required by the customer to take service under this tariff shall be paid for by the customer as a capital contribution.

(5) The Company reserves the right to determine the metering location.

(6) Energy is supplied at the low side of the transformer. Meter readings shall be decreased by 1.75% to adjust for transformer losses if primary metering is used.

(7) Under normal operating conditions, an average power factor over the entire billing period, calculated for kWh consumed and lagging kVAR-h, as recorded, of not less than 90% lagging for the total customer load (under all rates) shall be maintained, or the following adjustment factors (Constant) will be applied to the Energy Charge in effect:

Power Factor	Constant	Power Factor	Constant
90-100%	1.0000	65-70%	1.1255
80-90%	1.0230	60-65%	1.1785
75-80%	1.0500	55-60%	1.2455
70-75%	1.0835	50-55%	1.3335

(8) Qualifying generating facility must meet the following requirements:

(i.) Utilize dispatchable sources of generation.

(ii.) May have more than one generating unit so long as the aggregate manufacturer's nameplate rating is of not less than 2,000 kilowatts and which NSPI has the right to verify through inspection or testing.

(iii.) At the discretion of the customer, the generator may be connected to the grid either at any of the existing points of delivery of purchased power from NS Power or at a separate point if approved by NSPI. If a separate point of delivery is used, all additional costs will be the responsibility of the customer-generator.

(iv.) Generating facility shall meet all applicable safety and performance standards

established by Measurement Canada, the Canadian Electrical Code, and NSPI's interconnection guidelines.

GENERATION LOAD FOLLOWING CRITERIA

(1) Two months preceding each tariff year the customer-generator, in conjunction with the Company, shall establish the aggregate net operating capability of its generation equipment for the billing purposes of calculating hourly top-up energy from NS Power during the next tariff year. The net operating capability will be set based upon tests of customer's generation equipment and/or operating records. During a period during which the customer-generator encounters conditions that will result in a temporary significant reduction in generation below the established net operating capability, bill payments under the Load Following service and the other full requirement rate, if applicable, will be set based on adjusted net operating capability reflecting the average generation level during such period. For each billing month of the tariff year the Company will load follow to the equivalent of one hundred (100) percent load factor of the adjusted net operating capability in each hour that the customer generation does not exceed its adjusted net operating capability.

(2) On or before November 7th preceding each tariff year the Company shall apply to the Nova Scotia Utility and Review Board for approval of its forecasted incremental cost of generation for the following tariff year. Such average forecasted incremental cost shall be included in determining the load following rate for the next tariff year and each affected customer shall be notified.

ONE PART EXTRA HIGH VOLTAGE REAL TIME PRICING TARIFF

DEMAND CHARGE

NIL

ENERGY CHARGE

NSPI's actual hourly marginal energy costs, plus the following fixed cost adders for on-peak and off-peak usage:

On-peak (7:00am - 11:00pm, non-holiday weekdays): 6.802 ¢/kWh
Off-peak (11:00pm - 7:00am, non-holiday weekdays): 0.509 ¢/kWh
Weekend and holiday fixed cost adders are set at the off-peak price during all hours of the day.

These adders shall be developed annually based on budgeted costs and submitted to the Nova Scotia Utility and Review Board for approval.

A credit equal to 32 cents per peak kilovolt-ampere of monthly peak demand will be applied where the transformer is owned by the customer.

AVAILABILITY

(1) Customers must make a written request to take service under this tariff.

(2) This tariff is available to customers who are served at transmission voltage of 138 kV or higher and have loads of 2000 KVA or 1800 KW, and over.

SPECIAL CONDITIONS

(1) Projections of the anticipated hourly energy price (week ahead and day ahead) will be provided to the customer according to the following schedule:

- By midnight each business day, hourly price forecasts for each hour of the next five days shall be provided to the customer.

- Major changes to the hourly price forecasts will be provided to the customer as soon as they occur.

The actual price charged for each hour will be final twenty minutes prior to the commencement of that hour.

ONE PART EXTRA HIGH VOLTAGE REAL TIME PRICING TARIFF

(2) Metering will normally be at the low voltage side of the transformer. Should the customer's requirements make it necessary for the Company to provide primary metering, then the customer will be required to make a capital contribution equal to the additional capital cost of primary metering as opposed to the cost of secondary metering.

(3) The cost of any special metering or communication systems required by the customer to take service under this tariff shall be paid for by the customer as a capital contribution.

(4) Energy is supplied at the low side of the transformer. Meter readings shall be decreased by 1.75% to adjust for transformer losses if primary metering is used.

(5) Customers shall take service under this tariff for a minimum of twelve months from the commencement date of taking service under this tariff. The customer may terminate service under this tariff by giving 30 days notice before the end of the contract term. Service shall automatically renew for successive terms if no notice is given.

(6) This is a firm service tariff. However, existing customers served under the Interruptible Rider of the Large Industrial Tariff will be eligible to take service under this tariff provided that the customer applies for firm service in their written request as required by Availability Clause (1), but agrees to remain interruptible for up to five years as provided for under Availability Clause (5) of the Large Industrial Tariff Interruptible Rider. Within the five year window, a customer who has applied for firm service will be permitted to return to the Interruptible Rider without penalty, only if NSPI has not made irrevocable commitments to adding new capacity to meet the customer's request for firm service. Where such commitment has been made, the customer must reimburse NSPI or accept firm service for a period of at least two years.

