NYISO Business Issues Committee Meeting Minutes September 12, 2018 10:00 a.m. – 11:30 a.m.

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

Mr. Aaron Breidenbaugh (Consumer Power Advocates) called the meeting to order at 10:00 a.m. by welcoming the members of the BIC. The members of the BIC identified themselves and attendance was recorded. A quorum was determined.

2. Market Operations Report and Broader Regional Markets Report

Mr. Rana Mukerji (NYISO) reviewed the Market Operations report posted with the meeting material. Mr. Dan Mahoney (NYPA) asked whether the peak load to date occurred in July 2018 or August 2018. Mr. Mukerji stated that current peak load from the Summer 2018 Capability Period occurred in August 2018.

Mr. Mukerji reviewed the Broader Regional Markets report included with the meeting material. Mr. Breindenbaugh (CPA) asked for clarification regarding the next steps related to the ongoing dispute between PSEG and Con Edison related to the B and C lines given FERC's recent order dismissing PSEG's complaint. Mr. Mukerji (NYISO) noted that FERC's order essentially defers the resolution of the dispute to the ongoing proceedings in federal court.

3. Securing 100+ kV Facilities in the Market Model

Mr. Shaun Johnson (NYISO) reviewed the presentation included with the meeting material.

Mr. Kevin Lang (Couch White) asked whether the facilities listed for inclusion in the market models by the end of this year is the end state, or if NYISO anticipates the potential for additional 115 kV facilities to be modeled in the future. Mr. Dave Edelson (NYISO) noted that the initial list is not necessarily the end state and that NYISO continually reviews operating outcomes to identify potential opportunities for modeling additional facilities.

Mr. Andy Peebles (Saracen) asked whether the Niagara modeling enhancements could be implemented before the 115 kV facilities that are contingent on these enhancements are added to the market model. Mr. Edelson noted that the Niagara modeling enhancements are likely will be deployed before the 115 kV facilities contingent on the deployment of these enhancements are added to the market model.

Mr. Mark Younger (Hudson Energy Economics) asked whether the NYISO plans to provide advanced notice of the deployment of Niagara modeling enhancements and the addition of 115 kV facilities to the market model. Mr. Edelson stated that it is anticipated that notice of expected deployment dates for the Niagara modeling enhancements and the addition of the 115 kV facilities to the market model will likely be provided to the stakeholders.

Ms. Patti Caletka (NYSEG) asked for clarification regarding whether notice to the market place will be provided in the future if additional 115 kV facilities are added to the market models. Mr. Edelson and Mr. Johnson noted that the procedures developed for inclusion of additional 115 kV facilities to the market model include a requirement to update information in Attachment A of the Outage Scheduling Manual to indicate when new facilities are added to the market model.

Mr. Younger recommended that the NYISO provide advanced notice to stakeholders in the future if additional facilities are identified for potential inclusion in the market models and report on the determinations of whether any such facilities will in fact be added to the market model, the results of any related market power analysis, and the planned timeline for adding any such facilities to the market model.

Ms. Doreen Saia (Greenburg Traurig) asked whether the NYISO plans to communicate to stakeholders if delays arise with respect to the currently anticipated schedules for the software deployments for implementing the Niagara modeling

enhancements or the modeling changes related to implementing the additional 115 kV facilities. Mr. Johnson replied that it is anticipated that the NYISO would inform the stakeholders if any such delays arise.

4. Unsecured Credit Scoring Model

Mr. John Jucha (NYISO) reviewed the presentation included with the meeting material.

Mr. David Clarke (LIPA) asked for clarification whether the assessment of the "Revenue divided by Market Cap" factor indicated if such factor is currently over predicting the likelihood of default or under predicting such likelihood. Mr. Jucha noted that the analysis indicated that this criterion was not providing accurate predictions without focusing on whether this was more likely to under or over predict the likelihood of default.

Motion #1:

The Business Issues Committee (BIC) hereby recommends that the Management Committee approve, and recommend to the NYISO Board for filing under Section 205 of the Federal Power Act, revisions to Attachment K of the Market Administration and Control Area Services Tariff as described in the presentation entitled "Proposed Change to Unsecured Credit Scoring Model," made at the September 12, 2018 BIC meeting.

