NYISO Business Issues Committee Meeting Minutes March 17, 2016 2:05 pm – 4:30 pm

1. Introductions, Meeting Objectives, and Chairman's Report

The Chair of the Business Issues Committee (BIC), Mr. Chris LaRoe (Brookfield Power) called the meeting to order at 2:05 pm by welcoming the members of the BIC. The members of the BIC identified themselves and attendance was recorded. A quorum was determined.

2. Meeting Minutes

There were no comments or questions regarding the minutes of the January 13, 2016 or February 10, 2016 BIC meetings that were included with the meeting material.

Motion 1:

Motion to approve the minutes of the January 13, 2016 and February 10, 2016 BIC meetings. *Motion passed unanimously.*

3. Market Operations Report

Mr. Rana Mukerji (NYISO) reviewed the market operations report included with the meeting material. Bruce Bleiweis (DC Energy) asked for information pertaining to the cyber attack in Ukraine, which was discussed at MC Liaison subcommittee meeting on March 15, 2016. Mr. Mukerji stated that Mr. Doug Chapman (NYISO) will provide a report on this issue at the next Management Committee meeting.

4. Broader Regional Markets Report

Mr. Mukerji reviewed the broader regional markets report included with the meeting material, noting that the report has been streamlined. Mr. Dave Clarke (LIPA) asked if there was any update regarding FERC action in the proceeding related to cost allocation for the Michigan-Ontario PARs. Mr. Mukerji indicated that the NYISO is continuing to await FERC action on the ALI's Initial Decision that was issued December 18, 2012.

5. Planning Update

Mr. Zach Smith (NYISO) provided the update. Mr. Smith noted that the 2015 Northeastern Coordinated System Plan review schedule has been posted and will be discussed at the March 22, 2016 Joint ESPWG/IPTF/TPAS meeting. An IPSAC webex meeting regarding the plan will be held on May 9, 2016. There were no questions or comments.

6. Coordination Agreement between ISO NE and NYISO – ministerial revisions

Mr. Ethan Avallone (NYISO) reviewed the presentation included with the meeting material. There were no questions or comments.

Motion 2:

The Business Issues Committee ("BIC") hereby recommends that the Management Committee approve changes to the NYISO's Coordination Agreement with ISO-NE as more fully described in the "Coordination Agreement between ISO-NE and NYISO - Ministerial Clean-Up Revisions" presentation made to the BIC on March 17, 2016. *Motion passed unanimously.*

7. Demand Curve Reset Process Changes

Paul Hibbard of the Analysis group presented a summary of the changes recommended to the ICAP Demand Curve reset process as described in the presentation that was included with the meeting material).

Summary of changes include:

- Demand Curve Reset Period: 4 years (currently, 3 years)
- Net EAS revenues
 - Forecast net Energy and Ancillary Services (EAS) revenues using three-year average of historical net revenues (with no econometric adjustments)
 - Adjust historical revenues to reflect market conditions at the tariff-specified level of excess (i.e., minimum installed Capacity Requirement, plus MW rating of peaking unit) through GE MAPS based scaling factors ("level of excess" adjustment)
- Annual updates
 - Net EAS revenues: Update annually based on updated historical net EAS revenues (new LBMPs and costs), applying fixed "level of excess" adjustment factors
 - Gross cost of new entry (CONE): Adjust all zones based on single composite escalation factor, using finalized data at the time of update, sourced from publicly-available indices
 - Calculation of Reference Point Prices: Include annual updates to the winter-to-summer ratio (WSR) to reflect changes in system conditions

Mr. Howard Fromer (PSEG) questioned the method of calculating the net EAS revenues and what costs would be utilized to determine whether it would be economic for the peaking plant to produce energy during any given period. Mr. David Allen (NYISO) said the gas price costs for the peaking plant will reflect actual costs over the historical three year period being assessed.

Mr. Mark Younger (Hudson Energy Economics) stated he has a concern with the proposed methodology for the level of excess adjustment and he does not think it is appropriate to do it in the way that has been proposed it. He added that there haven't been any calculations done regarding the magnitude of the level of excess adjustment factors for this reset and we are, at this time, only relying on information drawn from what NERA did in the last reset to substantiate claims regarding the expected magnitude of this adjustment factor going forward. Mr. Hibbard stated that while a more complex methodology involving a table of adjustment factors for different levels of excess could be developed, its usefulness or improved accuracy compared to what has been proposed is questionable. Mr. Fromer stated that locking in a number that you are going to apply for the next three annual updates, as is being proposed, may also be inaccurate. Mr. Allen said when this process began, the goal was to come to approach that was conceptually consistent with the criteria we laid out; both getting towards accuracy and something that is simple, repeatable and formulaic. Mr. Allen noted that we still have to go through the demand curve reset process and decide the parameters that go into the modeling before knowing what the ultimate results of this process will be.

Mr. Clarke stated that LIPA supports the proposed level of excess adjustment methodology. The proposal is to start out with historic revenues and adjust them to the tariff specified excess levels of surplus. Since we have had significant historic capacity surplus beyond these minimum design levels in the past, the historic energy and ancillary service revenues are lower than they would be if there had been no surplus. Therefore, the use of those historic pricing lower levels without a level of excess adjustment would result in revenue estimates that don't match the capacity supply assumptions that are being used to determine the net CONE values for the ICAP Demand Curves.

Ms. Margie Philips (Direct Energy) stated a concern with timing of the updates to the WSR value and how it is calculated. She stated that she supports the inclusion of annual updates if the WSR is taken out of the proposal and worked on over the course of the ongoing reset.

