



SIXTH FLOOR, 900 HOWE STREET, BOX 250
VANCOUVER, B.C. V6Z 2N3 CANADA
web site: <http://www.b cuc.com>

**BRITISH COLUMBIA
UTILITIES COMMISSION**

**ORDER
NUMBER** G-92-09

TELEPHONE: (604) 660-4700
BC TOLL FREE: 1-800-663-1385
FACSIMILE: (604) 660-1102

**IN THE MATTER OF
the Utilities Commission Act, R.S.B.C. 1996, Chapter 473**

and

**An Application by FortisBC Inc.
for the Approval of a Net Metering Rate Schedule 95**

BEFORE: P.E. Vivian, Commissioner
A.A. Rhodes, Commissioner

July 29, 2009

O R D E R

WHEREAS:

- A. On April 17, 2009, FortisBC Inc. ("FortisBC") submitted an application (the "Application") to the British Columbia Utilities Commission (the "Commission") for approval of a Net Metering Rate Schedule 95 and resulting revisions to the FortisBC Electric Tariff Index and Rate Schedule 80; and
- B. FortisBC proposed the Net Metering Rate Schedule in response to the Provincial Energy Plan, the *Utilities Commission Act* section 64.01, Commission Order G-117-05 and stakeholder requests; and
- C. On April 28, 2009, the Commission issued Order G-43-09 establishing a written hearing process to review the Application; and
- D. In accordance with Order G-43-09, a written regulatory process was conducted from May 22, 2009 to July 6, 2009. Commission and Intervenor Information Requests were received on May 27, 2009. FortisBC responded to Information Requests by June 10, 2009; and
- E. FortisBC made its Final Submission on June 17, 2009, Intervenor Final Submissions were received on June 19, 2009, and FortisBC's Reply Submission was received on July 6, 2009; and
- F. The Commission has reviewed the Application, the responses to Information Requests and the Submissions of FortisBC and the participating Intervenor.

**BRITISH COLUMBIA
UTILITIES COMMISSION**

**ORDER
NUMBER** G-92-09

2

NOW THEREFORE the Commission orders as follows:

1. The Commission approves the FortisBC Net Metering program as proposed in the Application with the modifications described in the Reasons for Decision accompanying this Order.
2. The Net Metering program may commence subsequent to approval by the Commission of a revised FortisBC Net Metering Tariff - Rate Schedule 95 which incorporates the directives described in the Reasons for Decision accompanying this Order.

DATED at the City of Vancouver, in the Province of British Columbia, this 30th day of July 2009.

BY ORDER

Original signed by:

P.E. Vivian
Commissioner

Attachment

FortisBC Inc.
Net Metering Program

REASONS FOR DECISION

GENERAL APPROVAL

The Commission Panel generally approves the FortisBC Net Metering Tariff Application as filed. Prior to implementation, the Commission Panel directs FortisBC to incorporate the directives and determinations, as discussed in these Reasons, into the program.

Net Metering-Monitoring and Evaluation Report	Required
Existing Electro-Mechanical Meters	Acceptable
Rate Schedule 95 (Net Metering)	Modifications
Site Inspections Provisions	Modified
Reconciliation Costs	Modified

NET METERING-MONITORING AND EVALUATION REPORT

The Commission Panel directs FortisBC to file a Net Metering-Monitoring and Evaluation Report (the “Report”). The Report should contain information similar in nature to that required for the BC Hydro Net Metering program (Commission Order G-26-04, Appendix A, Section 2.6). FortisBC should file the Report with the Commission within 60 days of the anniversary date of program commencement.

The Commission Panel agrees with the Okanagan Environmental Industry Alliance (the “Alliance”) and the B.C. Sustainable Energy Association and the Sierra Club of British Columbia (“BCSEA”) that having FortisBC produce and file a report similar to BC Hydro’s will provide a more complete picture of the progress of net metering in the province. The collected reports will contribute to future net metering policy development.

