

**SCHEDULE 21 - FG&E**

FITCHBURG GAS AND ELECTRIC LIGHT COMPANY  
LOCAL SERVICE SCHEDULE

## **SCHEDULE 21-FG&E**

### **Fitchburg Gas and Electric Light Company Local Service Schedule**

#### **I. COMMON SERVICE PROVISIONS**

Fitchburg Gas and Electric Light Company (“FG&E”) is a participant in the New England Control Area and has agreed to provide transmission and ancillary services over PTF pursuant to the Tariff. The services provided under this Schedule 21-FG&E apply only to Non-PTF, except in the case of service to Network Customers that have all or part of their Network Load directly connected to the PTF in the Local Network. These Network Customers shall pay for Local Network Service pursuant to Attachment H to this Schedule 21-FG&E. Provisions of this Schedule 21-FG&E shall have priority over any conflicting provisions in the Tariff.

On October 4, 2010 FG&E requested confirmation of waiver of Sections 35.28, 37.5(b), 38.2(a)(1)-(7) and 38.2(a)(8), 38.2(a)(9) and 38.2(a)(11),, the FERC Standards for Business Practices and Communications Protocols for Public Utilities adopted in Order No. 676 (Standards for Business Practices and Communications Protocols for Public Utilities, Order No. 676, III FERC Stats. & Regs., Regs. Preambles 31,216 (2006)) and revised in Orders No. 676-C (Standards for Business Practices and Communication Protocols for Public Utilities, Order No. 676-C, 73 Fed. Reg. 43,848 (July 29, 2008), FERC Stats. & Regs, ¶ 31,274 (July 21, 2008)) and waiver of all standards incorporated by reference in Order 676-E (Standards for Business Practices and Communication Protocols for Public Utilities, Order No. 676-E, FERC Stats. & Regs ¶ 31,299 (November 24, 2009))). See Unitol Power Corp., Fitchburg Gas and Electric Light Company, and Unitol Energy Systems, Inc., Dockets No. OA96-104-000 et al. (June 1, 2006), Participating Transmission Owners (PTOs) and PTO Administrative Committee and the Schedule 20A Service Providers, Docket Nos. ER09-626-000 and ER09-626-001 (January 30, 2009) ) and PTO Administrative Committee, Participating Transmission Owners, Schedule 20A Service Providers, Cross-Sound Cable Company, LLC, New England Power Company, Northeast Utilities Service Company, Unitol Energy Systems, Inc., and Fitchburg Gas and Electric Light Company, Docket No. ER11-23-000, (October 4, 2010). These standards were developed by the North American Energy Standards Board and incorporated by reference through addition of Part 38 and Sections 35.28 and 37.5(b) of the Commission's Regulations pursuant to Docket No. RM05-5-000. The request for waiver was granted by the Commission in its order dated December 3, 2010.

#### **1 Definitions**

**1.0 Annual Transmission Costs:** The total annual cost of the Local Network for purposes of Local Network Service shall be the amount specified in Attachment H until amended by FG&E or modified by the Commission.

**1.1 Curtailment:** A reduction in firm or non-firm transmission service in response to a transmission capacity shortage as a result of system reliability conditions.

**1.2 Load Ratio Share:** Ratio of a Transmission Customer's Non-PTF Network Load to FG&E's total load computed in accordance with Sections II.10 and II.10(a) of this Schedule under Sections Supplementing Section 21 of the OATT and calculated on a rolling twelve month basis.

**1.3.1 Local Network:** The transmission facilities owned, controlled, or operated by FG&E that are used to provide transmission service under Schedule 21 of the OATT.

**1.4 Local Network Service:** The transmission service provided under Schedule 21 of the OATT and this Schedule.

**1.5 Network Load:** The load directly interconnected to the PTF or Non-PTF facilities of FG&E. A Network Customer may elect to designate less than its total load as Network Load but may not designate only part of the load at a discrete Point of Delivery. Where a Eligible Customer has elected not to designate a particular load at discrete points of delivery as Network Load, the Eligible Customer is responsible for making separate arrangements under Schedule 21 of the OATT for any Local Point-to-Point Service that may be necessary for such non-designated load. For purposes of establishing rates and charges under this Tariff, the Network Load will be subdivided into one of two categories:

**A.** PTF Network Load shall be the load over FG&E's PTF facilities and shall equal the load of Network Customers directly interconnected with FG&E's PTF or indirectly utilizing FG&E's PTF through Non-PTF facilities of FG&E.

**B.** Non-PTF Network Load shall be the load over FG&E's Non-PTF directly interconnected with FG&E's Non-PTF facilities.

**1.6 Network Upgrades:** Modifications or additions to transmission-related facilities that are

integrated with and support FG&E's overall Local Network for the general benefit of all users of such Local Network.

**1.7 Parties:** FG&E and the Transmission Customer receiving service under this Schedule and the OATT.

## **SECTIONS SUPPLEMENTING THE BODY OF THE TARIFF**

### **Preamble**

The following provisions supplement the provisions of the Tariff. Provisions of this Schedule 21-FG&E shall have priority over any conflicting provisions in the Tariff. The section numbers of this Schedule 21-FG&E correspond to or are consecutive to the section numbers in the body of the Tariff that are affected by the additional provisions herein.

### **Sections Supplementing Section 1: General Terms and Conditions**

**1.7 Creditworthiness:** For the purpose of determining the ability of the Transmission Customer to meet its obligations related to service hereunder, FG&E may require reasonable credit review procedures in accordance with Attachment L to Schedule 21-FG&E.

### **Sections Supplementing Section II of the Tariff: Open Access Transmission Tariff (OATT)**

#### **II.A. COMMON SERVICE PROVISIONS**

##### **II.4 Ancillary Services**

Ancillary Services are needed with transmission service to maintain reliability within and among the Control Areas affected by the transmission service. FG&E is required to provide (or offer to arrange with the ISO as discussed below), and the Transmission Customer is required to purchase Scheduling, System Control and Dispatch Service.

The following Ancillary Services are available pursuant to Section II.4 of the Tariff only to the Transmission Customer serving load within the New England Control Area: (i) Reactive Supply and Voltage Control from Generation Sources Service, (ii) Regulation and Frequency Response (Automatic Generation Control), (iii) Energy Imbalance, (iv) Operating Reserve - Spinning, and (v) Operating

Reserve - Supplemental.

## **II.8 Billing and Invoicing; Accounting**

**8.2 Invoicing:** Within a reasonable time after the first day of each month, FG&E shall submit an invoice to the Transmission Customer for the charges for all services furnished under the OATT during the preceding month. The invoice shall be paid by the Transmission Customer within twenty (20) days of receipt. All payments shall be made in immediately available funds payable to FG&E, or by wire transfer to a bank named by FG&E.

**8.4 Customer Default:** In the event the Transmission Customer fails, for any reason other than a billing dispute as described below, to make payment to FG&E on or before the due date as described above, and such failure of payment is not corrected within thirty (30) calendar days after FG&E notifies the Transmission Customer to cure such failure, a default by the Transmission Customer shall be deemed to exist. Upon the occurrence of a default, FG&E may initiate a proceeding with the Commission to terminate service but shall not terminate service until the Commission so approves any such request. In the event of a billing dispute between FG&E and the Transmission Customer, FG&E will continue to provide service under the Service Agreement as long as the Transmission Customer (i) continues to make all payments not in dispute, and (ii) pays into an independent escrow account the portion of the invoice in dispute, pending resolution of such dispute. If the Transmission Customer fails to meet these two requirements for continuation of service, then FG&E may provide notice to the Transmission Customer of its intention to suspend service in sixty (60) days, in accordance with Commission policy.

### **II.10.2 Stranded Cost Recovery**

FG&E may seek to recover stranded costs from the Transmission Customer pursuant to this OATT in accordance with the terms, conditions and procedures set forth in FERC Order No. 888. However, FG&E must separately file any specific proposed stranded cost charge under Section 205 of the Federal Power Act.

## **SECTIONS SUPPLEMENTING SCHEDULE 21 OF THE OATT**

### **I. Local Point-to-Point Service Over the Local Network Owned by FG&E**

## **Preamble**

In addition to the provisions set forth in Schedule 21 of the OATT, the provisions of this Schedule 21-FG&E shall govern Local Point-To-Point transactions using the Local Network owned by FG&E.

Provisions of this Schedule 21-FG&E shall have priority over any conflicting provisions in the Tariff.

The section numbers of this Schedule 21-FG&E correspond to or are consecutive to the sections of Schedule 21 of the OATT that are affected by the additional provisions herein.

To the extent not otherwise covered in the OATT, the then-current ISO New England Operating Documents, or the TOA, or the rules adopted thereunder, whenever FG&E implements least-cost redispatch procedures in response to a transmission constraint, FG&E and the Transmission Customer(s) taking Local Point-To-Point Service will each bear a proportionate share of the total redispatch cost.

### **3) Service Availability**

**b) Determination of Available Transfer Capability (ATC):** A description of FG&E's specific methodology for assessing ATC is contained in Attachment C of this Schedule. In the event sufficient transfer capability may not exist to accommodate a service request, FG&E will respond by performing a System Impact Study.

**g) Real Power Losses:** Real Power Losses are associated with all transmission service. FG&E is not obligated to provide Real Power Losses. The Transmission Customer is responsible for replacing losses associated with all transmission service as calculated by FG&E. The applicable Real Power Loss factors tabulated below will be applied to metered loads and Reserved Capacity amounts to account for losses on FG&E's system. The applicable Real Power Loss factors are as follows:

Firm Local Point-to-Point Service = 0.72% at 69 kV subtransmission.

Non-Firm Local Point-to-Point Service = 0.72% at 69 kV subtransmission.

### **6) Procedures for Arranging Non-Firm Local Point-To-Point Service**

**f) Determination of Available Transfer Capability:** Following receipt of a tendered schedule FG&E will make a determination on a non-discriminatory basis of ATC pursuant to Attachment C of this Schedule. Such determination shall be made as soon as reasonably practicable after receipt, but not later than the following time periods for the following terms of

service (i) thirty (30) minutes for hourly service, (ii) thirty minutes for daily service, (iii) four (4) hours for weekly service, and (iv) two (2) days for monthly service (during FG&E's normal business hours of 8:00 a.m. to 4:30 p.m., Monday to Friday).

## **11) Sale or Assignment of Local Point-to-Point Service**

**c) Information on Assignment or Transfer of Service:** FG&E currently has waiver from the obligations of FERC Order No. 889 to maintain an OASIS. In the future, upon implementation of any FG&E OASIS site, resellers may use FG&E's OASIS site to post transmission capacity available for resale.

## **II. Local Network Service using Non-PTF Owned by FG&E**

### **Preamble**

In addition to the provisions set forth in Schedule 21 of the OATT, the provisions of this Schedule 21-FG&E shall govern Local Network Service using Non-PTF owned by FG&E. Provisions of this Schedule 21-FG&E shall have priority over any conflicting provision in the Tariff. The section numbers of this Schedule 21-FG&E correspond to the sections of Schedule 21 of the OATT that are affected by the additional provisions herein.