(7) Under normal operating conditions, an average power factor over the entire billing period, calculated for kWh consumed and lagging kVAR.h, as recorded, of not less than 90% lagging at each metering point shall be maintained, or the following adjustment factors (constant) will be applied to the billed consumption.

POWER FACTOR	CONSTANT	POWER FACTOR	CONSTANT
90-100%	1.0000	65-70%	1.1255
80-90%	1.0230	60-65%	1.1785
75-80%	.0500	55-60%	1.2455
70-75%	1.0835	0-55%	1.3335

(8) The Company reserves the right to have a separate service agreement, if in the opinion of

ONE PART EXTRA HIGH VOLTAGE REAL TIME PRICING TARIFF

the Company issues not specifically set out herein, must be addressed for the ongoing benefit of the Company and its customers.

(9) The customer will make all necessary arrangements and bear all costs of ensuring that its load does not unduly deteriorate the integrity of the power supply system, by reason of its design and/or operation. These specific requirements shall be stipulated by way of a written operating agreement.

(10) In assessing issues which might unduly affect the integrity of the power supply system the following would be considered: reliability, harmonic voltage and current levels, voltage flicker, unbalance, rate of change in load levels, stability, fault levels and other related conditions.

ONE PART HIGH VOLTAGE REAL TIME PRICING TARIFF

DEMAND CHARGE

NIL

ENERGY CHARGE

NSPI's actual hourly marginal energy costs, plus the following fixed cost adders for on-peak and off-peak usage:

On-peak (7:00am - 11:00pm, non-holiday weekdays): 7.353 ¢/kWh
Off-peak (11:00pm - 7:00am, non-holiday weekdays): 0.769 ¢/kWh
Weekend and holiday fixed cost adders are set at the off-peak price during all hours of the day.

These adders shall be developed annually based on budgeted costs and submitted to the Nova Scotia Utility and Review Board for approval.

A credit equal to 32 cents per peak kilovolt-ampere of monthly peak demand will be applied where the transformer is owned by the customer.

AVAILABILITY

(1) Customers must make a written request to take service under this tariff.

(2) This tariff is available to customers who are served at transmission voltage of 69 kV and have loads of 2000 KVA or 1800 KW, and over.

SPECIAL CONDITIONS

(1) Projections of the anticipated hourly energy price (week ahead and day ahead) will be provided to the customer according to the following schedule:

- By midnight each business day, hourly price forecasts for each hour of the next five days shall be provided to the customer.
- Major changes to the hourly price forecasts will be provided to the customer as soon as they occur.

ONE PART HIGH VOLTAGE REAL TIME PRICING TARIFF

The actual price charged for each hour will be final twenty minutes prior to the commencement of that hour.

(2) Metering will normally be at the low voltage side of the transformer. Should the customer's requirements make it necessary for the Company to provide primary metering, then the customer will be required to make a capital contribution equal to the additional capital cost of primary metering as opposed to the cost of secondary metering.

(3) The cost of any special metering or communication systems required by the customer to take service under this tariff shall be paid for by the customer as a capital contribution.

(4) Energy is supplied at the low side of the transformer. Meter readings shall be decreased by 1.75% to adjust for transformer losses if primary metering is used.

(5) Customers shall take service under this tariff for a minimum of twelve months from the commencement date of taking service under this tariff. The customer may terminate service under this tariff by giving 30 days notice before the end of the contract term. Service shall automatically renew for successive terms if no notice is given.

(6) This is a firm service tariff. However, existing customers served under the Interruptible Rider of the Large Industrial Tariff will be eligible to take service under this tariff provided that the customer applies for firm service in their written request as required by Availability Clause (1), but agrees to remain interruptible for up to five years as provided for under Availability Clause (5) of the Large Industrial Tariff Interruptible Rider. Within the five year window, a customer who has applied for firm service will be permitted to return to the Interruptible Rider without penalty, only if NSPI has not made irrevocable commitments to adding new capacity to meet the customer's request for firm service. Where such commitment has been made, the customer must reimburse NSPI or accept firm service for a period of at least two years.

(7) Under normal operating conditions, an average power factor over the entire billing period, calculated for kWh consumed and lagging kVAR.h, as recorded, of not less than 90% lagging at each metering point shall be maintained, or the following adjustment factors (constant) will be applied to the billed consumption.

ONE PART HIGH VOLTAGE REAL TIME PRICING TARIFF

POWER FACTOR	CONSTANT	POWER FACTOR	CONSTANT
90-100%	1.0000	65-70%	1.1255
80-90%	1.0230	60-65%	1.1785
75-80%	1.0500	55-60%	1.2455
70-75%	1.0835	50-55%	1.3335

(8) The Company reserves the right to have a separate service agreement, if in the opinion of the Company issues not specifically set out herein, must be addressed for the ongoing benefit of the Company and its customers.

(9) The customer will make all necessary arrangements and bear all costs of ensuring that its load does not unduly deteriorate the integrity of the power supply system, by reason of its design and/or operation. These specific requirements shall be stipulated by way of a written operating agreement.