Motion passed unanimously with an abstention.

5. Revisions to OATT Attachment L

Mr. Greg Williams (NYISO) reviewed the presentation included with the meeting material.

Mr. Fromer (PSEG) asked for clarification regarding the types of agreements set forth in Table 1A of Attachment L of the OATT. Mr. Williams noted that these are historic transmission service agreements that predated the NYISO's commencement of operations and formed the basis of Grandfathered Rights and Grandfathered TCCs.

Mr. Fromer asked for confirmation that the extensions proposed with respect to Contract Nos. 189.1 and 190.1 are permitted under the terms of the underlying agreements. Mr. Williams stated that revisions to these agreements are governed by the terms of the underlying agreements and the Accepted Revisions process requires parties proposing revisions to the information in Table 1A of Attachment L of the OATT to provide information to support any requested revision.

Motion #2:

The Business Issues Committee ("BIC") hereby recommends that the Management Committee approve revisions to Attachment L of the Open Access Transmission Tariff, as more fully described in the presentation entitled "Revisions to OATT Attachment L" made to the BIC on September 12, 2018.

Motion passed unanimously.

6. Updating and Extending the 2017 CARIS Database for Specific Project Evaluation

Mr. Chen Yang (NYISO) reviewed the presentation included with the meeting material.

Mr. Lang noted that stakeholders raised concerns during discussions at the Electric System Planning Working Group ("ESPWG") regarding the modeling assumptions being utilized in Congestion Assessment and Resource Integration Study ("CARIS") Phase 2 database and whether this provides an accurate assessment of future system conditions. Mr. Tim Duffy (NYISO) stated that the NYISO acknowledges that stakeholders raised concerns during ESPWG discussions regarding the assumptions required by the NYISO's inclusion rules. Mr. Lang clarified that there is no indication that the NYISO did not comply with its current tariff requirements, but rather that concerns have been raised whether these requirements provide for an appropriate representation of future system conditions for the purposes of economic planning. Mr. Duffy noted that the concerns raised regarding modeling assumption for CARIS will be considered as part of the ongoing review of potential enhancements to the comprehensive system planning process.

Ms. Jane Quin (Con Edison) noted that Con Edison raised concerns regarding the carbon price assumptions included in the 2018 CARIS Phase 2 database. Mr. Duffy stated that in the event that a specific project proposal is brought forward, the NYISO has committed that it would include sensitivity analysis to assess various carbon pricing assumptions.

Ms. Dana Lazarus (Con Edison) stated that Con Edison continues to question the carbon price assumptions developed by the NYISO for the 2018 CARIS Phase 2 database and recommends that further assessment of the appropriateness of those assumptions be undertaken by the NYISO.