Local Network Service allows the Network Customer to integrate, economically dispatch, and regulate its current and planned Network Resources to serve its Network Load in a manner comparable to that in which FG&E utilizes its Non-PTF to serve its Native Load Customers. Local Network Service also may be used by the Network Customer to deliver economy energy purchases to its Network Load from non-designated resources on an as-available basis without additional charge. Transmission service for sales to non-designated loads will be provided pursuant to the applicable terms and conditions of Schedule 21 of the OATT.

## **2) Availability of Local Network Service**

**f) Real Power Losses:** The Network Customer is responsible for replacing losses associated with all transmission service as calculated by FG&E. The applicable Real Power Loss factors tabulated below will be applied to metered loads and Reserved Capacity amounts to account for losses on FG&E's system. The applicable Real Power Loss factors are as follows:

Local Network Service = 0.72% at 69 kV subtransmission.

**8) Load Shedding and Curtailments**

**a) Procedures:** Prior to the Service Commencement Date, FG&E and the Network Customer shall establish Load Shedding and Curtailment procedures pursuant to Section II.20 of the Tariff, with the objective of responding to contingencies on the Non-PTF. The Local Network Parties will implement such programs during any period when the ISO, the Local Control Center or FG&E determines that a system contingency exists and such procedures are necessary to alleviate such contingency. FG&E will notify all affected Network Customers in a timely manner of any scheduled Curtailment.

**b) Transmission Constraints:** During any period when FG&E determines that a transmission constraint exists on the Local Network, and such constraint may impair the reliability of FG&E's system, FG&E will take whatever actions, consistent with then-current ISO New England Operating Documents or the TOA, and the rules adopted thereunder, and with Good Utility Practice, that are reasonably necessary to maintain the reliability of FG&E's system. To the extent ISO determines that the reliability of the ISO New England Transmission System can be maintained by redispatching resources, FG&E will initiate procedures pursuant to the OATT, the then-current ISO New England Operating Documents, or the TOA, and the rules adopted thereunder to redispatch all Network Resources and FG&E's own resources on a least-cost basis without regard to the ownership of such resources. Any redispatch under this section may not unduly discriminate between FG&E's use of the Local Network on behalf of its Native Load Customers and any Network Customer's use of the Local Network to serve its designated Network Load.

**c) Cost Responsibility for Relieving Transmission Constraints:** To the extent not otherwise covered in the OATT, the then-current ISO New England Operating Documents, or the TOA, or the rules adopted thereunder, whenever FG&E implements least-cost redispatch procedures in response to a transmission constraint, FG&E and the Network Customer(s) will each bear a proportionate share of the total redispatch cost based on their respective Load Ratio Shares.

- d) Curtailments of Scheduled Deliveries:** If a transmission constraint on FG&E's Local Network cannot be relieved through the implementation of least-cost redispatch procedures and FG&E determines that it is necessary to Curtail scheduled deliveries, the Local Network Parties shall Curtail such schedules in accordance with Section II.22 of the Tariff.
- e) Allocation of Curtailments:** The ISO, the Local Control Center or FG&E shall, on a non-discriminatory basis, Curtail the transaction(s) that effectively relieve the constraint. However, to the extent practicable and consistent with Good Utility Practice, any Curtailment will be shared by FG&E and Network Customers in proportion to their respective Load Ratio Shares. Neither the ISO, the Local Control Center nor FG&E shall direct the Network Customer to Curtail schedules to an extent greater than either would Curtail FG&E's schedules under similar circumstances.
- f) Load Shedding:** To the extent that a system contingency exists on FG&E's Local Network and the ISO, the Local Control Center or FG&E determines that it is necessary for FG&E and the Network Customers to shed load, the Local Network Parties shall shed load in accordance with previously established procedures in accordance with Section II.22 of the Tariff, the then-current ISO New England Operating Documents, or the TOA, and the rules adopted thereunder.
- g) System Reliability:** Notwithstanding any other provisions of this Schedule, FG&E reserves the right, consistent with Good Utility Practice and on a not unduly discriminatory basis, to Curtail Local Network Service without liability on the part of FG&E for the purpose of making necessary adjustments to, changes in, or repairs on FG&E's lines, substations, and facilities, and in cases where the continuance of Local Network Service would endanger persons or property. In the event of any adverse conditions or disturbances on FG&E's Local Network or on any other system(s) directly or indirectly interconnected with FG&E's Local Network, FG&E, consistent with Good Utility Practice, also may Curtail Local Network Service in order to (i) limit the extent or damage of the adverse condition(s) or disturbance(s), (ii) prevent damage to generating or transmission facilities, or (iii) expedite restoration of service. FG&E will give the Network Customer as much advance notice as is practicable in the event of such Curtailment. Any Curtailment of Local Network Service will not be unduly discriminatory relative to FG&E's use of its Local Network on behalf of its Native Load Customers. FG&E shall specify the rate treatment and all related terms and conditions applicable in the event that the Network Customer

fails to respond to established Load Shedding and Curtailment procedures.

**9) Rates and Charges**

In addition to the above sections that correspond to sections in Schedule 21 of the OATT, the following additional provision shall apply to Local Network Service over FG&E's Local Network.

**a) Monthly Demand Charge:** The Network Customer shall pay a Monthly Demand Charge which shall be determined by multiplying its Load Ratio Share times one twelfth (1/12) of FG&E's Annual Transmission Revenue Requirement as specified in Attachment H to this Schedule 21-FG&E.

**10) Determination of Network Customer's Local Monthly Network Load:** The Network Customer's local monthly Network Load is its hourly load (including its designated Network Load not physically interconnected with FG&E under Section II.5(c) of Schedule 21 of the OATT) coincident with the FG&E's Monthly Local Network Peak. Monthly revenue requirements not otherwise paid for through charges to Eligible Customers for Local Point-to-Point Service will be allocated among FG&E's Network Customers receiving service under the tariff on the basis of their loads during the hour in the month in which the total connected load to the local network is at its maximum, without any adjustment for credits for generation.

In addition to the above sections that correspond to sections in Schedule 21 of the OATT, the following three provisions shall apply to Local Network Service over FG&E's local network.

**10a) Determination of FG&E's Monthly Local Network Load:** FG&E's monthly Local Network Load is FG&E's Monthly Local Network Peak minus the coincident peak usage of all Firm Local Point-To-Point Service customers pursuant to Schedule 21 of the OATT plus the Reserved Capacity of all Firm Local Point-To-Point Service customers.

**10b) Recovery of PTF Transmission Revenue Requirements:** The portion of FG&E's annual transmission revenue requirements with respect to PTF which is not recovered through the distribution of revenues from Regional Network Service or Local Point-to-Point Service shall be recovered from Eligible Customers taking Regional Network Service or Local Point-to-Point Service pursuant to Section II.13 of the Tariff.

## **SCHEDULE 1**

### **Local Scheduling, System Control and Dispatch Service**

This service is required to schedule the movement of power through, out of, within, or into FG&E's Local Network Control Area. Local Scheduling, System Control and Dispatch Service is to be provided directly by FG&E and the ISO. The Transmission Customer must purchase this service from FG&E. The charges for FG&E's Local Scheduling, System Control and Dispatch Service are to be based on the rates set forth below. To the extent that the ISO performs this service for FG&E, charges to the Transmission Customer are to reflect only a pass-through of the costs charged to FG&E by the ISO.

Each Firm Local Point-To-Point Service Customer under this Tariff will be charged for Local Scheduling, System Control and Dispatch Services for the total Reserved Capacity specified in each reservation for Firm Local Point-To-Point Service made under the Tariff at the rates set forth in Appendix A of this Schedule 1.

Each Network Customer under this Tariff will be charged a monthly Local Scheduling, System Control and Dispatch Service Demand Charge, which shall be determined by multiplying its Load Ratio Share times one twelfth (1/12) of the Formula Requirements specified in Appendix B of this Schedule 1.

Each Transmission Customer with generation within the ISO's Control Area shall be required also to provide for Scheduling, System Control and Dispatch Service for that generation. It is anticipated that the Transmission Customer will obtain these services by contracting with the ISO for these services on an unbundled basis. FG&E will make available Generation Scheduling, System Control and Dispatch Service at the rates set forth in Appendix C of this Schedule 1.

Each Transmission Customer with generation located outside of the ISO Control Area shall be required to provide for Scheduling, System Control and Dispatching Service for that generation. It is anticipated that the Transmission Customer will obtain these services by contracting for these services from the provider of these services within the Control Area where the generation is located. FG&E shall have the right, at any time, unilaterally to file for a change in any of the provisions of this Schedule 1 in accordance with Section 205 of the Federal Power Act and the Commission's implementing regulations.

**SCHEDULE 1**  
**Appendix A**  
**Determination Of**  
**FG&E's Local Network Point-To-Point Formula Rate**  
**For Local Scheduling, System Control And Dispatch Service**

FG&E's Formula Rate for Point-To-Point Local Scheduling, System Control and Dispatch Service ("Formula Rate") is an annual rate determined from the following formula.

$$\text{FORMULA RATE}_i = \frac{A_{i-1} - B_{i-1}}{C_{i-1}}$$

WHERE:

- $i$  equals the calendar year during which service is being rendered ("Service Year").
- $A_{i-1}$  is the Annual Control Center Expenses (expressed in dollars) of FG&E for the calendar year prior to the Service Year. The Annual Control Center Expenses are determined pursuant to the formula specified in Exhibit 1 to this Appendix A of Schedule 1.
- $B_{i-1}$  is the actual local scheduling, system control and dispatch revenues (expressed in dollars) provided from the provision of transmission services to others. The actual local scheduling and dispatch revenues shall be those recorded on the books of FG&E in FERC Account No. 456 pertaining to Transmission of Electricity for Others and such other applicable FERC Account for the calendar year prior to the Service Year.
- $C_{i-1}$  is the single annual coincident peak transmission load (expressed in kilowatts) of FG&E for the calendar year prior to the Service Year, as reported in FERC Form No. 1.

**Schedule 1**  
**Appendix A**  
**Exhibit 1**

**Determination of Annual Control Center Expenses**

The rate formula for determination of the annual control center expenses revenue requirements for FG&E is determined as follows:

A.  $ANNUAL\ CONTROL\ CENTER\ EXPENSES = \text{Sum of FG\&E's (Account 556 System Control and Load Dispatching Expense) + (Account 557 Other Expense) X .50*}$  for the calendar year prior to the Service Year.

\* This factor reflects allocation to the transmission function of a portion (50 percent) of the costs recorded in Accounts 556 and 557 associated with dispatching transmission and generating facilities. This 50 percent allocation of control center costs is based on two functions performed by the control center (i) control of generation and (ii) control of transmission.

## **SCHEDULE 1**

### **Appendix B**

#### **Determination of FG&E's Network Formula Requirements For Local Scheduling, System Control And Dispatch Service**

FG&E's formula requirements for Network Local Scheduling, System Control and Dispatch Service is determined from the following formula.

$$\text{Formula Requirements}_i = A_{i-1} - B_{i-1}$$

**WHERE:**

- $i$  equals the calendar year during which service is being rendered ("Service Year").
- $A_{i-1}$  is the Annual Control Center Expenses (expressed in dollars) of FG&E for the calendar year prior to the Service Year. The Annual Control Center Expenses are determined pursuant to the formula specified in Exhibit 1 to Appendix A of Schedule 1.
- $B_{i-1}$  is the actual local scheduling, system control and dispatch revenues (expressed in dollars) provided from the provision of transmission services to others. The actual local scheduling, system control and dispatch revenues shall be those recorded on the books of FG&E in FERC Account No. 456 pertaining to Transmission of Electricity for Others and such other applicable FERC Account for the calendar year prior to the Service Year.