(10) In assessing issues which might unduly affect the integrity of the power supply system the following would be considered: reliability, harmonic voltage and current levels, voltage flicker, unbalance, rate of change in load levels, stability, fault levels and other related conditions.

ONE PART DISTRIBUTION VOLTAGE REAL TIME PRICING TARIFF

DEMAND CHARGE

NIL

ENERGY CHARGE

NSPI's actual hourly marginal energy costs, plus the following fixed cost adders for on-peak and off-peak usage:

On-peak (7:00am - 11:00pm, non-holiday weekdays): 7.483¢/kWh
Off-peak (11:00pm - 7:00am, non-holiday weekdays): 1.834¢/kWh
Weekend and holiday fixed cost adders are set at the off-peak price during all hours of the day.

These adders shall be developed annually based on budgeted costs and submitted to the Nova Scotia Utility and Review Board for approval.

A credit equal to 32 cents per peak kilovolt-ampere of monthly peak demand will be applied where the transformer is owned by the customer.

AVAILABILITY

(1) Customers must make a written request to take service under this tariff.

(2) This tariff is available to customers who are served at voltage less than 69 KV and have loads of 2000 KVA or 1800 KW, and over.

SPECIAL CONDITIONS

(1) Projections of the anticipated hourly energy price (week ahead and day ahead) will be provided to the customer according to the following schedule:

- By midnight each business day, hourly price forecasts for each hour of the next five days shall be provided to the customer.

- Major changes to the hourly price forecasts will be provided to the customer as soon as they occur.

The actual price charged for each hour will be final twenty minutes prior to the commencement of that hour.

ONE PART DISTRIBUTION VOLTAGE REAL TIME PRICING TARIFF

(2) Metering will normally be at the low voltage side of the transformer. Should the customer's requirements make it necessary for the Company to provide primary metering, then the customer will be required to make a capital contribution equal to the additional capital cost of primary metering as opposed to the cost of secondary metering.

(3) The cost of any special metering or communication systems required by the customer to take service under this tariff shall be paid for by the customer as a capital contribution.

(4) Energy is supplied at the low side of the transformer. Meter readings shall be decreased by 1.75% to adjust for transformer losses if primary metering is used.

(5) Customers shall take service under this tariff for a minimum of twelve months from the commencement date of taking service under this tariff. The customer may terminate service under this tariff by giving 30 days notice before the end of the contract term. Service shall automatically renew for successive terms if no notice is given.

(6) This is a firm service tariff. However, existing customers served under the Interruptible Rider of the Large Industrial Tariff will be eligible to take service under this tariff provided that the customer applies for firm service in their written request as required by Availability Clause (1), but agrees to remain interruptible for up to five years as provided for under Availability Clause (5) of the Large Industrial Tariff Interruptible Rider. Within the five year window, a customer who has applied for firm service will be permitted to return to the Interruptible Rider without penalty, only if NSPI has not made irrevocable commitments to adding new capacity to meet the customer's request for firm service. Where such commitment has been made, the customer must reimburse NSPI or accept firm service for a period of at least two years.

(7) Under normal operating conditions, an average power factor over the entire billing period, calculated for kWh consumed and lagging kVAR.h, as recorded, of not less than 90% lagging at each metering point shall be maintained, or the following adjustment factors (constant) will be applied to the billed consumption.

ONE PART DISTRIBUTION VOLTAGE REAL TIME PRICING TARIFF

POWER FACTOR	CONSTANT	POWER FACTOR	CONSTANT
90-100%	1.0000	65-70%	1.1255
80-90%	1.0230	60-65%	1.1785
75-80%	1.0500	55-60%	1.2455
70-75%	1.0835	50-55%	1.3335

(8) The Company reserves the right to have a separate service agreement, if in the opinion of the Company issues not specifically set out herein, must be addressed for the ongoing benefit of the Company and its customers.

(9) The customer will make all necessary arrangements and bear all costs of ensuring that its load does not unduly deteriorate the integrity of the power supply system, by reason of its design and/or operation. These specific requirements shall be stipulated by way of a written operating agreement.

(10) In assessing issues which might unduly affect the integrity of the power supply system the following would be considered: reliability, harmonic voltage and current levels, voltage flicker, unbalance, rate of change in load levels, stability, fault levels and other related conditions.

SHORE POWER TARIFF

AVAILABILITY

(1) This tariff is available to port authorities of Nova Scotia for the sole purpose of providing port electricity to cruise ships docked in ports to meet their own consumption needs in displacement of the on-board self-generation. The tariff is applicable to electric energy where the regular demand is 2,000 kVA or 1,800 kW, and over.

(2) Customers served under this tariff must accept supply interruption. In the event there is an interruption required in order to avoid shortfalls in electricity supply, rate classes will be called upon to provide capacity to NSPI in the following order:

(i.) Generation Replacement and Load Following (GR&LF) Rate
(ii.) Load Retention Tariff
(iii.) Shore Power Tariff
(iv.) Interruptible Rider to the Large Industrial Rate

unless there are technical reasons to alter this sequence specific to the instance.

(3) This is a seasonal tariff available from April 1 to November 30.

ENERGY CHARGE

Energy charges will vary by voltage level of the point of delivery and will be made up of two components.