Mike Mager (Couch White) explained that Multiple Intervenors (MI) and the City of New York support the NYISO's proposal. Mr. Mager noted, however, that their comfort level in going from 3 to 4 years is directly related to having annual updates and that the comfort level with annual updates is directly related to them being very mechanical, non-controversial, and simple to implement and understand.

Mr. Mark Younger stated that during the last reset, the level of excess adjustment increased the net EAS offset for the upstate unit by 10%. Use of an adjustment factor that is not modified to account for changes in the actual level of excess over time is likely to overstate the level of the adjustment based on the expectations of shrinking excess in New York over the coming years. Given the claim that the level of excess adjustment is not likely to be a big adjustment, he believes the proper thing is to remove the level of excess adjustment entirely rather than determine a speculative value for the adjustment. Due to the use of historical market prices, the process will inherently correct for changes in excess over time and reflect how the changes actually affected market outcomes. Mr. Younger contended that that would be a much more transparent process and avoid the potential for inappropriate results.

Mike Cadwalader (Atlantic Economics) noted opposition to the suggestion that the level of excess adjustment be eliminated and explained the potential complexity related to the alternative of developing a table of adjustment factors for different levels of excess and selecting different adjustment factors to apply annually.

Ms. Kelli Joseph (NRG) explained NRG supports moving from 3 to 4 years but does not support annual updates. Ms. Joseph noted that NRG is not comfortable with the level of uncertainty associated with annual updates. She added that NRG would be more supportive of annual updates if included as part of a proposal to implement a forward capacity market construct.

Chris Hargett (Con Edison) stated that Con Edison and O&R agree with LIPA and MI and support the NYISO's proposal regarding the level of excess adjustment. Mr. Hargett stated that estimating level of excess adjustments in the annual update period is too challenging and unlikely to provide a material improvement in the accuracy of the results. He explained that Con Edison proposed a collaring mechanism during recent ICAPWG discussions that would limit the allowable magnitude of changes to the reference point price values resulting from the annual update process. Mr. Hargett noted that many stakeholders appeared supportive of the collaring mechanism. Mr. Hargett explained that the reference point price collar would cap the maximum allowable year over year change in ICAP Demand Curve reference point prices calculated pursuant to the annual updates for the 2018/2019, 2019/2020 and 2020/2021 Capability Years with a 12% maximum allowable increase and an 8% maximum allowable decrease. Mr. Hargett noted that Con Edison would be proposing an amendment to the motion to, in part, address their proposed collaring mechanism.

Mr. Dave Lawrence (Energy Connect) noted concerns regarding application of the proposed collaring mechanism to reference point prices. Mr. Lawrence stated that it would better to apply the collar to the annual reference value (*i.e.*, net CONE) for each peaking unit.

Mr. Hargett noted that Con Edison did not support applying the collar mechanism to annual reference values for peaking units because this would fail to adequately address the concerns regarding the potential for volatility in year-to-year changes in the reference point prices. This potential volatility is what Con Edison is seeking to mitigate through its proposed collaring mechanism.

Motion #3a:

Motion to amend motion 3:

The Business Issues Committee ("BIC") hereby recommends that the Management Committee approve the proposed changes to the ICAP Demand Curve reset ("DCR") process to implement a four year DCR period with annual updates, as more fully described in the presentations entitled "NYISO 2015/2016 ICAP Demand Curve Reset" and "Proposed DCR Process Changes" made to the BIC on March 17, 2016; provided, however, that: (i) as discussed at the March 17, 2016 BIC meeting, the proposal shall be revised to include the collaring concept, which shall be limited in duration to the 2017-2021 demand curve reset period and will be applicable at the identified percentage levels to the reference point price values for the 2018/2019, 2019/2020 and 2020/2021 Capability Years; and (ii) while the BIC recommends that the winter-summer ratio shall be one of the parameters updated annually, the specific methodology to be applied to calculate annual updates to the winter-summer ratio for the 2017/2018, 2018/2019, 2019/2020 and 2020/2021 Capability Years remains under review and the BIC requests that the ICAP Working Group seek to define the methodology for discussion and action at the MC meeting where the agenda item concerning the revisions to the demand curve reset process is addressed.

Motion passed with 100% affirmative votes.

Motion #3:

The Business Issues Committee ("BIC") hereby recommends that the Management Committee approve the proposed changes to the ICAP Demand Curve reset ("DCR") process to implement a four year DCR period with annual updates, as more fully described in the presentations entitled "NYISO 2015/2016 ICAP Demand Curve Reset" and "Proposed DCR Process Changes" made to the BIC on March 17, 2016; provided, however, that: (i) as discussed at the March 17, 2016 BIC meeting, the proposal shall be revised to include the collaring concept, which shall be limited in duration to the 2017-2021 demand curve reset period and will be applicable at the identified percentage levels to the reference point price values for the 2018/2019, 2019/2020 and 2020/2021 Capability Years; and (ii) while the BIC recommends that the winter-summer ratio shall be one of the parameters updated annually, the specific methodology to be applied to calculate annual updates to the winter-summer ratio for the 2017/2018, 2018/2019, 2019/2020 and 2020/2021 Capability Years remains under review and the BIC requests that the ICAP Working Group seek to define the methodology for discussion and action at the MC meeting where the agenda item concerning the revisions to the demand curve reset process is addressed.

Motion passed by majority show of hands with abstentions.

Working Group Updates

BAWG – Mr. Norman Mah (Con Ed Solutions) reported that BAWG had met and reviewed the grid accounting report.

CPWG – Mr. Mah reported that the CPWG did not meet since the last BIC meeting.