The BC Hydro report must contain information on net metering activities in other jurisdictions. For the FortisBC Report, that effort need not be replicated. Instead, the Report should be limited to descriptions and data on FortisBC program penetration, costs and recommended future changes. As FortisBC offers Time-of-Use pricing, the Report should address net metering program results for customers on regular rates as compared to those under Time-of-Use rates. FortisBC should also make recommendations for amendments to the Net Metering program that it deems necessary. The Commission will provide FortisBC with additional guidance on specific content closer to the due date, if requested.

ELECTRO-MECHANICAL METERS

The Application does not allow for the use of standard electro-mechanical meters, spinning in both directions, to measure energy exchange. (Exhibit B-1, p. 11) Instead, FortisBC proposes that a customer-generator be connected through a single meter, with separate registers for each flow direction. The Commission Panel considers that the evidence does not support ruling out the use of existing, electro-mechanical meters.

As part of a response to an information request, FortisBC supplied Measurement Canada Information Bulletin 2007-04-20. The Bulletin describes Measurement Canada's policy on the use of electro-mechanical meters in net metering applications. Among other details, the Bulletin states that electro-mechanical meters may be inaccurate in favour of the utility:

"MC has performed a study on the effect of operating electro-mechanical meters in the reverse direction. This study indicated that at low currents, the accuracy trend of electro-mechanical meters taken from a small sample of meters tested shows the errors to be in favour of the contractor. The report included results showing that some errors at low currents may be as high as 8% slow." (Exhibit B-2, BCUC Appendix 8.1, p. 3)

Bulletin 2007-04-20 specifies that electro-mechanical meters may be used for net metering until the earlier of either the replacement of the existing meter or December 31, 2013. Measurement Canada allows electro-mechanical meters in net metering applications. (Exhibit B-2, BCUC Appendix 8.1, Section 7)

FortisBC gave no indication in either the Application or responses to information requests that there is a safety reason why electro-mechanical meters cannot be used.

The Commission Panel anticipates that, further to the Advanced Metering Decision and Order G-168-08, FortisBC will be bringing forward a plan to generally replace existing meters with advanced meters in the relatively near future. In order to decrease the likelihood of making two meter replacements, existing, electro-mechanical meters should not be precluded from use in Net Metering.

The Commission Panel considers that electro-mechanical meter inaccuracy should be balanced against the cost to the customer of replacing existing meters. Allowing customers the option of using existing, electro-mechanical meters should improve the economics of the program.

The Commission Panel therefore directs FortisBC to provide customers with the option of using existing electro-mechanical meters for Net Metering, subject to the requirements of Measurement Canada Information Bulletin 2007-04-20, Section 7.2.

RATE SCHEDULE 95 – AMENDMENTS

The proposed Net Metering Rate Schedule 95 does not sufficiently describe two matters that the Commission Panel considers should be clarified for the benefit of potential customer-generators.

First, the terms "facility" and "Generating Facility" are used in proposed Rate Schedule 95. The Commission Panel considers that clear definitions of these terms are required. The proposed Rate Schedule 95 instead defines "Net Metered System." The BC Hydro Net Metering Service Rate Schedule (RS1289) (copy attached as Appendix 1) may be used as a guide for the definitions. Therefore, the Commission Panel directs FortisBC to submit a revised Rate Schedule 95 that includes definitions for "facility" and "Generating Facility" as applicable to the Net Metering program.

Second, the proposed Rate Schedule 95 does not clearly describe General Liability provisions. The Net Metering program poses potential negligence issues that are beyond what would commonly confront a residential customer. Therefore, the Commission Panel directs FortisBC to include in Rate Schedule 95, a more explicit description of the proposed general liability provisions as they relate to the utility and the Net Metering customer-generators. The description should include specific information regarding the exposure of each of the utility and the customer-generator to negligence and consequential damages.

PROPOSED INSPECTION PROVISIONS AND THE SAFETY STANDARDS ACT

The Application indicates that a site inspection may be required prior to interconnection. As proposed, site inspections could apply to cases where FortisBC has concerns over the nature of the installation, either for safety reasons or for adherence to interconnection standards.