(1) Annually adjusted fuel cost component which shall be the Company's forecast average annual marginal energy cost as approved for use with the GR&LF tariff and adjusted for line losses at the voltage level of the point of delivery.

(2) A fixed cost adder adjusted concurrent with changes in base cost rates coming into effect as a result of a General Rate Case application.

SHORE POWER TARIFF

Base Energy Charge Components	Transmission voltage of 138 kV or higher (cents per kWh)	Transmission voltage of 69 kV (cents per kWh)	Distribution voltage (cents per kWh)
Fuel Cost	6.463	6.526	6.653
Fixed Cost Adder	4.280	4.469	5.255
Total	10.744	10.995	11.908

A credit equal to 32 cents per peak kilovolt-ampere of monthly peak demand will be applied where the transformer is owned by the customer and the customer is served at a transmission voltage level.

SUPPLY INTERRUPTIONS

This is an interruptible service. Before connecting the ship to the shore supply the port authority will request permission from NSPI indicating the expected load and duration for which the power is needed.

The customer will make available suitable contact telephone numbers of a person or persons who are able to disconnect the load within ten minutes. Supply Interruption calls will be made to all customers taking energy under this tariff on an equitable and transparent basis.

This Tariff will be available provided that:

(1) The customer has provided written notice of its desire to take interruptible service.

(2) The customer will reduce its available interruptible system load by the amount requested by NSPI within ten (10) minutes of NSPI initiating and sending notice to the customer's dedicated telephone number (as confirmed by the automated dialing system) requiring such reduction. The customer must maintain a dedicated telephone number and dedicated telephone system in working order and must have a designated staff person to answer the dedicated telephone at all times when cruise ships are connected to the utility grid. The failure of the customer to answer the telephone, shall not excuse the customer from its responsibilities under this rate.

(3) Following interruption, service may only be restored by the customer with approval of the Company.

(4) Failure to comply in whole or in part with a request to interrupt load will result in penalty

charges. The penalty will apply based on the usage of the vessel being served via the Port Authority's equipment following the request to interrupt on the day on which the non-compliance took place.

Penalty for Non-Compliance

All energy served after the 10 minute deadline has expired will be billed at $5.00 per kWh. In addition a fixed charge of $2000.00 will be applied.

The penalty charge is applicable above and beyond the Port Authority's monthly bill.

SPECIAL CONDITIONS

(1) The Port Authority owns and is responsible for the maintenance and operation of all electrical equipment required for the supply of port electricity to docked ships other than the meters and metering transformers supplied by NSPI. NSPI owns and is responsible for the maintenance of meters and metering transformers installed on the Port Authority premises for the purposes of billing.

(2) The Port Authority will ensure that trained staff is available to operate on-shore interconnection equipment to facilitate the connection, synchronization, disconnection and interruption if needed at all times. Such operators must be available to be contacted by NSPI from a minimum of one hour before connection is required to the time that the ship returns to on board power supply.

(3) The Port Authority will file a two year schedule of expected vessels showing their peak electrical demand before October 31 in a calendar year preceding the cruise ship season.

(4) Metering will normally be at the low voltage side of the transformer. Should the customer's requirements make it necessary for the Company to provide primary metering, then the customer will be required to make a capital contribution equal to the additional capital cost of primary metering as opposed to the cost of secondary metering.

(5) The cost of any special metering or communication systems required by the customer to take service under this tariff shall be paid for by the customer as a capital contribution.

(6) Energy is supplied at the low side of the transformer. Meter readings shall be decreased by 1.75% to adjust for transformer losses if primary metering is used.

(7) Under normal operating conditions, an average power factor over the entire billing period, calculated for kWh consumed and lagging kVAR.h, as recorded, of not less than 90%

lagging at each metering point shall be maintained, or the following adjustment factors (constant) will be applied to the billed consumption.

POWER FACTOR	CONSTANT	POWER FACTOR	CONSTANT
90-100%	1.0000	65-70%	1.1255
80-90%	1.0230	60-65%	1.1785
75-80%	1.0500	55-60%	1.2455
70-75%	1.0835	50-55%	1.3335

(8) The Company reserves the right to have a separate service agreement, if in the opinion of the Company issues not specifically set out herein, must be addressed for the ongoing benefit of the Company and its customers.

(9) The customer will make all necessary arrangements and bear all costs of ensuring that its load does not unduly deteriorate the integrity of the power supply system, by reason of its design and/or operation. These specific requirements shall be stipulated by way of a written operating agreement.

(10) In assessing issues which might unduly affect the integrity of the power supply system the following would be considered: reliability, harmonic voltage and current levels, voltage flicker, unbalance, rate of change in load levels, stability, fault levels and other related conditions.

WHOLESALE MARKET BACKUP/TOP-UP SERVICE TARIFF

CUSTOMER CHARGE

The monthly customer charge under this tariff is calculated according to the following formula:

$$\text{Monthly customer charge} = \frac{\text{forecast annual administration costs}}{\text{forecast number of customers subscribed} * 12}$$

This charge will be $340.97 per month.

DEMAND CHARGE

$5.286 per month, per kilowatt (kW) of billing demand measured on an average hourly basis.

