#### **SCHEDULE 21-UI**

# The United Illuminating Company Local Service Schedule

#### **Preamble:**

The United Illuminating Company ("UI") is a participant under the TOA and the Tariff and has agreed to provide transmission and ancillary services over PTF pursuant to the Tariff. The services provided under this Schedule 21-UI apply only to Non-PTF. Schedule 21-UI includes provisions to recover expenses for PTF and Non-Pool Supported Facilities to the extent that these expenses are not recovered through regional revenues. Provisions of this Schedule 21-UI shall have priority over any conflicting provisions in the Tariff.

#### **Definitions:**

# 1. Annual True Up:

The reconciliation to actual costs and actual loads of the estimated costs and estimated loads used for billing purposes under Section 7 of this Tariff, as specified in Attachment F of this Schedule 21-UI.

## 2. Category A Monthly Network Load:

The Category A Network Load of a Transmission Customer coincident with UI's Local Monthly Network Load, as determined in Section II.10 of this Schedule 21-UI.

# 3. Category A Network Load:

The Network Load that is connected to the Non-PTF of UI, excluding the Native Load Customers of UI.

# 4. Category B Load Ratio Share:

Ratio of a Transmission Customer's Category B Monthly Network Load for an area or state in which Localized Facilities are located to the monthly transmission system peak load for the area or state calculated on a rolling twelve month basis.

# 5. Category B Monthly Network Load:

The Category B Network Load of a Transmission Customer coincident with UI's Local Monthly Network Load, as determined in Section II.10 of this Schedule 21-UI.

# 5A. Category B Network Load:

The Regional Network Load for an area or state in which Localized Facilities are located, excluding the Native Load Customers of UI.

# 6. Coincident Point-To-Point Load:

The load of a Transmission Customer taking Local Point-To-Point Service coincident with UI's Local Monthly Network Load, as determined in Section II.10 of this Schedule 21-UI.

### 7. Curtailment:

A reduction in Firm or Non-Firm service in response to a transfer capability shortage as a result of system reliability conditions.

# 8. Estimated Monthly Transmission Rate ("EMTR"):

The UI estimate of the MTR for the current calendar year.

# 9. Gross Earnings Tax Factor ("GETF"):

The factor used to account for Connecticut Gross Earnings Tax liability in transmission rates when not explicitly included in the relevant cost of service. The GETF shall equal the number one divided by the quantity equal to the number one minus the Connecticut Gross Earnings Tax Rate as given by the Connecticut General Statutes § 12-264(c)(1), or its successor.

#### 10. Local Network:

The transmission facilities owned, controlled, or operated by UI that are used to provide Local Service under Schedule 21 of the OATT.

#### 10A. Local Network Parties:

Local Network Parties are, with respect to this Schedule 21-UI, UI and the Transmission Customer receiving Local Service under this Schedule 21-UI.

#### 11. Local Point-To-Point Coincident Load:

The load coincident with UI's Monthly Peak of a Transmission Customer taking service under Schedule 8 of this Schedule 21-UI with yearly or monthly delivery.

#### 11A. Localized Facilities:

Facilities the cost of which the ISO has determined should not be included in the Pool Supported PTF costs recoverable under the OATT.

# 12. Mid Year Rate Calculation:

The calculation of rates to become effective on July 1 of a year. Actual rates and estimated rates for all transmission services provided under this Schedule 21-UI shall be calculated in the Mid Year Rate Calculation. Additionally, the Annual True Up shall be calculated in the Mid Year Rate Calculation.

## 13. Local Monthly Network Load:

The maximum coincident load during a calendar month of all Category A Network Loads, Coincident Point-To-Point Loads, and all load of UI's Native Load Customers, calculated pursuant to Section II.10a of this Schedule 21-UI.

## 14. Monthly Network Load:

The Network Load of a Transmission Customer coincident with UI's Local Monthly Network Load, calculated pursuant to Section II.10 of this Schedule 21-UI.

# 15. Monthly Schedule 1 Rate ("MS1R"):

The cost per month for local Scheduling, System Control and Dispatch Service per unit of transmission service taken by Transmission Customers under Schedules 8, 9, 12, or 13 of this Schedule 21-UI. The MS1R is assessed in addition to the MTR. The magnitude of the MS1R may vary among the Schedules identified above. Transmission Customers shall be billed the MS1R based on estimated costs and revenues subject to Annual True Up. Transmission Customers take local Scheduling, System Control and Dispatch Service under Schedule 1 of this Schedule 21-UI.

## **16.** Monthly Transmission Rate ("MTR"):

The cost per month per unit of transmission service taken by Transmission Customers under Schedules 8, 9, 12, or 13 of this Schedule 21-UI. The value of the MTR may vary among the Schedules identified above. Transmission Customers shall be billed the MTR based on estimated costs and revenues subject to Annual True Up.

## 17. Network Load:

The load that a Network Customer designates for Local Network Service under Schedule 21 of the OATT. The Network Customer's Network Load shall include all load served by the output of any Network Resources designated by the Network Customer (including losses). 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 an 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.

# 18. Network Upgrades:

Modifications or additions to transmission-related facilities that are integrated with and support UI's overall Local Network for the general benefit of all users of such Local Network.

# 19. New Year Rate Calculation:

The calculation of rates to be effective between January 1 and June 30 of a year. Only estimated rates for Primary Transmission Service and RNS shall be calculated through the New Year Rate Calculation. The rates for all other transmission services offered under this Schedule 21-UI shall remain at their respective values calculated in the most recent Mid Year Rate Calculation.

## 20. Non-Pool Supported Facilities ("NPS"):

Facilities, including the Localized Facilities identified in Section III.2 of this Schedule 21-UI, the costs of which are not included in the Pool Supported PTF costs recoverable under the OATT.

#### 21. Post-96 PTF:

Transmission facilities that are Pool Supported PTF and were placed in service on or after January 1, 1997.

# 22. Post-2003 PTF:

Transmission facilities that are Pool Supported PTF and were placed in service on or after January 1, 2004.

#### 23. **Pre-97 PTF**:

Transmission facilities that are Pool Supported PTF and were placed in service prior to January 1, 1997.

# 24. Primary Transmission Service:

Local Network Service or Local Point-To-Point Service over the PTF, NPS, and/or Non-PTF of the UI Local Network.

# 25. Transmission Investment Category:

All transmission facilities in the Local Network shall be classified into one of three categories for the purposes of assessing charges under this Schedule 21-UI. The three categories of transmission investment are:

- 1. Pool Transmission Facilities (PTF)
- 2. Non-Pool Supported Facilities (NPS)
- Facilities that are not Pool Transmission Facilities (Non-PTF), excluding Non-PTF included in NPS

## 26. UI:

The United Illuminating Company, a Transmission Owner, which will provide Local Service over its Local Network pursuant to this Schedule 21-UI.

# 27. Use:

For a Transmission Customer which has exercised its option to take Local Point-To-Point Service to serve all or a portion of its load at any Point of Delivery, the greatest for the hour of the maximum amount that it will receive in the hour, as determined from the meters and adjusted for losses, at that Point of Delivery from the resources covered by its Completed Applications and from Interchange Transactions. Use shall be expressed in terms of whole kilowatts on a sixty-minute interval (commencing on the clock hour) basis.

SECTIONS SUPPLEMENTING THE BODY OF THE TARIFF

**Preamble** 

The following provisions supplement the provisions of the Tariff. Provisions of this Schedule 21-UI shall

have priority over any conflicting provisions in the Tariff. The section numbers of this Schedule 21-UI

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 I: General Terms and Conditions

**I.7 Creditworthiness:** 

UI's Creditworthiness Procedures are specified in Attachment L to this Schedule 21-UI.

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. UI is required to provide (or offer to arrange with the

ISO as discussed below) and the Transmission Customer is required to purchase the following Ancillary

Service: Local Scheduling, System Control and Dispatch Service.

In the event of an unauthorized use of Local Scheduling, System Control and Dispatch Service by the

Transmission Customer, the Transmission Customer will be required to pay 200 percent of the charge

which would otherwise be applicable.

**II.5 OASIS** 

In the event available transfer capability as posted on the OASIS is insufficient to accommodate a request

for firm transmission service, additional studies may be required as provided by this Schedule 21-UI

pursuant to Sections I(7) and II(7) of Schedule 21.

# II.8 Invoicing and Payment

# II.8.2 Invoicing:

Within a reasonable time after the first day of each month, UI shall submit an invoice to the Transmission Customer for the charges for all Local 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 UI, or by wire transfer to a bank named by UI. Upon mutual agreement between UI and the Transmission Customer, the frequency of billing and payments may be adjusted to accommodate Transmission Customer preferences. Billing hereunder shall be based on cost estimates made by UI subject to Annual True Up pursuant to Attachment F of this Schedule 21-UI. The Annual True Up will include interest on any refunds or surcharges calculated in accordance with Section 35.19a of the Commission's regulations.

#### II.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 UI on or before the due date as described above, and such failure of payment is not corrected within thirty (30) calendar days after UI 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, UI 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 UI and the Transmission Customer, UI will continue to provide service under the Local Service Agreement (Attachment A to Schedule 21 of the OATT) 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 UI may provide notice to the Transmission Customer of its intention to suspend service in sixty (60) days, in accordance with Commission policy. Neither party shall have the right to challenge any monthly bill or to bring any court or administrative action of any kind questioning the propriety of any bill after a period of twenty four (24) months from the date the bill was due; provided, however, that in the case of a bill based on estimates, such twenty-four month period shall run from the due date of the final adjusted bill.

# II.8.8 Transmission Customer Right to Audit:

UI shall keep complete and accurate accounts and records with respect to its performance under this Tariff and shall maintain such data for a period of at least two (2) years after final billing for audit by a Transmission Customer. The Transmission Customer shall provide thirty (30) days' written notice to UI to request an audit of all such accounts and records relevant to service provided to the Transmission Customer for a specific time period. The Transmission Customer shall have the right, during normal business hours and at its own expense, to examine, inspect and make copies of all such accounts and records relevant to service provided to the Transmission Customer at such offices where such accounts and records are maintained, insofar as may be necessary for the purpose of ascertaining the reasonableness and accuracy of all relevant data, estimates or statements of charges submitted hereunder to the Transmission Customer. The records made available to a Transmission Customer for auditing purposes hereunder shall not include information pertaining to the loads of or charges to an individual customer other than the Transmission Customer unless the Transmission Customer requests that the Commission order that such information be made available to the Transmission Customer and the Commission so orders. Nothing in this section shall be interpreted as limiting the Transmission Customer's access to system-wide load or charge data.

## SECTIONS SUPPLEMENTING SCHEDULE 21 OF THE OATT

# I. Local Point-To-Point Service Over the Local Network Owned by UI

## **Preamble**

In addition to the provisions set forth in Schedule 21 of the OATT, the provisions of this Schedule 21-UI shall govern Local Point-To-Point transactions using the Local Network owned by UI. Provisions of this Schedule 21-UI shall have priority over any conflicting provisions in the Tariff. The section numbers of this Schedule 21-UI correspond to or are consecutive to the sections of Schedule 21 of the OATT that are affected by the additional provisions herein.

#### 1) Nature of Firm Local Point-To-Point Service

#### g) Classification of Firm Service:

(iii) The Transmission Customer will be billed for its Reserved Capacity under the terms of Schedule 8 of this Schedule 21-UI. Scheduling of Firm Local Point-To-Point Service: Schedules for the Transmission Customer's Firm Local Point-To-Point Service under Schedule 8 of this Schedule 21-UI must be submitted in accordance with applicable criteria, rules, standards and operating procedures.

## h) Scheduling of Firm Local Point-To-Point Service:

Schedules for the Transmission Customer's Firm Local Point-To-Point Service under Schedule 8 of this Schedule 21-UI must be submitted in accordance with applicable criteria, rules, standards and operating procedures

#### 2) Nature of Non-Firm Local Point-To-Point Service

#### e) Classification of Non-Firm Local Point-To-Point Service:

The Transmission Customer will be billed for its Reserved Capacity under the terms of Schedule 9 of this Schedule 21-UI.

#### f) Scheduling of Non-Firm Local Point-To-Point Service:

Schedules for Non-Firm Local Point-To-Point Service under Schedule 9 of this Schedule 21-UI must be submitted in accordance with applicable criteria, rules, standards, and operating procedures.

# g) Curtailment or Interruption of Service:

In the event UI exercises its right to effect a Curtailment, in whole or in part, of Non-Firm Local Point-To-Point Service, no credit or other adjustment shall be provided as a result of the Curtailment, with respect to the charge payable by the Customer. In the event UI exercises its right to effect an Interruption, in whole or part, of Non-Firm Local Point-To-Point Service, the charge payable by the Customer shall be computed as if the term of service actually rendered were the term of service reserved; provided that an adjustment of the charge be made only when the Interruption is initiated by UI, not when the Customer fails to schedule energy.

## 3) Service Availability

# b) Determination of Available Transmission Capability:

A description of UI's specific methodology for assessing available transmission capability posted on UI's page on the OASIS is contained in Attachment A of this Schedule 21-UI. In the event sufficient transmission capability may not exist to accommodate a service request, UI will respond by performing a System Impact Study.

# g) Real Power Losses:

The Transmission Customer is responsible for replacing losses associated with all transmission service. UI will calculate the Real Power Losses and will base this calculation upon average system losses. The applicable Real Power Loss factors are as follows:

T	•	D .
Losses	1n	Percent

Bulk Transmission	1.28
Bulk Substation	2.68
Distribution	1.67

#### h) Load Shedding:

To the extent that a system contingency exists on UI's or the New England Transmission System the Local Control Center and UI or the ISO determines that it is necessary to shed load, the Local Network Parties shall shed load in accordance with the procedure under the ISO New England Operating Documents or TOA, and the rules adopted thereunder, or in accordance with other mutually agreed to provisions.

# 5) Procedures for Arranging Firm Local Point-To-Point Service

# a) Application:

Requests for firm service for periods of less than one year shall be subject to expedited procedures that shall be negotiated between the Local Network Parties within the time constraints provided in Section I(5)(e) of Schedule 21 of the OATT.

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

# d) Determination of Available Transmission Capability:

A description of UI's specific methodology for assessing available transmission capability posted on UI's page on the OASIS is contained in Attachment A of this Schedule 21-UI. In the event sufficient transmission capability may not exist to accommodate a service request, UI will respond by performing a System Impact Study. Following receipt of a tendered schedule, UI will make a determination on a non-discriminatory basis of available transmission capability. 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 (30) minutes for daily service, (iii) four (4) hours for weekly service, and (iv) two (2) days for monthly service.

