

# TCC Unbundling Project

## Status Report

June 12, 2000

The TCC unbundling project is being initiated to increase the liquidity of TCCs by dividing them into component parts that can be more easily traded. The project is divided into three phases:

1. Unbundling of TCCs into component pieces
2. Tracking the trading of TCCs on a secondary market
3. Facilitating the trading of TCCs by implementing trading/auction software

The first phase is scheduled for September 30, 2000. Phases 2 and 3 will be scheduled and implemented after sufficient time to collect and review comments and suggestions from market participants.

## 1 Unbundling

TCCs will be unbundled into basic components so that the individual components can be sold and traded. Potentially a TCC can be subdivided into three pieces:

1. POI to Zone
2. Zone to Zone
3. Zone to POW

Changes to MIS and Billing systems are needed to:

1. Unbundle TCCs into their basic components
2. Track TCC ownership
3. Report ownership
4. Prepare billing

### 1.1 Definitions

Grandfathered rights

The transmission rights associated with:

1. Modified Wheeling Agreements;
2. Transmission Facility Agreements with transmission wheeling provisions;
3. Third Party Transmission Wheeling Agreements ("TWA") where the party entitled to exercise the transmission rights associated with such Agreements, has chosen, as provided for in the Tariff, to retain those rights rather than to convert them to TCCs; and
4. Existing Transmission Capacity for Native Load, OATT Attachment L, Table 3.

Upon the expiration or termination of Grandfathered Rights, the associated transmission capacity is converted to Residual Transmission Capacity.

Grandfathered TCC

The TCC associated with:

	<ol style="list-style-type: none"> <li>1. Modified Wheeling Agreements;</li> <li>2. Transmission Facility Agreements with transmission wheeling provisions;</li> <li>3. Third Party TWAs where the party entitled to exercise the transmission rights associated with such agreements, has chosen, as provided for in the Tariff, to convert those rights to TCCs.</li> </ol>
Point-Identification (PT-ID)	Published identifier that uniquely identifies a bus, zone, or sub-zone.
Point of injection (POI)	The point(s) on the NYS Transmission System where Energy, Capacity and Ancillary Services will be made available to the NYISO by the Delivering Party under the NYISO OATT or the NYISO Services Tariff. The Point(s) of Injection shall be specified in the Service Agreement. The NYISO identifies a POI by a unique PT-ID.
Point of withdrawal (POW)	The point(s) on the NYS Transmission System where Energy, Capacity and Ancillary Services will be made available to the Receiving Party under the NYISO OATT or the NYISO Services Tariff. The Point(s) of Withdrawal shall be specified in the Service Agreement. The NYISO identifies a POW by a unique PT-ID.
Primary Holder	<p>Holder of TCC or TCC basic component as a result their acquisition:</p> <ul style="list-style-type: none"> <li>• At TCC auction, or</li> <li>• At TCC reconfiguration auction, or</li> <li>• From another primary holder upon verification of creditworthiness, etc.</li> <li>• From a secondary holder upon verification of creditworthiness, etc.</li> </ul> <p>NYISO payments and/or bills go only to primary holders.</p>
Residual TCC	<p>TCC associated with transmission capability after all grandfathered rights and grandfathered TCCs have been taken into account. Residual TCCs are allocated to TO's who are required to:</p> <ul style="list-style-type: none"> <li>• Sell them through a direct sale on OASIS prior to each auction, or</li> <li>• Sell them through auction</li> </ul>
Secondary Holder	Holder of TCC or TCC basic component as a result of purchasing them from the primary holder or from another secondary holder. There will be no NYISO payments and/or bills to secondary holders.
Transmission congestion contract (TCC)	The right to collect or the obligation to pay congestion rents in the day-ahead market associated with a single MW of transmission between a specified point of injection (POI) and point of withdrawal (POW). TCCs are financial instruments that enable energy buyers and sellers to hedge fluctuations in the price of transmission.
TCC basic component	A portion of a Whole TCC that cannot be further subdivided.
Whole TCC	A TCC between a specific POI and a specific POW acquired at

auction. Only a Whole TCC may be acquired at or submitted to the TCC auction or the TCC reconfiguration auction. A Whole TCC can be decomposed into elements called TCC Basic Components.