Contracted firm demand requirement is defined as the demand (kW) requested by the wholesale customer (or aggregate customer group) and agreed to be supplied by NSPI. This may constitute all, or a portion of the demand contracted to be served on a primary basis by a third party supplier. Billing demand is determined based upon the following formula:

Billing demand = (PR * min(CD, CF * GC)) + (CD – min(CD, CF*GC))

Where: PR is Planning Reserve (based on NPCC planning criteria, i.e., 20% or as updated)

GC is the third party supplier's generating capacity

a) For non-dispatchable generation, GC = MSC, the Maximum Spill Capacity as defined in Wholesale Market Non-Dispatchable Supplier Spill Tariff.

b) For dispatchable generation, GC = the supplier's maximum capacity contracted to provide its wholesale customers' demand

CD is the customer's Contract Demand

CF is the capacity factor associated with the third party supplier's generation

ENERGY CHARGE

The energy charge shall be the Company's forecast average annual marginal energy costs as approved for use with the GRLF rate.

MINIMUM MONTHLY CHARGE

The minimum monthly charge will be the customer charge plus the demand charge.

WHOLESALE MARKET BACKUP/TOP-UP SERVICE TARIFF

AVAILABILITY

The tariff is available to wholesale customers as defined in section 2(b) of the Electricity Act, Chapter 25 of the Acts of 2004.

> (b) "wholesale customer" means Nova Scotia Power Incorporated, the electric utilities of the towns of Antigonish, Berwick, Canso, Lunenburg and Mahone Bay and The Electric Light Commissioners for Riverport, in the County of Lunenburg.

The tariff is applicable to the *scheduled* backup\top-up load of participating customers under the following terms and conditions:

(1) The wholesale customer has provided written notice of its intent to take service under this tariff, clearly identifying the following:

a. The Municipal utility or utilities for which service is being requested.
b. The year for which service is being requested.
c. The contract demand (kW) required for backup and top-up service.
d. The portion of the customer's annual load contracted to be supplied by third party suppliers or through self-supply
e. The names, addresses, contact details and supply arrangements associated with contracted third party suppliers

Backup\top-up service will be subscribed on a minimum 12 month, annual-renewable basis. Applications for service must be provided annually to NSPI by January 31st of each year, for service applicable to the subsequent year.

(2) Adequate metering equipment, as dictated by the Generation Interconnection Agreement, must be installed to monitor the generation of any third-party generators selected for use by the wholesale customer. The equipment and installation must be approved by the Company and the costs will be the responsibility of the generator.

SPECIAL CONDITIONS

(1) This tariff is designed for customers supplied and metered at the high side of the transformer at transmission voltage of 69 kV or higher. For customers metered at the low side of the transformer, or at a distribution voltage level, meter readings shall be increased by 1.75% for each transformation between the meter and the transmission voltage.

WHOLESALE MARKET BACKUP/TOP-UP SERVICE TARIFF

(2) The charges under this rate do not reflect transmission service costs. Customers taking service under this tariff must also take service under OATT.

(3) For system reasons, NSPI may, at its discretion, deny an application for service from a customer who has not taken service from NSPI in the year prior to the year requested.

(4) The Company reserves the right to have a separate service agreement, if in the opinion of the Company issues not specifically set out herein, must be addressed for the ongoing benefit of the Company and its customers.

(5) The customer will make all necessary arrangements to ensure that its load does not unduly deteriorate the integrity of the power supply system, either by its design and/or operation. These specific requirements shall be stipulated by way of a written operating agreement.

(6) In assessing issues which might unduly affect the integrity of the power supply system the following would be considered: reliability, harmonic voltage and current levels, voltage flicker, unbalance, rate of change in load levels, stability, fault levels and other related conditions.

WHOLESALE MARKET NON-DISPATCHABLE SUPPLIER SPILL TARIFF

ADMINISTRATION CHARGE

The monthly administration charge under this tariff is calculated according to the following formula:

$$\text{Monthly charge} = \frac{\text{forecast annual administration costs}}{\text{Forecast number of suppliers supplying wholesale customers} * 12}$$

This charge will be $2,045.80 per month.

ENERGY CREDIT

Compensation for spill energy delivered to NSPI will be at the Company's forecast average annual marginal energy costs as approved for use with the GRLF rate.

MINIMUM MONTHLY CHARGE

The minimum monthly charge shall be the administration charge.

AVAILABILITY

This tariff is available for use by independent non-dispatchable electric generators serving customers taking service under the Wholesale Market Backup\top-up Service tariff. The tariff is applicable to *scheduled* "spill energy", under the following terms and conditions:

(1) "Spill energy" is defined as the scheduled hourly energy forecast to be produced by the supplier above the scheduled hourly energy requirement of their wholesale customer(s). Unscheduled energy produced will be compensated according to OATT imbalance guidelines. Spill compensation under this tariff is limited to the supplier's Maximum Spill Capacity (kW). Maximum Spill Capacity must be approved by NSPI prior to commencement of service and will be limited to a level agreed as being required to provide the contracted annual amount of participating wholesale customer energy (MWh). Spill capacity will be reviewed periodically and adjusted as required to ensure that it matches the amount required to provide subscribed annual customer energy.

(2) Suppliers must install metering equipment to monitor the output of their generation. Consistent with the Generation Interconnection Agreement, the equipment and installation must be approved by the Company and the costs will be the responsibility of the supplier.