The Commission Panel agrees that a customer-generator must follow FortisBC interconnection requirements. However, the Commission Panel considers that, while FortisBC may elect to conduct a site safety inspection, as it is not inherently a utility function, a fee should not be charged to the customer.

The *Safety Standards Act* establishes installation, inspection, and operating requirements applicable to facilities downstream of the utility meter. If a customer can demonstrate to FortisBC that its facility has been properly certified under the *Safety Standards Act*, the Commission Panel is not persuaded that a FortisBC inspection is required. Production of required certifications issued under the *Safety Standards Act* should obviate the need for further inspection costs which only serve to adversely affect the economics of net metering.

The Commission Panel notes and agrees with the comments of Intervenor Resolution Electric: "Considering an electrical permit from the BC Safety Authority would be required to perform the installation work at a cost of approximately \$670 for a 2.5kW Photo Voltaic system it could be questioned what value there is in performing the inspection by two different inspection bodies, with a potential cost of \$1160." (Resolution Electric, Final Submission, p. 1)

The Commission Panel determines that a FortisBC inspection may be appropriate where Fortis BC is not satisfied with the customer-generator's documentation or certificate or is otherwise concerned that the customer-generator's facility poses safety or system problems. However, such inspection, if considered necessary by FortisBC, shall be for the account of FortisBC. In the event that any FortisBC inspection discovers a safety deficiency, FortisBC is to follow good utility practice and may decline to proceed with the net metering connection.

RECONCILIATION COSTS

The Application presents \$160 as the expected, annual cost of reconciling customer-generator accounts. The Commission Panel considers that FortisBC should use actual, incremental net metering program reconciliation costs in any financial report, rather than applying the proposed rate of \$160.

The Commission asked FortisBC to comment whether a customer-generator recording a credit balance would create a \$160 reconciliation cost. In response, FortisBC stated that "The reconciliation cost is lower if the credit balance is carried over since a cheque does not have to be issued to the customer. The \$160 is an estimated average cost for reconciling both customers that request a refund and those that carry their credit balances over. The cost differential is approximately \$50." (Exhibit B-2, BCUC 1.10.1) The Commission Panel expects the

reconciliations associated with the program to not require expenses beyond those commonly needed for a non-net metering account. There is no evidence that the proposed metering creates a complicated calculation justifying an incremental cost of \$160.

Intervenors also noted the expected reconciliation cost. In a letter to FortisBC dated March 30, 2009, Resolution Electric noted and questioned the magnitude of the expected reconciliation costs. (Exhibit B-1, p. 20)

The Commission Panel directs FortisBC to record any incremental costs incurred for net metering account reconciliation during the first 12 months of the program. FortisBC is to include a summary of the costs as a section in its Net Metering—Monitoring and Evaluation Report.

INTERVENOR ARGUMENTS

The Commission Panel is not persuaded by the Alliance arguments that the payback period should be lessened by incentive pricing. The Province has yet to give direction to the Commission requiring net metering programs to contain incentive pricing. Consistent with the recent Commission decision on the BC Hydro net metering program, an incentive price component is not required as a condition of approval at this time:

The Province has not yet issued a directive to the Commission with respect to incentive pricing and the specific role of the Net Metering program in achieving conservation objectives. Until the time that such a directive is issued, the Commission cannot presume the details of potential Government policy. The Commission is therefore not persuaded that it should order BC Hydro to include an incentive component into the Net Metering price at this time. (Commission Order G-4-09)

The Alliance proposes that Government or Commission policy should be released requiring an incentive component to net metering programs. The Commission, as per the BC Hydro Decision excerpt above, does not establish such policy.

The Alliance proposes that FortisBC should include a report of world-wide programs that offer incentive premiums as part of net metering. (Alliance Final Submission, Section 3) The Commission Panel considers that, as BC Hydro has been directed to update external net metering programs as part of its reporting requirements, there is no need for FortisBC to duplicate that effort. Nonetheless, the Commission Panel expects FortisBC to keep abreast of external net metering program attributes that could be beneficially applied to its service area in the future.