ESPWG – Mr. Butler provided the following written report:

ESPWG has met twice since the last BIC meeting.

- Activity has focused on development of a new transmission interconnection process for projects selected in a planning process, Development Agreements for the public policy and reliability planning processes, and a pro forma Operating Agreement for non-incumbent transmission projects.

- ESPWG also reviewed the treatment of energy efficiency and demand-side measures in the new load forecast to be released shortly, and heard about the NYISO's new, planned Clean Power Plan study, which will examine the potential impact of large-scale renewable penetration on system operations.

- Finally, the NYISO reviewed the topology assumptions used in its study of the proposed Fitzpatrick deactivation. The deadline for proposals to address the projected capacity shortfall caused by the Fitzpatrick retirement and other retirements has been postponed until April 29, 2016 so that the NYISO can update the projected need to reflect the new load forecast due out shortly.

ICAPWG – Mr. Liam Baker (EasternGen) reported that the ICAPWG has worked on the proposed ICAP Demand Curve reset process changes proposed at today's BIC meeting and the Renewables and Self-Supply Compliance Filing.

IPTF – The group has not met since the last BIC meeting.

LFTF – Mr. Bryan Irrgang (LIPA) reported the LFTF finalized the 2016 ICAP forecast.

MIWG – Mr. Bob Boyle (NYPA) reported that the MIWG met several times and discussed the changes to the Coordination Agreement between ISO-NE & NYISO, Energy Storage Optimization, Hybrid GT Pricing Improvements, FERC Offer Cap NOPR, and the Annual Broader Regional Markets FERC Report. **PRWLG** – The group did not meet.

EGCWG – The group will meet March 31, 2016.

8. New Business

Mr. Paul Gioia (Whiteman Osterman & Hannah) stated that for several years the Transmission Owners, LIPA and NYPA have been urging the NYISO to consider developing the criteria for elimination of capacity zones. He noted that the Transmission Owners previously received assurances that this effort was going to happen this year. NYISO, however, subsequently informed the Transmission Owners that given all the work related to the ICAP Demand Curve reset and other capacity market projects that the NYISO will not be able to pursue the project this year. There was concern among the Transmission Owners about supporting a four year demand curve period without considering zone elimination rules. Mr. Gioia stated that in response to such concerns, the Transmission Owners have been assured by NYISO that once the ICAP Demand Curve reset reports are completed, that the NYISO will reconvene consideration of the criteria for the elimination of the zones with the objective that any stakeholder approved tariff provisions coming out of that process would be filed next year, and that this issue would retain its priority status next year. In response to a request from Mr. Gioia, Mr. Mukerji committed that the NYISO will work on this matter as soon as possible.

Meeting adjourned at 4:30 pm.

Business Issues Committee Meeting March 17, 2016 Final Motions

Motion #1:

Motion to approve the Minutes of the January 13, 2016 and February 9, 2016 meeting minute.

Motion passed unanimously.

Motion #2:

The Business Issues Committee ("BIC") hereby recommends that the Management Committee approve changes to the NYISO's Coordination Agreement with ISO-NE as more fully described in the "Coordination Agreement between ISO-NE and NYISO -Ministerial Clean-Up Revisions" presentation made to the BIC on March 17, 2016.

Motion passed unanimously.

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Motion passed with 100% affirmative votes.

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Motion passed by majority show of hands with abstentions.

New York Independent System Operator

Business Issues Committee - March 17, 2016

Motion: Motion #Amend

Result: Motion Passed

Sector with base percent	%	Active	Quorum	Adj. Percent	For	Against	Abstain	% For	% Against
Generation Owners	21.50	\	\checkmark	21.50	6.00	0.00	1.00	21.50	0.00
Other Suppliers	21.50		\checkmark	21.50	11.00	0.00	7.00	21.50	0.00
Transmission Owners	20.00		\checkmark	20.00	3.00	0.00	1.00	20.00	0.00
End Use Consumer			\checkmark						
Large Consumer	9.00			9.00	4.00	0.00	0.00	10.33	0.00
Large Cons. Gov. Agency	2.00			2.00	0.00	0.00	0.00	0.00	0.00
Small Consumer	4.50		\checkmark	4.50	6.00	0.00	0.00	5.17	0.00
Gov. State-wide Cons. Advocate	2.70			2.70	0.00	0.00	1.00	0.00	0.00
Gov. Sm. Cons. & Retail Aggr.	1.80			1.80	2.00	0.00	0.00	4.50	0.00
Public Power			\checkmark						
State Power Authorities	8.00			9.07	2.00	0.00	0.00	9.07	0.00
Munis & Co-ops	7.00			7.93	8.00	0.00	3.00	7.93	0.00
Environmental	2.00	 ✓ 		0.00	0.00	0.00	0.00	0.00	0.00
			5	100.00	42.00	0.00	13.00	100.00	0.00
				100.00	Norn	nalize to 10	00% :	100.0	0.0