WHOLESALE MARKET NON-DISPATCHABLE SUPPLIER SPILL TARIFF

SPECIAL CONDITIONS

(1) Suppliers must meet all conditions set forth in the Generation Interconnection Procedures and Generation Interconnection Agreement.

(2) The Company reserves the right to have a separate service agreement, if in the opinion of the Company issues not specifically set out herein, must be addressed for the ongoing benefit of the Company and its customers.

(3) The supplier will make all necessary arrangements to ensure that its generation output does not unduly deteriorate the integrity of the power supply system, either by its design and/or operation. These specific requirements shall be stipulated in the Generation Interconnection Agreement.

In assessing issues which might unduly affect the integrity of the power supply system the following would be considered: reliability, harmonic voltage and current levels, voltage flicker, unbalance, rate of change in load levels, stability, fault levels and other related conditions.

ENERGY BALANCING SERVICE TARIFF
Renewable to Retail

ENERGY BALANCING SERVICE

The Energy Balancing Service is a supplemental generation service provided to Licenced Retail Suppliers (LRS) in respect of the Licenced Retail Supplier's RtR Customers utilizing the production from renewable low-impact generators. The service consists of delivery of complementary energy to RtR Customers and reception of surplus generation from qualifying generators. The service is required to be taken in conjunction with Standby Service under the Standby Service Tariff so that the reliability of service to RtR Customers is equivalent to that provided under Bundled Service. For the purposes of this Energy Balancing Service Tariff, hourly LRS load in excess of generation is defined as top-up energy and hourly generation in excess of LRS load is defined as spill energy.

All capitalized terms herein shall, unless otherwise defined herein, have the meanings ascribed thereto in the LRS Terms and Conditions.

AVAILABILITY

This Energy Balancing Service Tariff is applicable to the LRS in order to facilitate the purchase of renewable low-impact electricity by RtR Customers.

This Energy Balancing Service Tariff is provided under the following terms and conditions:

(3) The LRS must have a valid LRS Participation Agreement executed with NS Power; and

(4) The LRS must be providing service to RtR Customers.

APPLICABILITY

(1) An LRS taking service under this Energy Balancing Service Tariff shall also take service under the OATT, the Standby Service Tariff, and the Renewable to Retail Market Transition Tariff.

(2) The service under this Energy Balancing Service Tariff is based on metered energy quantities, and is independent of the LRS's forecasts. OATT Schedule 4 is not applicable, but the Generation Forecasting Service under Schedule 4A of the OATT is applicable.

(3) The hourly top-up and spill quantities are determined at the delivery point from the transmission system. The hourly top-up quantity equals the excess in each hour, if positive,

of the LRS's aggregate customer load adjusted by the addition of distribution losses over the aggregate renewable low impact electricity supplied by the LRS or its contracted generation adjusted by the deduction of transmission losses. The hourly spill quantity equals the excess in each hour, if positive, of the aggregate renewable low impact electricity supplied by the LRS or its contracted generation adjusted by the deduction of transmission locational losses, as applicable to the geographic zone in which the generating facility is interconnected, over its aggregate customer load adjusted by the addition of distribution losses. The locational loss values will be published by the NS Power System Operator. The aggregate hourly load quantities are determined in accordance with the applicable provisions in the LRS Terms and Conditions.

(4) To qualify for this service, the LRS must ensure that the imbalance between low impact renewable generation and energy consumption over the established compliance period conforms to Section 10 of the Board Electricity Retailers Regulations (Nova Scotia) enacted under the Act.

(5) Maximum Spill Capacity must be approved by NS Power prior to commencement of service and will be limited to a level agreed as being required to provide the contracted annual amount of participating LRS energy. Spill capacity will be reviewed annually and will include the LRS' proposal to mitigate it on a going forward basis. If NS Power is not satisfied with the LRS' proposal, it may impose a limit on hourly production of the LRS's generation portfolio.

ADMINISTRATION CHARGE

The monthly administration charge is applicable to each LRS and is set annually according to the following formula:

$$\text{Monthly charge} = \frac{\text{forecast annual administration costs}}{\text{forecast number of LRS's subscribed} * 12}$$

This charge will be $340.97 per month.

ENERGY CHARGE

Energy charge for top-up service is made up of the following two components:

ENERGY BALANCING SERVICE TARIFF
Renewable to Retail

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(1) Annually adjusted fuel cost component based on NS Power's incremental cost of serving the LRS's forecasted incremental top-up load.

(2) Fixed cost adder reflective of fixed cost energy-related generation costs.

Energy Charge Components	Cents per kWh
Fuel Cost	6.275
Fixed Cost Adder	3.168
Total	9.443

The charge is applicable to top-up energy consumed in each hour.

ENERGY CREDIT

6.275 cents per kilowatt hour

The Energy Credit for spill service is set annually and is applicable to spilled energy in each hour.

MINIMUM MONTHLY CHARGE

The minimum monthly charge will be the administration charge

SPECIAL CONDITIONS

(7) NS Power reserves the right to have a separate service agreement, if in the opinion of NS Power issues not specifically set out herein, must be addressed for the ongoing benefit of NS Power and its customers.