7. Working Group Updates

- <u>Billing and Accounting and Credit Working Group</u>: The group met on August 24, 2018 and reviewed the standard accounting/settlement reports, a presentation by KPMG regarding the 2018 System and Organizational Controls ("SOC 1") audit report, proposed enhancements to the NYISO's unsecured credit scoring model, and a presentation regarding the credit policy for the TCC market.
- Electric System Planning Working Group: The group has met twice since the last BIC meeting. The group met on August 22, 2018 and reviewed the 2018 Reliability Needs Assessment ("RNA") draft report, and input assumptions for the 2018 CARIS Phase 2 database. On September 6, 2018, the group met and reviewed the NYISO's proposal for complying with FERC Order No. 845, input assumptions for the 2018 CARIS Phase 2 database, and proposed short-term enhancements to the comprehensive system planning process.
- Installed Capacity Working Group: The group has met four times since the last BIC meeting. On August 14, 2018, the group met jointly with MIWG and PRLWG and reviewed proposed rules for the participation of distributed energy resources ("DER") and energy storage resources ("ESRs") in the capacity market. On August 23, 2018, the group met jointly with MIWG and PRLWG and reviewed proposed capacity market participation rules for DER and ESRs. The group met jointly with MIWG on August 30, 2018 and reviewed the consumer impact assessment related to ESRs participating in the wholesale markets, and the Market Monitoring Unit's market report for the second calendar quarter of 2018. On September 11, 2018, the group met jointly with MIWG and PRLWG and reviewed a proposed meter data services construct for DER participating in the wholesale markets.
- Electric Gas Coordination Working Group: The group has not met since the last BIC meeting.
- <u>Load Forecasting Task Force</u>: The group met on August 24, 2018 and reviewed the proposed weather adjustment of the capacity market load forecast to account for Behind-the-Meter: Net-Generation resources.
- Market Issues Working Group: The group has met five times since the last BIC meeting. On August 14, 2018, the group met jointly with ICAPWG and PRLWG and reviewed proposed Day-Ahead Margin Assurance Payment rules for ESRs. The group met jointly with ICAPWG and PRLWG on August 23, 2018 and reviewed the NYISO's proposal for compliance with FERC Order No. 844. On August 29, 2018, the group met jointly with PRLWG and reviewed an update regarding the Securing 100+ kV Transmission Facilities in the Market Model initiative, and the proposed rules for transmission node identification related to DER participation in the energy and ancillary services markets. The group met jointly with ICAPWG on August 30, 2018 and reviewed the consumer impact assessment related to ESRs participating in the wholesale markets, the Market Monitoring Unit's market report for the second calendar quarter of 2018, and proposed scheduling rules related to ESRs participating in the energy and ancillary services markets. On September 11, 2018, the group met jointly with ICAPWG and PRLWG and reviewed a proposed meter data services construct for DER participating in the wholesale markets.
- <u>Price Responsive Load Working Group</u>: The group has met four times since the last BIC meeting. The group met jointly with MIWG and/or ICAPWG on August 14, 2018, August 23, 2018, August 29, 2018 and September 11, 2018 and reviewed the DER-related agenda topics for each meeting.

8. New Business

There was no new business.

The meeting adjourned at 11:30 a.m.

Business Issues Committee Meeting

September 12, 2018 Final Motions

Motion #1:

The Business Issues Committee (BIC) hereby recommends that the Management Committee approve, and recommend to the NYISO Board for filing under Section 205 of the Federal Power Act, revisions to Attachment K of the Market Administration and Control Area Services Tariff as described in the presentation entitled "Proposed Change to Unsecured Credit Scoring Model," made at the September 12, 2018 BIC meeting.

Motion passed unanimously with an abstention.

Motion #2:

The Business Issues Committee ("BIC") hereby recommends that the Management Committee approve revisions to Attachment L of the Open Access Transmission Tariff, as more fully described in the presentation entitled "Revisions to OATT Attachment L" made to the BIC on September 12, 2018.

Motion passed unanimously.

New York Independent System Operator - Committee Membership

Business Issues Committee - September 12, 2018 - NYISO - Parties Checked in Attendance