**SCHEDULE 1**  
**Appendix C**

**Determination Of FG&E's Formula Rate**  
**For Generation Scheduling, System Control And Dispatch Service**

FG&E's Formula Rate for Generation Scheduling, System Control and Dispatch Service ("Formula Rate") is an annual rate determined from the following formula.

$$\text{FORMULA RATE}_i = \frac{A_{i-1} - B_{i-1}}{C_{i-1}}$$

WHERE:

- $i$  equals the calendar year during which service is being rendered ("Service Year").
  
- $A_{i-1}$  is the Annual Control Center Expenses (expressed in dollars) of FG&E for the calendar year prior to the Service Year. The Annual Control Center Expenses are determined pursuant to the formula specified in Exhibit 1 to Appendix A of Schedule 1.
  
- $B_{i-1}$  is the actual generation scheduling, system control and dispatch revenues (expressed in dollars) provided from the provision of generation services to others. The actual generation scheduling and dispatch revenues shall be those recorded on the books of FG&E for the calendar year prior to the Service Year.
  
- $C_{i-1}$  is FG&E's capacity entitlements for the calendar year prior to the service year.

## SCHEDULE 7

### Long-Term Firm Local and Short-Term Firm Local Point-to-Point Service

The Transmission Customer shall compensate FG&E each month for Firm Reserved Capacity at the sum of the applicable charges set forth below:

**1) Yearly delivery:**

The Yearly Delivery Charge per kW shall be FG&E's Annual Transmission Revenue Requirement (determined in accordance with Attachment H of this Tariff) divided by FG&E's Total Peak Load for the corresponding calendar year. Total Peak Load shall be FG&E's peak load, minus the coincident peak of all firm local point-to-point customers, plus the contract demand reservation for firm local point-to-point customers.

**2) Monthly delivery:**

The Monthly Delivery Charge per kW shall be determined by dividing the Yearly Delivery Charge by 12.

**3) Weekly delivery:**

The Weekly Delivery Charge per kW shall be determined by dividing the Yearly Delivery Charge by 52.

**4) Daily delivery:**

The Daily Delivery Charge per kW shall be determined by dividing the Yearly Delivery Charge by 365.

The total delivery charge in any week, pursuant to a reservation for daily delivery, shall not exceed the Weekly delivery Charge specified in section (3) above times the highest amount in kilowatts of Firm Reserved Capacity in any day during such week.

**5) Discounts:** Three principal requirements apply to discounts for transmission service as follows (1) any offer of a discount made by FG&E must be announced to all Eligible Customers solely by posting on Unitil.com, (2) any customer-initiated requests for discounts (including requests for use by one's wholesale merchant or an Affiliate's use) must occur solely by posting on Unitil.com, and (3) once a discount is negotiated, details must be immediately posted on Unitil.com. For any discount agreed upon for service on a path from point(s) of receipt to point(s) of delivery, FG&E must offer the same

discounted transmission service rate for the same time period to all Eligible Customers on all unconstrained transmission paths that go to the same point(s) of delivery on FG&E's Local Network.

6) **Resales:** The rates and rules governing charges and discounts stated above shall not apply to resales of transmission service, compensation for which shall be governed by section I.11 (a) of Schedule 21 of the OATT.

## **SCHEDULE 8**

### **Non-Firm Local Point-to-Point Service**

The Transmission Customer shall compensate FG&E for Non-Firm Local Point-To-Point Service for Non-Firm Reserved Capacity up to the sum of the applicable charges set forth below:

**1) Monthly delivery:**

The Monthly Delivery Charge shall be determined by multiplying the Monthly Delivery Charge as described on Schedule 7 by .75.

**2) Weekly delivery:**

The Weekly Delivery Charge shall be determined by multiplying the Weekly Delivery Charge as described on Schedule 7 by .75.

**3) Daily delivery:**

The Daily Delivery Charge shall be determined by multiplying the Daily Delivery Charge as described on Schedule 7 by .75.

The total delivery charge in any week, pursuant to a reservation for Daily delivery, shall not exceed the Weekly Delivery Charge specified in section (2) above times the highest amount in kilowatts of Non-Firm Reserved Capacity in any day during such week.

**4) Hourly delivery:** The basic charge shall be that agreed upon by the Local Network Parties at the time this service is reserved and in no event shall exceed the Daily Delivery Charge specified in section (3) above divided by 24. The total delivery charge in any day, pursuant to a reservation for Hourly delivery, shall not exceed the Daily Delivery Charge specified in section (3) above times the highest amount in kilowatts of Non-Firm Reserved Capacity in any hour during such day. In addition, the total delivery charge in any week, pursuant to a reservation for Hourly or Daily delivery, shall not exceed the Weekly Delivery Charge specified in section (2) above times the highest amount in kilowatts of Non-Firm Reserved Capacity in any hour during such week.

**5) Discounts:** Three principal requirements apply to discounts for transmission service as follows (1) any offer of a discount made by FG&E must be announced to all Eligible Customers solely by posting on Unitil.com, (2) any customer-initiated requests for discounts (including requests for use by one's wholesale merchant or an Affiliate's use) must occur solely by posting on Unitil.com, and (3) once a

discount is negotiated, details must be immediately posted on Unitil.com. For any discount agreed upon for service on a path from point(s) of receipt to point(s) of delivery, FG&E must offer the same discounted transmission service rate for the same time period to all Eligible Customers on all unconstrained transmission paths that go to the same point(s) of delivery on FG&E's Local Network.

**6) Resales:** The rates and rules governing charges and discounts stated above shall not apply to resales of transmission service, compensation for which shall be governed by section I.11 (a) of Schedule 21 of the OATT.

**SCHEDULE 9**  
**DISTRIBUTION ADDER UNDER TARIFF**

In the case where distribution facilities of FG&E are employed in providing service under Schedule 21 of the OATT, the Transmission Customer shall compensate FG&E for the use of such facilities. In addition to the charges contained in this Tariff, the compensation for such distribution facilities will be determined on a case-by-case basis.

All such charges shall be subject to appropriate regulatory approval.

## ATTACHMENT C

### Methodology To Assess Available Transfer Capability

#### 1. Introduction

ISO is the regional transmission organization (RTO) for the New England Control Area. The New England Control Area includes the transmission system located in the states of Connecticut, Maine, Massachusetts, New Hampshire, Rhode Island, and Vermont, but does not include the transmission system in northern Maine (i.e., Aroostook and parts of Penobscot and Washington Counties) that is radially connected to New Brunswick and administered by the Northern Maine Independent System Administrator. The New England Control Area is comprised of PTF, non-PTF, OTF, MTF, and is interconnected to three neighboring Balancing Authority Areas (“BAA”) with various interface types.

As part of its RTO responsibilities, the ISO is registered with the North American Electric Reliability Corporation (“NERC”) as several functional model entities that have responsibilities related to the calculation of ATC as defined in the following NERC Standards: MOD-001 – Available Transmission System Capability (“MOD-001”), MOD-004 – Capacity Benefit Margin (“MOD-004”), and MOD-008 – Transmission Reliability Margin Calculation Methodology (“MOD-008”). The extent of those responsibilities is based on various Commission approved transmission operating agreements and the provisions of the ISO New England Operating Documents.

While the ISO is the Transmission Service Provider for regional transmission service (“Regional Transmission Service”) associated with Pool Transmission Facilities, the Participating Transmission Owners (“PTOs”) provide local transmission service over Non-Pool Transmission Facilities within the RTOP footprint and are responsible for calculating TTC and ATC associated with Local Transmission Service provided under Schedule 21 pursuant to the Transmission Operating Agreement (“TOA”). Pursuant to CFR § 37.6(b)<sup>1</sup> of the FERC Regulations, Transmission Provider’s are obligated to calculate and post TTC and ATC for each Posted Path. The ISO is not responsible for the calculation of these values.

Posted Path is defined as any control area to control area interconnection; any path for which service is

---

<sup>1</sup> Section §37.6(b) Posting transfer capability. The available transfer capability on the Transmission Provider’s system (ATC) and the total transfer capability (TTC) of that system shall be calculated and posted for each Posted Path as set out in this section.

denied, curtailed or interrupted for more than 24 hours in the past 12 months; and any path for which a customer requests to have ATC or TTC posted. For this last category, the posting must continue for 180 days and thereafter until 180 days have elapsed from the most recent request for service over the requested path. For purposes of this definition, an hour includes any part of any hour during which service was denied, curtailed or interrupted.<sup>2</sup>

FG&E does not currently have any Posted Paths based on the above definition. However, to the extent that FG&E does in the future have a Posted Path, FG&E will calculate TTC using the NERC Standard MOD-029 – Rated System Path Methodology (“MOD-029”) as outlined below.

### **1.1 Scope of Document**

The scope of this document is limited to those functions performed by FG&E as the Transmission Service Provider of Schedule 21-FG&E Point-to Point transmission service over Local Facilities pursuant to the PTOs’ Transmission Operating Agreement and the ISO OATT:

- Methodology for calculating Total Transfer Capability (TTC)
- Methodology for calculating Available Transfer Capability (ATC)
- Existing Transmission Commitment (ETC)
- Use of Transmission Reliability Margin (TRM)
- Use of Capacity Benefit Margin (CBM)
- Use of Rollover Rights (ROR) in the calculation of ETC

TTC and ATC are required to be calculated only for certain non-PTF internal Posted Paths over which Local Point-to-Point transmission service is provided under Schedule 21-FG&E. TTC and ATC is not calculated by FG&E for Local Network Service because ISO employs a market model for economic, security constrained dispatch of generation, and FG&E does not require advance reservation for such network service.

## **2. Transmission Service in the New England Markets**

Since the inception of the OATT for New England, the process by which generation located inside New England supplies energy to the bulk electric system has differed from the Commission pro forma OATT.

---

<sup>2</sup> Section § 37.6(b)(1)(i).

The fundamental difference is that internal generation is dispatched in an economic, security constrained manner by the ISO rather than utilizing a system of physical rights, advance reservations and point-to-point transmission service. Through this process, internal generation provides offers that are utilized by the ISO in the Real-Time Energy Market dispatch software. This process provides the least-cost dispatch to satisfy Real-Time load on the system.

In addition to offers from generation within New England, entities may submit External Transactions to move energy into the New England Control Area, out of the New England Control Area or through the New England Control Area. The Real-Time Energy Market clears these External Transactions based on forecast Locational Marginal Pricing (LMPs) and the transfer capability of the associated external interfaces. With those External Transactions in place, the Real-Time Energy Market dispatches internal generation in an economic, security constrained manner to meet Real-Time load within the region.