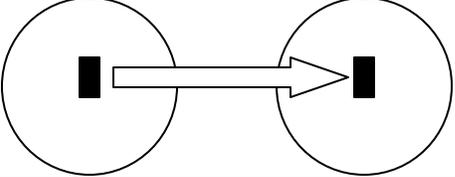
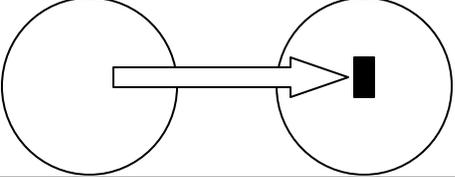
## 1.2 NYCA & Adjacent Zones

The New York control area (NYCA) is divided into eleven non-overlapping zones. In addition, four non-overlapping zones are used to represent neighboring control areas. The eleven zones in the NYCA are further subdivided into a number of non-overlapping sub-zones. Each sub-zone is entirely contained within one zone. NYCA and neighboring zones are:

Zone ID	Zone Name
A	West
B	Genesee
C	Central
D	North
E	Mohawk Valley
F	Capital
G	Hudson Valley
H	Millwood
I	Dunwoodie
J	New York City
K	Long Island
M	Hydro Quebec (HQ)
N	New England (NEPEX)
O	Ontario Hydro (OH)
P	Pennsylvania-New Jersey-Maryland (PJM)

## 1.3 Whole TCC

The TCC Auction enables creation of Whole TCCs between two buses, between bus and zone, or between two zones. Extension to sub-zones will be considered at a later date. Grandfathered TCC will be considered Whole TCCs. A Whole TCC from any bus to the bus with the same PT-ID will be prohibited. A Whole TCC from any zone to the zone with the same PT-ID will be prohibited. A Whole TCC between two buses that are electrically equivalent but have unique PT-IDs will be allowed.

Allowable Whole TCC's	
Case 1: From BUS <sub>1</sub> in ZONE <sub>1</sub> To BUS <sub>2</sub> in ZONE <sub>2</sub>	
Case 2: From ZONE <sub>1</sub> To BUS <sub>2</sub> in ZONE <sub>2</sub>	

Case 3: From BUS <sub>1</sub> in ZONE <sub>1</sub> To ZONE <sub>2</sub>	
Case 4: From ZONE <sub>1</sub> To ZONE <sub>2</sub>	
Case 5: From BUS <sub>1</sub> in ZONE <sub>1</sub> To BUS <sub>2</sub> in ZONE <sub>1</sub>	
Case 6: From BUS <sub>1</sub> in ZONE <sub>1</sub> To ZONE <sub>1</sub>	
Case 7: From ZONE <sub>1</sub> To BUS <sub>1</sub> in ZONE <sub>1</sub>	

<b>Prohibited Whole TCCs</b>	
Case 8: From BUS <sub>1</sub> in ZONE <sub>1</sub> To BUS <sub>1</sub> in ZONE <sub>1</sub>  where the two buses have the same PT-ID	
Case 9: From ZONE <sub>1</sub> To ZONE <sub>1</sub>  where the two zones (sub-zones) have the same PT-ID	

### **1.4 Unbundling of Whole TCC into TCC Basic Components**

Basic components of a TCC will be:

- From a bus to the zone containing the bus (Case 6)
- From one zone to another zone (Case 4)
- From a zone to a bus within the zone (Case 7)

Each Whole TCC will be unbundled into TCC basic components as tabulated. Basic components of a TCC will have the same duration as the Whole TCC from which they are derived.