Organization	Sector	Representative	Alternate1	Alternate2	Alternate3	Alternate4	Alternate5	Alternate6	Alternate7	Proxy	Guest
Astoria Energy LLC	Generation Owners	McCall, Chuck	Browne, Scott	Habib , Phillipe	Singer, Leonard						
Bayonne Energy Center, LLC	Generation Owners	Allman, Ellen	Yang, Sue	Caplan, Stu							
CPV Valley LLC	Generation Owners	Litchfield, Matt	Rumsey, Tom								
Calpine	Generation Owners	Kruse, Brett	Reitmeyer, Jay	Flumerfelt, John	Schleimer, Steve						
Cricket Valley Energy Center	Generation Owners	Davis , Charles	Wallenstein , Arnold	Paryl , Ron							
Danskammer Energy, LLC	Generation Owners	Reid , William	Cada, Eric	N	TT:	n					
EDP Renewables North America LLC	Generation Owners	Brodbeck , John	Kaplan , Seth	Nemeth , Jeffrey	High , Jeremy	Priemer , Dustin					
East Coast Power, LLC	Generation Owners	Shanker, Roy	Fogarty , Thomas	Lee , Tina	Franzetti , Paul						
Empire Generating Co, LLC	Generation Owners Generation Owners	Nuss , Kurt	Argetsinger , Andrew	Willson , Darrell	Swenson , Nils						
Entergy Nuclear Northeast	+		Saia, Doreen	Bergeron , John							
Helix Ravenswood LLC	Generation Owners	D'Andrea , James	Kline, Marc	DiBari , Dominic							
Howard Wind LLC	Generation Owners Generation Owners	Merich , Olivia	Rugh , Chris								
Indeck Energy Services, Inc.	•	1	Younger, Mark								
Innovative Energy Systems	Generation Owners Generation Owners	Zeliff, Peter	Henningham, Scott	Owers 1 Claud							
Invenergy Energy Management LLC	<u> </u>	Pakula , Maggie	Goldstein , Michael	Orzel , Chris							
National Grid Generation LLC	Generation Owners	Kain , Terrence	McCabe, Brian								+
Noble Environmental Power LLC Selkirk Cogen Partners, LP	Generation Owners Generation Owners	Silton , Harry Biittig, Timothy	Ryan Iamas								
Somerset Operating Company, LLC	Generation Owners Generation Owners	Gregson, Brian	Ryan, James Goodenough, Jeery	Evanoski, Dave							
BJ Energy LLC	Other Suppliers	Ni, Bing	Lee, George	Evanoski , Dave							
BP Energy Company	Other Suppliers	Chintapalli , Raj	Magruder, Kathy	✓ Ackerman, Alan							
BioUrja Power, LLC	Other Suppliers	Moore, Cody	Ward, Roxie	Tekerman, Alan							
BlueRock Energy, Inc.	Other Suppliers	Nichols , Jim	Yeager, Keith	VanHorne, Phil	Graham , Tammy						
Brookfield Energy Marketing L.P.	Other Suppliers	LaRoe, Chris	Mitreski, Aleksandar	Mitelman, Rimma	Dallaire , Eric						
CPower	Other Suppliers	Dotson-Westphalen, Peter	Hourihan , Michael	Damaskos , Deno	Campbell , Bruce						
Castleton Commodities Merchant Trading L.P.	Other Suppliers	Stuss, Gordon	Romine , Brad	Emmett, Robert	Cumpoen, Bruce						
Citigroup Energy Inc.	Other Suppliers	✓ Trayers, Barry	, 2								
Con Edison Solutions Inc.	Other Suppliers	✓ Mah, Norman	Dannels , Jeff								
Constellation New Energy	Other Suppliers	Barlette, Richard	Kirk, Steven								