The process for submitting External Transactions into the Real-Time Energy Market does not require an advance physical reservation for use of the PTF. In the event that the net of the economic External Transactions is greater than the transfer capability of the associated external interface, the External Transactions selected to flow are selected based on the rules specified in the Tariff. For any External Transactions that are confirmed to flow in Real-Time based on the economics of the system, a transmission reservation for RNS or Through or Out Service is created after-the-fact to satisfy the transparency needs of the market.

The process described above is applicable to the PTF within the ISO Area, and non-PTF Local Facilities where utilized for Local Network Service by generation or load. However, FG&E owns Local Facilities over which an advance transmission service reservation for firm or non-firm transmission service may be required. On those Local Facilities, the market participant may obtain a transmission service reservation from FG&E under Schedule 21-FG&E prior to delivery of energy into the Real-Time Energy Market.<sup>3</sup> This document addresses the calculation of ATC and TTC for these non-PTF internal paths.

### **3. Schedule 21-FG&E Total Transfer Capability (TTC)**

The TTC on FG&E's non-PTF Local Facilities that require Point-to-Point transmission service reservations are relatively static values and are calculated using the NERC Standard MOD-029 – Rated System Path Methodology. TTC is the amount of electric power that can be moved or transferred reliably from one area to another area of the interconnected transmission systems by way of all transmission lines

---

<sup>3</sup> See n - 2, 3 and 6, supra.

(or paths) between those areas under specified system conditions. FG&E calculates TTC according to this definition applying the process as described below.

### **3.1 Guidelines and Principles**

When estimating TTC, FG&E will apply the following, as amended and/or adopted from time to time

- Good Utility Practice
- NERC criteria and guidelines
- ISO New England criteria, rules and reliability standards
- Northeast Power Coordinating Council (NPCC) criteria and guidelines
- Fitchburg Gas and Electric Light Company guides

### **3.2 Transmission System Model Representation**

FG&E will estimate TTC using transmission system load flow models developed for FG&E's system. The models may include representations of other neighboring systems. FG&E will use system models that it deems appropriate for study of the Request for firm transmission service. Additional system models and operating conditions, including assumptions specific to a particular analysis, may be developed for conditions not available in the library of load flow cases. The system models may be modified, if necessary, to include additional system information on load, transfers and configuration, as it becomes available.

### **3.3 Contingency Analysis**

FG&E will perform, if necessary, power flow and transient stability analysis to ensure that the interface's physical limits will not be violated for credible system contingencies per NERC, NPCC and ISO reliability criteria. TTC, based on contingency analysis, is the incremental transfer capability of the transmission system following the loss of the most critical element while maintaining thermal, and stability performance of the system within acceptable regional practices and consistent with guidelines of Item 3.1 of this Attachment.

### **3.4 Posting TTCs**

When necessary, FG&E will estimate TTC as outlined above and post on its website.

## **4. Capacity Benefit Margin (CBM)**

CBM is defined as the amount of firm transmission transfer capability set aside by a TSP for use by the

Load Serving Entities. The ISO does not set aside any CBM for use by the Load Serving Entities, because of the New England approach to capacity planning requirements in the ISO New England Operating Documents. Load Serving Entities operating within the New England Control Area are required to arrange for their Capacity Requirements prior to the beginning of any given month in accordance with ISO Tariff, Section III.13.7.3.1 (Calculation of Capacity Requirement and Capacity Load Obligation). Load Serving Entities do not utilize CBM to ensure that their capacity needs are met; therefore, CBM is not applicable within the New England market design. Accordingly, for purposes of ATC calculation, CBM for the New England Control Area is set to zero (0).

### **Existing Transmission Commitments, Firm (ETC<sub>F</sub>)**

The ETC<sub>F</sub> are those confirmed Firm transmission reservations (PTP<sub>F</sub>) plus any rollover rights for Firm transmission reservations (ROR<sub>F</sub>) that have been exercised. There are no allowances necessary for Native Load forecast commitments (NL<sub>F</sub>), Network Integration Transmission Service (NITS<sub>F</sub>), grandfathered Transmission Service (GF<sub>F</sub>) and other service(s), contract(s) or agreement(s) (OS<sub>F</sub>) to be considered in the ETC<sub>F</sub> calculation.

### **Existing Transmission Commitments, Non-Firm(ETC<sub>NF</sub>)**

The (ETC<sub>NF</sub>) are those confirmed Non-Firm transmission reservations (PTP<sub>NF</sub>). There are no allowances necessary for Non-Firm Network Integration Transmission Service (NITS<sub>NF</sub>), Non-Firm grandfathered Transmission Service (GF<sub>NF</sub>) or other service(s), contract(s) or agreement(s) (OS<sub>NF</sub>).

## **5. Transmission Reliability Margin (TRM)**

TRM is the amount of transmission transfer capability set aside to provide reasonable assurance that the interconnected transmission network will be secure. TRM accounts for the inherent uncertainty in system conditions and the need for operating flexibility to ensure reliable system operation as system conditions change. It is used only for external interfaces under the New England market design. FG&E, under Schedule 21, does not have any external interfaces, and therefore, TRM for FG&E's non-PTF facilities is zero.

## **6. Calculation of ATC for FG&E's Local Facilities**

## General Description

This section defines the ATC calculations performed by FG&E pursuant to MOD-029 for its non-PTF internal interfaces. Consistent with the NERC definition, the equation for Available Transfer Capability is:  $ATC = (TTC - CBM - TRM - \text{Existing Transmission Commitments} + \text{Postbacks} + \text{counterflows})$ . As discussed above, the CBM and TRM for the PTF interfaces for which FG&E calculates ATC are zero (0). As consistent with the ISO calculation, the equations for Firm and Non-Firm Available Transfer Capability are:

$$\text{Firm ATC} = (TTC - CBM - TRM - \text{Firm ETC})$$

$$\text{Non-firm ATC} = (TTC - CBM - TRM - \text{Firm and Non-Firm ETC})^4$$

As discussed above, the TRM and CBM for FG&E's non-PTF paths are zero. The purpose of the Existing Transmission Commitments ("ETC") component of the ATC equation is for FG&E to reduce the amount of ATC by the amount of existing firm transmission commitments that are not otherwise included in CBM or TRM. There is no requirement to purchase transmission service in advance of flowing energy in Real-Time, and there is no MW amount set aside by FG&E on any interface. One such example is point-to-point service commitments. Point-to-point service commitments sharing common transmission paths would be combined through system modeling to calculate the net existing transmission capacity (ETC) impact. This ETC value is then used in the ATC calculation shown above. Therefore there are no Existing Transmission Commitments to be applied in the ATC equation. For this reason, ETC equals zero (0) for the purposes of ATC calculation. Because Postbacks and counterflows are related to ETC and ETC is zero (0), both Postbacks and counterflows also are equal to zero (0).

As described in Section 2, under Schedule 21-FG&E, FG&E requires the purchase of transmission service in advance of delivery of energy to the New England Wholesale Market over certain non-PTF paths, and those existing transmission commitments would be applied to the ATC equation for the specific posted path. As a practical matter, the ratings of the radial transmission paths are always higher than the transmission requirements of the Transmission Customers connected to that path. As such, transmission services over these posted paths are considered to be always available.

Entities submit their bids and offers to move energy into, out of and through the Energy Market through External Transactions. As Real-Time approaches, the ISO determines which of the submitted External Transactions will be scheduled in the coming hour in accordance with the rules set forth in the ISO New

---

<sup>4</sup> Existing Transmission Commitments ("ETC")

England Operating Documents. Basically, the ATC of the non-PTF assets in the New England market is almost always positive. The ATC is equal to the amount of External Transactions that the ISO will schedule on an interface for the designated hour. With this simplified version of ATC, there is no detailed algorithm to be described or posted other than: ATC equals TTC. Thus, for those non-PTF facilities that serve as a path for the FG&E's Schedule 21-FG&E Point-to-Point Transmission Customers, FG&E would post the ATC as 9999, consistent with industry practice. ATC on these paths varies depending on the time of day. However, it would be posted with an ATC of "9999" to reflect the fact that there are no restrictions on these paths for commercial transactions.

## **6.1 Calculation of Schedule 21-FG&E Firm ATC ( $ATC_F$ )**

### **6.1.1 Calculation of $ATC_F$ in the Planning Horizon (PH)**

For purposes of this Attachment C PH is any period before the Operating Horizon.

Consistent with the NERC definition,  $ATC_F$  is the capability for Firm transmission reservations that remain after allowing for TRM, CBM,  $ETC_F$ ,  $Postbacks_F$  and  $counterflows_F$ .

As discussed above, TRM and CBM are zero. Firm Transmission Service under Schedule 21-FG&E that is available in the Planning Horizon (PH) includes: Yearly, Monthly, Weekly, and Daily.  $Postbacks_F$  and  $counterflows_F$  of Schedule 21-FG&E transmission reservations are not considered in the ATC calculation. Therefore,  $ATC_F$  in the PH is equal to the TTC minus  $ETC_F$

### **6.1.2 Calculation of $ATC_F$ in the Schedule 21-FG&E Operating Horizon (OH)**

For purposes of this Attachment C OH is noon eastern prevailing time each day. At that time, the OH spans from noon through midnight of the next day for a total of 36 hours. As time progresses the total hours remaining in the OH decreases until noon the following day when the OH is once again reset to 36 hours.

Consistent with the NERC definition,  $ATC_F$  is the capability for Firm transmission reservations that remain after allowing for  $ETC_F$ , CBM, TRM,  $Postbacks_F$  and  $counterflows_F$ .

As discussed above, TRM and CBM is zero. Daily Firm Transmission Service under Schedule 21-FG&E

is the only firm service offered in the Operating Horizon (OH).  $Postbacks_F$  and  $counterflows_F$  of Schedule 21-FG&E transmission reservations are not considered in the  $ATC_F$  calculation. Therefore,  $ATC_F$  in the OH is equal to the TTC minus  $ETC_F$ .

**6.1.3** Because Firm Schedule 21-FG&E transmission service is not offered in the Scheduling Horizon (SH):  $ATC_F$  in the SH is zero.

## **6.2 Calculation of Schedule 21-FG&E Non-Firm ATC ( $ATC_{NF}$ )**

### **6.2.1 Calculation of $ATC_{NF}$ in the PH**

$ATC_{NF}$  is the capability for Non-Firm transmission reservations that remain after allowing for  $ETC_F$ ,  $ETC_{NF}$ , scheduled CBM ( $CBM_S$ ), unreleased TRM ( $TRM_U$ ), Non-Firm Postbacks ( $Postbacks_{NF}$ ) and Non-Firm counterflows ( $counterflows_{NF}$ ).

As discussed above, the TRM and CBM for Schedule 21-FG&E are zero. Non-Firm ATC available in the PH includes: Monthly, Weekly, Daily and Hourly.  $TRM_U$ ,  $Postbacks_{NF}$  and  $counterflows_{NF}$  of Schedule 21-FG&E transmission reservations are not considered in this calculation. Therefore,  $ATC_{NF}$  in the PH is equal to the TTC minus  $ETC_F$  and  $ETC_{NF}$ .

### **6.2.2 Calculation of $ATC_{NF}$ in the OH**

$ATC_{NF}$  available in the OH includes: Daily and Hourly.