New York Independent System Operator

Business Issues Committee - March 17, 2016

Motion: Motion #Amend

Result: Motion Passed

Sector	Organization	Representative	Affiliate	Present	For	Against
Generation Owners	Indeck Energy Services, Inc.	Younger, Mark	N	Y	1.00	0.00
Generation Owners	Astoria Energy LLC	McCall, Chuck	Ν	Y	1.00	0.00
Generation Owners	Calpine		N	N	0.00	0.00
Generation Owners	CPV Valley LLC	Litchfield, Matt	N	Y	1.00	0.00
Generation Owners	East Coast Power, LLC	Shanker, Roy	Ν	Y	1.00	0.00
Generation Owners	Entergy Nuclear Northeast	Saia, Doreen	N	Y	1.00	0.00
Generation Owners	Innovative Energy Systems		Y	N	0.00	0.00
Generation Owners	Noble Environmental Power LLC		N	N	0.00	0.00
Generation Owners	Selkirk Cogen Partners, LP		Y	N	0.00	0.00
Generation Owners	TC Ravenswood, Inc.	LaRoe, Chris	N	Y	1.00	0.00
Generation Owners	EDP Renewables North America LLC		N	N	0.00	0.00
Generation Owners	Cricket Valley Energy Center		Ν	N	0.00	0.00
Generation Owners	Invenergy Energy Management LLC		N	N	0.00	0.00
Generation Owners	National Grid Generation LLC		Y	N	0.00	0.00
Generation Owners	Somerset Operating Company, LLC	Evanoski, Dave	Ν	Y	0.00	0.00
Generation Owners	Howard Wind LLC		N	N	0.00	0.00
Other Suppliers	BJ Energy LLC		N	N	0.00	0.00
Other Suppliers	Citigroup Energy Inc.		N	N	0.00	0.00
Other Suppliers	Con Edison Solutions Inc.		Y	N	0.00	0.00
Other Suppliers	Constellation New Energy		Y	N	0.00	0.00
Other Suppliers	Cross Sound Cable Company, LLC		N	N	0.00	0.00
Other Suppliers	DC Energy	Bleiweis, Bruce	N	Y	0.00	0.00
Other Suppliers	DTE Energy		N	N	0.00	0.00
Other Suppliers	Energy Spectrum	Ahrens, David	N	Y	0.00	0.00
Other Suppliers	EnerNoc	· · · · · · · · · · · · · · · · · · ·	N	N	0.00	0.00
Other Suppliers	Galt Power	Ackerman, Alan	N	Y	0.00	0.00
Other Suppliers	HQ Energy Services US	Bernier, Luc	N	Y	1.00	0.00
Other Suppliers	Integrys Energy Services of New York, Inc		Y	N	0.00	0.00
Other Suppliers	Morgan Stanley Capital Group, Inc.		N	N	0.00	0.00
Other Suppliers	NRG Power Marketing Inc.	Joseph, Kelli	N	Y	0.00	0.00
Other Suppliers	Ontario Power Generation, Inc.		N	N	0.00	0.00
Other Suppliers	Exelon Generating Co. LLC	Kirk, Steven	N	Y	1.00	0.00
Other Suppliers	PSEG Energy Resource & Trade, LLC		N	Y	1.00	0.00
Other Suppliers	SESCO Enterprises, LLC		N	N	0.00	0.00
Other Suppliers	Shell Energy North America, LLC		N	N	0.00	0.00
Other Suppliers	TransCanada Power Marketing, Ltd.		Y	N	0.00	0.00
Other Suppliers	U.S. Power Generating Co.	Baker, Liam	N	Y	1.00	0.00
Other Suppliers	BP Energy Company		N	N	0.00	0.00
Other Suppliers	EDF Trading North America, LLC		N	N	0.00	0.00
Other Suppliers	NextEra Energy	Applebaum, David		Y	1.00	0.00
Other Suppliers	Innoventive Power		N	N	0.00	0.00
Other Suppliers	Vitol Inc.		N	N	0.00	0.00
Other Suppliers	GDF Suez Energy NA, Inc.		Y	N	0.00	0.00
Other Suppliers	Viridity Energy, Inc.		N	N	0.00	0.00
Other Suppliers	Riverbay Corporation	Ahrens, David	N	Y	0.00	0.00
Other Suppliers	EnergyConnect	Lawrence, David	N	Y	0.00	0.00
Other Suppliers	Castleton Commodities Merchant Trading L.P		N	N I	0.00	0.00
	Casticion Commountes Merchant Hading L.F	•	14	IN	0.00	0.00