Whole TCC	TCC Basic Components
Case 1: From BUS <sub>1</sub> in ZONE <sub>1</sub> To BUS <sub>2</sub> in ZONE <sub>2</sub>	From BUS <sub>1</sub> to ZONE <sub>1</sub> From ZONE <sub>1</sub> to ZONE <sub>2</sub> From ZONE <sub>2</sub> to BUS <sub>2</sub>
Case 2: From ZONE <sub>1</sub> To BUS <sub>2</sub> in ZONE <sub>2</sub>	From ZONE <sub>1</sub> to ZONE <sub>2</sub> From ZONE <sub>2</sub> to BUS <sub>2</sub>
Case 3: From BUS <sub>1</sub> in ZONE <sub>1</sub> To ZONE <sub>2</sub>	From BUS <sub>1</sub> to ZONE <sub>1</sub> From ZONE <sub>1</sub> to ZONE <sub>2</sub>
Case 4: From ZONE <sub>1</sub> To ZONE <sub>2</sub>	From ZONE <sub>1</sub> to ZONE <sub>2</sub>
Case 5: From BUS <sub>1</sub> in ZONE <sub>1</sub> To BUS <sub>2</sub> in ZONE <sub>1</sub>	From BUS <sub>1</sub> to ZONE <sub>1</sub> From ZONE <sub>1</sub> to BUS <sub>2</sub>
Case 6: From BUS <sub>1</sub> in ZONE <sub>1</sub> To ZONE <sub>1</sub>	From BUS <sub>1</sub> to ZONE <sub>1</sub>
Case 7: From ZONE <sub>1</sub> To BUS <sub>1</sub> in ZONE <sub>1</sub>	From ZONE <sub>1</sub> to BUS <sub>1</sub>

## 1.5 Grandfathered Rights

Grandfathered rights may be converted into Whole TCCs, and with limitations, those Whole TCCs may be converted back to grandfathered rights. When otherwise allowed, only Whole TCCs may be converted back to grandfathered rights. The conversion of TCC basic components back to grandfathered rights will be prohibited.

## 1.6 TCC Auction

The TCC auction is conducted every six months. TCC auction rules limit the duration of acquired TCCs to one of a few predefined intervals. Number and duration of intervals may change in the future. Presently these are:

- 6 months duration
- 24 months duration

### 1.6.1 Submission of TCCs

Primary holders may submit TCCs to the TCC auction and only Whole TCCs may be submitted to the TCC auction. Submission of TCC basic components to the TCC auction will be prohibited. Secondary holders will be prohibited from submitting TCCs to the TCC auction.

### 1.6.2 Duration of TCCs Submitted

Whole TCCs may be submitted to the TCC auction for any of the auction's pre-defined intervals provided the interval duration is less than or equal to the remaining duration of the TCC. If the TCC is sold for an interval less than the TCC's remaining duration, the TCC and its ownership revert upon expiration of the interval.

### **1.6.3 Acquisition of TCCs**

Purchaser of a Whole TCC at a TCC auction will be a primary holder. Attributes linked to the primary holder are:

1. Holder identification
2. TCC identifier
3. Other...

Attributes linked to a Whole TCC are:

1. Point of injection
2. Point of withdrawal
3. Number of TCCs (capacity)
4. Starting time & date
5. Ending time & date
6. Up to three TCC basic components derived from the TCC
7. Other...

## **1.7 TCC Reconfiguration Auction**

The TCC reconfiguration auction is similar to the TCC auction except that it is conducted monthly. Like the TCC auction, the TCC reconfiguration auction limits the duration of acquired Whole TCCs to a predefined interval. Number and duration of intervals may change in the future. Presently these are:

- 1 month duration

### **1.7.1 Submission of TCCs**

Primary holders may submit TCCs to the TCC reconfiguration auction and only Whole TCCs may be submitted to the TCC reconfiguration auction. Submission of TCC basic components to the TCC reconfiguration auction will be prohibited. Secondary holders will be prohibited from submitting TCCs to the TCC reconfiguration auction.

### **1.7.2 Duration of TCCs Submitted**

Whole TCCs may be submitted to the TCC reconfiguration auction for any of the auction's pre-defined intervals provided the interval duration is less than or equal to the remaining duration of the TCC. If the TCC is sold for an interval less than the TCC's remaining duration, the TCC and its ownership revert upon expiration of the interval.