As discussed above TRM and CBM for Schedule 21-FG&E are zero.  $TRM_U$ , counterflows and  $ETC_{NF}$  are not considered in this calculation. Therefore,  $ATC_{NF}$  in the OH is equal to the TTC minus  $ETC_F$ , plus postbacks of  $PTP_F$  in OH as  $PTP_{NF}$  ( $Postbacks_{NF}$ ).

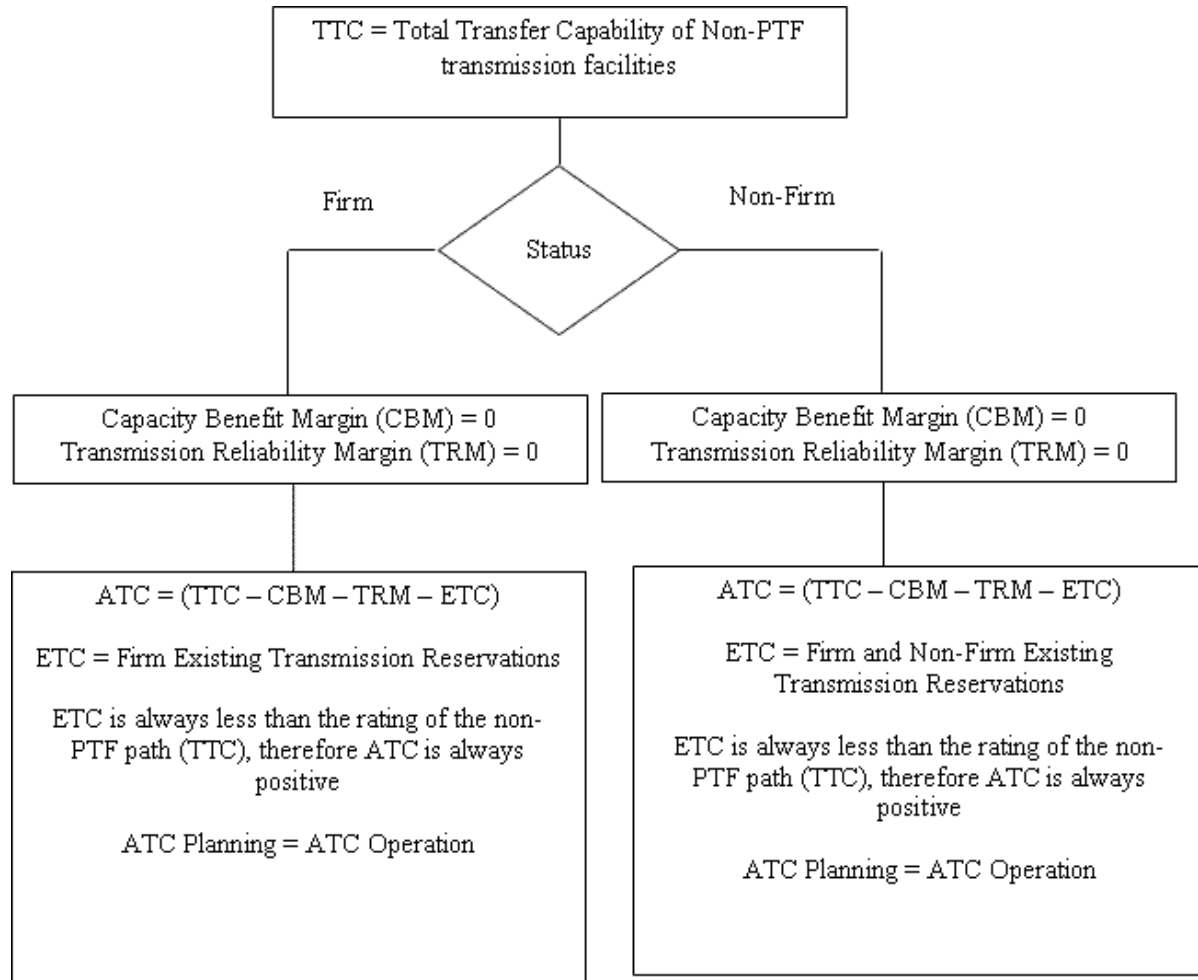
## **6.3 Negative ATC**

As stated above, the ratings of the radial transmission paths are always higher than the transmission requirements of the Transmission Customers connected to that path. As such, transmission services over these posted paths are considered to be always available.

As stated above, FG&E's non-PTF facilities are primarily radial paths that provide transmission service to directly interconnected generators. It is possible, in the future, that a particular radial path may interconnect more nameplate capacity generation than the path's TTC. However, due to the ISO's security constrained dispatch methodology, the ISO will only dispatch an amount of generation interconnected to such path so as not to incur a reliability or stability violation on the subject path. Therefore, ATC in the PH, OH and SH may become zero, but will not become negative.

## ATC Process Flow Diagram for Non-PTF Interfaces

The process flow diagram illustrates the steps through which ATC is calculated both on an operating and planning horizon.



## **7. Posting of Schedule 21-FG&E ATC**

### **7.1 Location of ATC Posting.**

When necessary, FG&E will estimate ATC values for these internal paths as outlined above and post on its website, [http://www.unitil.net/nepool/ma/pdf/atc\\_cbm\\_ttc\\_trm\\_fge.pdf](http://www.unitil.net/nepool/ma/pdf/atc_cbm_ttc_trm_fge.pdf).

### **7.2 Updates To ATC**

When any of the variables in the ATC equations change, the ATC values are recalculated and immediately posted.

### **7.3 Coordination of ATC Calculations**

Schedule 21-FG&E non-PTF has no external interfaces. Therefore it is not necessary to coordinate the values.

### **7.4 Mathematical Algorithms**

A link to the actual mathematical algorithm for the calculation of ATC for FG&E's non-PTF internal interfaces is located at [http://www.unitil.com/sites/default/files/pdfs/fge\\_atc\\_algorithms\\_3\\_11.pdf](http://www.unitil.com/sites/default/files/pdfs/fge_atc_algorithms_3_11.pdf).

## **ATTACHMENT D**

### **Methodology for Completing a System Impact Study**

FG&E will perform System Impact Studies for the purpose of determining the feasibility of integrating Network Load and Network Resources into FG&E's Local Network under Schedule 21 of the OATT, or for the purpose of determining the feasibility of providing Local Point-To-Point Service under this Tariff. All System Impact Studies will be completed using the same method employed by FG&E to integrate into FG&E's Local Network (i) generation resources owned or acquired to serve its Native Load Customers, and (ii) its Native Load Customers' load. Specifically, System Impact Studies will be performed by applying the applicable criteria, rules, standards and operating procedures. In addition to applying the applicable criteria, rules, standards and operating procedures, to determine the feasibility of providing service to Network Load and/or Local Point-To-Point Service, System Impact Studies will also be performed by applying the Unitil "Guidelines for System Planning and Design.

**ATTACHMENT E**

**Index Of Local Point-To-Point Service Customers**

<u>Customer</u>	<u>Date of Service Agreement</u>
Fitchburg Gas and Electric Light Company	September 10, 1996
Pinetree Power Fitchburg Inc.	March 9, 1999

## ATTACHMENT H

### Annual Transmission Revenue Requirement For Local Network Service

The Transmission Revenue Requirement for FG&E will reflect FG&E's costs with respect to transmission facilities not related to PTF ("Non PTF"). Except as provided below for the transitional implementation of this formula rate, the Transmission Revenue Requirement will be an annual calculation, effective June 1, based on the previous year's calendar data as reported in FG&E's FERC Form 1 report for that year, or other reasonable documentation, using end-of-year balances for each rate base item, as set forth below. The initial Transmission Revenue Requirement shall be effective October 1, 2003 through May 31, 2004 based on calendar year 2002 data as adjusted, as approved by the Commission. Further, the Transmission Revenue Requirement to be effective June 1, 2004, based on calendar year 2003 data, shall include an adjustment to annualize the impact on 2003 depreciation expense of revised depreciation rates effective October 1, 2003, as approved by the Commission.

Beginning July 31, 2004, FG&E shall make an annual informational filing on or before July 31 of each year showing the Transmission Revenue Requirement in effect for the period beginning June 1 of that year through May 31 of the subsequent year. If there are corrections made to the information reflected in the informational filing after it has been submitted, FG&E will file corrections to the informational filing.

#### I. FORMULA

A. The Transmission Revenue Requirement for FG&E's Non-PTF shall equal the sum of the following: (A) Non-PTF Return and Associated Income Taxes, plus (B) Non-PTF Depreciation Expense, plus (C) Non-PTF Amortization of Intangible Plant and Other Regulatory Assets/Liabilities, plus (D) Non-PTF Amortization of Rate Case Expense, plus (E) Non-PTF Amortization of Loss on Reacquired Debt, minus (F) Non-PTF Amortization of Investment Tax Credits, plus (G) Non-PTF Property Tax Expense, plus (H) Non-PTF Payroll Tax Expense, plus (I) Non-PTF Transmission Operation and Maintenance Expense, plus (J) Non-PTF Customer Accounting Bad Debts Expense, plus (K) Non-PTF Administrative and General Expense, plus (L) Non-PTF Transmission Related Taxes and Fees Charge, minus (M) Non-PTF Transmission Rents Received from Electric Property, minus (N) Non-PTF Revenue for Through or Out Service.

B. Each of the components of A. above shall be calculated by subtracting the related PTF costs and revenues from the same calendar year, as included in ISO-NE's OATT, from the total transmission costs

and revenues as described in Section III. Support Expense included in PTF shall only be included in this computation to the extent these costs are included in the determination of total transmission costs.

## II. DEFINITIONS

### A. ALLOCATION FACTORS

1. Transmission Wages and Salaries Allocation Factor shall equal the ratio of Transmission-related direct wages and salaries to FG&E's total direct wages and salaries, excluding administrative and general wages and salaries.
2. Transmission Plant Allocation Factor shall equal the ratio of the sum of (1) Transmission Plant, (2) Transmission Related Intangible Plant, (3) Transmission Related General Plant, and (4) Transmission Related Common Plant, to Total Plant in Service.
3. Transmission Revenue Allocation Factor shall equal the ratio of Total Internal Transmission Revenue to Total Billed Revenue from Sales to Ultimate Customers.

### B. TERMS

Administrative and General Expense shall equal FG&E's expenses as recorded in FERC Account Nos. 920-935, excluding FERC Account Nos. 924, 928 and 930.1.

Amortization of Intangible Plant and Common Plant shall equal FG&E's expenses related to Intangible Plant and Common Plant as recorded in FERC Account No. 404.

Amortization of Investment Tax Credits shall equal FG&E's credits as recorded in FERC Account No. 411.4.

Amortization of Loss on Reacquired Debt shall equal FG&E's expenses as recorded in FERC Account No. 428.1.

Amortization of Other Regulatory Assets/Liabilities-FAS 109 shall equal FG&E's expenses related to Other Regulatory Assets/Liabilities-FAS 109 as recorded in FERC Account No. 404.

Amortization of Rate Case Expenses shall equal FG&E's expenses related to the deferred costs of

regulatory rate proceedings related to transmission service as approved by FERC and as recorded in FERC Account No. 407.