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Sector	Organization	Representative	Affiliate	Present	For	Against
Other Suppliers	Noble Americas Gas & Power Corp.	Sunga, Leonard	N	Y	1.00	0.00
Other Suppliers	Lyonsdale Biomass, LLC		N	N	0.00	0.00
Other Suppliers	Direct Energy Business Marketing, LLC	Philips, Marjorie	N N	Y	1.00	0.00
Other Suppliers	Energy Technology Savings	Vana an Maria	N N	N	0.00	0.00
Other Suppliers	Mercuria Energy America, Inc.	Younger, Mark		Y	1.00	0.00
Other Suppliers	Powerex Corporation		N N	N N	0.00	0.00
Other Suppliers	Repsol Energy North America Corporation Talen Energy	Uuginalti Tom	N N	Y		0.00
Other Suppliers	CPower	Hyzinski, Tom	N N	I Y	1.00 0.00	0.00
Other Suppliers Other Suppliers	XO Energy NY, LP	Ackerman, Alan	N	I N	0.00	0.00
Other Suppliers	Dynegy Marketing and Trade	Roby, Rick	N	Y	1.00	0.00
Other Suppliers	Brookfield Energy Marketing L.P.	LaRoe, Chris	N	Y	1.00	0.00
Transmission Owners	New York State Electric & Gas (NYSEG)	Caletka, Patricia	N	Y	1.00	0.00
Transmission Owners	Central Hudson Gas & Electric Corp.	Borchert, John	N	Y	0.00	0.00
Transmission Owners	Consolidated Edison Co. of NY, Inc.	Quin, Jane	N	Y	1.00	0.00
Transmission Owners	National Grid	Carron, Benjamin	N	Y	1.00	0.00
Transmission Owners	Orange & Rockland Utilities, Inc.		Y	N N	0.00	0.00
Transmission Owners	Rochester Gas and Electric Corp.		Y	N	0.00	0.00
End Use - Large Consumer	Alcoa, Inc.	Mager, Michael	N	Y	1.00	0.00
End Use - Large Consumer	IBM Corporation	Mager, Michael	N	Y	1.00	0.00
End Use - Large Consumer	Occidental Chemical Corp.	Mager, Michael	N	Y	1.00	0.00
End Use - Large Consumer	Wegmans Food Markets	Mager, Michael	N	Y	1.00	0.00
End Use - Large Consumer	Nucor Steel Auburn, Inc.	Mager, Michael	N	N I	0.00	0.00
End Use - Large Cons. Gov. Agency	Metropolitan Transportation Authority		N	N N	0.00	0.00
End Use - Small Consumer	American Sugar Refining, Inc	Mager, Michael	N	Y	1.00	0.00
End Use - Small Consumer	Beth Israel Health Care System	Mager, Michael	N	Y	1.00	0.00
End Use - Small Consumer	Fordham University	Mager, Michael	N	Y	1.00	0.00
End Use - Small Consumer	Memorial Sloan Kettering Cancer Center	Mager, Michael	N	Y	1.00	0.00
End Use - Small Consumer	Mount Sinai Medical Center	Mager, Michael	N	Y	1.00	0.00
End Use - Small Consumer	New York University	Mager, Michael	N	Y	1.00	0.00
End Use - Small Consumer	Association for Energy Affordability	Mager, Michael	N	N N	0.00	0.00
End Use - Gov. State-wide Cons. Advocate	Utility Intervention Unit, Division of	Hogan, Erin	N	Y	0.00	0.00
Lid Use - Gov. State-wide Colls. Advocate	Consumer Protection, NY Dept. of State	Hogan, Ehn	1	1	0.00	0.00
End Use - Gov. Sm. Cons. & Retail Aggr.	NYS Energy Research & Dev. Authority	Hall, Christopher	N	Y	1.00	0.00
End Use - Gov. Sm. Cons. & Retail Aggr.	City of New York	Mager, Michael	N	Y	1.00	0.00
Public Power - State Power Authorities	Long Island Power Authority	Clarke, Dave	N	Y	1.00	0.00
Public Power - State Power Authorities	New York Power Authority	Antinori, Andrew	N	Y	1.00	0.00
Public Power - Munis & Co-ops	Bath Electric, Gas & Water Systems	Bolbrock, Richard	N	Y	1.00	0.00
Public Power - Munis & Co-ops	Freeport Electric	Rudebusch, Tom	N	Y	0.00	0.00
Public Power - Munis & Co-ops	Jamestown Board of Public Utilities	Rudebusch, Tom	N	Y	0.00	0.00
Public Power - Munis & Co-ops	Lake Placid Village	Bolbrock, Richard	N	Y	1.00	0.00
Public Power - Munis & Co-ops	Municipal Commission of Boonville	Bolbrock, Richard	N	Y	1.00	0.00
Public Power - Munis & Co-ops	Plattsburgh Municipal Lighting Dept	Bolbrock, Richard	N	Y	1.00	0.00
Public Power - Munis & Co-ops	Village of Westfield	Bolbrock, Richard	N	Y	1.00	0.00
Public Power - Munis & Co-ops	Village of Solvay	Bolbrock, Richard	N	Y	1.00	0.00
Public Power - Munis & Co-ops	Village of Arcade	Bolbrock, Richard	N	Y	1.00	0.00
Public Power - Munis & Co-ops	Village of Fairport	Bolbrock, Richard	Ν	Y	1.00	0.00
Public Power - Munis & Co-ops	Village of Rockville Centre	Rudebusch, Tom	N	Y	0.00	0.00
Public Power - Environmental	American Lung Association		N	N	0.00	0.00
Public Power - Environmental	American Wind Energy Association		N	N	0.00	0.00
Public Power - Environmental	Environmental Advocates		N	N	0.00	0.00
Public Power - Environmental	Natural Resources Defense Council		N	N	0.00	0.00
Public Power - Environmental	PACE Energy & Climate Center		N	N	0.00	0.00
Public Power - Environmental	Riverkeeper		Ν	N	0.00	0.00

New York Independent System Operator - Committee Membership

Business Issues Committee - March 17, 2016 - NYISO - Parties Checked in Attendance