# 12) Metering and Power Factor Correction at Receipt and Delivery Points

#### (a) Transmission Customer Obligations:

Unless otherwise agreed, the Transmission Customer shall be responsible for installing and maintaining compatible metering and communications equipment to accurately account for the capacity and/or energy being transmitted under Schedule 21 of the OATT and to communicate the information to UI.

# 13) Compensation for Local Point-To-Point Service

Rates for Firm Local and Non-Firm Local Point-To-Point Service are provided in the Schedules appended to this Local Service Schedule: Firm Local Point-To-Point Service (Schedule 8 of this Schedule 21-UI); Non-Firm Local Point-To-Point Service (Schedule 9 of this Schedule 21-UI).

UI shall use Schedule 21 of the OATT to make its Third-Party Sales. UI shall account for such use at the applicable OATT rates, pursuant to Section II.8.5 of the OATT.

# II. Local Network Service Using Non-PTF Owned by UI

#### **Preamble**

In addition to the provisions set forth in Schedule 21 of the OATT, the provisions of this Schedule 21-UI shall govern Local Network Service using Non-PTF owned by UI. Provisions of this Schedule 21-UI shall have priority over any conflicting provisions in the Tariff. The section numbers of this Schedule 21-UI correspond to or are consecutive 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 UI 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.

# 2) Availability of Local Network Service

# f) Real Power Losses:

The Network Customer is responsible for replacing losses associated with all transmission service. UI will calculate the Real Power Losses and will base the calculation upon average system losses. The applicable Real Power Loss factors are as follows:

# Losses in Percent

<b>Bulk Transmission</b>	1.28
Bulk Substation	2.68
Distribution	1.67

# 8) Load Shedding and Curtailments

### a) Procedures:

Prior to the Service Commencement Date, UI 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 UI determines that a system contingency exists and such procedures are necessary to alleviate such contingency. UI will notify all Network Customers in a timely manner of any scheduled Curtailment.

#### d) Curtailments of Scheduled Deliveries:

If a transmission constraint on UI's Local Network cannot be relieved through the implementation of least-cost redispatch procedures and UI determines that it is necessary to curtail scheduled deliveries, the Local Network Parties shall curtail such schedules in accordance with Section II.20 of the Tariff.

## e) Allocation of Curtailments:

The ISO or UI shall, on a non-discriminatory basis, curtail transaction(s) that effectively relieve the constraint. However, to the extent practicable and consistent with Good Utility Practice, UI shall curtail service to Network Customers on a basis comparable to the Curtailment of service to UI's Native Load Customers. Neither the ISO nor UI shall direct the Network Customer to curtail schedules to an extent greater than either would curtail UI's schedules under similar circumstances.

# f) Load Shedding:

To the extent that a system contingency exists on UI's Local Network and the ISO or UI determines that it is necessary for UI 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.20 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, UI 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 UI for the purpose of making necessary adjustments to, changes in, or repairs on UI'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 UI's

Non-PTF or on any other system(s) directly or indirectly interconnected with UI's Non-PTF, UI, 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. UI 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 UI's use of its Non-PTF on behalf of its Native Load Customers. UI 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, the following additional provisions shall apply to Local Network Service over UI's Local Network.

# a) Monthly Demand Charge:

The Network Customer shall pay a Monthly Demand Charge which shall be determined as specified in Schedule 12 to this Schedule 21-UI.

## b) Native Load Customer Revenue Requirement Responsibility:

The Native Load Customers of UI shall be responsible for paying, pursuant to Schedule 14 of this Schedule 21-UI, the total of all transmission related expenses, less the total of all transmission revenue received under the OATT, the ISO Self Funding Tariff, or received from Schedules 8, 9, 12, or 13 of this Schedule 21-UI.

# 10) Determination of Network Customer's Monthly Network Load:

The Network Customer's Local Monthly Network Load is its hourly load coincident with UI's Monthly Peak. In addition to the above sections that correspond to sections in Schedule 21, the following two additional provisions shall apply to Local Network Service over UI's Local Network.

## a) Determination of UI's Local Monthly Network Load:

UI's monthly Local Network Load is UI's Monthly Peak minus the coincident peak usage of all Firm Local Point-To-Point Service customers pursuant to Schedule 21 of this OATT plus the Reserved Capacity of all Firm Local Point-To-Point Service Customers.

### b) Redispatch Charge:

The Network Customer shall pay any redispatch costs allocated between the Network Customer and UI pursuant to Section II(8) of Schedule 21 in the proportion of the Network Customer's Monthly Network Load to UI's Local Monthly Network Load. To the extent that UI incurs an obligation to the Network Customer for redispatch costs in accordance with Section II(8) of Schedule 21, such amounts shall be credited against the Network Customer's bill for the applicable month.

# III. Localized Facilities Rates and Charges

This section provides for the recovery of expenses for Localized Facilities from customers taking Regional Network Service under the ISO Tariff in an area or state in which Localized Facilities are located, which customers are not otherwise subject to the charges for Local Network Service under this Schedule 21-UI.

## **III.1** Rates and Charges

Any customer taking Regional Network Service under the ISO Tariff in an area or state in which Localized Facilities are located and which is not subject to the charges set forth in Schedules 8, 9, 12 and Schedule 13 of this Local Service Schedule shall pay to UI, in equal monthly installments, the customer's Category B Load Ratio Share of the annual revenue requirement for Localized Facilities calculated using the methodology in Attachment D. Category B Load Ratio Share will be calculated for each area or state where Localized Facilities are located. Upon mutual agreement between UI and the customer, the frequency of billings and payments may be adjusted to accommodate customer preferences. UI shall file a Localized Facilities Costs Sharing Agreement under this Local Service Schedule, in the form set forth in Attachment G, to recover such charges from such customer. UI shall not charge any such customer any such costs until such Localized Costs Sharing Agreement has been accepted by the Commission. To the extent that UI has not recovered from each customer the full amount of its Category B Load Ratio Share of UI's revenue requirement for each Localized Facility listed in Section III.2 of this Schedule 21-UI (1) from the effective date of the Commission's acceptance of the revision of Section III.2 to add such Localized Facility to the date of the ISO's final determination that the facility or a portion thereof is a Localized Facility, or (2) from the date of such ISO final determination to the effective date of the Commission's acceptance of the revision of Section III.2 to add such Localized Facility, UI shall recover its revenue requirement due either as a lump sum in the first month after the ISO's final determination or the Commission's acceptance of the addition of the Localized Facility, as applicable, or in equal monthly installments beginning in such month through December of that year.

# **III.2** Identification of Area or State

The following identifies the Localized Facilities and the area or state in which the Localized Facilities are located:

New Haven Harbor Crossing Corridor Project (Connecticut)

Trumbull Substation Project (Connecticut)

Middletown to Norwalk Project (Connecticut)

Pootatuck Substation (Connecticut)

of Schedule 21-UI

Local Scheduling, System Control and Dispatch Service

This service is required to schedule the movement of power through, out of, within, or into UI's Local

Network. Local Scheduling, System Control and Dispatch Service is to be provided by UI and the ISO.

The Transmission Customer must purchase this service from UI. The charges for UI's Local Scheduling,

System Control and Dispatch Service are based on the rates set forth below.

All Transmission Customers taking service under Schedules 8 or 9 of this Schedule 21-UI shall compensate

UI each month for Reserved Capacity at the sum of the applicable demand charges set forth below:

1) Yearly delivery:

The MS1R as determined in Appendix A of this Schedule 1 of this Schedule 21-UI per kW of Firm

Reserved Capacity per year. Yearly delivery is not available for Non-Firm Reserved Capacity.

2) Monthly delivery:

The MS1R specified in section (1) above per kW of Reserved Capacity per month.

3) Weekly delivery:

The MS1R specified in section (1) above multiplied by 12 months per year and divided by 52 weeks per

year, per kW of Reserved Capacity per week. The total demand charge in any month, pursuant to a

reservation for weekly delivery, shall not exceed the rate specified in section (2) above times the highest

amount in kilowatts of Reserved Capacity in any week during such month.

4) Daily delivery:

The MS1R specified in section (3) above divided by 7 days per week, per kW of Reserved Capacity per day.

The total demand charge in any week, pursuant to a reservation for daily delivery, shall not exceed the rate

specified in section (3) above times the highest amount in kilowatts of Reserved Capacity in any day during

such week.

5) Hourly delivery:

Daily delivery charge specified in section (4) above divided by 24 hours per day, per kW of Non-Firm

Reserved Capacity per day. The total demand charge in any day, pursuant to a reservation for hourly delivery, in no event shall exceed the daily charge divided by 24. The total demand charge in any day, pursuant to a reservation for Hourly delivery, shall not exceed the rate specified in section (4) above times the highest amount in kilowatts of Non-Firm Reserved Capacity in any hour during such day. In addition, the total demand charge in any week, pursuant to a reservation for Hourly or Daily delivery, shall not exceed the rate specified in section (3) above times the highest amount in kilowatts of Non-Firm Reserved Capacity in any hour during such week. Hourly delivery is not available for Firm Reserved Capacity.

Each Transmission Customer taking service under Schedules 12 or 13 of this Schedule 21-UI must pay a monthly demand charge for Local Scheduling, System Control and Dispatch Service equal to the MS1R as determined in Appendix A of this Schedule 1 of this Schedule 21-UI per kW of its Monthly Network Load.

# **SCHEDULE 1 of Schedule 21-UI**

# Appendix A

# Calculation of the Monthly Schedule 1 Rate for Local Scheduling, System Control and Dispatch Service for Service Under this Schedule 21-UI

The Monthly Schedule 1 Rate (MS1R) assessed for service under this Schedule 21-UI shall be calculated pursuant to this Appendix A and shall be calculated in units of \$ per kW per month. The MS1R shall be calculated separately for service over the PTF, NPS and Non-PTF. Transmission Customers taking service under Schedules 8, 9, and 12 of the Schedule 21-UI shall be required to pay the MS1R over the PTF, NPS and Non-PTF. Transmission Customers taking service under Schedule 13 of this Schedule 21-UI shall be required to pay the MS1R only over the NPS.

The MS1R used in the Annual True Up shall be calculated, as described below pursuant to this Appendix A, based on the Annual Schedule 1 Revenue Requirements as calculated pursuant to Exhibit 1 of this Appendix A. In the Mid Year Rate Calculation, the estimated MS1R shall be set equal to the actual MS1R calculated in that same Mid Year Rate Calculation. The estimated MS1R shall not be re-calculated or revised in the New Year Rate Calculation.

All loads used in the denominator of the MS1R calculation are pursuant to Attachment E of this Schedule 21-UI. These loads include 12CP, 12CPB, 12CPRC, 12CPLP.

The MS1R for Non-PTF shall equal (A) Non-PTF Annual Schedule 1 Revenue Requirement, divided by (B) the quantity equal to (1) 12CP, plus (2) 12CPRC, and minus (3) 12CPLP, divided by (C) twelve months per year, and multiplied by (D) GETF.

The MS1R for NPS shall equal (A) NPS Annual Schedule 1 Revenue Requirement, divided by (B) the quantity equal to (1) 12CP, plus (2) 12CPB, plus (3) 12CPRC, and minus (4) 12CPLP, divided by (C) twelve months per year, and multiplied by (D) GETF.

The MS1R for PTF shall equal (A) PTF Annual Schedule 1 Revenue Requirement, divided by (B) the quantity equal to (1) 12CP, plus (2) 12CPRC, and minus (3) 12CPLP, divided by (C) twelve months per

year, and multiplied by (D) GETF.

#### of Schedule 21-UI

# **Appendix A Exhibit 1**

# **Determination of the Annual Schedule 1 Revenue Requirements**

## I. Definitions

Capitalized terms not otherwise defined in the Tariff and as used in this formula have the definitions shown in Section I.A of this Exhibit, below. All revenue and costs shall be taken from the previous calendar year.

#### A. Terms

<u>Annual Schedule 1 Revenue Requirements</u> shall refer to any, or collectively to all of the annual Schedule 1 revenue requirements calculated pursuant to this Appendix A Exhibit 1.

<u>Gross Earning Tax for Non-PTF Schedule 1 Revenue for Crediting</u> shall equal the amount of Connecticut Gross Earnings Tax paid on Non-PTF Schedule 1 Revenue for Crediting.

Gross Earning Tax for NPS Schedule 1 Revenue for Crediting shall equal the amount of Connecticut Gross Earnings Tax paid on NPS Schedule 1 Revenue for Crediting.

<u>Gross Earning Tax for PTF Schedule 1 Revenue for Crediting</u> shall equal the amount of Connecticut Gross Earnings Tax paid on PTF Schedule 1 Revenue for Crediting.

Non-PTF Annual Schedule 1 Revenue Requirement shall equal UI's revenue requirement for providing System Control, Scheduling and Dispatch Service over the Non-PTF portion of UI's transmission system.

Non-PTF Schedule 1 Cash Working Capital shall equal the amount of cash working capital for providing System Control, Scheduling and Dispatch Service over the Non-PTF portion of UI's transmission system.

Non-PTF Schedule 1 Expense shall equal the cost of providing System Control, Scheduling and Dispatch Service over the Non-PTF portion of UI's transmission system.

Non-PTF Schedule 1 Revenue for Crediting shall equal the sum of all revenue booked to FERC Account 456 received through Schedule 1 demand charges assessed for service over UI's Non-PTF to Transmission Customers taking service under Schedule 9 of this Schedule 21-UI, or taking Short-Term service under Schedule 8 of this Schedule 21-UI.

<u>NPS Annual Schedule 1 Revenue Requirement</u> shall equal UI's revenue requirement for providing System Control, Scheduling and Dispatch Service over the Non-Pool Supported Facilities portion of UI's transmission system.

NPS Schedule 1 Cash Working Capital shall equal the amount of cash working capital for providing System Control, Scheduling and Dispatch Service over the Non-Pool Supported Facilities portion of UI's transmission system.

NPS Schedule 1 Expense shall equal the cost of providing System Control, Scheduling and Dispatch Service over the Non-Pool Supported Facilities portion of UI's transmission system.

NPS Schedule 1 Revenue for Crediting shall equal the sum of all revenue booked to FERC Account 456 received through Schedule 1 demand charges assessed for service over UI's NPS to Transmission Customers taking service under Schedule 9 of this Schedule 21-UI, or taking Short-Term service under Schedule 8 of this Schedule 21-UI.

<u>PTF Annual Schedule 1 Revenue Requirement</u> shall equal UI's revenue requirement for providing System Control, Scheduling and Dispatch Service over the PTF portion of UI's transmission system.

<u>PTF Schedule 1 Cash Working Capital</u> shall equal the amount of cash working capital for providing System Control, Scheduling and Dispatch Service over the PTF portion of UI's transmission system.