Cross Sound Cable Company, LLC	Other Suppliers	Reinhart, Brian	Rotger, Jose								
DC Energy	Other Suppliers	Bleiweis, Bruce	Stevens, Andrew	Tate, Matthew	Milberg, Sadao	Jeev , Kumar					
DTE Energy	Other Suppliers	Pakela, Gregory	Wieszczyk, Raymond	German , Robert	6, 6, 6, 6, 6, 6, 6, 6, 6, 6, 6, 6, 6, 6	,					
Direct Energy Business Marketing, LLC	Other Suppliers	✓ Galarneau , Kenneth	Philips , Marjorie	Comstock, Read							
Drift Marketplace, Inc.	Other Suppliers	Tilley, Alan	Robinson, Greg								
Dynegy Marketing and Trade	Other Suppliers	Frazier , Amanda	Allen, Sean								
EDF Trading North America, LLC	Other Suppliers	Erbrick, Michael	LeForce, Randall								
ENGIE Energy Marketing NA, Inc.	Other Suppliers	Levine , Jeffrey	Hawkins, Darin	Campbell, Chad							
Eastern Generation	Other Suppliers	Baker, Liam	Reese, John	✓Younger, Mark	✓ Schwall , Matthew	Johnson , David	Wolcott, Tyler				
EnerNoc	Other Suppliers	Brewster, David	Geller , Greg								
Energy Spectrum	Other Suppliers	David, Gary	Ahrens, David	Neiburg, David	Iskowitz, Aron	Brown, Ruben	Pentland, William	Villegas, Cristina	Cinadr , Matt		
Energy Technology Savings	Other Suppliers	Hendler , Jeff	Ross , Valerie								
Exelon Generating Co. LLC	Other Suppliers	Barlette, Richard	Kirk , Steven								
Galt Power	Other Suppliers		✓ Ackerman, Alan								
HQ Energy Services US	Other Suppliers	Plante , Matthieu	✓ Leuthauser, Scott	Guilbault, Louis	Bélanger, Frédéric						
Innoventive Power	Other Suppliers	Gruber, Craig	Halford, Steve								
Lyonsdale Biomass, LLC	Other Suppliers	Ralston, William	Hebel, Nathan	Carrigan , Kathleen							
Mercuria Energy America, Inc.	Other Suppliers	Davis , Andrew	✓Younger, Mark	Frye, Samuel							
Morgan Stanley Capital Group, Inc.	Other Suppliers	Murray, Patrick	Kochonies, Karen	Ezickson, Doron							
NRG Power Marketing Inc.	Other Suppliers	Hsia , Jennifer	Cona , Lisa	Kranz, Bradley							
New York Transco	Other Suppliers	Nachmias, Stuart	Hitti , Nabil	Caso , Rob	Carrigan , Kathleen	Dumais, Paul	McKinney , Jeff				
NextEra Energy	Other Suppliers	Applebaum, David	Gardner, Michelle	Gibelli , Stephen							
Ontario Power Generation, Inc.	Other Suppliers	Lacivita, Ken	Gell, Richard	Barr, David	Sheinfield, Joel						
PSEG Energy Resource & Trade, LLC	Other Suppliers	Fromer, Howard	DePillo, Raymond	Cimino , David	Murawski , James						
Riverbay Corporation	Other Suppliers	Merola, Peter	Ellison, Noel								
SESCO Enterprises, LLC	Other Suppliers	Schubiger, Michael	Thoresen, James								
Shell Energy North America, LLC	Other Suppliers	Picardi, Matt									
Talen Energy	Other Suppliers	✓ Toomey , Megan	Hohenshilt , Jennifer	Labella, Julie	Raggio, Debra						
TransCanada Power Marketing, Ltd.	Other Suppliers	Cahill , Paul	Schuler, Richard	Murphy , Tonya							
Viridity Energy, Inc.	Other Suppliers	Freifeld, Allen									

Organization	Sector	Representative	Alternate1	Alternate2	Alternate3	Alternate4	Alternate5	Alternate6	Alternate7	Proxy	Guest
Vitol Inc.	Other Suppliers	Wadsworth, Joe	Viola, Bob	Kahn, Casey						Ĭ	
XO Energy NY, LP	Other Suppliers	Drangula , Carey	Thompson, Matthew	Hughes, Adam							
Central Hudson Gas & Electric Corp.	Transmission Owners	Borchert , John	Chan, Ting	May , Jeff	Dittmann, David						
Consolidated Edison Co. of NY, Inc.	Transmission Owners	✓ Quin , Jane	Nachmias, Stuart	Butler, Scott	Hargett, Chris	Butterklee, Neil					
National Grid	Transmission Owners	✓Janzen, Margaret	Lodemore , David	Carron , Benjamin							
New York State Electric & Gas (NYSEG)	Transmission Owners	✓Caletka, Patricia	Lynch, Tim	Brophy , Richard							
Orange & Rockland Utilities, Inc.	Transmission Owners										
Rochester Gas and Electric Corp.	Transmission Owners	✓Caletka, Patricia	Lynch, Tim	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	Mackaronis , Chris								
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	✓Breidenbaugh, Aaron	✓Lang, Kevin	Mager, Michael	Trinsey, Amanda					
Association for Energy Affordability	Small Consumer	Strauss , Valerie	Hepinstall, David	Farmer, Miles	_	· ·					
Beth Israel Health Care System	Small Consumer	Luthin, Catherine	✓Breidenbaugh, Aaron	✓ Lang, Kevin	Mager, Michael	Trinsey, Amanda					
Fordham University	Small Consumer	Luthin, Catherine	✓ Breidenbaugh , Aaron	✓Lang, Kevin	Mager, Michael	Trinsey, Amanda					
Memorial Sloan Kettering Cancer Center	Small Consumer	Luthin, Catherine	✓ Breidenbaugh , Aaron	✓Lang, Kevin	Mager, Michael	Trinsey, Amanda					
Mount Sinai Medical Center	Small Consumer	Luthin, Catherine	✓ Breidenbaugh , Aaron	✓ Lang, Kevin	Mager, Michael	Trinsey , Amanda					
New York University	Small Consumer	Luthin, Catherine	✓ Breidenbaugh , Aaron	✓ Lang, Kevin	Mager, Michael	Trinsey , Amanda					
Utility Intervention Unit, Division of Consumer	Government Statewide Consumer Advocate					1111505 , 1 manda					
Protection, NY Dept. of State		Hogan , Erin	✓ Montalvo , Marc	Loiacono, Matthew	O'Hare , Katie						
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		Coun Desid	Mas Carl	W/:1 Y-	Maurre C.1 1					
Tivis Biloigy Nessellon & Bow Mullionly	Aggregate	✓ Hall , Christopher	Coup, David	Mas , Carl	Wilcox , James	Matteson , Schuyler					
Long Island Power Authority	State Power Authorities	✓Clarke, Dave	Wilczek , Mariann								
New York Power Authority	State Power Authorities	Antinori , Andrew	✓Cordi , John	✓ Kane, James	✓ Mahoney , Daniel						
Bath Electric, Gas & Water Systems	Municipalities and Coops	Bonacci , Erin	Wentlent, Chris	Cordeiro, Mark							
Freeport Electric	Municipalities and Coops	Livingston , Al	Kimlingen, Ted	✓ Rudebusch, Tom	Fiore , Chris	1					
Jamestown Board of Public Utilities	Municipalities and Coops	Sellstrom , Kris	Leathers, David	Allen, Cory	✓Rudebusch, Tom						
Lake Placid Village	Municipalities and Coops	Daby , Kimball	Wentlent, Chris	Cordeiro, Mark							
Municipal Commission of Boonville	Municipalities and Coops	Varner, Doug	Wentlent, Chris	Cordeiro, Mark							
Plattsburgh Municipal Lighting Dept	Municipalities and Coops	Treacy, William	Wentlent, Chris	Cordeiro, Mark							
Village of Arcade	Municipalities and Coops	Kilburn, Larry	Wentlent, Chris	Cordeiro, Mark		-					
Village of Fairport	Municipalities and Coops	Hegarty , Matt	Wentlent, Chris	Cordeiro, Mark							
Village of Rockville Centre	Municipalities and Coops	Andreas , Philip	Valenzano, Michael	✓ Rudebusch, Tom							
Village of Solvay	Municipalities and Coops	Hawksby , Joe	Wentlent, Chris	Cordeiro, Mark							
Village of Westfield	Municipalities and Coops	Thompson , Andrew Reynolds , Anne	Wentlent, Chris	Cordeiro, Mark	Goggin Michael	Grass Come					
American Wind Energy Association Environmental Advocates	Environmental Environmental	Reynolds , Anne Bambrick , Conor	Reeder , Mark Farmer , Miles	Beck , Betsy Morris, Jackson	Goggin, Michael	Grace, Gene					
Environmental Defense Fund	Environmental	Christian , Rory	✓ Stein , Elizabeth	WIOIIIS, JACKSUII		1					
Natural Resources Defense Council	Environmental	Farmer, Miles	Morris, Jackson	De Costanzo , Donna							
PACE Energy & Climate Center	Environmental	Musgrove , Sheryl	Taylor, Geordi	Farmer, Miles		†					
Riverkeeper	Environmental	Gallay , Paul	Jones , Abigail	Doran , Erin		1					
AEP On-Site Partners, LLC	Non Voting	Jansen , Joel	Kakodkar , Guatam	,							
AES ES Holdings LLC	Non Voting	Hillman , Sharon	Kumaraswarmy , Kiran								
Acadia Center	Non Voting	Howe, Cullen									
Acadia Energy Corporation	Non Voting	Rappaport, Jason	Bay , John								
Alliance for Clean Energy New York	Non Voting	Reynolds, Anne	Dufresne, Zach	Reeder, Mark							
Anbaric Northeast Transmission Development Co.	Non Voting	Sanderson , Barry	Kosel, Howard								
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									
Avangrid Renewables, Inc.	Non Voting	Kilgallen , Kevin	Sokolski , Adam			-					
Boston Energy Marketing & Trading	Non Voting	Kramek , Mike									
Bruce Power	Non Voting	Jain , Anshul	Meyer , Sandra	Codes Mr. 1. 11							
Calring Energy LLC	Non Voting	Keevill , Gary	Alvarez , Asavari	Garber, Mitchell		+					
Canandaigua Powar Partners, LLC	Non Voting	Sun , Jungsuk	Nakhonthap , Jade	Sunga, Leonard		1					
Canandaigua Power Partners, LLC Cubit Power One Inc.	Non Voting Non Voting	Keene , John Powell , Alan	Gaddes , Caleb	Singer Leonard							
Cubit Power One Inc. Customized Energy Solutions	Non Voting Non Voting	Mancini, Rick	Powell , Leighton	Singer, Leonard Rexrode, Caryn	✓ Ackerman, Alan						
Cypress Creek Renewables	Non Voting	Kohlstedt, Kevin	Fernands, Stephen		Ackerman, Alan	1					
Cypiess Creek Renewables	TYOH VOLING	Komsteat , Kevin	Kemp, Melissa	Salehian, Afshin		1		1		1	1