Organization	Sector	Representative	Alternate1	Alternate2	Alternate3	Alternate4	Alternate5	Alternate6	Alternate7	Proxy	Guest
toria Energy LLC	Generation Owners	McCall, Chuck	Browne, Scott	Habib , Phillipe	Singer, Leonard						
Valley LLC	Generation Owners	🗸 Litchfield , Matt	Rumsey, Tom								
ne	Generation Owners	Kruse, Brett	Reitmeyer, Jay	Flumerfelt, John	Schleimer, Steve						
ket Valley Energy Center	Generation Owners	De Meyere , Bob	Wallenstein, Arnold	Paryl, Ron							
Renewables North America LLC	Generation Owners	Brodbeck , John	Kaplan, Seth	Grimes , Mike	Nemeth , Jeffrey	Dictor, Stephen					
Coast Power, LLC	Generation Owners	Shanker, Roy	Fogarty , Thomas	Fisher, Amy	Lee , Tina	Franzetti , Paul					
gy Nuclear Northeast	Generation Owners	Logan , Kathy	Potkin, Marc	🗸 Saia, Doreen	Del Orto , Ken						
ard Wind LLC	Generation Owners	Merich, Olivia	Rugh , Chris								
k Energy Services, Inc.	Generation Owners	Ferguson, Mike	🗸 Younger, Mark								
vative Energy Systems	Generation Owners	Zeliff, Peter	Henningham, Scott								
ergy Energy Management LLC	Generation Owners	Ma, Alex	Goldstein, Michael	Orzel, Chris							
nal Grid Generation LLC	Generation Owners	Kain, Terrence	McCabe, Brian								
e Environmental Power LLC rk Cogen Partners, LP	Generation Owners Generation Owners	Silton , Harry Biittig, Timothy	Pyon James								
rset Operating Company, LLC	Generation Owners	Evanoski , Dave	Ryan, James	McManus, John							
avenswood, Inc.	Generation Owners	Taylor, William	Goodenough , Jeery DAndrea , James		Herbert Miler					🗸 LaRoe, Chris	
,		-		Congel, Dan	Hachey, Mike					V Lakoe, Chins	
nergy LLC nergy Company	Other Suppliers Other Suppliers	Ni, Bing Briscoe , Judy	Lee, George Magruder , Kathy								
Rock Energy, Inc.	Other Suppliers	Nichols , Jim	Yeager, Keith	VanHorne, Phil	Graham, Tammy						
kfield Energy Marketing L.P.	Other Suppliers	LaRoe, Chris	Mitreski, Aleksandar	Mitelman, Rimma	Dallaire, Eric						
/er	Other Suppliers	Markham , Craig	Lacey, Frank	Damaskos, Deno	Ackerman, Alan						
eton Commodities Merchant Trading L.P.	Other Suppliers	Stuss, Gordon	Romine, Brad	Emmett, Robert	+						
roup Energy Inc.	Other Suppliers	Trayers, Barry	,	,							
Edison Solutions Inc.	Other Suppliers	🗸 Mah, Norman	Dannels, Jeff								
ellation New Energy	Other Suppliers	McCartney, Glen	Wentlent, Chris	🗸 Kirk , Steven							
s Sound Cable Company, LLC	Other Suppliers	Reinhart, Brian	Rotger, Jose	,							
nergy	Other Suppliers	Bleiweis, Bruce	Stevens, Andrew	Tate, Matthew	Milberg, Sadao	Kuo, David					Ī
Energy	Other Suppliers	Pakela, Gregory	Wieszczyk, Raymond	German , Robert	-						
t Energy Business Marketing, LLC	Other Suppliers	Philips , Marjorie	Comstock , Read								
gy Marketing and Trade	Other Suppliers	Roby , Rick	Ellis, Dean	Ziegler, Pete							
Trading North America, LLC	Other Suppliers	Erbrick , Michael	LeForce , Randall	_							
Noc	Other Suppliers	Brewster, David	Breidenbaugh, Aaron	Geller, Greg							
gy Spectrum	Other Suppliers	David, Gary	Ahrens, David	Neiburg, David	Iskowitz, Aron	Brown, Ruben	Pentland, William	Villegas, Cristina	Cinadr , Matt		
gy Technology Savings	Other Suppliers	Hendler , Jeff	Ross, Valerie								
gyConnect	Other Suppliers	Campbell, Bruce	Davis, Robert	Lawrence , David							
on Generating Co. LLC	Other Suppliers	Sears, Deborah	Wentlent, Chris	🗸 Kirk , Steven						Kirk, steve	
Suez Energy NA, Inc.	Other Suppliers	Levine , Jeffrey	Hawkins , Darin	Campbell, Chad							
Power	Other Suppliers	Fernands, Rochelle	🗸 Ackerman, Alan								
nergy Services US	Other Suppliers	Bernier , Luc	Collins, Kyle	Leuthauser, Scott	Vennes, Yannick						
ventive Power	Other Suppliers	Gruber, Craig	Halford, Steve								
ys Energy Services of New York, Inc	Other Suppliers	Haugh, Michael									
sdale Biomass, LLC	Other Suppliers	Ralston, William	Hebel , Nathan	Carrigan, Kathleen							
uria Energy America, Inc.	Other Suppliers	Davis, Andrew	Vounger, Mark								
an Stanley Capital Group, Inc.	Other Suppliers	Murray, Patrick	Kochonies, Karen	Ezickson, Doron							
Power Marketing Inc.	Other Suppliers	Joseph , Kelli	Fuller, Peter	Cona , Lisa							
Era Energy	Other Suppliers	🗸 Applebaum, David	Gardner, Michelle								
e Americas Gas & Power Corp.	Other Suppliers	Boston, Roy	Kyle , Chris	🗸 Sunga , Leonard							
io Power Generation, Inc.	Other Suppliers	Lacivita, Ken	Gell, Richard	Barr, David	Sheinfield, Joel						
Energy Resource & Trade, LLC	Other Suppliers	Fromer, Howard	DePillo, Raymond	Messmer, Robert	Murawski , James						
rex Corporation	Other Suppliers	Tang, Glen	Dion, Julien	Fichten, Murray							
l Energy North America Corporation	Other Suppliers	Moreton, Samuel	Horvath, Peter	1							
bay Corporation	Other Suppliers	Merola, Peter	Ellison, Noel	Ahrens, David	Villegas, Cristina						
O Enterprises, LLC	Other Suppliers	Schubiger, Michael	Thoresen, James								
Energy North America, LLC	Other Suppliers	Picardi, Matt	French, Dave								
Energy Conside Dewer Marketing, 1 td	Other Suppliers	Hyzinski , Tom	Greening, Michele	Con-1 D-1	Hash M ²¹						
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TransCanada Power Marketing, Ltd. U.S. Power Generating Co.	Other Suppliers Other Suppliers	Taylor, William Baker, Liam	D'Andrea, James Reese, John	Congel, Dan Vounger, Mark	Hachey, Mike Schwall , Matthew	Johnson , David	Wolcott , Tyler				