<u>PTF Schedule 1 Expense</u> shall equal the cost of providing System Control, Scheduling and Dispatch Service over the PTF portion of UI's transmission system.

<u>PTF Schedule 1 Revenue for Crediting</u> shall equal the sum of all revenue booked to FERC Account 456 received from the ISO to UI's provision of service to enable the ISO to provide OATT Schedule 1 service and through Schedule 1 demand charges assessed for service over UI's PTF to Transmission

Customers taking service under Schedule 9 of this Schedule 21-UI, or taking Short-Term service under Schedule 8 of this Schedule 21-UI.

<u>Regional Non-RNS Load Schedule 1 Expense</u> shall equal the sum of all expenses booked to FERC 561 for UI's participation in the New England RTO that are not specifically identified elsewhere.

<u>RNS Load Schedule 1 Expense</u> shall equal the sum of UI's expenses booked to FERC Account 561 that are incurred due to charges assessed by ISO for UI taking Regional Network Service under the OATT or ISO Self Funding Tariff.

<u>Schedule 1 Expense Cash Working Capital Allowance</u> shall be 12.5% (45 days/360 days).

Schedule 1 Total Cost shall equal UI's total expense booked to FERC Account 561.

<u>Total Annual Schedule 1 Revenue Requirement (S1RR)</u> shall equal UI's total revenue requirement for providing System Control, Scheduling and Dispatch Service over the UI Transmission System, including the Non-PTF, NPS, and PTF portions.

<u>UI Transmission System Schedule 1 Expense</u> shall equal the total of UI's expenses that are not RNS Load Schedule 1 Expense or Regional Non-RNS Load Schedule 1 Expense that were booked to FERC Account 561.

# II. Calculation of Schedule 1 Revenue Requirements

- 1. <u>Non-PTF Annual Schedule 1 Revenue Requirement</u> shall equal (A) Non-PTF Schedule 1 Expense, plus (B) Non-PTF Schedule 1 Cash Working Capital, less (C) Non-PTF Schedule 1 Revenue for Crediting, plus (D) Gross Earnings Tax for Non-PTF Schedule 1 Revenue for Crediting.
  - A. <u>Non-PTF Schedule 1 Expense</u> shall equal (i) Schedule 1 Total Cost, less (ii) RNS Load Schedule 1 Expense, less (iii) PTF Schedule 1 Expense, and less (iv) NPS Schedule 1 Expense.
  - B. Non-PTF Schedule 1 Cash Working Capital shall equal the product of (i) Non-PTF Schedule 1 Expense, (ii) Schedule 1 Expense Cash Working Capital Allowance, and (iii) Non-PTF Before Tax Cost of Capital.

- C. <u>Non-PTF Schedule 1 Revenue for Crediting</u> shall equal the Non-PTF Schedule 1 revenue assessed to transmission customers taking service under Schedule 9 of this Schedule 21-UI, or taking Short-Term service under Schedule 8 of this Schedule 21-UI.
- D. <u>Gross Earnings Tax for Non-PTF Schedule 1 Revenue for Crediting</u> shall equal the product of (i) Non-PTF Schedule 1 Revenue for Crediting and (ii) Gross Earnings Tax Rate.
- 2. <u>NPS Annual Schedule 1 Revenue Requirement</u> shall equal (A) NPS Schedule 1 Expense, plus (B) NPS Schedule 1 Cash Working Capital, less (C) NPS Schedule 1 Revenues for Crediting, plus (D) Gross Earnings Tax for NPS Schedule 1 Revenues for Crediting.
  - A. <u>NPS Schedule 1 Expense shall</u> equal the product of (i) UI Transmission System Schedule 1 Expense and (ii) NPS Allocation Factor.
    - i. <u>UI Transmission System Schedule 1 Expense</u> shall equal (a) Schedule 1 Total Cost, less (b) RNS Load Schedule 1 Expense, and less (c) Regional Non-RNS Load Schedule 1 Expense.
      - b. <u>RNS Load Schedule 1 Expense</u> shall equal the sum of the specific expenses identified on the worksheet used to calculate S1RR.
      - c. <u>Regional Non-RNS Load Schedule 1 Expense</u> shall equal the sum of the specific expenses identified on the worksheet used to calculate S1RR.
  - B. <u>NPS Schedule 1 Cash Working Capital</u> shall equal the product of (i) NPS Schedule 1 Expense, (ii) Schedule 1 Expense Cash Working Capital Allowance, and (iii) NPS Before Tax Cost of Capital.
  - C. <u>NPS Schedule 1 Revenue for Crediting</u> shall equal the NPS Schedule 1 revenue assessed to transmission customers taking service under Schedule 9 of this Schedule 21-UI, or taking Short-Term service under Schedule 8 of this Schedule 21-UI.
  - D. <u>Gross Earnings Tax for NPS Schedule 1 Revenue for Crediting</u> shall equal the product of (i) NPS Schedule 1 Revenue for Crediting and (ii) Gross Earnings Tax Rate.

- 3. <u>PTF Annual Schedule 1 Revenue Requirement</u> shall equal (A) PTF Schedule 1 Expense, plus (B) PTF Schedule 1 Cash Working Capital, less (C) PTF Schedule 1 Revenues for Crediting, plus (D) Gross Earnings Tax for PTF Schedule 1 Revenues for Crediting.
  - A. <u>PTF Schedule 1 Expense</u> shall equal (i) Regional Non-RNS Load Schedule 1 Expense, plus the product of (ii) UI Transmission System Schedule 1 Expense and (iii) PTF Allocation Factor.
  - B. <u>PTF Schedule 1 Cash Working Capital</u> shall equal the product of (i) PTF Schedule 1 Expense, (ii) Schedule 1 Expense Cash Working Capital Allowance, and (iii) PTF Before Tax Cost of Capital.
  - C. <u>PTF Schedule 1 Revenue for Crediting</u> shall equal the sum of (1) the Schedule 1 revenues received from ISO under Schedule 1 of the OATT and (2) PTF Schedule 1 revenue assessed to transmission customers taking service under Schedule 9 of this Schedule 21-UI, or taking Short-Term service under Schedule 8 of this Schedule 21-UI. The specific regional revenues received from ISO under the OATT shall be identified on the worksheet used to calculate S1RR.
  - D. <u>Gross Earnings Tax for PTF Schedule 1 Revenue for Crediting</u> shall equal the product of (i) PTF Schedule 1 Revenue for Crediting and (ii) Gross Earnings Tax Rate.
- 4. <u>Total Annual Schedule 1 Revenue Requirement ("S1RR")</u> shall equal the sum of (A) PTF Annual Schedule 1 Revenue Requirement, (B) NPS Annual Schedule 1 Revenue Requirement, and (C) Non-PTF Annual Schedule 1 Revenue Requirement.

#### of Schedule 21-UI

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

The Transmission Customer shall compensate UI each month for Firm Local Point-To-Point Service at the sum of the applicable demand charges set forth below:

# 1) Yearly delivery:

The MTR specified in section (6) below per kW of Firm Reserved Capacity per year.

# 2) Monthly delivery:

The MTR specified in section (6) below per kW of Firm Reserved Capacity per month.

# 3) Weekly delivery:

The MTR specified in section (6) below multiplied by 12 months per year and divided by 52 weeks per year, per kW of Firm Reserved Capacity per week.

## 4) Daily delivery:

The MTR specified in section (6) below, multiplied by 12 months per year, divided by 52 weeks per year, and divided by 7 days per week, per kW of Firm Reserved Capacity per day. The total demand charge in any week, pursuant to a reservation for daily delivery, shall not exceed the rate 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 UI must be announced to all Eligible Customers solely by posting on the OASIS, (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 the OASIS, and (3) once a discount is negotiated, details must be immediately posted on the OASIS. For any discount agreed upon for service on a path, from point(s) of receipt to point(s) of delivery, UI 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 UI's Local Network.

# 6) MTR for billing:

The MTR for billing based on estimated rates shall be the EMTR as determined in Attachment CE of this Schedule 21-UI. The EMTR shall equal the sum of (1) EMTR for service over the PTF, (2) EMTR for service over the NPS, and (3) EMTR for service over the Non-PTF. EMTRs shall be calculated in both the Mid Year Rate Calculation and the New Year Rate Calculation.

The MTR for billing the Annual True Up based on actual costs and revenues shall be the MTR as determined in Attachment C of this Schedule 21-UI. The MTR shall equal the sum of (1) MTR for service over the PTF, (2) MTR for service over the NPS, and (3) MTR for service over the Non-PTF. Actual MTRs shall be calculated in the Mid Year Rate Calculation.

#### 7) 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 Schedule 21-UI

#### Non-Firm Local Point-To-Point Service

The Transmission Customer shall compensate UI for Non-Firm Local Point-To-Point Service at the sum of the applicable demand charges set forth below:

# 1) Monthly delivery:

The monthly delivery charge as set forth in section (2) of Schedule 8 of Schedule 21-UI per kW of Non-Firm Reserved Capacity per month.

# 2) Weekly delivery:

The weekly delivery charge as set forth in section (3) of Schedule 8 of Schedule 21-UI per kW of Non-Firm Reserved Capacity per week.

# 3) Daily delivery:

The daily delivery charge as set forth in section (4) of Schedule 8 of Schedule 21-UI per kW of Non-Firm Reserved Capacity per day. The total demand charge in any week, pursuant to a reservation for Daily delivery, shall not exceed the rate 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 charge divided by 24. The total demand charge in any day, pursuant to a reservation for Hourly delivery, shall not exceed the rate 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 demand charge in any week, pursuant to a reservation for Hourly or Daily delivery, shall not exceed the rate 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 UI must be announced to all Eligible Customers solely by posting on the OASIS, (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 the OASIS, and (3) once a discount is negotiated, details must be immediately posted on the OASIS. For any discount agreed upon for service on a path, from point(s) of receipt to point(s) of delivery, UI 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 UI'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 Schedule 21-UI

#### Local Network Service for Load Connected to the Non-PTF

The Transmission Customer shall compensate UI for Local Network Service each month at an amount equal to the MTR multiplied by the Transmission Customer's Category A Monthly Network Load. The MTR for billing based on estimated rates shall be the EMTR as determined in Attachment CE of this Schedule 21-UI. The EMTR shall equal the sum of (1) EMTR for service over the PTF, (2) EMTR for service over the NPS, and (3) EMTR for service over the Non-PTF. The EMTR shall be calculated in both the Mid Year Rate Calculation and the New Year Rate Calculation.

The MTR for billing the Annual True Up based on actual costs and revenues shall be the MTR as determined in Attachment C of this Schedule 21-UI. The MTR shall equal the sum of (1) MTR for service over the PTF, (2) MTR for service over the NPS, and (3) MTR for service over the Non-PTF. The actual MTR shall be calculated in the Mid Year Rate Calculation.

#### of Schedule 21-UI

#### Local Network Service for Load Connected to the PTF

The Transmission Customer with a Category B Network Load shall compensate UI for Local Network Service each month at an amount equal to the MTR multiplied by the Transmission Customer's Category B Monthly Network Load. The MTR for billing based on estimated rates shall be the EMTR as determined in Attachment CE of this Schedule 21-UI. The EMTR shall equal the EMTR for service over the NPS. The EMTR shall be calculated in both the Mid Year Rate Calculation and the New Year Rate Calculation.

The MTR for billing the Annual True Up based on actual costs and revenues shall be the MTR as determined in Attachment C of this Schedule 21-UI. The MTR shall equal the MTR for service over the NPS. The actual MTR shall be calculated in the Mid Year Rate Calculation.

If a Transmission Customer has both Category A Network Load and Category B Network Loads, that Transmission Customer shall be assessed individually for each Network Load under the appropriate Schedule.

#### of Schedule 21-UI

# **Native Load Customer Revenue Requirement Responsibility**

The Native Load Customers of UI shall compensate UI on an annual basis for the total of all transmission related expenses less the total revenue received under the OATT and under Schedules 1, 8, 9, 12, and 13 of this Schedule 21-UI, plus any gross earnings tax UI pays for revenues received, and less the total revenue received under Schedule 20A-UI. The revenue requirement responsibility shall be estimated, subject to Annual True Up. The Estimated Annual Native Load Customer Revenue Requirement shall be determined pursuant to Appendix A Exhibit 1-E of this Schedule 14 of this Schedule 21-UI. The actual Annual Native Load Customer Revenue Requirement shall be determined pursuant to Appendix A Exhibit 1 of this Schedule 14 of this Schedule 21-UI.

of Schedule 21-UI

Appendix A Exhibit 1

Determination of the Annual Native Load Customer Revenue Requirement ("ANLCRR")

The ANLCRR shall be calculated pursuant to this exhibit. The ANLCRR shall be calculated in units of \$

per year. All charges incurred by UI under the OATT that are billed based on Monthly Network Load shall

be recovered under Schedule 14 of this Schedule 21-UI, unless recovered under a Connecticut state

jurisdictional tariff.

I. Definitions

Capitalized terms not otherwise defined in the Tariff and as used in this formula have the following

definitions:

ANLCRR shall equal UI's annual transmission revenue requirement to be collected from UI's Native

Load Customers for the previous calendar year.

Customer Accounts Expenses and Customer Service and Informational Expenses shall equal UI's

expenses as recorded in FERC Account Nos. 901-910.

Phase I/II HVDC-TF Gross Earnings Tax shall equal UI's payment of gross earnings tax on Phase I/II

HVDC-TF Revenue for the previous calendar year.

Phase I/II HVDC-TF Revenue shall equal UI's total revenue from Transmission Customers taking

service under Schedule 20A-UI of the OATT for the previous calendar year.

RNS Revenue for Crediting shall equal the revenue received by UI under Schedules 8 and 9 of the

OATT during the previous calendar year. Actual RNS revenues shall be used for months of the current

calendar year for which such revenues are available plus estimated RNS revenues for the remainder of

the year. Such RNS revenue estimates shall be based upon the current calendar year actual revenues

booked to FERC Account No. 456.

<u>RNS Revenue for Crediting Gross Earnings Tax</u> shall equal UI's payment of gross earnings tax on RNS Revenue for Crediting for the previous calendar year.

<u>Schedule 14 Gross Earnings Tax</u> shall equal UI's payment of gross earnings tax for revenues received from Native Load Customers.

<u>Schedule 14 Specific Expense Cash Working Capital</u> shall equal the cash working capital for expenses assigned exclusively to Native Load Customers.

<u>Schedule 21-UI Gross Earnings Tax</u> shall equal UI's payment of gross earnings tax on Schedule 21-UI Revenue for the previous calendar year.