The existing FortisBC Tariff includes a Time-of-Use pricing option. A Commission information request asked whether, in FortisBC's view, the combination of the proposed Net Metering program and the Time-of-Use rate class constituted a price incentive.

“The existence of Time-of-Use rates does constitute an incentive for participation in the Net Metering program, compared to BC Hydro’s program. On-peak rates for residential Time-of-Use are 15.9 cents per kWh in summer and 16.522 cents per kWh in winter, compared to 7.46 cents for non Time-of-Use residential rates. Although FortisBC’s summer peak is growing more rapidly than its winter peak, the Company does not consider that further incentives for participation are required, particularly given the expected size of installations under the Net Metering program.” (Exhibit B-2, BCUC 1.19.1)

The Commission Panel accepts FortisBC’s response that the combination of net metering and Time-of-Use pricing forms an acceptable incentive to participate in the net metering program. A customer on the Time-of-Use pricing would have a shorter payback period, and therefore a greater incentive to participate in net metering.

The Final Submissions of the other registered Intervenor indicated support for the proposed Net Metering program without condition.

FINAL APPROVAL

The Commission Panel expects to grant final approval for the FortisBC Net Metering program subsequent to FortisBC filing the appropriate Tariff pages containing the revisions necessary to comply with the above determinations and directives, and a finding by the Commission Panel that the requirements described in these Reasons are satisfied.

APPENDIX 1

BC HYDRO – RATE SCHEDULE 1289 NET METERING SERVICE

SCHEDULE 1289 - NET METERING SERVICE

Definitions

"Generating Facility" for purposes of this Rate Schedule means a generating facility that:

- (a) Utilizes water, wind, solar, fuel cell, geothermal, biogas, biomass, municipal solid waste, cogeneration or other energy resources or technologies meeting the requirements of the Province of British Columbia's definition of "BC Clean Electricity" to generate electricity;
- (b) Has a nameplate rating of not more than fifty (50) kilowatts; and
- (c) Is owned by the Customer and is located on the same parcel of land as the Customer's Premises for which service is being provided under any of the Rate Schedules listed above, or on an adjacent parcel of land owned or leased by the Customer, and is connected to the same Point of Delivery as the Customer's Premises being served under any of the Rate Schedules listed above;

and includes all wiring, protection-isolation devices, disconnect switches, and other equipment and facilities on the Customer's side of the Point of Delivery.

Metering

1. Inflows of electricity from the BC Hydro system to the Customer, and outflows of electricity from the Customer's Generating Facility to the BC Hydro system, will normally be determined by means of a single meter capable of measuring flows of electricity in both directions.
2. Alternatively, if BC Hydro determines that flows of electricity in both directions cannot be reliably determined by a single meter, or that dual metering will be more cost-effective, BC Hydro may require that separate meters be installed to measure inflows and outflows of electricity.
3. The Customer shall install, at its cost, the meter base and any wiring, protection-isolation devices, disconnect switches, and other equipment and facilities on the Customer's side of the Point of Delivery as required under BC Hydro's "Net Metering Interconnection Requirements, 50 kW and Below". BC Hydro will supply and install the meter or meters and make the final connections.
4. Any meters or meters required for purposes of this Rate Schedule shall be in addition to any demand meters (if applicable) required under the Rate Schedule under which the Customer is receiving service from BC Hydro.

Special Conditions

6. If BC Hydro in its discretion deems it necessary to require the Customer to interrupt or disconnect its Generating Facility from BC Hydro's system, or for BC Hydro to itself effect the interruption or disconnection of the Generating Facility from its system, as provided in the Net Metering Interconnection Agreement, or as a result of the suspension or termination of service to the Customer in accordance with Special Condition 3 above, then except to the extent caused by the wilful misconduct or gross negligence of BC Hydro, its servants or agents, BC Hydro and its servants or agents shall not be liable to the Customer for any loss or damage whatsoever resulting from such interruption or disconnection.