Organization	Sector	Representative	Alternate1	Alternate2	Alternate3	Alternate4	Alternate5	Alternate6
Viridity Energy, Inc.	Other Suppliers	Freifeld, Allen						
Vitol Inc.	Other Suppliers	Wadsworth , Joe	Viola , Bob	Kam , Kenney				
XO Energy NY, LP	Other Suppliers	Drangula , Carey	Thompson, Matthew	Hughes, Adam				
Central Hudson Gas & Electric Corp.	Transmission Owners	Borchert , John	Chan, Ting	Seitz, Diane	Dittmann, David			
Consolidated Edison Co. of NY, Inc.	Transmission Owners	🗸 Quin , Jane	Nachmias, Stuart	Butler, Scott	Hargett, Chris	Butterklee, Neil		
National Grid	Transmission Owners	Franey, Bart	Lodemore, David	Carron , Benjamin				
New York State Electric & Gas (NYSEG)	Transmission Owners	🖌 Caletka, Patricia	Kinney, Ray	Brophy, Richard				
Orange & Rockland Utilities, Inc.	Transmission Owners							
Rochester Gas and Electric Corp.	Transmission Owners	🗸 Caletka, Patricia	Kinney, Ray	Brophy, Richard				
Alcoa, Inc.	Large Consumer	🗸 Mager, Michael	Loughney, Robert	Trinsey, Amanda	Lang, Kevin			
IBM Corporation	Large Consumer	🗸 Mager, Michael	Loughney, Robert	Trinsey, Amanda	Lang, Kevin			
Nucor Steel Auburn, Inc.	Large Consumer	Brew, James	Radigan, Frank	Kopon, Owen				
Occidental Chemical Corp.	Large Consumer	🗸 Mager, Michael	Loughney, Robert	Trinsey, Amanda	Lang, Kevin			
Wegmans Food Markets	Large Consumer	🗸 Mager, Michael	Loughney, Robert	Trinsey, Amanda	Lang, Kevin			
Metropolitan Transportation Authority	Large Consumer Government Agency	Keller , David	Chou, Frances					
American Sugar Refining, Inc	Small Consumer	Luthin, Catherine	Dowling, John	Loughney, Robert	🗸 Mager, Michael	Trinsey, Amanda		
Association for Energy Affordability	Small Consumer	Morris, Jackson	Hepinstall, David	Strauss, Valerie				
Beth Israel Health Care System	Small Consumer	Luthin, Catherine	Dowling, John	Loughney, Robert	Mager, Michael	Trinsey, Amanda		
Fordham University	Small Consumer	Luthin, Catherine	Dowling, John	Loughney, Robert	Mager, Michael	Trinsey, Amanda		
Memorial Sloan Kettering Cancer Center	Small Consumer	Luthin, Catherine	Dowling, John	Loughney, Robert	Mager, Michael	Trinsey, Amanda		
Mount Sinai Medical Center	Small Consumer	Luthin, Catherine	Dowling, John	Loughney, Robert	Mager, Michael	Trinsey, Amanda		
New York University	Small Consumer	Luthin, Catherine	Dowling, John	Loughney, Robert	🗸 Mager, Michael	Trinsey, Amanda		
Utility Intervention Unit, Division of Consumer Protection, NY Dept. of State	Government Statewide Consumer Advocate	🗸 Hogan , Erin	Rigberg, Saul	Montalvo , Marc	Pereira , Alvaro			
City of New York	Government Small Consumer and Retail Aggregate	Lang, Kevin	🗸 Mager, Michael	Trinsey , Amanda				
NYS Energy Research & Dev. Authority	Government Small Consumer and Retail Aggregate	✓ Hall , Christopher	Coup, David	Mas , Carl	Wilcox, James			
Long Island Power Authority	State Power Authorities	Clarke, Dave	🗸 Wilczek , Mariann					
New York Power Authority	State Power Authorities	Antinori, Andrew	Boyle, Bob	🗸 Lundin , Tim	Mahoney, Daniel	🗸 Wilkie , Brian		
Bath Electric, Gas & Water Systems	Municipalities and Coops	Hallgren , Guy	Bolbrock, Richard	Cordeiro, Mark				
Freeport Electric	Municipalities and Coops	Livingston, Al	Kimlingen, Ted	Rudebusch, Tom	Fiore, Chris			
Jamestown Board of Public Utilities	Municipalities and Coops	Gustafson, David	Leathers, David	Kulig, Steve	Rudebusch, Tom			
Lake Placid Village	Municipalities and Coops	Kroha, Peter	Bolbrock, Richard	Cordeiro, Mark				
Municipal Commission of Boonville	Municipalities and Coops	Stabb, Kenneth	Bolbrock, Richard	Cordeiro, Mark				
Plattsburgh Municipal Lighting Dept	Municipalities and Coops	Treacy, William	Bolbrock, Richard	Cordeiro, Mark				
Village of Arcade	Municipalities and Coops	Kilburn, Larry	Bolbrock, Richard	Cordeiro, Mark				
Village of Fairport	Municipalities and Coops	Hegarty, Matt	Bolbrock, Richard	Cordeiro, Mark				
Village of Rockville Centre	Municipalities and Coops	Andreas, Philip	Cardile, Thomas	🗸 Rudebusch, Tom				
Village of Solvay	Municipalities and Coops	Hawksby, Joe	Bolbrock, Richard	Cordeiro, Mark				
Village of Westfield	Municipalities and Coops	Thompson, Andrew	Bolbrock, Richard	Cordeiro, Mark				
American Lung Association	Environmental	Gahl , David	Seilback, Michaek	Morris, Jackson				
American Wind Energy Association	Environmental	Reynolds, Anne	Gramlich, Robert					
Environmental Advocates	Environmental	Bambrick, Conor	Gahl , David	Morris, Jackson				
Natural Resources Defense Council	Environmental	Morris, Jackson	Ho, Bruce	Clements, Allison				
PACE Energy & Climate Center	Environmental	Gahl, David	Martin , Nicholas	Morris, Jackson				
Riverkeeper AES ES Holdings LLC	Environmental Non Voting	Len , Christopher Hillman , Sharon	Lucas , Mark Kumaraswarmy , Kiran	Gahl , David				
Ace Energy Company, Inc.	Non Voting	Lynch, Stephen	Kumaraswarmy , Kiran					
Alliance for Clean Energy New York	Non Voting	Reynolds, Anne						
Anbaric Northeast Transmission Development Co.	Non Voting	Sanderson, Barry						
Appian Way Energy Partners East, LLC	Non Voting	Levy , Tal	Klein, Abram	Shen, Dong	Westlund , John	Laich , Marcus		
Ardor Energy LLC	Non Voting	Breen , Erika						
Boston Energy Marketing & Trading	Non Voting	🗸 Kramek , Mike						
Boundless Energy, LLC	Non Voting	Tompkins John, E.	Pratt, Charles					
Bruce Power	Non Voting	Viswanathan, Samira	Meyer, Sandra					
Caithness Energy LLC	Non Voting	Keevill, Gary	Collins, Kevin	Garber, Mitchell				
Cubit Power One Inc.	Non Voting	Powell, Alan	Powell, Leighton	Singer, Leonard	(A.1			
Customized Energy Solutions	Non Voting	Mancini, Rick	Fernands, Stephen	Rexrode, Caryn	🗸 Ackerman, Alan			
Ecogen Energetix, Inc.	Non Voting Non Voting	Hagner, Thomas Comstock, Read						
Energya VM	Non Voting	Ortiz Lopez , Jose Ignacio	Adell Almazan, Miguel					
First Wind Holdings, LLC	Non Voting	Keene, John	Salehian, Afshin					
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ite6	Alternate7	Proxy	Guest
		✓ Hargett, Chris	