(8) The LRS's RtR Customers and generators will make all necessary arrangements to ensure that their generation and load do not unduly deteriorate the integrity of the power supply system, either by its design and/or operation. These specific requirements shall be stipulated by way of a written operating agreement.

(9) In assessing issues which might unduly affect the integrity of the power supply system the following would be considered: reliability, harmonic voltage and current levels, voltage

ENERGY BALANCING SERVICE TARIFF
Renewable to Retail

flicker, unbalance, rate of change in load levels, stability, fault levels and other related conditions.

(10) Nothing contained in this Energy Balancing Service Tariff or any service agreement shall be construed as affecting or in any way limiting the right of NS Power to make application to the Nova Scotia Utility and Review Board for a change in any rates, terms and conditions, charges, classification of service, service agreement, rule or regulation, including, without limitation, the rates, charge or terms and conditions contained in this Energy Balancing Service Tariff, the Standby Service Tariff or the Renewable to Retail Market Transition Tariff.

STANDBY SERVICE TARIFF
Renewable to Retail

STANDBY SERVICE

Standby Service is a supplemental generation capacity service provided to Licensed Retail Suppliers (LRS). The service is provided in combination with Energy Balancing Service under the Energy Balancing Service Tariff. The service has two components:

Capacity adequacy service – fulfillment of the LRS's obligation to provide or pay for its share of firm capacity required to meet adequacy standards of the Nova Scotia electricity system arising from forced and unforced generation outages. Energy delivered during generation outages will be billed under the Energy Balancing Service Tariff.

Top-up capacity service – provision of capacity to support energy delivery through the Energy Balancing Service in respect of imbalance between load and generation.

All capitalized terms herein shall, unless otherwise defined herein, have the meanings ascribed thereto in the LRS Terms and Conditions.

AVAILABILITY

This Standby Service Tariff is applicable to the LRS to facilitate the purchase of renewable low-impact electricity by RtR Customers.

This Standby Service Tariff is provided under the following terms and conditions:

(1) The LRS must have a valid LRS Participation Agreement executed with NS Power; and.

(2) The LRS must be providing service to RtR Customers.

APPLICABILITY

(6) An LRS taking service under this Standby Service Tariff shall also take service under Open Access Transmission Tariff (OATT), the Energy Balancing Service Tariff and the Renewable to Retail Market Transition Tariff.

(7) The service under this Standby Service Tariff is complementary to the generation ancillary services to the Renewable to Retail market under OATT.

(8) The aggregate hourly load quantities are determined at the delivery point from the transmission system, inclusive of distribution system losses, in accordance with the provisions of the LRS Terms and Conditions.

STANDBY SERVICE TARIFF
Renewable to Retail

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(9) This service is applicable to firm load only.

ADMINISTRATION CHARGE

The monthly administration charge is applicable to each LRS and is set annually according to the following formula:

$$\text{Monthly charge} = \frac{\text{forecast annual administration costs}}{\text{forecast number of LRS's subscribed} * 12}$$

This charge will be $340.97 per month.

DEMAND CHARGE

$5.141 per month, per kilowatt (kW) of monthly standby contract demand.

MINIMUM MONTHLY CHARGE

The minimum monthly charge will be the administration charge.

DETERMINATION OF MONTHLY STANDBY CONTRACT DEMAND

Monthly Standby Contract Demand (MSCD) in kW is determined using the following formula:

$$\text{MSCD} = \text{LWPFD} - \min\left(\text{LWPFD}, \left(\sum_{i=1}^{n} CCi * GCi\right)/(1+PR)\right)$$

Where:

LWPFD is LRS Winter Peak Firm Demand in respect of each billing month calculated as follows:

$$\text{LWPFD} = \sum_{i=1}^{k} (CMPFDi * CMDAFi)$$

"k" is the number of otherwise applicable bundled service rate classes to RtR customers of LRS.

"CMPFDi" is hourly kW Class Monthly Peak Firm Demand of the LRS firm load in each tariff class at the time of system coincident firm load peak in each month at transmission delivery points (i.e. inclusive of distribution system losses). The CMPFD for the unmetered

STANDBY SERVICE TARIFF
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customer class shall be determined by use of research based class load profile data. "CMDAFi" is the Class Monthly Demand Adjustment Factor applicable to each class as set out below:

Classes	Jan, Feb, Dec	Mar, Apr	May, June	Jul, Aug, Sep	Oct, Nov
Domestic	1.00	1.27	1.67	2.17	1.47
Small General	1.00	1.21	1.32	1.09	1.28
General	1.00	1.12	1.32	1.05	1.19
Large General	1.00	1.05	1.04	0.78	0.99
Small Industrial	1.00	1.06	1.01	0.94	1.00
Medium Industrial	1.00	1.14	1.08	1.01	1.02
Large Industrial Firm	1.00	1.10	1.03	0.89	1.09
Unmetered	1.00	8.24	7.90	7.68	2.28

"PR" is Planning Reserve (%) (based on Northeast Power Coordinating Council planning criteria, i.e., 20% or as updated)

"CCi" is a capacity contribution factor of LRS' generator to NS Power's system peak as determined by NS Power. The capacity contribution factor may be the subject of periodic adjustment if operating conditions of the generator, such as a prolonged deration, depart from those assumed by NS Power.