Common Plant shall equal FG&E's gross balance of the plant common to both electric and gas operations as recorded in FERC Account Nos. 303, 310, 389-399, excluding capital leases.

Common Plant Amortization Reserve shall equal FG&E's Common Plant reserve balances as recorded in FERC Account No. 111.

Common Plant Depreciation Expense shall equal FG&E's Common Plant expenses as recorded in FERC Account No. 403.

Common Plant Depreciation Reserve shall equal FG&E's Common Plant reserve balance as recorded in FERC Account No. 108.

Customer Accounting Bad Debts Expense shall equal FG&E's expenses as recorded in FERC Account No. 904.

General Plant shall equal FG&E's gross plant balance as recorded in FERC Account Nos. 389-399.

General Plant Depreciation Expense shall equal FG&E's General Plant expenses as recorded in FERC Account No. 403.

General Plant Depreciation Reserve shall equal FG&E's General Plant reserve balance as recorded in FERC Account No. 108.

Intangible Plant shall equal FG&E's gross plant balance as recorded in FERC Account No. 303 (consisting of investments in computer systems and software).

Intangible Plant Amortization Reserve shall equal FG&E's Intangible Plant reserve balance as recorded in FERC Account No. 111.

Other Regulatory Assets/Liabilities–FAS 106 shall equal the net of FG&E's FAS 106 balance as recorded in FERC Account No. 182.3 and any FAS 106 balance as recorded in FG&E's FERC Account No. 254.

Other Regulatory Assets/Liabilities–FAS 109 shall equal the net of FG&E's FAS 109 balance as recorded in FERC Account No. 182.3 and any FAS 109 balance as recorded in FG&E's FERC Account No. 254.

Payroll Tax Expense shall equal those payroll tax expenses as recorded in FG&E's FERC Account Nos. 408.1 and 409.1.

Plant Held for Future Use shall equal FG&E's balance in FERC Account No. 105.

Prepayments shall equal FG&E's electric prepayment balance as recorded in FERC Account No. 165. The electric portion shall be determined by multiplying the balance in FERC Account No. 165 by the ratio of electric utility plant to total utility plant as reported in FG&E's FERC Form 1.

Property Insurance Expense shall equal FG&E's expenses as recorded in FERC Account No. 924.

Property Tax Expense shall equal FG&E's property tax expenses as recorded in FERC Account Nos. 408.1 and 409.1.

Support Expense shall equal Transmission Support Expense as defined in the OATT Attachment F.

Total Accumulated Deferred Income Taxes shall equal the net of the deferred tax balances as recorded in FERC Account Nos. 281-283 and FERC Account No. 190.

Total Billed Revenue from Sales to Ultimate Customers shall equal FG&E's total electric service revenues as recorded in FERC Account Nos. 440, 442, 444, 445, 446, 448, and 449.

Total Internal Transmission Revenue shall equal FG&E's internal transmission revenues as recorded in FERC Account Nos. 440, 442, 444, 445, 446, 448 and 449.

Total Loss on Reacquired Debt shall equal FG&E's expenses as recorded in FERC Account No. 189.

Total Plant in Service shall equal FG&E's total electric gross plant balance as recorded in FERC Account Nos. 301-399 (inclusive of electric Common Plant).

Transmission Operation and Maintenance Expense shall equal FG&E's electric expenses as recorded in FERC Account Nos. 560-564 and 566-576.5 and shall exclude expenses already included in PTF Transmission Support Expense, costs billed to Select Energy, Inc. under a generation related entitlement sales agreement and Account Nos. 561.4 and 575.7.

Transmission Plant shall equal FG&E's gross plant balance as recorded in FERC Account Nos. 350-359 excluding joint owned unit costs.

Transmission Plant Depreciation Expense shall equal FG&E's Transmission Plant expenses as recorded in FERC Account No. 403 less joint owned unit costs.

Transmission Plant Depreciation Reserve shall equal FG&E's Transmission Plant reserve balance as recorded in FERC Account 108 less joint owned unit reserves.

Transmission Plant Held for Future Use shall equal the transmission-related balance of electric Plant Held for Future Use.

Transmission Plant Materials and Supplies shall equal FG&E's balance as assigned to transmission, as recorded in FERC Account No. 154.

Transmission Prepayments shall equal FG&E's Prepayments multiplied by the Transmission Wages and Salaries Allocation Factor.

Transmission Related Accumulated Deferred Income Taxes shall equal FG&E's electric balance of Total Accumulated Deferred Income Taxes multiplied by the Transmission Plant Allocation Factor.

Transmission Related Administrative and General Expense shall equal the sum of (1) electric Administrative and General Expenses multiplied by the Transmission Wages and Salaries Allocation Factor, plus (2) electric Property Insurance Expense reduced by amounts billed to Select Energy Inc. under a generation related entitlement sales agreement and multiplied by the Transmission Plant Allocation Factor, plus (3) electric expenses included in FERC Account No. 928 related to FERC fees and assessments, plus (4) any other electric transmission related expenses included in FERC Account No. 928 plus (5) specific electric transmission related expenses included in FERC Account No. 930.1 and minus (6) any Administrative and General Expense amounts billed to Select Energy Inc. and not already

deducted elsewhere, multiplied by the Transmission Wages and Salaries Allocation Factor.

Transmission Related Amortization of Intangible Plant and Other Regulatory Assets/Liabilities shall equal the sum of (1) electric Amortization of Intangible Plant and Common Plant multiplied by the Transmission Wages and Salaries Allocation Factor and (2) electric Amortization of Other Regulatory Assets/Liabilities-FAS 109 multiplied by the Transmission Plant Allocation Factor. This component shall include additional regulatory assets/liabilities as established by regulatory authority and relevant to transmission services.

Transmission Related Amortization of Investment Tax Credits shall equal FG&E's electric Amortization of Investment Tax Credits multiplied by the Transmission Plant Allocation Factor.

Transmission Related Amortization of Loss on Reacquired Debt shall equal FG&E's electric Amortization of Loss on Reacquired Debt multiplied by the Transmission Plant Allocation Factor.

Transmission Related Cash Working Capital shall be 12.5% allowance (45 days/360 days) of the sum of Transmission Operation and Maintenance Expense, plus Transmission Related Customer Accounting Bad Debts Expense and plus Transmission Related Administrative and General Expense.

Transmission Related Common Plant shall equal FG&E's electric Common Plant multiplied by the Transmission Wages and Salaries Allocation Factor.

Transmission Related Customer Accounting Bad Debts Expense shall equal FG&E's electric Customer Accounting Bad Debts Expense multiplied by the Transmission Revenue Allocation Factor.

Transmission Related Depreciation & Amortization Reserve shall equal the sum of (1) Transmission Plant Depreciation Reserve plus (2) electric Intangible Plant and electric Common Plant Amortization Reserves multiplied by the Transmission Wages and Salaries Allocation Factor and (3) electric General Plant and electric Common Plant Depreciation Reserves multiplied by the Transmission Wages and Salaries Allocation Factor.

Transmission Related Depreciation Expense shall equal the sum of (1) Transmission Plant Depreciation Expense, (2) electric General Plant Depreciation Expense multiplied by the Transmission Wages and Salaries Allocation Factor and (3) electric Common Plant Depreciation Expense multiplied by the

Transmission Wages and Salaries Allocation Factor.

Transmission Related General Plant shall equal FG&E's electric General Plant multiplied by the Transmission Wages and Salaries Allocation Factor.

Transmission Related Intangible Plant shall equal FG&E's electric Intangible Plant multiplied by the Transmission Wages and Salaries Allocation Factor.

Transmission Related Loss on Reacquired Debt shall equal FG&E's electric balance of Total Loss on Reacquired Debt multiplied by the Transmission Plant Allocation Factor.

Transmission Related Other Regulatory Assets/Liabilities shall equal the sum of (1) FG&E's electric balance of Other Regulatory Assets/Liabilities-FAS 106 multiplied by the Transmission Wages and Salaries Allocation Factor, and (2) FG&E's electric balance of Other Regulatory Assets/Liabilities-FAS 109 multiplied by the Transmission Plant Allocation Factor. This component shall include additional regulatory assets/liabilities as established by regulatory authority and relevant to transmission services.

Transmission Related Payroll Tax shall equal FG&E's electric Payroll Tax Expense multiplied by the Transmission Wages and Salaries Allocation Factor.

Transmission Related Property Tax shall equal FG&E's electric Property Tax Expense, reduced by amounts billed to Select Energy, Inc. under a generation related entitlement sales agreement, multiplied by the Transmission Plant Allocation Factor.

### III. CALCULATION OF TRANSMISSION REVENUE REQUIREMENT

This section describes the calculation of the components of the Transmission Revenue Requirement for FG&E's Non-PTF as provided in Section I.

A. Non-PTF Return and Associated Income Taxes shall equal the product of the Total Internal Transmission Investment Base and the Cost of Capital Rate, reduced by the amount recovered as PTF. For purposes of this computation, the PTF amount shall be calculated using the Cost of Capital Rate defined in III.A.2 below.

1. Total Internal Transmission Investment Base

The Total Internal Transmission Investment Base shall be the sum of the year end balances of the following items as defined in Section II.: (a) Transmission Plant, plus (b) Transmission Related Intangible Plant, plus (c) Transmission Related General Plant, plus (d) Transmission Related Common Plant, plus (e) Transmission Plant Held for Future Use, minus (f) Transmission Related Depreciation & Amortization Reserve, minus (g) Transmission Related Accumulated Deferred Income Taxes, plus (h) Transmission Related Loss on Reacquired Debt, plus (i) Transmission Related Other Regulatory Assets/Liabilities, plus (j) Transmission Prepayments, plus (k) Transmission Plant Materials and Supplies, plus (l) Transmission Related Cash Working Capital.

2. Cost of Capital Rate

The Cost of Capital Rate will equal (a) FG&E's Weighted Cost of Capital, plus (b) Federal Income Tax plus (c) State Income Tax.

(a) The Weighted Cost of Capital will be calculated based upon the capital structure at the end of each year and will equal the sum of:

- (i) the long-term debt component, which equals the product of the actual weighted average embedded cost to maturity of FG&E's long-term debt then outstanding and the ratio that long-term debt is to FG&E's total capital.
- (ii) the preferred stock component, which equals the product of the actual weighted average embedded cost to maturity of FG&E's preferred stock then outstanding and the ratio that preferred stock is to FG&E's total capital.
- (iii) the return on equity component, which equals the product of the cost of equity of 10.9% and the ratio that common equity is to FG&E's total capital.

(b) Federal Income Tax shall equal

$$\frac{(A+[(C+B)/D]) \times FT}{1-FT}$$

Where FT is the Federal Income Tax Rate; A is the sum of the preferred stock component and the return on equity component, as determined in Sections III.A.2.(a)(ii) and (iii) above; B is Transmission Related Amortization of Investment Tax Credits, as defined in Section II above, C is the equity AFUDC component of Transmission Related Depreciation Expense, as defined in Section II above, and D is Total Internal Transmission Investment Base, as determined in Section III.A.1., above.