Organization	Sector	Representative A	Alternate1	Alternate2	Alternate3	Alternate4	Alternate5	Alternate6	Alternate7	Proxy	Guest
cesis LLC	Non Voting	Wu , Brian									
nergya VM	Non Voting	Garcia, Francisco	Maeso, Manual	Lopez, Ana	Corvillo , Cristina						
luent Energy	Non Voting	Acampora , Peter	Doll, Ed								
GI Energy	Non Voting	Falcier, Peter	Robinson, James								
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								
nstitute for Policy Integrity at NYU School of Law	Non Voting	Unel, Burcin	Noll, Bethany								
Key Capture Energy	Non Voting	Fitzgerald, Dan	Bishop , Jeff								
AAG Energy Solutions, Inc.	Non Voting	Pelletier, Simon	Vezina, Alexandre								
IRG Curtailment Solutions, Inc.	Non Voting	Popova , Julia	Ainspan, Malcolm	Pieniazek, Marie							
NY-BEST Consortium	Non Voting	Acker, William	Sheehan, Denise								
NYS Department of Public Service	Non Voting	✓ Paynter , Thomas	Evans, Adam								
National Fuel Gas Distribution Corporation	Non Voting	Novak, Michael	Eck, Robert								i
New Athens Generating Co. LLC	Non Voting	Tripp, Hank									
North America Transmission, LLC	Non Voting	✓ Willick , Lawrence	York , Joshua								
Northeast Clean Heat & Power Initiative	Non Voting	Venkataraman, Sree	Brown, Ruben	Cinadr , Matt	Dwyer , Herb						
Northline Utilities LLC	Non Voting	McKinney , Jeff	Danskin, Susan								İ
JuEnergen	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							
ENEW Northeast	Non Voting	Pullaro , Francis	Krich, Abigail								
ES Americas, Inc.	Non Voting	Fernandes, John	Boyd , Dan								
ed Wolf Energy Trading, LLC	Non Voting	Christian , Adam									İ
ichard P. Felak	Non Voting	Felak, Rich									İ
TEM, Inc.	Non Voting	Ko , Ted									
aracen Energy East LP	Non Voting	Peebles , Andy									
iemens Energy, Inc.	Non Voting	Feltes, James									
tephentown Spindle, LLC	Non Voting	Hebert, Chris									1
aylor Biomass Energy, LLC	Non Voting	Taylor, Jim	Page, Allan								
eichos Energy, LLC	Non Voting	Maclearnsberry , Kirk	VanCoevering , Darrel								İ
esla Motors, Inc.	Non Voting	Burson , Kate	Van Cleve, Sarah	Watson, Betty							
ransAlta Energy Marketing (U.S.) Inc.	Non Voting	Nivolianitis, Ted	Abend, Erik								
ransmission Developers Inc.	Non Voting	Jessome , Donald	Helmer, William	Harrison , Bob							
ransource New York, LLC	Non Voting	Burkholder, Joshua	•								
Villiam P. Short	Non Voting	Short, William	Schaefer, Marc		Savage, Paul	Verna, Jim					İ

NYISO Employees

Duffy, Timothy

Prevratil, Sheri

Williams, Gregory

Bissell, Garrett

Johnson, Shaun

Mukerji, Rana

Eckels, Debbie

Dixon, Kirk RTO Insider, Michael Kuser