"GCi" is the generator capacity dedicated to serving LRS load.

"n" is the total number of LRS' generators including those under contract.

SPECIAL CONDITIONS

(11) NS Power reserves the right to have a separate service agreement, if in the opinion of NS Power issues not specifically set out herein, must be addressed for the ongoing benefit of NS Power and its customers.

(12) The LRS's RtR Customers and generators will make all necessary arrangements to ensure that their generation and load do not unduly deteriorate the integrity of the power supply system, either by its design or operation. These specific requirements shall be stipulated by way of a written operating agreement.

STANDBY SERVICE TARIFF
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(13) In assessing issues which might unduly affect the integrity of the power supply system the following would be considered: reliability, harmonic voltage and current levels, voltage flicker, unbalance, rate of change in load levels, stability, fault levels and other related conditions.

(14) Nothing contained in this Standby Service Tariff or any service agreement shall be construed as affecting or in any way limiting the right of NS Power to make application to the Nova Scotia Utility and Review Board for a change in any rates, terms and conditions, charges, classification of service, service agreement, rule or regulation, including, without limitation, the rates, charge or terms and conditions contained in this Standby Service Tariff, the Energy Balancing Service Tariff or the Renewable to Retail Market Transition Tariff.

RENEWABLE TO RETAIL MARKET TRANSITION TARIFF
Renewable to Retail

PURPOSE

Pursuant to Section 3G(2) of the Electricity Act (Nova Scotia), this Renewable to Retail Market Transition Tariff (RTT) is designed to recover from Licenced Retail Suppliers (LRS) NS Power's embedded fixed costs and deferred costs, recovered through Bundled Service, which are not otherwise recovered through other tariffs applicable to the LRS or its RtR Customers. For certainty, for the purposes of this RTT, NS Power's embedded fixed costs include, but are not limited to, generation related fixed costs (e.g. depreciation, cost of financing including return on common equity, income tax and OM&G). Deferred costs of NS Power are those costs approved by the Nova Scotia Utility and Review Board (Board) for recovery by NS Power from customers at a future date.

All capitalized terms herein shall, unless otherwise defined herein, have the meanings ascribed thereto in the LRS Terms and Conditions.

APPLICABILITY

1) The RTT is applicable to the LRS, and is in addition to (and not in substitution of) any charges owing by the LRS to NS Power under the Open Access Transmission Tariff (OATT), the Standby Service Tariff or the Energy Balancing Service Tariff.

2) The RTT employs certain usage determinants and rate components applicable under both the Standby Service Tariff and the Energy Balancing Service Tariff.

3) Energy Charges and Demand Charges (both as set out below) under this RTT include provision for mitigation in respect of forecasted NS Power savings enabled by the LRS's supply of electricity to its RtR Customers. The savings credits will be determined annually on the basis of experience and will be applied on a prospective basis.

4) The Energy Charge under this RTT includes provision for annual adjustment on a prospective basis to account for the forecasted difference between NS Power's average avoided cost by the LRS's supply of electricity and its average system fuel cost. If the average avoided cost exceeds the average system fuel cost, this adjustment will be a reduction in the Energy Charge; if the average avoided cost is less than the average system fuel cost, this adjustment will be an addition to the Energy Charge.

5) An LRS taking service under this RTT shall also take service under the OATT, the Standby Service Tariff, and the Energy Balancing Service Tariff.

RENEWABLE TO RETAIL MARKET TRANSITION TARIFF
Renewable to Retail

ENERGY CHARGE

Energy charge is made up of the following components:

Energy Charge Components	Cents per kWh
Fixed Cost Adder from Energy Balancing Service Tariff	3.168
2014 Cost of Service Earnings Adjustment	(0.774)
Prior Period Actual Earnings Adjustment	(0.043)
Annually Adjusted Energy Savings Credit	0.000
Annual Energy Cost Adjustment	(0.180)
Total	2.171

The Energy Charge is applicable to the LRS's monthly displaced energy on NS Power's generation system, defined as the total monthly LRS load, including distribution losses, minus the total monthly LRS top-up quantity as determined under the Energy Balancing Service Tariff for that LRS.

DEMAND CHARGE

Demand Charge is made up of two components:

Demand Charge Components	Dollars per kW
Demand Charge from Standby Service Tariff	$5.141
Annually Adjusted Demand Savings Credit	$0.000
Total	$5.141

The Demand Charge is applicable to the LRS's monthly displaced demand on NS Power's system determined as the difference between Winter Peak Firm Demand, in respect of the monthly bill of the LRS, and Monthly Standby Contract Demand, both as determined under the Standby Service Tariff for that LRS. For greater certainty, Winter Peak Firm Demand and Monthly Standby Contract Demand are as set out in the Standby Service Tariff.

RENEWABLE TO RETAIL MARKET TRANSITION TARIFF
Renewable to Retail

SPECIAL CONDITIONS

(1) Nothing contained in this RTT or any service agreement shall be construed as affecting or in any way limiting the right of NS Power to make application to the Board for a change in any rates, terms and conditions, charges, classification of service, service agreement, rule or regulation, including, without limitation, the rates, charge or terms and conditions contained in this RTT, the Standby Service Tariff or the Energy Balancing Service Tariff.