Organization	Sector	Representative	Alternate1	Alternate2	Alternate3	Alternate4	Alternate5	Alternate6	Alternate7	Proxy	Guest
Fluent Energy	Non Voting	Acampora, Peter	Doll, Ed								
Hudson River Energy Group	Non Voting	Radigan, Frank	Canfield, Richard								
Hydro-Quebec TransEnergie	Non Voting	Prevost, Michel									
TC Mid-Atlantic Development LLC	Non Voting	Wrenbeck , Tom	Benedict, Nathan								
berdrola Renewables Inc	Non Voting	Allen, Thresa									
nnovari, Inc.	Non Voting	Lunt, Robin	Hodges, Brent								
MAG Energy Solutions, Inc.	Non Voting	Roberge, Martin	Vezina, Alexandre								
NRG Curtailment Solutions, Inc.	Non Voting	Pieniazek, Marie	Scheiderich , Jim	Lynch, Stephen	Korczykowski , Jim						
NYS Department of Public Service	Non Voting	Paynter , Thomas	Evans, Adam								
National Fuel Gas Distribution Corporation	Non Voting	Novak , Michael	Eck , Robert								
New Athens Generating Co. LLC	Non Voting	DeVinney, Dan									
New York Transco	Non Voting	Nachmias, Stuart	Hitti , Nabil	Allen, Richard	Carrigan, Kathleen						
Noble Americas Energy Solutions	Non Voting	Sun , Jungsuk	Nakhonthap, Jade	🗸 Sunga , Leonard							
Northeast Clean Heat & Power Initiative	Non Voting	De Veer, Henrietta	Lilian , Jon	Dwyer, Herb	Brown, Ruben	Cinadr , Matt	Martin , Nicholas	Villegas, Cristina			
NuEnergen	Non Voting	Hamilton , Sandy	Korczykowski, Ryan								
Power Supply Services LLC	Non Voting	Phillips , Gabriel	Abend , Erik								
RBC Energy Services, LP	Non Voting	Burnham, Steve	Fraiture, Christian	Doolittle, Robin							
RENEW Northeast	Non Voting	Pullaro, Francis	Krich , Abigail								
RES Americas, Inc.	Non Voting	Fernandes , John	Boyd , Dan								
Red Wolf Energy Trading, LLC	Non Voting	Sharma , Rishi									
Richard P. Felak	Non Voting	Felak, Rich									
Saracen Energy East LP	Non Voting	Peebles , Andy									
iemens Energy, Inc.	Non Voting	Feltes, James									
tephentown Spindle, LLC	Non Voting	Hebert, Chris									
Taylor Biomass Energy, LLC	Non Voting	Taylor , Jim	Page, Allan								
FransAlta Energy Marketing (U.S.) Inc.	Non Voting	Nivolianitis, Ted									
Fransmission Developers Inc.	Non Voting	Jessome, Donald	Helmer, William								
Villiam P. Short	Non Voting	Short, William	Schaefer, Marc		Savage, Paul	Verna, Jim					