(c) State Income Tax shall equal

$$\frac{(A+[(C+B)/D] + \text{Federal Income Tax}) \times ST}{1-ST}$$

Where ST is the State Income Tax Rate; A is the sum of the preferred stock component and return on equity component as determined in Sections III.A.2. (a)(ii) and (iii) above; B is the Transmission Related Amortization of Investment Tax Credits as defined in Section II. above; C is the equity AFUDC component of Transmission Related Depreciation Expense, as defined in Section II above; D is the Total Internal Transmission Investment Base, as determined in Section III.A.1. above; and Federal Income Tax is the rate determined in Section III.A.2.(b) above.

B. Non-PTF Depreciation Expense shall equal FG&E's Transmission Related Depreciation Expense reduced by the amount recovered as PTF.

C. Non-PTF Amortization of Intangible Plant and Other Regulatory Assets/Liabilities shall equal FG&E's Transmission Related Amortization of Intangible Plant and Other Regulatory Assets/Liabilities reduced by the amount recovered as PTF.

D. Non-PTF Amortization of Rate Case Expenses shall equal the Amortization of Rate Case Expenses reduced by the amount recovered as PTF.

E. Non-PTF Amortization of Loss on Reacquired Debt shall equal FG&E's Transmission Related Amortization of Loss on Reacquired Debt reduced by the amount recovered as PTF.

F. Non-PTF Amortization of Investment Tax Credits shall equal FG&E's Transmission Related Amortization of Investment Tax Credits reduced by the amount recovered as PTF.

G. Non-PTF Property Tax Expense shall equal FG&E's Transmission Related Property Tax Expense reduced by the amount recovered as PTF.

H. Non-PTF Payroll Tax Expense shall equal FG&E's Transmission Related Payroll Tax Expense reduced by the amount recovered as PTF.

- I. Non-PTF Transmission Operation and Maintenance Expense shall equal Transmission Operation and Maintenance Expenses reduced by the amount recovered as PTF.
- J. Non-PTF Customer Accounting Bad Debts Expense shall equal the Transmission Related Customer Accounting Bad Debts Expense reduced by the amount recovered as PTF.
- K. Non-PTF Administrative and General Expenses shall equal the Transmission Related Administrative and General Expenses reduced by the amount recovered as PTF.
- L. Non-PTF Transmission Related Taxes and Fees Charge shall include any fee or assessment imposed by any governmental authority on service provided hereunder which is not specifically identified under any other section. This amount shall be reduced by the amount recovered as PTF.
- M. Non-PTF Transmission Rents Received from Electric Property shall equal any amount in FERC Account No. 454, Rents from Electric Property, associated with Transmission Plant. This amount shall be reduced by the amount recovered as PTF.
- N. Non-PTF Revenue for Through or Out Service shall equal distributions received by FG&E pursuant to Section II.13 of the Tariff from ISO out of revenues paid for Through or Out Service or for In Service (as defined in the OATT).



## **Attachment L**

### **Creditworthiness Policy**

#### **1. Introduction**

This guide establishes creditworthiness standards for transmission service and/or interconnection service customers (“Customers”) entering into new or amended service agreements with Fitchburg Gas and Electric Light Company (“FG&E”) under the ISO New England Open Access Transmission Tariff (“ISO-NE OATT”).<sup>5</sup> In accordance with the Federal Energy Regulatory Commission’s Policy Statement on Credit-Related Issues for Electric OATT Transmission Providers, Independent System Operators and Regional Transmission Organizations (“Policy Statement”), this Creditworthiness Policy is intended to make FG&E’s credit-related practices more transparent and comprehensive. The following describes FG&E credit review procedures and the types of security that are acceptable to FG&E to protect against the risk of non-payment.

#### **2. Creditworthiness**

FG&E will evaluate the creditworthiness of Customers entering into new or amended transmission or interconnection service agreements with FG&E in order to assess a Customer’s credit risk relative to the exposure of “Total Outstanding Obligation” as defined in Section 2.1 below, created by the transaction or transactions that FG&E has with the Customer. For purposes of determining the ability of a Customer to meet its obligations, FG&E may require the Customer to submit financial information for the credit review, including credit ratings, credit reports and audited financial statements for the last five years, including audited quarterly reports for the prior two years, if available. Further, the Customer will be expected to provide calculations of the following: Current Total Capitalization Ratio, Including Short-Term Debt; Tangible Net Worth for a period within sixty days of a Customer’s request; Earnings Before Interest, Taxes, Depreciation and Amortization for twelve of the last fifteen consecutive months; and additional calculations and other information deemed necessary for the evaluation credit. In completing its evaluation, FG&E may consider other factors including but not limited to past billing history or the characteristics of service being requested.

##### **2.1 Total Outstanding Obligation**

The Customer’s Total Outstanding Obligation to FG&E will be the sum total of the following

---

<sup>5</sup> See ISO New England Inc., ISO New England Inc. Transmission, Markets and Services Tariff, Section II. This policy is applicable to transmission or interconnection service agreements established from time-to-time under Schedules 21 - FG&E of the ISO-NE OATT and to individually negotiated agreements for similar transmission or interconnection services.

components:

2.1.1 If the Customer is making payments to FG&E for ongoing expenses (including, but not limited to, O&M expenses related to interconnections or other monthly charges such as monthly transmission charges under Schedule 21 – FG&E) the Customer will be required to provide security pursuant to Section 2.2 below, for four months' worth of the Customer's average payment obligation for such charges.

2.1.2 In accordance with the provisions of the ISO-NE OATT, a Customer will pay a Contribution in Aid of Construction ("CIAC") or transfer ownership of facilities to FG&E for transmission or interconnection facilities that are to be constructed on behalf of a Customer at the Customer's sole expense. If FG&E determines in good faith that the receipt of CIAC payments or property from the Customer are non-taxable, FG&E will require a form of security from the customer pursuant to Section 2.2 below for the amount of the potential tax liability to FG&E that would occur if such facilities were deemed taxable.

2.1.3 In accordance with the provisions of Schedule 21 – FG&E to the ISO-NE OATT, a Customer will pay a formula rate over time for return of and on the cost of capital incurred by FG&E on behalf of a Customer at the Customer's sole expense. The Customer will also be required to provide security pursuant to Section 2.2 below, for the unamortized balance of plant in service reserved for the sole use of the Customer.

## **2.2 Creditworthiness Requirements**

A Customer will be considered creditworthy upon satisfying at least one of the following conditions or a combination of those conditions at the time that the customer enters into a transmission or interconnection service agreement and for so long as the Customer maintains satisfaction of at least one of these conditions for any outstanding obligations thereunder:

2.2.1 The Customer maintains a minimum credit rating from Standard & Poor's Long-term Issuer Credit Rating of BBB- or better or Moody's Investors Service Long-term Issuer Credit Rating of Baa3 or better so long as the Customer's Total Outstanding Obligation plus any other unsecured obligations with FG&E does not exceed the Credit Limits discussed in Section 4 below. When FG&E reviews a Customer's rating from two or more rating agencies and a split rating is present, the lower debt rating will apply. In the event that the Customer has no rating

from either Standard & Poor's or Moody's Investors Service, a rating from Fitch may also be used with acceptable ratings equivalent to those from either Standard and Poor's or Moody's Investors Service. If unrated, the Customer's financial statements will be reviewed to determine an equivalent rating based on the Customer's unsecured credit limits and/or financial statements.

If, at any time, the Customer's rating falls below investment grade (BBB- from Standard and Poor's and/or Baa3 from Moody's or equivalent ratings from Fitch), the Customer will be required to (i) notify FG&E within 10 days and, (ii) within 30 days, provide another form of security reasonably acceptable to FG&E, as described in this Section 2.2.

2.2.2 The Customer provides and maintains in effect during the term of and until full and final payment and performance of the service agreement an unconditional and irrevocable standby letter of credit for the Total Outstanding Obligation in the form and substance and issued by a bank reasonably acceptable to FG&E. A draft, acceptable form letter of credit is attached. Any such bank must satisfy the creditworthiness criteria described in 2.2.1 above.

If, at any time, the bank's rating falls below investment grade (BBB- from Standard and Poor's and/or Baa3 from Moody's or equivalent ratings from Fitch), the Customer will be required to (i) notify FG&E within 10 days and, (ii) within 30 days, provide another form of security reasonably acceptable to FG&E, as described in this Section 2.2.

2.2.3 If the Customer's parent or an affiliate company satisfies the creditworthiness criteria described in 2.2.1 above and, subject to the Credit Limits stated in Section 4 below, such company submits to FG&E and maintains in effect a letter of guaranty reasonably acceptable to FG&E as to amount, form and substance for the term of and until full and final payment and performance of the service agreement.

If, at any time, the credit rating of the Customer's parent or affiliate providing the guaranty falls below investment grade (BBB- from Standard and Poor's and/or Baa3 from Moody's or equivalent ratings from Fitch), the Customer will be required to (i) notify FG&E within 10 days and, (ii) within 30 days, provide another form of security reasonably acceptable to FG&E, as described in this Section 2.

2.2.4 The Customer makes an advance payment to FG&E in immediately available funds for

the Total Outstanding Obligation.

### **3. Customer Costs Requiring Prepayment**

In accordance with the provisions of the ISO-NE OATT, a Customer will pay a Contribution in Aid of Construction (“CIAC”) for transmission or interconnection facilities to be constructed by FG&E on behalf of a Customer at the Customer’s sole expense. The Customer will have the option to (i) prepay the CIAC in immediately available funds to FG&E, or (ii) make periodic CIAC progress payments, as defined in the Customer’s service agreement, to prepay in increments capital costs scheduled to be incurred by FG&E. If FG&E determines in good faith that such payments or property transfers made by the Customer should be reported as income subject to taxation, the Customer shall also prepay all costs associated with the cost consequences of the current tax liability imposed on FG&E by those facilities (the “Tax Gross- up”).

### **4. Determination of Credit Limits**

FG&E reserves the right to limit the total amount of unsecured credit extended to a Customer under 2.2.1 and 2.2.3 above such that the sum of all unsecured credit that such Customer has with FG&E, including the Total Outstanding Obligation, shall not exceed the Credit Limits defined below. Such limitations are based on an assessment of the Customer’s or its Guarantor’s credit rating and the net worth of the Customer’s or its Guarantor’s assets.

Standard and Poor’s (or Equivalent) Rating	Unsecured Credit Limit as Percent of Customer’s or Guarantor’s Tangible Net Worth
A and above	1.0%
A-	0.5%
BBB+	0.3%
BBB	0.2%
BBB-	0.1%

Once FG&E has evaluated or reevaluated and determined the maximum Credit limits for each Customer, it will inform the prospective Customer of the amount of such credit limits. A customer may request in writing a reevaluation of the maximum Credit limits, within 14 days from the date that they were informed by FG&E of such limits. Justification for such a reevaluation should be contained in the request. All requests for reevaluation must be submitted directly to the FG&E Contract Administrator.

From time to time, principally due to unknown factors such as changing market, economic, banking or other financial conditions, but not solely limited to these factors, FG&E may find it necessary to modify or amend its creditworthiness policies and guidelines after a 15 day notice period and require that present and future Transmission Customers fulfill any additional conditions contained in the modified Creditworthiness Guide. Transmission Customers will have 30 days after the notice period to cure any deficiency.