<u>Schedule 21-UI Revenue</u> shall equal the revenue received by UI from Transmission Customers taking service under Schedules 1, 8, 9, 12, and 13 of this Schedule 21-UI for the previous calendar year.

<u>Total Transmission and Distribution Revenue</u> shall equal the amount recorded in FERC Account Nos. 440-444 related to Transmission and Distribution for the most recent calendar year.

<u>Transmission Revenue Allocation Factor</u> shall equal the ratio of (a) actual revenue related to Transmission as recorded in applicable sub-accounts to FERC Account Nos. 440-444 for the most recent calendar year, to (b) Total Transmission and Distribution Revenue.

## II. Definition of the ANLCRR

The ANLCRR shall equal (A) APTRR, plus (B) S1RR, plus (C) RNS Load Schedule 1 Expense, plus (D) Transmission of Electricity by Others, minus (E) Transmission Support Expense, plus (F) Schedule 14 Specific Expense Cash Working Capital, minus (G) Phase I/II HVDC-TF Revenue, plus (H) Phase I/II HVDC-TF Gross Earnings Tax, minus (I) RNS Revenue for Crediting, plus (J) RNS Revenue for Crediting Gross Earnings Tax, minus (K) Schedule 21-UI Revenue, plus (L) Schedule 21-UI Gross Earnings Tax, plus (M) Schedule 14 Gross Earnings Tax, plus (N) Customer Accounts Expenses and Customer Service and Information Expenses Related to Transmission, and minus (O) Localized Facility Revenue.

(A) APTRR is defined in Attachment D.

- (B) <u>S1RR</u> is defined in Schedule 1 Appendix A Exhibit 1.
- (C) <u>RNS Load Schedule 1 Expense</u> is defined in Schedule 1 Appendix A Exhibit 1.
- (D) Transmission of Electricity by Others is defined in Attachment D.
- (E) <u>Transmission Support Expense</u> is defined in Attachment D.
- (F) <u>Schedule 14 Specific Expense Cash Working Capital</u> shall be a 12.5% allowance (45 days / 360 days) of the expenses assigned exclusively to Native Load Customers and shall equal (1) 0.125, multiplied by (2) the quantity (i) RNS Load Schedule 1 Expense, plus (ii) Transmission of Electricity by Others, and minus (iii) Transmission Support Expense, and multiplied by (3) Cost of Capital Rate for Non-PTF.
  - (3) <u>Cost of Capital Rate for Non-PTF</u> shall equal the value for the Non-PTF Transmission Investment Category calculated pursuant to Attachment D Section III (A) 2.
- (N) <u>Customer Accounts Expenses and Customer Service and Informational Expenses Related to Transmission</u> shall equal the product of (a) Customer Accounts Expenses and Customer Service and Informational Expenses less any charges directly assigned to non-transmission and non-distribution business units and (b) the Transmission Revenue Allocation Factor.
- (O) <u>Localized Facility Revenue</u> shall equal revenue received from Transmission Customers taking RNS under the ISO Tariff in an area or state in which Localized Facilities are located, pursuant to Section III of this Schedule 21-UI.

of Schedule 21-UI

Appendix A Exhibit 1-E

Determination of the Estimated Native Load Customer Revenue Requirement ("ENLCRR")

The ENLCRR shall be calculated pursuant to this exhibit. The ENLCRR shall be calculated in units of \$

per year. Estimated values shall be used for the Annual Primary Transmission Revenue Requirement and

Regional Network Service Revenue Requirement. Actual values for the previous calendar year shall be

used for the Schedule 1 revenue requirement, Phase I/II HVDC-TF expenses and revenues, and revenues

received from Schedules 1, 8, 9, 12, and 13 of this Schedule 21-UI.

I. Definitions

Capitalized terms not otherwise defined in the Tariff and as used in this formula have the following

definitions:

ENLCRR is UI's estimate of the annual transmission revenue requirement that must be collected from UI's

Native Load Customers during the current calendar year.

Estimated RNS Revenue Requirement ("ERNSRR") is the estimated revenue requirement for UI taking

Regional Network Service under Schedule 9 of the OATT, or its successor schedule or schedules, on behalf

of the UI Native Load Customers for the current calendar year. Actual load values and RNS rates for the

current calendar year plus estimated load values and RNS rates for the remainder of the year shall be used

for charges pursuant to Schedule 9 of the OATT.

Total RNS Charge is the sum of all charges incurred by UI for taking Regional Network Service under

Schedule 9 of the OATT, or its successor schedule or schedules, on behalf of the UI Native Load

Customers.

# II. Definition of the Estimated Annual Native Load Customer Revenue Requirement ("EANLCRR")

The EANLCRR shall equal (A) EAPTRR, plus (B) S1RR, plus (C) RNS Load Schedule 1 Expense, plus (D) Estimated Transmission of Electricity by Others, minus (E) Transmission Support Expense, plus (F) Schedule 14 Specific Expense Cash Working Capital, minus (G) Phase I/II HVDC-TF Revenue, plus (H) Phase I/II HVDC-TF Gross Earnings Tax, minus (I) RNS Revenue for Crediting, plus (J) RNS Revenue for Crediting Gross Earnings Tax, minus (K) Schedule 21-UI Revenue, plus (L) Schedule 21-UI Gross Earnings Tax, plus (M) Schedule 14 Gross Earnings Tax, plus (N) Customer Accounts Expenses and Customer Service and Information Expenses Related to Transmission, and minus (O) Localized Facility Revenue.

- (A) EAPTRR is defined in Attachment DE.
- (B) <u>S1RR</u> is defined in Schedule 1 Appendix A Exhibit 1 This is an actual value and shall be taken from the most recent Mid Year Rate Calculation.
- (C) <u>RNS Load Schedule 1 Expense</u> is defined in Schedule 1 Appendix A Exhibit 1 This is an actual value and shall be taken from the most recent Mid Year Rate Calculation.
- (D) Estimated Transmission of Electricity by Others is UI's estimate of the value for the current year of Transmission of Electricity by Others, as defined in Attachment D. The value of Estimated Transmission of Electricity by Others shall equal the product of (1) UI's actual or estimated load pursuant to Attachment E and (2) the RNS rate pursuant to Schedule 9 of the OATT, plus (3) an estimate for all other amounts appropriately charged for transmission of electricity based upon (a) the actual amounts charged and recorded in FERC Account No. 565 to date in the current calendar year plus (b) the estimated charges for the remainder of the current calendar year.
- (E) <u>Transmission Support Expense</u> is defined in Attachment D. This is an actual value and shall be taken from the most recent Mid Year Rate Calculation.
- (F) <u>Schedule 14 Specific Expense Cash Working Capital</u> shall be a 12.5% allowance (45 days / 360 days) of the expenses assigned exclusively to Native Load Customers and shall equal (1) 0.125, multiplied by (2) the quantity (i) RNS Load Schedule 1 Expense, plus (ii) Estimated Transmission of

Electricity by Others, and minus (iii) Transmission Support Expense, and multiplied by (3) Cost of Capital Rate for Non-PTF.

- (3) <u>Cost of Capital Rate for Non-PTF</u> shall equal the value for the Non-PTF Transmission Investment Category, calculated pursuant to Attachment D Section III (A) 2, in the most recent Mid Year Rate Calculation.
- (N) <u>Customer Accounts Expenses and Customer Service and Information Expenses Related to</u>
  <u>Transmission</u> is defined in Schedule 14 Appendix A Exhibit 1. This is an actual value and shall be taken from the most recent Mid Year Rate Calculation.
- (O) <u>Localized Facility Revenue</u> shall equal revenue received from Transmission Customers taking RNS under the ISO Tariff in an area or state in which Localized Facilities are located, pursuant to Section III of this Schedule 21-UI.

# ATTACHMENT A of Schedule 21-UI

### **Methodology to Assess Available Transfer Capability**

### 1. Introduction

ISO New England Inc. ("ISO") is the regional transmission organization ("RTO") for the New England Control Area. The ISO is responsible for the development, oversight, and fair administration of New England's wholesale market, management of the bulk electric power system and the wholesale markets' planning processes. The ISO serves as the Balancing Authority for the New England Control Area. The New England Control Area is interconnected to three neighboring Balancing Authority Areas: New Brunswick System Operator Area, New York Independent System Operator Area, and Hydro-Quebec TransÉnergie Area.

Pursuant to CFR § 37.6(b) of the FERC Regulations Transmission Provider's are obligated to calculate and post TTC and ATC for each Posted Path. While the ISO is the Transmission Service Provider ("TSP") for Regional Transmission Service associated with PTF, the PTOs are the TSPs for Local Service over Non-PTF within the RTO footprint and are responsible for calculating TTC and ATC associated with Local Service provided under Schedule 21 to the ISO Tariff pursuant to the TOA.

Pursuant to the terms of the TOA executed between ISO and the PTOs, as a PTO, The United Illuminating Company (UI), UI is a TSP, who is obligated to calculate and post TTC and ATC for each Posted Path (Non-PTF Posted Path) over which Local Point-To-Point Service is provided under Schedule 21-UI of the ISO Tariff. These Non-PTF Posted Paths are primarily radial paths that provide Local Service to generators or load directly connected to PTF through Non-PTF (Direct Assignment Facilities).

Pursuant to CFR § 37.6(b), Posted Path is defined as any control area to control area interconnection; any path for which service is 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 the purposes of this definition, an hour includes any part of any hour during which service was denied, curtained or interrupted.

Based on this definition, UI does not own any Posted Paths. However, to the extent that UI does, in the

future, UI will follow NERC Standard MOD-029-1 (Rated System Path Methodology), as outlined below.

1.1 Scope

The scope of this Attachment A is limited to the following functions that, in the future, may be performed or

utilized by UI as the TSP for LPTP Service under Schedule 21-UI over its Non-PTF pursuant to the TOA

and the ISO Tariff:

Total Transfer Capability (TTC) methodology

• Available Transfer Capability (ATC) methodology

• Existing Transmission Commitments (ETC) calculation

• Use of Rollover Rights (ROR) in the calculation of ETC

Use of TRM and CBM

As explained below, TTC and ATC are required to be calculated by UI only for certain Non-PTF internal

Posted Paths over which Local Point-To-Point Service is provided under Schedule 21-UI. UI does not

currently own any Posted Paths.

1.2 **Definitions** 

Capitalized terms used and defined in this Attachment A to Schedule 21-UI shall have the meaning given

them under this Attachment. Capitalized terms used and not defined in this Schedule 21-UI but defined in

other sections of Schedule 21 or the ISO Tariff shall have the meaning given them under those sections.

Capitalized terms used in this Attachment A to Schedule 21-UI that are not defined in it or elsewhere in

Schedule 21 or the ISO Tariff shall have the meanings customarily attributed to applicable criteria, rules,

standards and operating procedures.

**Operating Horizon (OH):** For the purpose of this Attachment A, the OH is noon through midnight of the

next day for a total of 36 hours. As time progresses the total hours remaining in the OH decreases each

hour until noon the following day when the OH is once again reset to 36 hours.

**Planning Horizon (PH):** For the purpose of this Attachment A, PH is any time before the OH.

**Scheduling Horizon (SH):** For the purpose of this Attachment A, SH is Real-Time and the hour before.

# 2. Transmission Service in the New England Markets

Since the inception of the ISO Tariff 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. 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 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 in the New England Control Area.

Additionally, entities may submit energy 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 energy transactions based on forecast LMPs and the transfer capability of the associated external interfaces. With those External Transactions in place, the Real-Time Energy Market dispatches generation in an economic, security constrained manner to meet Real-Time load within the New England Control Area.

The process for submitting External Transactions (ETs) into the New England 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 ETs is greater than the transfer capability of associated external interface, the ETs selected to flow are based on the ISO New England Operating Documents. For any ETs that are scheduled to flow in Real-Time based on the economics of the New England Control Area, a transmission reservation for Regional Transmission Service is created after-the-fact to satisfy the transparency needs of the market.

The process described above is only applicable to the PTF within the New England Control Area, and Non-PTF internal paths where utilized for LNS by generation or load. However, UI owns Non-PTF internal paths over which an advance transmission service reservation for Firm or Non-Firm LPTP Service may be required pursuant to Schedule 21 and Schedule 21-UI. On such Non-PTF internal paths, the Transmission Customer may obtain a transmission service reservation from UI under Schedule 21-UI prior to delivery of energy into the Real-Time Energy Market. This Attachment A addresses the calculation of ATC and TTC for these Non-PTF internal paths.

# **3.** Total Transfer Capability (TTC)

TTC is the amount of electric power that can be transferred reliably from one area to another area of the interconnected systems by way of all transmission lines (or paths) between those areas under specified

system conditions. For UI, the TTC on any future Non-PTF internal paths that may require LPTP Service reservations will be relatively static values. UI would thus calculate TTC for any radial Non-PTF Posted Path as the rating of the limiting element of such path.

## 4. Capacity Benefit Margin (CBM)

CBM is defined as the amount of firm transmission transfer capability set aside by a TSP for use by Load Serving Entities (LSEs). The ISO does not set aside any CBM for use by LSEs for the Non-PTF modeled by ISO; consistent with ISO's economic, security constrained dispatch methodology the ISO will only dispatch an amount of generation interconnected to such Non-PTF path so as not to incur a reliability or stability violation on the subject path.

Wherever applicable, the administration of Schedule 21-UI is consistent with the services provided under the ISO Tariff by ISO. UI provides LPTP Service and LNS over its Non-PTF that are only connected to the New England system and do not interconnect with other systems. Therefore, since UI does not have any Posted Paths it does not reserve any CBM. If, in the future, UI does have a Non-PTF Posted Path the CBM will be set to zero (0).

### 5. Transmission Reliability Margin (TRM)

TRM is the amount of the TTC necessary 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. In the New England Control Area TRM is used only for external interfaces under the New England market design. UI provides Local Point-To-Point Service over its Non-PTF that are connected only to the internal New England system. Therefore, since UI does not and will not have any Non-PTF Posted Paths that are also external interfaces it does not reserve any TRM. If, in the future, UI does have a Non-PTF Posted Path the TRM will be zero (0).

### 6. Calculation of Schedule 21-UI Existing Transmission Commitments (ETCs)

ETCs are committed uses of Non-PTF Posted Paths considered when determining ATC. The purpose of the ETC components in UI's ATC equation is to ensure that all ETCs on UI's Non-PTF Posted Paths are considered when determining ATC. As stated above UI does not currently own any Non-PTF Posted Paths. If, in the future, UI does have a Non-PTF Posted Path the ETCs would be applied to the ATC equation for such path in the following manner:

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

 $ETC_F$  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>) or other Firm 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>)**

 $ETC_{NF}$  are those confirmed Non-Firm transmission reservations (PTP  $_{NF}$ ). There are no allowances necessary for Non-Firm Network Integration Transmission Service (NITS  $_{NF}$ ), Non-Firm grandfathered Transmission Service (GF  $_{NF}$ ) or other Non-Firm service(s), contract(s) or agreement(s) (OS  $_{NF}$ ) to be considered in the  $ETC_{NF}$  calculation.

## 7. Calculation and Posting of Schedule 21-UI, ATC

# 7.1 General Description

NERC Standards MOD-001-1 (Available Transmission System Capability) and Mod-029-1 (Rated System Path Methodology) define the required items to be identified when describing a TSP's ATC methodology. As a practical matter, the rating of any radial UI Non-PTF would always be higher than the transmission requirements of the Transmission Customers connected to that path. As such, transmission services over these Non-PTF are considered to be always available.

Transmission Customers are not restricted from reserving Firm or Non-Firm LPTP Service on UI's Non-PTF. Common practice is not to calculate or post Firm and Non-Firm ATC values for the Non-PTF assets described above, as ATC is positive and listed as 9999. Thus, UI has posted the ATC as 9999, consistent with industry practice and to reflect the fact that there are no restrictions on UI's Non-PTF for LPTP Service.

## 7.2 Calculation of Firm ATC $(ATC_F)$

### 7.2.1 Calculation of $ATC_F$ in the PH

For purposes of this Attachment A, PH is any period before the OH. Consistent with the NERC definition,  $ATC_F$  is the capability for Firm transmission reservations that remain after allowing for TTC, TRM, CBM,  $ETC_F$ , Firm Postbacks (Postbacks<sub>F</sub>), and Firm counterflows (counterflows<sub>F</sub>). As discussed above CBM and TRM are zero. Firm Transmission Service under Schedule 21-UI that is available in the PH includes:

Yearly, Monthly, Weekly and Daily. Postbacks<sub>F</sub> and counterflows<sub>F</sub> of Schedule 21-UI transmission reservations are not considered in the PH. Therefore ATC<sub>F</sub> in the PH is equal to the TTC minus ETC<sub>F</sub>.

### 7.2.2 Calculation of $ATC_F$ in the OH

Consistent with the NERC definition,  $ATC_F$  is the capability for Firm transmission reservations that remain after allowing for TTC, TRM, CBM,  $ETC_F$ , Firm Postbacks (Postbacks<sub>F</sub>), and Firm counterflows (counterflows<sub>F</sub>). As discussed above CBM and TRM are zero. Daily Firm Transmission Service is the only service that is offered in the OH. Postbacks<sub>F</sub> and counterflows<sub>F</sub> of transmission reservations are not considered in the  $ATC_F$  OH. Therefore  $ATC_F$  in the OH is equal to the TTC minus  $ETC_F$ .

# 7.2.3 Calculation of $ATC_F$ in the SH

Firm transmission service is not offered in the SH. Therefore ATC<sub>F</sub> in the SH is equal to zero.

### 7.3 Calculation of Non-Firm ATC (ATC $_{NF}$ )

## 7.3.1 Calculation of $ATC_{NF}$ in the PH

 $ATC_{NF}$  is the capability for Non-Firm transmission reservations that remain after allowing for TTC,  $ETC_{F}$ ,  $ETC_{NF}$ , scheduled CBM (CBM<sub>S</sub>), unreleased TRM (TRM<sub>U</sub>) Non-Firm Postbacks (Postbacks<sub>NF</sub>), and Non-Firm counterflows (counterflows<sub>NF</sub>). As discussed above, TRM and CBM are zero. Postbacks<sub>NF</sub> and counterflows<sub>NF</sub> of Schedule 21-UI transmission reservations are not considered in this calculation. Therefore,  $ATC_{NF}$  in the PH is equal to the TTC minus  $ETC_{F}$  and  $ETC_{NF}$ .

## 7.3.2 Calculation of $ATC_{NF}$ in the OH

 $ATC_{NF}$  is the capability for Non-Firm transmission reservations that remain after allowing for TTC,  $ETC_{F}$ ,  $ETC_{NF}$ , scheduled CBM ( $CBM_U$ ), unreleased TRM ( $TRM_U$ ), Non-Firm Postbacks (Postbacks<sub>NF</sub>), and Non-Firm counterflows (counterflows<sub>NF</sub>).  $ATC_{NF}$  available in the OH includes: Daily and Hourly. As discussed above, TRM and CBM are zero. Counterflows<sub>NF</sub>, are not considered in this calculation. Therefore,  $ATC_{NF}$  in the OH is equal to the TTC minus  $ETC_{F}$ , and  $ETC_{NF}$  plus Postbacks<sub>NF</sub>.

### 7.3.3 Calculation of $ATC_{NF}$ in the SH

 $ATC_{NF}$  in the SH is equal to the  $ATC_{NF}$  in the OH for the designated hour. With this simplified version of ATC, there is no detailed algorithm or flow chart to be described or posted other than:  $ATC_{NF}$  in the SH equals  $ATC_{NF}$  in the OH.

# 7.4 Posting of ATC

ATC values for UI Non-PTF Posted Paths will be posted on the UI page of ISO's OASIS site.

### 7.4.1 Updates to the ATC

When any of the variables in the ATC equations change, the ATC values for UI Non-PTF Posted Paths will be recalculated and reposted.

# 7.4.2 Negative ATC

As stated above, the ratings of radial Non-PTF transmission paths will always higher than the transmission requirements of Transmission Customers connected to such path. Therefore, ATC over UI Non-PTF Posted Paths are considered to be always available and will not be negative.

### 7.5 Coordination of ATC Calculations

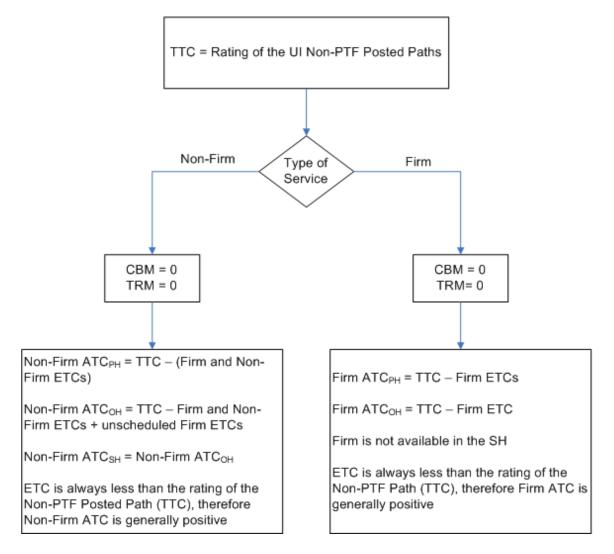
UI does not have any Non-PTF external interfaces. Therefore it is not necessary to coordinate UI ATC calculations.

## 7.5.1 Mathematical Algorithms

A link to the mathematical algorithms to be used for the calculation of ATC for any future UI Non-PTF Posted Paths are located under UI's FERC Order 890 Postings at:

 $\frac{< http://www.uinet.com/wps/wcm/connect/db103700450b48c0a4a7befca51ac10c/Schedule+21-UI+Mathe\ matical+Algorithm+for+the+Calculation+of+ATC.pdf?MOD=AJPERES&CACHEID=db103700450b48\ c0a4a7befca51ac10c>$ 

# 7.6 ATC Process Flow Diagram\_



# ATTACHMENT B of Schedule 21-UI

## Methodology for Completing a System Impact Study

If UI must perform a System Impact Study to determine the feasibility of providing Firm Local Point-To-Point Service or Local Network Service under the OATT, it will complete the study using the same method employed by UI to provide the requested service to itself. UI (or its Designated Agent) will perform the System Impact Study by applying UI's transmission planning criteria. The design standards outlined in UI's transmission planning criteria are in accordance with applicable criteria, rules, standards, and operating procedures. These criteria and standards referenced above, along with other assumptions and guidelines used in the analysis of UI's system, are included as part of the annual FERC Form 715 filings of UI.

# ATTACHMENT C

# of Schedule 21-UI

Determination of the Monthly Transmission Rate ("MTR") for Primary Transmission Service

The MTR assessed for Primary Transmission Service under this Schedule 21-UI shall be calculated pursuant to this attachment. The MTR shall be calculated in units of \$ per kW per month. The MTR shall be calculated separately for service over the PTF, NPS and Non-PTF. Transmission Customers taking service under Schedules 8, 9, and 12 of the Schedule 21-UI shall be required to pay the MTR over the PTF, NPS and Non-PTF. Transmission Customers taking service under Schedule 13 of this Schedule 21-UI shall be required to pay the MTR only over the NPS.

The MTR used in the Annual True Up shall be calculated, as described below pursuant to this Attachment C of this Schedule 21-UI, based on the Annual Primary Transmission Revenue Requirements as calculated pursuant to Attachment D of this Schedule 21-UI. The MTR shall be calculated in the Mid Year Rate Calculation.

All loads used in the denominator of the MTR calculation are pursuant to Attachment E of this Schedule 21-UI. These loads include 12CP, 12CPB, 12CPRC, 12CPLP.

The MTR for Non-PTF shall equal (A) the sum of (1) Annual Primary Transmission Non-PTF Revenue Requirement and (2) Annual Direct Transmission CWIP in Rate Base Revenue Requirement, divided by (B) the quantity equal to (1) 12CP, plus (2) 12CPRC, and minus (3) 12CPLP, divided by (C) twelve months per year, and multiplied by (D) GETF.

The MTR for NPS shall equal (A) Annual Primary Transmission NPS Revenue Requirement divided by (B) the quantity equal to (1) 12CP, plus (2) 12CPB, plus (3) 12CPRC, and minus (4) 12CPLP, divided by (C) twelve months per year, and multiplied by (D) GETF.

The MTR for PTF shall equal (A) Annual Primary Transmission PTF Revenue Requirement, divided by (B) the quantity equal to (1) 12CP, plus (2) 12CPRC, and minus (3) 12CPLP, divided by (C) twelve months per year, and multiplied by (D) GETF.

# ATTACHMENT CE of Schedule 21-UI

# Determination of the Estimated Monthly Transmission Rate ("EMTR") for Primary Transmission Service

The EMTR assessed for Primary Transmission Service under this Schedule 21-UI shall be calculated pursuant to this attachment. The EMTR shall be calculated in units of \$ per kW per month. The EMTR shall be calculated separately for service over the PTF, NPS and Non-PTF. Transmission Customers taking service under Schedules 8, 9, and 12 of the Schedule 21-UI shall be required to pay the EMTR over the PTF, NPS and Non-PTF. Transmission Customers taking service under Schedule 13 of this Schedule 21-UI shall be required to pay the EMTR only over the NPS.

The EMTR shall be calculated, as described below pursuant to this Attachment CE of this Schedule 21-UI, based on the Estimated Annual Primary Transmission Revenue Requirements as calculated pursuant to Attachment DE of this Schedule 21-UI. The EMTR shall be calculated in the New Year Rate Calculation and in the Mid Year Rate Calculation.

All loads used in the denominator of the EMTR calculation are pursuant to Attachment E of this Schedule 21-UI. These loads include E12CP, E12CPB, E12CPRC, E12CPLP.

The EMTR for Non-PTF shall equal (A) the sum of (1) Estimated Annual Primary Transmission Non-PTF Revenue Requirement, and (2) Estimated Annual Direct Transmission CWIP in Rate Base Revenue Requirement, divided by (B) the quantity equal to (1) E12CP, plus (2) E12CPRC, and minus (3) E12CPLP, divided by (C) twelve months per year, and multiplied by (D) GETF.

The EMTR for NPS shall equal (A) Estimated Annual Primary Transmission NPS Revenue Requirement, divided by (B) the quantity equal to (1) E12CP, plus (2) E12CPB, plus (3) E12CPRC, and minus (4) E12CPLP, divided by (C) twelve months per year, and multiplied by (D) GETF.

The EMTR for PTF shall equal (A) Estimated Annual Primary Transmission PTF Revenue Requirement, divided by (B) the quantity equal to (1) E12CP, plus (2) E12CPRC, and minus (3) E12CPLP, divided by (C) twelve months per year, and multiplied by (D) GETF.

The E12CP shall be calculated as (a) the 12CP for the most recent calendar year, multiplied by (b) the ratio

of (1) the 12CP for the most recent calendar year, to (2) the 12CP for the year immediately preceding the most recent calendar year. If the 12CP for the year immediately preceding the most recent calendar year is equal to zero, the E12CP shall be set equal to the 12CP for the most recent calendar year.

The E12CPB shall be calculated as (a) the 12CPB for the most recent calendar year, multiplied by (b) the ratio of (1) the 12CPB for the most recent calendar year, to (2) the 12CPB for the year immediately preceding the most recent calendar year. If the 12CPB for the year immediately preceding the most recent calendar year is equal to zero, the E12CPB shall be set equal to the 12CPB for the most recent calendar year.

The E12CPRC shall be calculated as (a) the 12CPRC for the most recent calendar year, multiplied by (b) the ratio of (1) the 12CPRC for the most recent calendar year, to (2) the 12CPRC for the year immediately preceding the most recent calendar year. If the 12CPRC for the year immediately preceding the most recent calendar year is equal to zero, the E12CPRC shall be set equal to the 12CPRC for the most recent calendar year.

The E12CPLP shall be calculated as (a) the 12CPLP for the most recent calendar year, multiplied by (b) the ratio of (1) the 12CPLP for the most recent calendar year, to (2) the 12CPLP for the year immediately preceding the most recent calendar year. If the 12CPLP for the year immediately preceding the most recent calendar year is equal to zero, the E12CPLP shall be set equal to the 12CPLP for the most recent calendar year.

### ATTACHMENT D

#### of Schedule 21-UI

# **Annual Primary Transmission Revenue Requirement ("APTRR")**

This formula sets forth the method that UI will use to determine its APTRR for each Transmission Investment Category. The sum of the APTRRs for each of the Transmission Investment Categories equals UI's total cost to own, operate and maintain the Local Network used for providing Transmission Service to Transmission Customers under this Schedule 21-UI, minus certain revenues received for the provision of such service. The APTRRs are annual formula rate calculations that shall be performed as part of the Mid Year Rate Calculation and shall be used in the Annual True Up pursuant to Attachment F of this Schedule 21-UI as the actual revenue requirements to which the estimated charges billed the previous year will be reconciled. The calculations shall be based on the previous calendar year's FERC Form 1 data. The calculations shall be based on actual data, in lieu of allocated data, if specifically identified in the FERC Form 1, or detailed in a worksheet reconcilable to published values in the FERC Form 1.

### I. Attachment D Calculations

The APTRRs shall be calculated for each of the following Transmission Investment Categories:

PTF

**NPS** 

Non-PTF

All expenses, adjustments to rate base, and revenues shall be allocated to each of the Transmission Investment Categories on the basis of the ratio of the plant investment of each category to the total transmission plant investment of the Local Network. Other specifically identified components of the APTRRs will be assigned directly to the Transmission Investment Categories. The sum of the APTRRs for each of the Transmission Investment Categories shall equal the APTRR for the Local Network.

The amount of the return associated with Direct Transmission CWIP in Rate Base shall be calculated using the Commission approved enhanced returns. Adjustments consistent with Commission orders shall be made to the Returns and Income Taxes for each Transmission Investment Category to account for any Commission approved enhanced returns on investment.

For the purpose of calculating APTRRs, Direct Transmission CWIP in Rate Base shall be treated like a

separate Transmission Investment Category.

Any ambiguity or discrepancy between the descriptions of data or calculations contained in this Attachment

D and the data or calculations, with accompanying references and footnotes, shown on the worksheets used

to calculate the APTRRs for each Transmission Investment Category shall be resolved by reference to and

in accordance with the methodologies shown on those worksheets.

II. Definitions

Capitalized terms not otherwise defined in the Tariff and as used in this formula have the following

definitions:

A. Allocation Factors

1. NPS Plant Allocation Factor shall equal the ratio of (a) NPS Plant in Service to (b) Direct

Transmission Plant in Service.

2. <u>Plant in Service Allocation Factor</u> shall equal the ratio of (a) Total Transmission Plant in

Service to (b) Total Plant in Service.

(a) Total Transmission Plant in Service shall equal the sum of (1) Direct Transmission Plant in

Service, (2) General Transmission Plant, and (3) Intangible Transmission Plant.

3. <u>PTF Plant Allocation Factor</u> shall equal the ratio of (a) PTF Plant in Service to (b) Direct

Transmission Plant in Service.

(a) <u>PTF Plant in Service</u> shall equal the sum of (1) Pre-97 PTF Plant in Service, and (2)

Post-96 PTF Plant in Service.

4. <u>Transmission Wages and Salaries Allocation Factor</u> shall equal the ratio of (a) Direct

Transmission Wages and Salaries to (b) Total Direct Wages and Salaries Excluding Administrative

and General Wages and Salaries.

(b) Total Direct Wages and Salaries Excluding Administrative and General Wages and

<u>Salaries</u> shall equal the difference between (i) Total Wages and Salaries and (ii) Administrative and General Wages and Salaries.

### B. Terms

<u>Administrative and General Expense</u> shall equal UI's expenses as recorded in FERC Account Nos. 920-935, excluding FERC Account Nos. 924, 928 and 930.1.

<u>Administrative and General Wages and Salaries</u> shall equal UI's payroll distribution to Administration and General.

<u>AFUDC Regulatory Liability</u> shall equal the unamortized balance of the capitalized AFUDC booked on UI transmission projects as recorded in FERC Account 254 consistent with Commission orders.

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

<u>Amortization of AFUDC Regulatory Liability</u> shall equal the amortization of the AFUDC Regulatory Liability as recorded in FERC Account No. 407.4.

<u>Capitalization Ratio of Common Equity</u> shall equal the percentage that common equity capitalization is to total company capitalization and shall be equal to the average of 13 end of month balances.

<u>Capitalization Ratio of Long-Term Debt</u> shall equal the percentage that long-term debt capitalization is to total company capitalization and shall be equal to the average of 13 end of month balances.

<u>Capitalization Ratio of Preferred Stock</u> shall equal the percentage that preferred stock capitalization is to total company capitalization and shall be equal to the average of 13 end of month balances.

<u>Direct Transmission CWIP in Rate Base</u> shall equal the portion of UI's transmission plant as recorded in FERC Account 107 consistent with Commission orders.

<u>Direct Transmission Plant Depreciation Expense</u> shall equal UI's transmission expense as recorded in FERC Account No. 403.

<u>Direct Transmission Plant in Service</u> shall equal UI's plant balance as recorded in FERC Account Nos. 350-359.

<u>Direct Transmission Wages and Salaries</u> shall equal UI's direct payroll distribution to Transmission.

Embedded Cost of Long-Term Debt shall equal the interest cost, stated as a percentage, of UI's long-term debt.

Embedded Cost of Preferred Stock shall equal the cost, stated as a percentage, of UI's preferred stock.

<u>Equity AFUDC Component of Transmission Depreciation Expense</u> shall equal the product of Transmission Depreciation Expense multiplied by the 41 year average of the equity AFUDC rate as taken from internal accounting data.

General Advertising Expense shall equal UI's expenses as recorded in FERC Account No. 930.1.

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

General Plant Accumulated Depreciation shall equal UI's general plant reserve balance as recorded in FERC Account No. 108.

General Plant Depreciation Expense shall equal UI's general plant expenses as recorded in FERC Account No. 403.

<u>Intangible Plant</u> shall equal UI's gross plant balance as recorded in FERC Account Nos. 301-303.

<u>Intangible Plant Amortization Expense</u> shall equal UI's amortization charges for intangible plant as recorded in FERC Account No. 404.

<u>Intangible Plant Amortization Reserve</u> shall equal UI's intangible plant accumulated provision for amortization as recorded in FERC Account No. 111.

<u>Load Dispatching Expense</u> shall equal UI's expenses as recorded in FERC Account No. 561.

Municipal Tax Expense shall equal UI's expenses as recorded in FERC Account Nos. 408.1, 409.1.

Other Transmission Regulatory Assets FAS 109 shall equal UI's FAS 109 balance in FERC Account No. 182.3.

Other Transmission Regulatory Liabilities FAS 109 shall equal UI's FAS 109 balance in FERC Account No. 254.

NPS Plant in Service shall equal UI's plant included in FERC Accounts 350 through 359 that is NPS. Non-PTF Plant in Service shall equal UI's plant included in FERC Accounts 350 through 359 that is Non-PTF.

<u>Payroll Tax Expense</u> shall equal UI's payroll expenses as recorded in UI's FERC Account Nos. 408.1 and 409.1.

<u>Post-96 PTF Plant in Service</u> shall equal UI's plant included in FERC Accounts 350 through 359 that is Post-96 PTF.

Prepayments shall equal UI's prepayment balance as recorded in FERC Account No. 165.

<u>Pre-97 PTF Plant in Service</u> shall equal UI's plant included in FERC Accounts 350 through 359 that is Pre-97 PTF.

<u>Property Insurance</u> shall equal UI's expenses as recorded in FERC Account No. 924.

Regulatory Expense shall equal UI's expenses as recorded in FERC Account No. 928.

RSP NPS is post-2003 NPS transmission plant investment that is included in the Regional System Plan.

RSP NPS Plant in Service shall equal UI's plant included in FERC Accounts 350 through 359 that is RSP NPS.

RSP PTF is post-2003 PTF transmission plant investment that is included in the Regional System Plan.

RSP PTF Plant in Service shall equal UI's plant included in FERC Accounts 350 through 359 that is RSP PTF.

<u>Total Administrative and General Expense</u> shall equal UI's expenses as recorded in FERC Account Nos. 920-935.

<u>Total Plant in Service</u> shall equal UI's total gross plant balance as recorded in FERC Account Nos. 301-399.

<u>Total Transmission Operation and Maintenance Expense</u> shall equal UI's total expenses as recorded in FERC Account Nos. 560 through 573.

<u>Total Wages and Salaries</u> shall equal UI's total payroll expenses, excluding Payroll Tax Expense.

<u>Transmission Accumulated Deferred Tax Asset</u> shall equal UI's transmission related deferred tax balance as recorded in FERC Account No. 190.

<u>Transmission Accumulated Deferred Tax Liability</u> shall equal UI's transmission related deferred tax balance as recorded in FERC Account Nos. 281-283.

<u>Transmission Cost of Removal</u> shall equal UI's Transmission cost of removal balance as recorded in FERC Account 253.

<u>Transmission Loss on Reacquired Debt</u> shall equal UI's transmission related balance as recorded in FERC Account 189.

<u>Transmission Materials and Supplies</u> shall equal UI's balance, as assigned to transmission, as recorded in FERC Account 154.

Transmission of Electricity by Others shall equal UI's expenses as recorded in FERC Account 565.

<u>Transmission Plant Accumulated Depreciation</u> shall equal UI's Transmission reserve balance as recorded in FERC Account 108.

<u>Transmission Plant Held for Future Use</u> shall equal UI's transmission related balance in FERC Account No. 105.

#### III. Definition of the APTRR

An APTRR shall be calculated for each Transmission Investment Category. The APTRR for each category shall include the following individual components directly assigned or allocated to the Transmission Investment Category as specified in this Attachment D: (A) Return and Associated Income Taxes, plus (B) Transmission Depreciation Expense, minus (C) Transmission Amortization of Investment Tax Credits, plus (D) Transmission Municipal Tax Expense, plus (E) Transmission Payroll Tax Expense, plus (F) Primary Transmission Operation and Maintenance Expense, plus (G) Transmission Administrative and General Expense, plus (H) Transmission Support Expense, minus (I) Primary Transmission Revenue Credits, minus (J) Transmission Rents Received from Electric Property, plus (K) Gross Earnings Tax on Transmission Revenues and Rents, and minus (L) Connecticut Fixed Capital Credit.

An APTRR shall be calculated for Direct Transmission CWIP in Rate Base and shall include the following component: (A) Return and Associated Income Taxes.

The individual components of the APTRR shall have the meanings defined below in this Section III of this Attachment D.

A. <u>Return and Associated Income Taxes</u> assigned to each Transmission Investment Category shall equal the product of (1) Transmission Investment Base for each category and (2) Cost of Capital Rate for that category.

Adjustments consistent with Commission orders shall be made to the Returns and Associated Income Taxes for each Transmission Investment Category to account for any Commission approved enhanced returns on investment.

For the purpose of calculating Return and Associated Income Taxes, Direct Transmission CWIP in Rate Base shall be treated like a separate Transmission Investment Category. The amount of the return associated with Direct Transmission CWIP in Rate Base shall be calculated using the Commission approved enhanced returns.

## 1. <u>Transmission Investment Base</u>

The values used for all rate base items identified in this paragraph shall be equal to the average of 13 end of month balances. The months used in the calculation of the 13 month average shall be the 12 months of the year under analysis and the month of December from the year just prior to the year under analysis.

<u>Transmission Investment Base</u> shall equal (a) Direct Transmission Plant in Service, plus (b) General Transmission Plant, plus (c) Intangible Transmission Plant, plus (d) Transmission Plant Held for Future Use, minus (e) Transmission Accumulated Depreciation, plus (f) Transmission Accumulated Deferred Taxes, plus (g) Transmission Loss on Reacquired Debt, plus (h) Other Transmission Regulatory Assets/Liabilities, plus (i) Transmission Prepayments, plus (j) Transmission Materials and Supplies, and plus (k) Primary Transmission Cash Working Capital.

- (b) <u>General Transmission Plant</u> shall equal the product of (1) General Plant and (2) Transmission Wages and Salaries Allocation Factor.
- (c) <u>Intangible Transmission Plant</u> shall equal the product of (1) Intangible Plant and (2) Transmission Wages and Salaries Allocation Factor.
- (e) <u>Transmission Accumulated Depreciation</u> shall equal the sum of (1) Transmission Plant Accumulated Depreciation, (2) Transmission Cost of Removal, (3) General Transmission Plant Accumulated Depreciation, and (4) Intangible Transmission Plant Amortization Reserve.
  - (3) <u>General Transmission Plant Accumulated Depreciation</u> shall equal the product of (1) General Plant Accumulated Depreciation and (2) Transmission Wages and Salaries Allocation Factor.
  - (4) <u>Intangible Transmission Plant Amortization Reserve</u> shall equal the product of (1) Intangible Plant Amortization Reserve and (2) Transmission Wages and Salaries Allocation Factor.
- (f) <u>Transmission Accumulated Deferred Taxes</u> shall equal (1) Transmission Accumulated Deferred Tax Asset, minus (2) Transmission Accumulated Deferred Tax Liability.
- (h) <u>Other Transmission Regulatory Assets/Liabilities</u> shall equal (1) Other Transmission Regulatory Assets FAS 109, minus (2) Other Transmission Regulatory Liabilities FAS 109.

- (i) <u>Transmission Prepayments</u> shall equal the product of (1) Prepayments and (2) Transmission Wages and Salaries Allocation Factor.
- (k) <u>Primary Transmission Cash Working Capital</u> shall be a 12.5% allowance (45 days/360 days) of certain primary transmission expenses and shall equal the product of (1) 0.125 and (2) the sum of (i) Primary Transmission Operation and Maintenance Expense, (ii) Transmission Administrative and General Expense, and (iii) Transmission Support Expense.

For Direct Transmission CWIP in Rate Base, Transmission Investment Base shall equal (a) Direct Transmission CWIP in Rate Base, minus (b) AFUDC Regulatory Liability.

### 2. Cost of Capital Rate

The Cost of Capital Rates shall be calculated separately for each Transmission Investment Category, including Direct Transmission CWIP in Rate Base, and shall equal the sum of (a) Weighted Cost of Capital, (b) Federal Income Tax, and (c) State Income Tax for each category.

- (a) <u>Weighted Cost of Capital</u> shall equal the sum of (1) Long-Term Debt Component, (2) Preferred Stock Component, and (3) Common Equity Component.
- (1) <u>Long-Term Debt Component</u> shall equal the product of (i) Capitalization Ratio of Long-Term Debt and (ii) Embedded Cost of Long-Term Debt.
- (2) <u>Preferred Stock Component</u> shall equal the product of (i) Capitalization Ratio of Preferred Stock and (ii) Embedded Cost of Preferred Stock.
- (3) <u>Common Equity Components</u> for each Transmission Investment Category shall equal the product of (i) Capitalization Ratio of Common Equity and (ii) Return on Equity(s) for that Transmission Investment Category.
  - (ii) Return on Equity(s) for each Transmission Investment Category shall equal the values most recently approved by the Commission applicable to that category. The Docket Number of the Commission decision in which the ROEs were approved shall be cited as the source of this

data.

(b) <u>Federal Income Tax</u> shall equal

[(A+[(C-B)/D]x (FT)] divided by (1-FT)

where FT is the Federal Income Tax Rate, A is the Sum of Preferred Stock Component and Common Equity Component, B is the Transmission Investment Category Amortization of Investment Tax Credits, C is the Transmission Investment Category Equity AFUDC Component of Transmission Depreciation Expense, and D is the Transmission Investment Category Transmission Investment Base.

- A. <u>Sum of Preferred Stock Component and Common Equity Component</u> shall equal the sum of (1) Preferred Stock Component and (2) Common Equity Component.
- B. <u>Transmission Investment Category Amortization of Investment Tax Credits</u> shall equal the product of (1) Amortization of Investment Tax Credits and (2) the NPS Plant Allocation Factor or PTF Plant Allocation Factor, as appropriate, for the particular Transmission Investment Category under consideration. For Non-PTF, the Transmission Investment Category Amortization of Investment Tax Credits shall equal (3) Amortization of Investment Tax Credits, minus (4) PTF Transmission Investment Category Amortization of Investment Tax Credits, and minus (5) NPS Transmission Investment Category Amortization of Investment Tax Credits. No Amortization of Investment Tax Credits shall be assigned to Direct Transmission CWIP in Rate Base or to Schedule 1.
- C. <u>Transmission Investment Category Equity AFUDC Component of Transmission</u>

  <u>Depreciation Expense</u> shall equal the product of (1) Equity AFUDC Component of Transmission

  Depreciation Expense and (2) the NPS Plant Allocation Factor or PTF Plant Allocation Factor, as appropriate, for the particular Transmission Investment Category under consideration. For Non-PTF the Transmission Investment Category Equity AFUDC Component of Transmission Depreciation

  Expense shall equal (3) Equity AFUDC Component of Transmission Depreciation Expense, minus (4)

  PTF Transmission Investment Category Equity AFUDC Component of Transmission Depreciation

  Expense, and minus (5) NPS Transmission Investment Category Equity AFUDC Component of

  Transmission Depreciation Expense. No Equity AFUDC Component of Transmission Depreciation

  Expense shall be assigned to Direct Transmission CWIP in Rate Base or to Schedule 1.

- D. <u>Transmission Investment Category Transmission Investment Base</u> shall equal the sum (calculated separately for each Transmission Investment Category) of the Transmission Investment Base calculated pursuant to Section III.A.1 of this Attachment D assigned or allocated to each Transmission Investment Category, respectively.
- (c) <u>State Income Tax</u> shall equal

[A+[(C-B-E)/D] + Federal Income Tax)x(ST)] divided by (1-ST)

where ST is the State Income Tax Rate, A is the Sum of Preferred Stock Component and Common Equity Component, B is the Transmission Investment Category Amortization of Investment Tax Credits, C is the Transmission Investment Category Equity AFUDC Component of Transmission Depreciation Expense, D is the Transmission Investment Category Transmission Investment Base, E is the Transmission Investment Category Connecticut Fixed Capital Credit, and Federal Income Tax is the rate determined in Section III.A.2.(b).

- E. <u>Transmission Investment Category Connecticut Fixed Capital Credit</u> shall be applied to each Transmission Investment Category based on the plant allocation factor for each category.
- B. <u>Transmission Depreciation Expense</u> shall equal (1) Direct Transmission Plant
  Depreciation Expense, plus (2) General Transmission Plant Depreciation Expense, plus (3) Intangible
  Transmission Plant Amortization Expense, and minus (4) Amortization of AFUDC Regulatory Liability.
  - (2) <u>General Transmission Plant Depreciation Expense</u> shall equal the product of (i) General Plant Depreciation Expense and (ii) Transmission Wages and Salaries Allocation Factor.
  - (3) <u>Intangible Transmission Plant Amortization Expense</u> shall equal the product of (i) Intangible Plant Amortization Expense and (ii) Transmission Wages and Salaries Allocation Factor.
- C. <u>Transmission Amortization of Investment Tax Credits</u> shall equal the product of (1) Amortization of Investment Tax Credits and (2) Plant in Service Allocation Factor.
- D. <u>Transmission Municipal Tax Expense</u> shall equal (1) the sum of expenses included in Municipal Tax Expense directly assignable to transmission assets, plus (2) the product of (i) the sum of

expenses included in Municipal Tax Expense directly assignable to General Plant and (ii) Transmission Wages and Salaries Allocation Factor, and (3) the product of (i) the sum of expenses included in Municipal Tax Expense directly assignable to Intangible Plant and (ii) Transmission Wages and Salaries Allocation Factor.

- E. <u>Transmission Payroll Tax Expense</u> shall equal the product of (1) Payroll Tax Expense and (2) Transmission Wages and Salaries Allocation Factor.
- F. <u>Primary Transmission Operation and Maintenance Expense</u> shall include all expenses recorded in FERC Account Nos. 560, 562-564 and 566-573, excluding all Phase I/II HVDC-TF expenses, and shall equal (1) Total Transmission Operation and Maintenance Expense, minus (2) Transmission of Electricity by Others, minus (3) Load Dispatching Expense, and minus (4) any station expenses and rents recorded in FERC Account Nos. 562 or 567.
- G. <u>Transmission Administrative and General Expense shall</u> equal (1) the product of (i) Administrative and General Expense and (ii) Transmission Wages and Salaries Allocation Factor, plus (2) the product of (i) Property Insurance and (ii) Plant in Service Allocation Factor, plus (3) Transmission Regulatory Expense, and plus (4) Transmission General Advertising Expense.
  - (1)(i) <u>Administrative and General Expense</u> shall be calculated as (a) Total Administrative and General Expense, minus (b) Property Insurance, minus (c) Regulatory Expense, and minus (d) General Advertising Expense.
  - (3) <u>Transmission Regulatory Expense</u> shall equal UI's transmission related regulatory expenses as recorded in FERC Account No. 928, including FERC Assessments and any other Federal or State transmission related assessments or regulatory expenses.
  - (4) <u>Transmission General Advertising Expense</u> shall equal the sum of (a) transmission related expenses included in Account 930.1 and (b) transmission related public education expenses included in Account 426.54.
- H. <u>Transmission Support Expense</u> shall equal the expense paid by UI for transmission support.

- I. <u>Primary Transmission Revenue Credits</u> shall equal the sum of revenue received by UI for providing certain transmission service including under (1) Schedule 9 of this Schedule 21-UI and (2) Schedule 8 of this Schedule 21-UI for Short-Term reservations. Revenue received in (1) and (2) under Schedules 8 and 9 of this Schedule 21-UI shall be credited to the Non-PTF revenue requirement.
- J. <u>Transmission Rents Received from Electric Property</u> shall equal the sum of rents received by UI for the use by others of transmission related assets.
- K. <u>Gross Earnings Tax on Revenue and Rents</u> shall equal the sum of the gross earning tax payments by UI for revenues received under Paragraph I of this Section III and for rents received under Paragraph J of this Section III.
- L. <u>Connecticut Fixed Capital Credit</u> shall equal the income tax credit given by the State of Connecticut for fixed capital investments made in the State of Connecticut as recorded in FERC Account No. 409.1.

ATTACHMENT DE

of Schedule 21-UI

**Estimated Annual Primary Transmission Revenue Requirement ("EAPTRR")** 

This formula sets forth the method that UI will use to calculate its EAPTRR. The EAPTRR is UI's

estimate of the APTRR for the current calendar year. The EAPTRR is calculated twice per calendar year

pursuant to Attachment F of this Schedule 21-UI. The EAPTRR consists of an historic component and a

forecasted incremental component. The historic component is based on data from the most recent calendar

year for which the FERC Form 1 has been published. The estimated incremental component is based on

the current calendar year actual expense and revenue data, UI's most recent FERC Form 1, and an estimate

of the plant in service during the current calendar year.

An EAPTRR shall be calculated separately for each of the three Transmission Investment Categories. The

Total EAPTRR shall be equal to the sum of the EAPTRR for each of the three Transmission Investment

Categories, less the sum of the products of (A) the EADIT for each of the three Transmission Investment

Categories multiplied by (B) the applicable Cost of Capital for each Transmission Investment Category as

determined pursuant to Schedule 21-UI, Attachment D, Section III.A.2.

I. Definitions

Capitalized terms not otherwise defined in the Tariff and as used in this formula have the following

definitions:

**EAPTRR** is UI's estimate of what its Annual Primary Transmission Revenue Requirement pursuant to

Attachment D of this Schedule 21-UI will be for the current calendar year.

EADIT is UI's estimate of what its Transmission Accumulated Deferred Taxes related to accelerated

depreciation pursuant to Attachment D of this Schedule 21-UI will be for the current calendar year,

calculated in accordance with IRS regulation Section 1.167(l)-1(h)(6).

Estimated Direct Transmission Plant in Service is UI's estimate of the Direct Transmission Plant in Service

identified in Schedule 21-UI, Attachment D, Section III.A.1.(a) for the current calendar year.

### II. Definition of EAPTRR

The values used for 13 month average rate base items identified in this paragraph shall be equal to the average of 13 end of month balances. The months used in the calculation of the 13 month average shall be the 12 months of the year under analysis and the month of December from the year just prior to the year under analysis. For the New Year Rate Calculation, all end of month balances shall be estimates taken from internal company forecasts. For the Mid Year Rate Calculation, actual end of month balances shall be used for those months in which actual balances are available. The end of month balances for the remaining months shall be estimates taken from internal company forecasts.

The EAPTRR for Direct Transmission CWIP in Rate Base shall equal the product of (A) Estimated Direct Transmission CWIP in Rate Base and (B) the Cost of Capital Rate for Direct Transmission CWIP in Rate Base as calculated pursuant to Attachment D in the most recent Mid Year Rate Calculation.

(A) <u>Estimated Direct Transmission CWIP in Rate Base</u> is UI's estimate of the Direct Transmission CWIP in Rate Base identified in Schedule 21-UI, Attachment D, Section III.A.1.(b) for the current calendar year.

The EAPTRR for the Non-PTF Transmission Investment Category shall equal the product of (A) Estimated Non-PTF Plant in Service and (B) Non-PTF Revenue Requirement Ratio.

- (A) <u>Estimated Non-PTF Plant in Service</u> shall equal (1) Estimated Direct Transmission Plant in Service, minus (2) Estimated NPS Plant in Service, and minus (3) Estimated PTF Plant in Service.
- (B) Non-PTF Revenue Requirement Ratio shall equal the sum of (A) and (B), where (A) is the quotient of (1) Non-PTF APTRR calculated pursuant to Attachment D in the most recent Mid Year Rate Calculation, and (2) Non-PTF Plant in Service calculated pursuant to Attachment D in the most recent Mid Year Rate Calculation; and (B) is the quotient of (1) the Cost of Capital Rate multiplied by UI's Transmission Accumulated Deferred Taxes associated with Non-PTF Plant in service calculated in the most recent Mid Year Rate Calculation, divided by (2) Non-PTF Plant in service calculated in the most recent Mid Year Rate Calculation.

The EAPTRR for the NPS Transmission Investment Category shall equal the sum of the products of (A) Estimated NPS Plant in Service and (B) NPS Revenue Requirement Ratio.

- (A) <u>Estimated NPS Plant in Service</u> shall equal the product of (1) Estimated Direct Transmission Plant in Service and (2) NPS Plant Allocation Factor as taken from the calculation of NPS APTRR pursuant to Attachment D, in the most recent Mid Year Rate Calculation.
- (B) NPS Revenue Requirement Ratio shall equal the sum of (A) and (B), where (A) is the quotient of (1) NPS APTRR that has been calculated pursuant to Attachment D in the most recent Mid Year Rate Calculation, and (2) NPS Plant in Service as included in the NPS APTRR specified in (1) of this definition; and (B) is the quotient of (1) the Cost of Capital Rate multiplied by UI's Transmission Accumulated Deferred Taxes associated with NPS Plant in service calculated in the most recent Mid Year Rate Calculation, divided by (2) NPS Plant in service calculated in the most recent Mid Year Rate Calculation.

The EAPTRR for the PTF Transmission Investment Category shall equal the sum of (A) Estimated PTF Base Revenue Requirement and (B) Estimated RSP PTF Incremental Revenue Requirement.

- (A) <u>Estimated PTF Base Revenue Requirement</u> shall equal the product of (1) Estimated PTF Plant in Service and (2) PTF Revenue Requirement Ratio.
  - (1) <u>Estimated PTF Plant in Service</u> shall equal the product of (a) Estimated Direct Transmission Plant in Service and (b) PTF Plant Allocation Factor as taken from the calculation of PTF APTRR pursuant to Attachment D, in the most recent Mid Year Rate Calculation.
  - PTF Revenue Requirement Ratio shall equal the sum of (i) and (ii), where (i) is the quotient of (a) PTF APTRR that has been calculated pursuant to Attachment D in the most recent Mid Year Rate Calculation, and (b) PTF Plant in Service as included in the PTF APTRR specified in (a) of this definition; and (ii) is the quotient of (1) the Cost of Capital Rate multiplied by UI's Transmission Accumulated Deferred Taxes associated with PTF Plant in service calculated in the most recent Mid Year Rate Calculation, divided by (2) PTF Plant in service calculated in the most recent Mid Year Rate Calculation.
- (B) <u>Estimated RSP PTF Incremental Revenue Requirement</u> shall equal the product of (1) Estimated RSP PTF Net Investment and (2) RSP PTF Incremental Cost of Capital.
  - (1) <u>Estimated RSP PTF Net Investment</u> shall equal the product of (a) Estimated RSP

PTF Plant in Service and (b) RSP PTF Net Investment Ratio.

- Estimated RSP PTF Plant in Service shall equal the product of (1) the difference between (i) estimated end of month balance of Direct Transmission Plant in Service for December of the year being estimated and (ii) estimated or actual, as appropriate, end of month balance of Direct Transmission Plant in Service for December of the year immediately preceding the year being estimated, and (2) PTF Plant Allocation Factor as taken from the calculation of PTF APTRR pursuant to Attachment D, in the most recent Mid Year Rate Calculation.
- (b) RSP PTF Net Investment Ratio shall equal the sum of (i) and (ii), where (i) is the ratio of (1) RSP PTF Net Investment as calculated in the most recent Mid Year Rate Calculation to (2) RSP PTF Plant in Service as calculated in the most recent Mid Year Rate Calculation; and (ii) is the ratio of (1) the Cost of Capital Rate multiplied by UI's Transmission Accumulated Deferred Taxes associated with RSP PTF Plant in service calculated in the most recent Mid Year Rate Calculation, divided by (2) RSP PTF Plant in service calculated in the most recent Mid Year Rate Calculation.
- (2) <u>RSP PTF Incremental Cost of Capital</u> shall equal the ROE adder for new PTF transmission investment approved by the Commission.

# ATTACHMENT E of Schedule 21-UI

#### **Actual and Estimated Loads**

The methodologies used to compute the actual and estimated coincident peak loads for use in calculating rates are contained in this Attachment E.

#### I. Definitions

Capitalized terms not otherwise defined in the Tariff and as used in this formula have the following definitions:

12CP is the average for the twelve months of a calendar year of UI's Local Monthly Network Load.

<u>12CPB</u> is the average for the twelve months of a calendar year of the sum of all Category B Monthly Network Loads excluding the Load of ISO RNS customers that are assessed Localized Facilities costs.

<u>12CPLP</u> is the average for the twelve months of a calendar year of the sum of all Coincident Point-To-Point Loads.

<u>12CPRC</u> is the average for the twelve months of a calendar year of the sum of the Reserved Capacity of all Transmission Customers taking monthly or annual delivery under Schedule 8 of this Schedule 21-UI.

Estimated 12CP (E12CP) is the estimate of the 12CP for the current calendar year.

Estimated 12CPB (E12CPB) is the estimate of the 12CPB for the current calendar year.

Estimated 12CPLP (E12CPLP) is the estimate of the 12CPLP for the current calendar year.

Estimated 12CPRC (E12CPRC) is the estimate of the 12CPRC for the current calendar year.

### II. Calculation of Estimated Loads

In general, an estimated load shall be calculated by adjusting the actual value from the previous calendar year by the percentage change between the previous calendar year and the calendar year prior to the previous calendar year.

- (A) <u>E12CP</u> shall equal be calculated as the product of (1) 12CP from the previous calendar year and (2) the sum of (a) the number 1 and (b) the percentage change in 12CP between the previous calendar year and the calendar prior to the previous calendar year.
- (B) <u>E12CPB</u> shall equal be calculated as the product of (1) 12CPB from the previous calendar year and (2) the sum of (a) the number 1 and (b) the percentage change in 12CPB between the previous calendar year and the calendar prior to the previous calendar year.
- (C) <u>E12CPLP</u> shall equal be calculated as the product of (1) 12CPLP from the previous calendar year and (2) the sum of (a) the number 1 and (b) the percentage change in 12CPLP between the previous calendar year and the calendar prior to the previous calendar year.
- (D) <u>E12CPRC</u> shall equal be calculated as the product of (1) 12CPRC from the previous calendar year and (2) the sum of (a) the number 1 and (b) the percentage change in 12CPRC between the previous calendar year and the calendar prior to the previous calendar year.

# ATTACHMENT F of Schedule 21-UI

# Estimated Rate Calculation and Annual True Up Re-billing Additional Procedures Descriptions

Additional descriptions of the procedures for calculating estimated rates and re-billing through the Annual True Up based on actual rates are provided in this Attachment F.

### I. Procedure for Billing Based on Estimated Rates

Transmission Customers shall be charged initially based on estimated rates for Primary Transmission Service and Regional Network Service. All estimated rates shall be calculated twice per calendar year. Estimated rates shall be calculated in the New Year Rate Calculation and made effective on January 1 for the period between January 1 and June 30. Estimated rates also shall be calculated in the Mid Year Rate Calculation and made effective on July 1 for the period between July 1 and December 31.

EMTRs in effect for the period between July 1 and December 31 shall be based on expense and rate base adjustment data from the previous calendar year, actual expense and revenue data for the current calendar year, and estimated transmission plant in service for the current calendar year. EMTRs in effect for the period between January 1 and June 30 shall be based on the current calendar year actual expense and revenue data, UI's most recent FERC Form 1, and an estimate of transmission plant in service for the current calendar year.

# II. Procedure for Re-billing Through Annual True Up

Transmission Customers shall be re-billed for charges assessed under this Schedule 21-UI during the previous calendar year based on actual rates within two calendar months after the calendar month when the most recent FERC Form 1 annual report is published. Each calendar year, the actual rates for the previous calendar year shall be calculated at the time the estimated rates for July 1 are calculated. For each bill rendered to each Transmission Customer the previous calendar year, the difference between the total charge based on actual rates and the total charge based on estimated rates shall be calculated.

Interest charges shall be applied to all balances owed by the Transmission Customer to UI or owed by UI to the Transmission Customer in accordance with Section II.8.2 of this Schedule 21-UI. The date interest

charges begin for the Annual True Up on any individual bill is the date that the bill was due pursuant to Section II.8.2 of this Schedule 21-UI. For interest charges owed to UI by the Transmission Customer, the date interest charges end for the Annual True Up on any individual bill is 20 days after receipt by the Transmission Customer of the Annual True Up bill. For interest charges owed to the Transmission Customer by UI, the date interest charges end for the Annual True Up on any individual bill is the day the Annual True Up refund is mailed to the Transmission Customer.

### ATTACHMENT G

### **Localized Costs Sharing Agreement**

This Localized Costs Sharing Agreement ("LCSA"), dated as of, is entered into by and between
The United Illuminating Company ("UI or "COMPANY") and ("Transmission
Customer").
The Transmission Customer is taking Regional Network Service under the ISO Tariff in an area or state in
which Localized Facilities are located and is not subject to the charges set forth in Schedules 8, 9, 12 or 13
of Schedule 21-UI on file with, and as may be revised from time to time in accordance with the rules of, the
Federal Energy Regulatory Commission ("Commission"). Transmission Customer agrees to pay the
charges as provided in Section III.1 of Schedule 21-UI for its portion of the cost of Localized Facilities as
listed in Section III.2 of Schedule 21-UI. The charges under this LCSA shall commence at 0001 hours on
such date as they are permitted to become effective by the Commission (the "Effective Date"). Charges
under this LCSA shall terminate at the earlier of (1) 2400 hours on the date forty (40) years after the
Effective Date or (2) the date upon which the Transmission Customer no longer takes Regional Network
Service under the ISO Tariff in an area or state in which UI Localized Facilities are located.
Other special provisions (if any):
Any notice or request made to or by UI or Transmission Customer regarding this LCSA shall be made in
writing and shall be telecommunicated or delivered either in person, or by prepaid mail (return receipt
requested) to the representative of UI or Transmission Customer as indicated below. Such representative
and address for notices or requests may be changed from time to time by notice by UI or Transmission
Customer to the other.
COMPANY:
TRANSMISSION CUSTOMER:
N 41

Nothing in this LCSA shall be construed as affecting in any way the right of UI to file with the Commission under Section 205 of the Federal Power Act and pursuant to the Commission's rules and regulations promulgated thereunder for a change in any rates, terms, or conditions of this LCSA. Nothing in this LCSA shall be construed as affecting in any way the ability of the Transmission Customer to file with the Commission under Section 206 of the Federal Power Act and pursuant to the Commission's rules and

regulations promulgated thereunder for a change in any rates, terms, or conditions of this LCSA.

IN WITNESS WHEREOF, UI and Transmission Customer have caused this LCSA to be executed by their respective authorized officials as of the date first above written.

THE UNITED ILLUMINATING COMPANY

By:

Title:

TRANSMISSION CUSTOMER

By:

Title:

# ATTACHMENT L SCHEDULE 21-UI

### **Creditworthiness Procedures**

### I. Overview

For the purpose of determining the ability of the Transmission Customer (Customer) to meet its obligations related to service hereunder, The United Illuminating Company (UI) may require reasonable credit review procedures. All Customers requesting or taking service provided under Schedule 21 and 21-UI, for service over UI's Local Network or any Federal Energy Regulatory Commission (FERC)-regulated interconnection service from UI, collectively referred to as (Service), must meet the creditworthiness of this Schedule 21-UI Attachment L. The creditworthiness of each Customer must be established prior to receiving Service and applies to new Customers requesting Service and existing Customers. The intention of this Attachment L is to make UI's credit practices more transparent and comprehensive to Customers while protecting UI against the risk of non-payment. If the Customer relies on the creditworthiness of a parent company, the Customer's parent company (referred to herein as Guarantor) must provide to UI a written guarantee that it will be unconditionally responsible for all financial obligations associated with the Customer's receipt of Service from UI.

UI shall make this credit review in accordance with procedures based on specific quantitative and qualitative criteria to determine the level of secured and unsecured credit required from the Customer. Quantitative factors may include, among other items, Customer's history, management, and credit exposures. Qualitative factors may include, among other items, financial statements, capital structure and cash flow. UI's creditworthiness requirements are described below in this Attachment L.

Customers requesting Service under Schedule 21 and Schedule 21-UI should send the necessary information for creditworthiness approval to UI's contact identified on UI's transmission website, via the link on UI's OASIS website, https://oasis.iso-ne.com/oasis/uico.

Upon receipt of a Customer's information, UI will evaluate it for completeness and will notify the Customer if additional information is required. Upon completion of its evaluation, UI will provide a determination letter to the Customer notifying the Customer of their status. If the Customer is required to provide Financial Assurance, as described in Section IV, an estimate of the total payment obligations that the Customer would be expected to pay UI for the first three months of the Service will be included in the

determination letter.

II. Financial Information

Customers requesting Service must submit, if available, the following information:

All current credit rating reports from commercially accepted credit rating agencies including, Standard and

Poor's, Moody's Investors Service, and Fitch Ratings.

The most current audited financial statements by a registered independent auditor.

III. Creditworthiness Requirements

The Customer must meet at least one of the following criteria:

(1) If rated, the Customer's or Guarantor's lowest rating on its senior unsecured long-term

debt is at least:

• BBB from Standard and Poor's or Fitch Ratings, or

• Baa2 from Moody's Investors Service.

(2) If un-rated or if rated below BBB/Baa2, as described in (1) above, the Customer must meet

all of the following:

• A Current Ratio of at least 2.0 (current assets divided by current liabilities);

• A Total Capitalization Ratio of less than 60% debt: total debt (including all short-term borrowing)

divided by the sum of total shareholders' equity plus total debt plus preferred securities;

• EBITDA-to-Interest Expense Ratio of at least 2.0 (earnings before interest, taxes, depreciation and

amortization in the most recent fiscal quarter divided by expense for interest); and

• An unqualified audit opinion in the most recent audited annual financial statement.

If the Customer does not qualify for unsecured credit, the Customer will still qualify for unsecured credit

equivalent to three months of payment obligations if it has 12 consecutive months of payments to UI with

no missed, late or defaults in payment.

# IV. Financial Assurance Requirement

If the Customer does not meet the applicable requirements of creditworthiness set forth in Section III, then not less than five business days in advance of the commencement of Service, the Customer must provide either:

- (1) Advance payment of an amount equivalent to 3 months of Service. UI will pay interest to the Customer in accordance with the Commission's regulations at 18 CFR ? 35.19a (a)(2)(iii); or
- Provide UI a letter of credit in an amount equivalent to 3 months of Service. The cost of the letter of credit shall be paid by the Customer. Letter of credit means one or more irrevocable, transferable standby letters of credit issued by a U.S. commercial bank or a U.S. branch of a foreign bank provided that such Customer or Guarantor is not an affiliate with such bank, the bank has at least ten billion dollars (\$10,000,000,000) in assets, and the bank's lowest credit rating is at least A2 from Moody's Investor's Service or A from Standard & Poor's or Fitch Ratings. If at any time the bank falls below these requirements then within 5 business days the Customer must obtain another letter of credit from a bank that does meet these requirements.

### V. Credit Levels

If the Customer meets the applicable criteria outlined in Section III, that Customer may receive unsecured credit from UI equivalent to three months of payment obligations.

# VI. Contesting Creditworthiness Determination

The Customer may contest UI's determination of creditworthiness by submitting a written request for re-evaluation within 15 calendar days of receiving the creditworthiness determination letter. Such request should provide information supporting the basis for a request to re-evaluate a Customer's creditworthiness. UI will evaluate and respond to the request within 15 calendar days.

VII. Process for Changing Credit Requirements

In the event that UI plans to revise its requirements for credit levels or collateral requirements as detailed in

this Attachment L, UI shall submit such changes in a filing to the FERC under Section 205 of the Federal

Power Act. UI shall follow the notification requirements pursuant to Section 3.04(a) of the Transmission

Operating Agreement and reflected herein.

**General Notification Process:** 

UI shall provide written notification to ISO and stakeholders of any filing described above, at least 30 days

in advance of such filing. Filing notifications shall include a detailed description of the filing, including a

redlined document containing revised change(s) to this Attachment L.

UI shall consult with interested stakeholders upon request.

Following FERC acceptance of such filing and upon the effective date, UI shall revise its Attachment L

Creditworthiness Policy and an updated version of Schedule 21-UI shall be posted to the ISO website.

**VIII. Posting Collateral Requirements** 

A. Change in Customer Financials

During the term of Service, the Customer must inform UI, in writing, within 5 business days of any material

change in its, their Guarantor's or their letter of credit provider's financial condition. A material change in

financial condition may include, but is not limited to, the following:

• Change in ownership by way of a merger, acquisition or substantial sale of assets;

• A downgrade by a major rating agency;

• Being placed on a credit watch with negative implications by a major rating agency;

• A bankruptcy filing;

• A declaration of or acknowledgement of insolvency;

• Any action requiring filing of a Form 8-K;

• A report of a significant quarterly loss or decline in earnings;

• The issuance of a regulatory order and/or the filing of a lawsuit that could materially adversely impact current or future financial results.

• A suspension from the ISO marketplace that is not cured within 5 business days.

**B.** Change in Creditworthiness Status

A credit review and a recalculation of the three month payment obligation amount shall be conducted for

each Customer not less than annually or upon reasonable written request by the Customer. After

conducting the review UI will notify the Customer, in writing if there is a change in their creditworthiness

status and the reason for the change. If the Customer is now required to post financial assurance, or

additional financial assurance, they will receive a written notice from UI and have 5 business days after

receipt of such notice to provide such assurance. Such additional financial assurance may be the result of,

but not limited to, the following conditions:

• The Customer no longer meets the applicable criteria for creditworthiness:

• UI determines that a material change notification in Section VIII A. will have an adverse effect on

the Customer's ability to make future payments;

• The Customer's payment obligations exceed the amount of credit extended by UI, in which case

financial assurance equal to the amount of excess must be provided; or

• The Customer has not paid or has been late in two or more payments in the last 12 months.

IX. Ongoing Financial Information Requirement

If the Customer has met the applicable criteria for creditworthiness and takes Service with UI, then during

the term of the Service the Customer or their Guarantor is required to submit to UI, when issued:

Current rating agency reports; and

Current audited annual financial statements from a registered independent auditor.

X. Suspension of Service

UI may immediately suspend Service to a Customer if the Customer does not meet either of the following:

the terms described in this Schedule 21-UI Attachment L; or

despite a written notice from UI as specified in Section VIII, after 5 business days the Customer's payment obligations to UI still exceed the amount of credit to which it is entitled under this Attachment L.