### **1.7.3 Acquisition of TCCs**

Purchaser of a Whole TCC at a TCC reconfiguration auction will be a primary holder. Attributes linked to the primary holder are:

1. Holder identification
2. TCC identifier
3. Other...

Attributes linked to a Whole TCC are:

1. Point of injection
2. Point of withdrawal
3. Number of TCCs (capacity)
4. Starting time & date
5. Ending time & date
6. Up to three TCC basic components derived from the TCC
7. Other...

## **1.8 Secondary Market**

A Whole TCC or a TCC basic component may be transferred from one holder (seller) to another holder (buyer) at any time without involvement of the NYISO. Granularity of capacity for a TCC is, by definition,

1 MW. Granularity of duration for a TCC transferred from one party to another will be 1 hour, starting and ending on the hour. The “hour beginning” standard will be used when referring to hourly intervals. That is, an hourly interval will be identified by the hour at the beginning of the interval (0, 1... 23).

Seller of the TCC may be a primary holder or a secondary holder. Buyer of the TCC will be a secondary holder. If seller is a primary holder, the seller remains the primary holder until buyer becomes primary holder (see below).

### **1.9 Tracking Secondary Holder**

Federal Energy Regulatory Commission (FERC) rulings<sup>1</sup> require the NYISO to track secondary holders for informational purposes only. The rulings<sup>2</sup> also require both parties (seller and buyer) involved in the transfer to notify the NYISO of the transfer. Notification will include:

1. Identification of Seller
2. Identification of Buyer
3. Identification of TCC or TCC basic component
4. Number of TCCs or TCC basic components transferred (capacity)
5. Duration of transfer
6. Time period(s) of transfer
7. Other...

The NYISO will maintain separate reports for information submitted by sellers and buyers. The NYISO will have no responsibility to resolve discrepancies in information submitted by seller and buyer. The NYISO will have no responsibility to verify that number (capacity), duration and/or time period(s) of the transfer are valid, that is, that the TCCs are actually owned by seller.

The following time periods will be recognized for tracking purposes:

1. Fixed duration: continuously from a fixed starting time and date to a fixed ending time and date.
2. Periodic on-peak: only during peak hours from a fixed starting time and date to a fixed ending time and date.
3. Periodic off-peak: only during off-peak hours from a fixed starting time and date to a fixed ending time and date.
4. Other: any other time period arranged between buyer and seller will be identified as “other.”  
Secondary holder will be prohibited from becoming the primary holder of any TCCs with time period of “other.”

### **1.10 Secondary Holder Becoming Primary Holder**

A secondary holder of a Whole TCC or TCC basic component may become a primary holder upon request and submission and verification of the following information:

1. Creditworthiness of holder
2. Proof of ownership
3. Identification of TCCs or TCC basic components
4. Number of TCCs or TCC basic components owned (capacity)
5. Duration of TCCs or TCC basic components
6. Time period(s) of TCCs or TCC basic components must be one of:
  - Fixed duration
  - Periodic on-peak
  - Periodic off-peak
7. Other...

---

<sup>1</sup> FERC Docket ER97-1523-000, et al., January 27, 1999.

<sup>2</sup> FERC Docket ER97-1523-003, et al. July 29, 1999.

The new primary holder will collect or be billed for congestion rents associated with the TCC. The TCC will be removed from the bill of the previous primary holder. Note that the new primary holder and the previous primary holder may be separated by several secondary holder(s). Time of transfer of ownership will be agreed upon jointly by seller and buyer with the conditions that:

1. Transfer must take place on the hour (00:00, 01:00, etc.)
2. Transfer may not be retroactive to a time in the past
3. Transfer may not take place before verification of ownership, creditworthiness, etc. by the NYISO

### **1.11 Billing**

A Whole TCC owned by a primary holder will be separated into its basic components for the hourly and daily TCC summaries. The TCC basic components derived from the Whole TCC will appear on the summaries with rents for each basic component accumulated for the appropriate period.

The TCC portion of the invoice will not be changed and will continue to report the only sum of all TCCs for the billing period.