FORM LETTER OF CREDIT

\_\_\_\_\_ Bank

\_\_\_\_\_

(address)

IRREVOCABLE STANDBY LETTER OF CREDIT

DATE: \_\_\_\_\_

AMOUNT U.S. \$ \_\_\_\_\_

\_\_\_\_\_

FOR INTERNAL IDENTIFICATION PURPOSES ONLY

\_\_\_\_\_

Our Number:

Beneficiary:

Applicant:

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

Attn: At the request of:

\_\_\_\_\_

Ref: \_\_\_\_\_

LADIES AND GENTLEMEN;

WE HEREBY ESTABLISH THIS IRREVOCABLE, AND UNCONDITIONAL, EXCEPT AS STATED HEREIN, LETTER OF CREDIT NUMBER \_\_\_\_\_ (LETTER OF CREDIT), BY ORDER OF, FOR THE ACCOUNT OF, AND ON BEHALF OF [CUSTOMER NAME] (ACCOUNT PARTY) IN FAVOR OF FITCHBURG GAS AND ELECTRIC LIGHT COMPANY (BENEFICIARY) FOR DRAWINGS, IN ONE OF MORE DRAFTS, UP TO AN AGGREGATE AMOUNT NOT EXCEEDING U.S. \$ \_\_\_\_\_ EFFECTIVE IMMEDIATELY. THE TERM 'BENEFICIARY' INCLUDES ANY SUCCESSOR OF THE NAMED BENEFICIARY.

THIS LETTER OF CREDIT CANNOT BE AMENDED, MODIFIED OR REVOKED WITHOUT THE PRIOR WRITTEN CONSENT OF BOTH THE BANK AND THE BENEFICIARY. THE BENEFICIARY SHALL NOT BE DEEMED TO HAVE WAIVED ANY RIGHTS UNDER THIS LETTER OF CREDIT, UNLESS AN OFFICER OF THE BENEFICIARY SHALL HAVE SIGNED A WRITTEN WAIVER EXPRESSLY REFERENCING THE RIGHT TO BE WAIVED. NO SUCH WAIVER SHALL BE EFFECTIVE AS TO ANY TRANSACTION THAT OCCURS SUBSEQUENT TO THE DATE OF THE WAIVER, NOT AS TO ANY CONTINUANCE OF A BREACH AFTER THE WAIVER.

WE HEREBY UNDERTAKE TO PROMPTLY HONOR YOUR DRAFT(S) DRAWN ON US, INDICATING OUR LETTER OF CREDIT NUMBER \_\_\_\_\_ IS ISSUED, PRESENTABLE AND PAYABLE AND WE GUARANTY TO THE DRAWERS, ENDORSERS, AND BONA FIDE HOLDERS OF THIS LETTER OF CREDIT, THAT DRAFTS UNDER AND IN COMPLIANCE WITH THE TERMS OF THIS LETTER OF CREDIT WILL BE HONORED. THIS LETTER OF CREDIT MAY NOT BE TRANSFERRED OR ASSIGNED BY US.

SUBJECT TO THE EXPRESS TERMS AND CONDITIONS HEREIN, FUNDS UNDER THIS LETTER OF CREDIT ARE AVAILABLE TO YOU BY PRESENTATION AT OUR OFFICES LOCATED AT [ \_\_\_\_\_ ] OF BENEFICIARY'S DRAWING CERTIFICATE ISSUED SUBSTANTIALLY IN THE FORM OF ANNEX 1 ATTACHED HERETO AND WHICH FORMS AN INTEGRAL PART HEREOF, DULY COMPLETED AND PURPORTEDLY BEARING THE ORIGINAL SIGNATURE OF AN OFFICER OF THE BENEFICIARY. PRPRESENTATION OF ANY

DRAWING CERTIFICATE UNDER THIS LETTER OF CREDIT MAY BE MADE IN PERSON TO US OR MAY BE SENT TO US BY TELEX TO [\_\_\_\_\_] OR BY FACSIMILE TRANSMISSION TO FACSIMILE TELEPHONE NUMBER [\_\_\_\_\_].

ALL COMMISSIONS AND CHARGES WILL BE BORNE BY THE ACCOUNT PARTY. IF DOCUMENTS, IN COMPLIANCE WITH THE TERMS OF THIS LETTER OF CREDIT, ARE RECEIVED BEFORE 10:00 AM (EASTERN TIME) ON A BUSINESS DAY, PAYMENT WILL BE EFFECTED ON OR BEFORE 5:00 PM (EASTERN TIME) ON THE NEXT BUSINESS DAY. IF DOCUMENTS, IN COMPLIANCE WITH THE TERMS OF THIS LETTER OF CREDIT ARE RECEIVED AFTER 10:00 AM ON A BUSINESS DAY, PAYMENT WILL BE EFFECTED ON OR BEFORE 5:00 PM ON THE SECOND BUSINESS DAY FOLLOWING SUCH DATE OF RECEIPT.

EXCEPT AS EXPRESSLY STATED HEREIN, THIS UNDERTAKING IS NOT SUBJECT TO ANY AGREEMENT, CONDITION OR QUALIFICATION. THIS LETTER OF CREDIT DOES NOT INCORPORATE, AND SHALL NOT BE DEEMED MODIFIED OR AMENDED BY REFERENCE TO ANY DOCUMENT, INSTRUMENT OR AGREEMENT (A) THAT IS REFERRED TO HEREIN (EXCEPT FOR THE UNIFORM CUSTOMS, AS DEFINED BELOW), OR (B) IN WHICH THIS LETTER OF CREDIT IS REFERRED TO OR TO WHICH THIS LETTER OF CREDIT RELATES.

OUR OBLIGATION UNDER THIS LETTER OF CREDIT SHALL BE OUR INDIVIDUAL OBLIGATION AND IS IN NO WAY CONTINGENT UPON THE REIMBURSEMENT WITH RESPECT THERETO, OR UPON OUR ABILITY TO PERFECT ANY LIEN, SECURITY INTEREST OR ANY OTHER REIMBURSEMENT.

THIS LETTER OF CREDIT EXPIRES WITH OUR CLOSE OF BUSINESS ON [364 days from effective date]; HOWEVER, IT IS A CONDITION OF THIS LETTER OF CREDIT THAT IT SHALL BE DEEMED AUTOMATICALLY EXTENDED WITHOUT AMENDMENT FOR 364 DAYS FROM THE PRESENT OR ANY FUTURE EXPIRATION DATE HEREOF, UNLESS AT LEAST SIXTY (60) DAYS BEFORE ANY SUCH EXPIRATION DATE WE NOTIFY YOU BY REGISTERED MAIL ADDRESSED TO: [address of beneficiary, ATTN: \_\_\_\_\_], THAT WE ELECT NOT TO RENEW THIS LETTER FOR SUCH ADDITIONAL PERIOD.

THIS LETTER OF CREDIT IS SUBJECT TO THE UNIFORM CUSTOMS AND PRACTICE FOR DOCUMENTARY CREDITS (1993 REVISION) INTERNATIONAL CHAMBER OF COMMERCE,

PUBLICATION NO. 500. IF THIS LETTER OF CREDIT EXPIRES DURING THE INTERRUPTION OF BUSINESS AS DESCRIBED IN ARTICLE 17 THEREOF WE HEREBY SPECIFICALLY AGREE TO EFFECT PAYMENT IF THE LETTER OF CREDIT IS DRAWN AGAINST WITHIN 30 DAYS AFTER THE RESUMPTION OF BUSINESS.

ANNEX 1 TO [BANKNAME]  
IRREVOCABLE LETTER OF CREDIT NO. \_\_\_\_\_

[INSERT DATE]

[BANK NAME]

[ATTENTION]

[BANK ADDRESS 1]

[BANK ADDRESS 2]

LADIES AND GENTLEMEN:

THE UNDERSIGNED \_\_\_\_\_, A DULY ELECTED AND ACTING OFFICER OF FITCHBURG GAS AND ELECTRIC LIGHT COMPANY (THE "BENEFICIARY"), HEREBY CERTIFIES TO [INSERT BANK NAME] (THE "BANK"), WITH REFERENCE TO IRREVOCABLE LETTER OF CREDIT NO. \_\_\_\_\_ DATED \_\_\_\_\_, ISSUED BY THE BANK IN FAVOR OF THE BENEFICIARY (THE "LETTER OF CREDIT"), AS FOLLOWS AS OF THE DATE THEREOF:

1. THE BENEFICIARY IS A PARTY TO THAT CERTAIN [INTERCONNECTION AGREEMENT], EFFECTIVE \_\_\_\_\_, BETWEEN THE BENEFICIARY AND [CUSTOMER NAME] (THE "AGREEMENT").

2. BENEFICIARY IS MAKING A DRAWING UNDER THE LETTER OF CREDIT IN THE AMOUNT OF \$\_\_\_\_\_ BECAUSE [CHECK APPLICABLE PROVISION]:

[\_\_\_\_] (A) THERE CURRENTLY EXIST ONE OR MORE UNPAID AMOUNTS WHICH [CUSTOMER NAME] IS OBLIGATED TO PAY PURSUANT TO THE TERMS OF THE AGREEMENT.

[\_\_\_\_] (B) THE BENEFICIARY HAS RECEIVED NOTICE FROM THE BANK OF ITS INTENTION NOT TO RENEW THE LETTER OF CREDIT BEYOND THE CURRENT EXPIRATION DATE AND [CUSTOMER NAME] HAS FAILED, PRIOR TO THE CLOSE OF BUSINESS ON

\_\_\_\_\_ [INSERT DATE WHICH IS NOT MORE THAN THIRTY (30) DAYS BEFORE THE PRESENT EXPIRATION DATE], TO DELIVER TO BENEFICIARY A REPLACEMENT LETTER OF CREDIT SATISFYING THE REQUIREMENTS OF THE AGREEMENT.

3. BASED UPON THE FOREGOING, THE BENEFICIARY HEREBY MAKES DEMAND UNDER THE LETTER OF CREDIT FOR PAYMENT OF U.S. DOLLARS \_\_\_\_\_ AND \_\_\_\_\_/100THS (U.S. \$\_\_\_\_\_).

4. FUNDS PAID PURSUANT TO THE PROVISIONS OF THE LETTER OF CREDIT SHALL BE WIRE TRANSFERRED TO THE BENEFICIARY IN ACCORDANCE WITH THE FOLLOWING INSTRUCTIONS:

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

UNLESS OTHERWISE PROVIDED HEREIN, CAPITALIZED TERMS WHICH ARE USED AND NOT DEFINED HEREIN SHALL HAVE THE MEANING GIVEN EACH SUCH TERM IN THE LETTER OF CREDIT.

IN WITNESS WHEREOF, THIS CERTIFICATE HAS BEEN DULY EXECUTED AND DELIVERED ON BEHALF OF THE BENEFICIARY BY ITS DULY ELECTED AND ACTING OFFICER AS OF THIS \_\_\_\_ DAY OF \_\_\_\_\_, \_\_\_\_\_.

BENEFICIARY: FITCHBURG GAS AND ELECTRIC LIGHT COMPANY

\_\_\_\_\_  
NAME:

\_\_\_\_\_  
TITLE: