



# **Decision Support System (DSS) Consolidated Invoice Mapping Document**

**Version 2.3**

**September 15, 2006**

## Table of Contents

Revision History .....	3
Introduction.....	4
Document Intent.....	4
Consolidated Invoice - Summary (PDF).....	4
Consolidated Invoice - Invoice Details (CSV) .....	5
Power Supplier Statement.....	5
Transmission Customer Statement .....	6
Transmission Congestion Contract Statement.....	10
Transmission Owner Statement .....	10
Demand Response Statement.....	10
Virtual Bidding Statement .....	11
Working Capital Statement.....	11

## Revision History

- August 8, 2006 – Added Real Time BPCG Guaranteed Payments Mitigation information
- September 15, 2006 – Added Billing Code 327 to required calculation for Billing Code 305, RT Bid Production Cost Guarantee in Power Supplier Statement
- September 15, 2006 – Updated Version # to 2.3 and included in page headings

## Introduction

### Document Intent

This document is intended to help NYISO Decision Support System (DSS) users provide a direct link from their NYISO Consolidated Invoice reports to the corresponding data in DSS in order to support detailed invoice reconciliation.

### Consolidated Invoice - Summary (PDF)

The Consolidated Invoice Summary is the sum of various billing codes from the Invoice Details CSV file for each market role.

Power Supplier	=Sum of the billing codes documented below (301, 304, 314, 302, 305, 306, 307, 312, 308, 309, 310, & 320/322/324/326)
Transmission Customer	=Sum of the billing codes documented below (701, 705, 768, 769, 709, 752, 751, 756, 755, 803, 805/809/832/835, 828/829/830/833, 812, 817, 810, 818, 813, 819, 814, 820, 804, 807, 821, 806, 822, 808, & 823)  Note: 709, 817, 818, 819, 820, 821, 822, & 823 relate to Station Service and are not currently in the DSS.
Transmission Congestion Contract Holder	=<Day TCC Rent Stlmnt (\$)>  Note that TCC Surcharge Settlements are billed as Manual Adjustments
Transmission Owner	=<Day DAM Resid Cong Stlmnt: TO (\$) > +<Day NTAC (NYPA) (\$) > +<Ramapo Par>  Note: The DSS currently does not contain the Transmission Owner Settlement for Ramapo Par
Demand Response Customer	=Sum of the billing codes documented below (2012, 2015, 2013, 2011, & 2014)
Virtual Bidding Customer	=Sum of the billing codes documented below (771, 774, 773, & 775)
Adjustments	=Sum of Mo Manual Adj Stlmnt (\$) + Mo Manual Adj Interest Stlmnt (\$)
Interest	=<Mo Int Stlmnt: Inv Bill Month (\$) >
ICAP	=<Mo ICAP Stlmnt (\$) >
Working Capital	=<Mo Work Cp Stlmnt (\$) > where Mo Wrk Cp Type ID = 25, 35, 40, or 60.

**Consolidated Invoice - Invoice Details (CSV)**
**Power Supplier Statement**

<b>Energy(MWh)</b>	
300 Forward Energy	<b>From the Power Suppliers Universe:</b> =<Day NYISO DAM Energy (MW)>
303 Balancing Energy	<b>From the Power Suppliers Universe:</b> =<Day Gen BalMkt Energy (MW)> +<Day CLR (MW)>
<b>Energy Settlement (\$)</b>	
301 Forward Energy	<b>From the Power Suppliers Universe:</b> =<Day Total DAM Stlmnt: Gen (\$)>
304 Balancing Energy	<b>From the Power Suppliers Universe:</b> =<Day Total BalMkt Stlmnt: Gen (\$)> +<Day Total CLR BalMkt Stlmnt: Gen (\$)> +<Day DAM Margin Assurance (\$)> +<Day DAM Margin Assurance LRR (\$)>
314 ELR DAM Contract Balancing Payment \$	<b>From the Power Suppliers Universe:</b> =<Day ELR DAM MargAsrc Stlmnt (\$)>
302 DAM Bid Production Cost Guarantee	<b>From the Power Suppliers Universe:</b> =<Day DAM BPCG Stlmnt (\$)>
305 R/T Bid Production Cost Guarantee	<b>From the Power Suppliers Universe:</b> =<Day RT BPCG Stlmnt (\$)> +<Day Supplemental Event Stlmnt (\$)> <b>+&lt;Day RT BPCG Mitg Charge (\$)&gt; 327</b>  <b>From the Power Suppliers AS Universe:</b> +<Day Reg Rev Adj Stlmnt (\$)>
<b>Ancillary Service Charges</b>	
<b>Cost Based Ancillary Services</b>	
306 Reactive Supply and Voltage Control Avail Paymt.	<b>From the Power Suppliers AS Universe:</b> =<Day VSS Stlmnt (\$)>
307 Reactive Supply and Voltage Control LOC Paymt.	<b>From the Power Suppliers AS Universe:</b> =<Day VSS LOC Stlmnt (\$)>
312 Black Start Service Payment	<b>From the Power Suppliers AS Universe:</b> =<Day Black Start Stlmnt (\$)>

<b>Market Based Ancillary Service</b>	
308 Regulation and Frequency Response Avail Payment	<b>From the Power Suppliers AS Universe:</b> =<Day DAM Reg Avail Stlmnt (\$)> +<Day SUP Reg Avail Stlmnt (\$)> +<Day BalMkt Reg Avail Stlmnt (\$)> +<Day Reg Replacement Cost (\$)>
309 Regulation and Frequency Response Penalty Charge	<b>From the Power Suppliers AS Universe:</b> =<Day Reg Penalty (\$)>
310 Operating Reserves Service Availability Payment	<b>From the Power Suppliers AS Universe:</b> =<Day DAM 10Sync Avail Stlmnt (\$)> +<Day Sup 10Sync Avail Stlmnt (\$)> +<Day BalMkt 10Sync Avail Stlmnt (\$)> +<Day 10Sync Reduct Stlmnt (\$)> +<Day DAM 10NSync Avail Stlmnt (\$)> +<Day Sup 10NSync Avail Stlmnt (\$)> +<Day BalMkt 10NSync Avail Stlmnt (\$)> +<Day 10NSync Reduct Stlmnt (\$)> +<Day DAM 30Min Avail Stlmnt (\$)> +<Day Sup 30Min Avail Stlmnt > +<Day BalMkt 30Min Avail Stlmnt > +<Day 30Min Reduct Stlmnt (\$)> +<Day 10Sync LOC Stlmnt (\$)> +<Day Adj 10NSync LOC Stlmnt (\$)>
310 Operating Reserves Service Penalty Charge	<b>From the Power Suppliers AS Universe:</b> =<Day 10Min Shortfall Stlmnt (\$)>
320 322 324 326 Scheduling System Control & Dispatch Service - Injections	<b>From the Power Suppliers AS Universe:</b> =< Day MST Sched 1 Inj. Stlmnt: Gen (\$)> +< Day OATT Sched 1 Inj. Stlmnt: Gen (\$)> +< Day MST Ttl Msc Exp Inj. Stmt:Gen(\$)> +< Day OAT Ttl Msc Exp Inj. Stmt:Gen(\$)>  <b>From the Demand Response Universe:</b> =< Day MST Sched 1 Inj. Stlmnt: DRB (\$)> +< Day OATT Sched 1 Inj. Stlmnt: DRB (\$)> +< Day MST Ttl Msc Exp Inj. Stmt: DRB (\$)> +< Day OAT Ttl Msc Exp Inj. Stmt: DRB (\$)>

**Transmission Customer Statement**

<b>Energy(MWh)</b>	
700 Forward Energy	<b>From the Loads Universe:</b> =<Day DAM Sched Load (MW)>

	<p><b>+ From the TC Universe:</b>          +&lt;Day DAM LBMP Energy (MWh)&gt;          +&lt;Day DAM Repl Energy (MWh)&gt;</p>
704 Balancing Energy	<p><b>From the Loads Universe:</b>          +&lt;Day BalMkt Load - LSE (MWh)&gt;</p> <p><b>+ From the TC Universe:</b>          =&lt;Day BalMkt LBMP Energy (MWh)&gt;          +&lt;Day BalMkt Repl Energy (MWh)&gt;</p>
800 Ancillary Service	<p><b>From the Loads AS Universe:</b>          =&lt;Day RT LSE Load (MWh)&gt;</p>
708 Station Service Energy Credit/Charge	Not currently in the DSS
<b>Energy Settlement (\$):</b>	
701 Forward Energy \$	<p><b>From the Loads Universe:</b>          =&lt;Day Total DAM Stlmnt - LSE (\$)&gt;</p> <p><b>+ From the TC Universe:</b>          +&lt;Day DAM LBMP Energy Stlmnt (\$)&gt;          +&lt;Day DAM Repl Engy Stlmnt (\$)&gt;</p>
705 Balancing Energy \$	<p><b>From the Loads Universe:</b>          =&lt;Day Total BalMkt Stlmnt - LSE (\$)&gt;</p> <p><b>+ From the TC Universe:</b>          +&lt;Day BalMkt LBMP Engy Stlmnt (\$)&gt;          +&lt;Day BalMkt Repl Engy Stlmnt (\$)&gt;          +&lt;Day Fin Imp Ch Stlmnt: Trans (\$)&gt;</p>
768 DAM External Bid Production Cost Guarantee \$	<p><b>From the TC Universe:</b>          =&lt;Day DAM Trans BPCG (\$)&gt;</p>
769 R/T External Bid Production Cost Guarantee \$	<p><b>From the TC Universe:</b>          =&lt;Day RT Trans BPCG (\$)&gt;          +&lt;Day Imp ECA Suppl Guar Cr Stlmt (\$)&gt;</p>
709 Station Service Energy Credit/Charge	Not currently in the DSS
<b>Transmission Usage Charge Settlement[TUC] (\$):</b>	
752 Forward Congestion Charge	<p><b>From the TC Universe:</b>          =&lt;Day DAM TUC Cong Stlmnt (\$)&gt;          +&lt;Day DAM LBMP Cong Stlmnt (\$)&gt;          +&lt;Day DAM Repl Cong Stlmnt (\$)&gt;</p>
751 Forward Loss Charge	<p><b>From the TC Universe:</b></p>

	=<Day DAM TUC Loss Stlmnt (\$)> +<Day DAM LBMP Loss Stlmnt (\$)> +<Day DAM Repl Loss Stlmnt (\$)>
756 Balancing Congestion Charge	<b>From the TC Universe:</b> =<Day BalMkt TUC Cong Stlmnt (\$)> +<Day BalMkt LBMP Cong Stlmnt (\$)> +<Day BalMkt Repl Cong Stlmnt (\$)>
755 Balancing Loss Charge	<b>From the TC Universe:</b> =<Day BalMkt TUC Loss Stlmnt (\$)> +<Day BalMkt LBMP Loss Stlmnt (\$)> +<Day BalMkt Repl Loss Stlmnt (\$)>
803 NYPA Transmission Adjustment Charge[NTAC]	<b>From the Loads AS Universe:</b> =<Day NTAC Stlmnt - LSE (\$)>  <b>+ From the TC AS Universe:</b> +<Day NTAC Stlmnt - TC (\$)>
<b>Ancillary Service Charges</b>	
805 809 832 835 Scheduling System Control & Dispatch Service - Withdrawals	<b>From the Loads AS Universe:</b> =<Day MST Sched 1 WD Stlmnt: LSE (\$)> +<Day OATT Sched 1 WD Stlmnt: LSE (\$)> +<Day MST Ttl Msc Exp WD Stmt:LSE (\$)> +<Day OAT Ttl Msc Exp WD Stmt:LSE (\$)> +<Day Fin Imp Cred Stlmnt: LSE (\$)>  <b>+ From the TC AS Universe:</b> +<Day MST Sched 1 WD Stlmnt: TC (\$)> +<Day OATT Sched 1 WD Stlmnt: TC (\$)> +<Day MST Ttl Msc Exp WD Stmt:TC (\$)> +<Day OAT Ttl Msc Exp WD Stmt:TC (\$)> +<Day Fin Imp Cred Stlmnt: TC (\$)>
828 829 830 833 Scheduling System Control & Dispatch Service - Injections	<b>From the TC AS Universe:</b> =<Day MST Sched 1 Inj. Stlmnt: TC (\$)> +<Day OATT Sched 1 Inj. Stlmnt: TC (\$)> +<Day MST Ttl Msc Exp Inj. Stmt:TC (\$)> +<Day OAT Ttl Msc Exp Inj. Stmt:TC (\$)>
812 NYISO-wide Uplift	<b>From the Loads AS Universe:</b> =<Day DAM BPCG Stlmnt - LSE (\$)> +<Day RT BPCG Stlmnt - LSE (\$)> +<Day Supp Event Stlmnt - LSE (\$)> +<Day DAM Trans BPCG Stlmnt - LSE (\$)>

	+<Day RT Trans BPCG Stlmnt - LSE (\$) > +<Day Imp ECA Sup Gnt Stlmnt -LSE (\$) > +<Day DAM BPCG Forecast Stlmnt (\$) >  <b>+ From the TC AS Universe:</b> +<Day DAM BPCG Stlmnt - TC (\$) > +<Day RT BPCG Stlmnt - TC (\$) > +<Day Supp Event Stlmnt - TC (\$) > +<Day DAM Trans BPCG Stlmnt - TC (\$) > +<Day RT Trans BPCG Stlmnt - TC (\$) > +<Day ELR DAM MargAsrc Stlmnt-TC (\$) > +<Day Imp ECA Sup Gnt Stlmnt - TC (\$) >
817 Station Service NYISO-wide Uplift	Not currently in the DSS
810 Local Reliability Related Uplift	<b>From the Loads AS Universe:</b> =<Day DAM BPCG LRR Stlmnt - LSE (\$) > +<Day RT BPCG LRR Stlmnt - LSE (\$) > +<Day ELR DAM MargAsrc Stlmnt-LSE (\$) >
818 Station Service Local Reliability Related Uplift	Not currently in the DSS
813 Residual Adjustments	<b>From the Loads AS Universe:</b> =<Day DAM Resid Engy Stlmnt - LSE (\$) > +<Day DAM Resid Loss Stlmnt - LSE (\$) > +<Day Bal Resid Engy Stlmnt - LSE (\$) > +<Day Bal Resid Loss Stlmnt - LSE (\$) > +<Day Bal Resid Cong Stlmnt - LSE (\$) > +<Day DAM Mrgn Assrnc Stlmnt- LSE (\$) > +<Day DAM MgnAssrnc LRR Stlmt-LSE (\$) > +<Day Emergency Purch Stlmnt -LSE (\$) > +<Day Emrgency Sales Stlmnt - LSE (\$) >  <b>+ From the TC AS Universe:</b> +<Day DAM Resid Engry Stlmnt - TC (\$) > +<Day DAM Resid Loss Stlmnt - TC (\$) > +<Day Bal Resid Engry Stlmnt - TC (\$) > +<Day Bal Resid Loss Stlmnt - TC (\$) > +<Day Bal Resid Cong Stlmnt - TC (\$) > +<Day DAM Mrgn Assrnc Stlmnt - TC (\$) > +<Day Emergency Purch Stlmnt - TC (\$) > +<Day Emergency Sales Stlmnt - TC (\$) >
819 Station Service Residual Adjustments	Not currently in the DSS
814 Demand Response Program Uplift	<b>From the Loads AS Universe:</b> =<Day DADRP Stlmnt (\$) >
820 Station Service Demand Response Program Uplift	Not currently in the DSS

<b>OATT Charges</b>	
804 Reactive Supply & Voltage Control Service	<b>From the Loads AS Universe:</b> =<Day VSS Stlmnt - LSE (\$) > <b>+ From the TC AS Universe:</b> +<Day VSS Stlmnt - TC (\$) >
807 Regulation & Frequency Response Service	<b>From the Loads AS Universe:</b> =<Day Regulation Stlmnt: LSE (\$) > +<Day RRA Stlmnt: LSE (\$) >
821 Station Service Regulation & Frequency Response Service	Not currently in the DSS
806 Operating Reserves Service	<b>From the Loads AS Universe:</b> =<Day Op Res Stlmnt - LSE (\$) > <b>+ From the TC AS Universe:</b> +<Day Op Res Stlmnt - TC (\$) >
822 Station Power Operating Reserves Service	Not currently in the DSS
808 Black Start Service	<b>From the Loads AS Universe:</b> =<Day Black Start Stlmnt - LSE (\$) >
823 Station Service Black Start Service	Not currently in the DSS

**Transmission Congestion Contract Statement**

**Objects from the TCC Universe**

Contract ID	TCC Credit
=<TCC ID>	=<Day TCC Rent Stlmnt (\$) >

**Transmission Owner Statement**

**Objects from the Transmission Owners Universe**

OATT Attachment N: Congestion Balancing Settlement (\$)	=<Day DAM Resid Cong Stlmnt - TO (\$) >
OATT Attachment H: External Transmission Service (MWh)	Hr TSC Ext Energy (MWh)
OATT Attachment H: NYPA Transmission Access Settlement (\$)	=<Day NTAC (NYPA) (\$) >
Ramapo Phase Angle Regulator	Not currently in the DSS

**Demand Response Statement**

**Objects from the Demand Response Universe**

2012 Load Reduction	=<Day DADRP Reduction (\$) >
2015 Load Reduction Uplift	=<Day DADRP BCG Stlmnt (\$) >
2013 Demand Response Penalty	=<Day DADRP Penalty - DRP (\$) > +<Day DADRP Penalty - LSE (\$) >
2011 Demand Response Incentive	=<Day DADRP Incentive (\$) >

2014 Demand Reduction Load Balancing	=<Day DADRP Load Balance (\$)>
For Information Only:	
Load Reduction Over-collection Payment	Not currently in the DSS
Load Reduction Bid Guarantee	=<Hr Total DADRP Cost (\$)>

**Virtual Bidding Statement**

**Objects from the Virtual Bidding Universe**

771 DAM Virtual Load LBMP Energy Sales	=<Day Total DAM VLoad Stlmnt (\$)>
774 Balancing Virtual Load LBMP Energy Sales	=<Day Total BalMkt VLoad Stlmnt (\$)>
773 DAM Virtual Load LBMP Energy Expenditure	=<Day Total DAM VSupply Stlmnt (\$)>
775 Balancing Virtual Load LBMP Energy Expenditure	=<Day Total BalMkt VSupply Stlmnt (\$)>

**Working Capital Statement**

**Objects from the Working Capital Universe**

Type ID	=<Mo Wrk Cp Type Id>
Transaction Date	=<Mo Wrk Cp Effective Date>
Type Description	=<Mo Wrk Cp Type Description>
Amount	=<Mo Wrk Cp Rate (\$/MWh)>
Transaction Description	=<Mo Wrk Cp Transaction Desc>