

FILE

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PUCO EXHIBIT FILING

Date of Hearing: May 7, 2018

Case No. 17-791-EL-CSS and 19-1967-EL-CSS

PUCO Case Caption: _____

Direct Energy Business v. Ohio Edison, et al. (17-791-EL-CSS)

Ohio Edison, et al. v. Direct Energy Business (19-1967-EL-CSS)

List of exhibits being filed:

Direct Exhibits: 3, 4, 5, 6, 7, 8, 9, 10, 11, 16

Companies Exhibits: 1, 2, 4, 5, 6, 9, 10, 11

~~*Confidential Exhibits:~~

~~Direct Exhibits: 12-C, 13-C, 14-C, 15-C~~

~~Companies Exhibits: 7-C~~

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Reporter's Signature: Carolyn M. Burke

Date Submitted: May 21, 2018

BEFORE THE OHIO STATE BOARD OF EDUCATION

- - -

In the Matter of: :
 :
Michael Klubnik. :

- - -

PROCEEDINGS - VOLUME I

before Linda F. Mosbacher, Hearing Examiner, at the
Ohio Department of Education, 25 South Front Street,
Conference Room 101, Columbus, Ohio, at 10:00 a.m. on
Tuesday, May 15, 2018.

- - -

ARMSTRONG & OKEY, INC.
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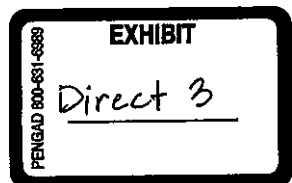
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**BEFORE
THE PUBLIC UTILITIES COMMISSION OF OHIO**

DIRECT ENERGY BUSINESS, LLC,)	
)	
Complainant,)	
)	
v.)	Case No. 17-791-EL-CSS
)	
OHIO EDISON COMPANY AND THE)	
CLEVELAND ELECTRIC ILLUMINATING)	
COMPANY,)	
)	
Respondents.)	

OHIO EDISON COMPANY AND THE)	
CLEVELAND ELECTRIC ILLUMINATING)	
COMPANY,)	
)	
Complainants,)	Case No. 17-1967-EL-CSS
)	
v.)	
)	
DIRECT ENERGY BUSINESS, LLC,)	
)	
Respondent.)	

**DIRECT TESTIMONY OF MARJORIE ROSENBLUTH PHILIPS
ON BEHALF OF
DIRECT ENERGY BUSINESS, LLC**



Direct Testimony of Marjorie Rosenbluth Philips

Q1. Please introduce yourself.

A1. My name is Marjorie Rosenbluth Philips. I am the Director, RTO and Federal Services, for Direct Energy (Direct). My business address is 194 Wood Avenue South, Iselin, New Jersey 08830.

Q2. What are your job responsibilities?

A2. I provide regulatory support to Direct's interactions with the PJM regional transmission organization (RTO). I also have management responsibility for personnel who provide regulatory support to Direct's activities in the ISO-New England, New York Independent System Operator and Midcontinent Independent System Operator RTO regions. I am also responsible for Direct's activities before the Federal Energy Regulatory Commission (FERC), other than compliance activities. As part of my job, I routinely interpret and monitor PJM's Open-Access Transmission Tariff (OATT) and related policy and procedure guidelines issued by PJM.

Q3. What training, education and experience do you have for your job?

A3. I earned a B.A. in Political Theory, with Honors, from McGill University in 1980. I then attended Columbia University's School of International Affairs, which trained me for negotiations and cooperation in large stakeholder bodies. I then attended Fordham University School of Law, where I earned a J.D. in 1988. I was an Associate at Skadden Arps in New York, New York from 1989 to 1994, where I practiced corporate law related specifically to electric generation project development. I have since worked for Exelon Corporation, PSEG, Constellation and Hess Corporation, whose wholesale electric business was purchased by my current company, Direct Energy.

1 **Q4. Have you reviewed the Companies' Supplier Tariff?**

2 A4. Yes. I am generally familiar with the provisions of the Supplier Tariff that reference the

3 "Transmission Provider," which is PJM. Under Section XV.A of the Supplier Tariff,

4 "The Certified Supplier agrees that settlements will be provided under the rates, terms

5 and conditions of the Transmission Provider OATT and the applicable business practice

6 manuals."

7 **Q5. Are you familiar with the "Transmission Provider OATT and the applicable**

8 **business practice manuals" referenced in this section of the Supplier Tariff?**

9 A5. Yes. This refers to the PJM OATT. The applicable terms and conditions for financial

10 settlements are contained in Attachment K, Section 3.6 of the OATT, which I have

11 attached to my testimony as Exhibit 2.1.

12 **Q6. To whom does the PJM OATT apply?**

13 A6. The PJM tariff applies to all PJM members, and a company must be a PJM member to

14 participate in PJM's markets. These market participants include, among others, generator

15 and demand response owners, transmission owners, electric distribution companies,

16 public power entities and competitive suppliers.

17 **Q7. What is the purpose of the OATT?**

18 A7. Getting electricity from where it is generated to where it is needed is a complex task

19 involving many stakeholders. The OATT standardizes the rules and regulations for

20 market participants. Market participants may still deal with each other directly through

21 bilateral transactions, but otherwise, all wholesale market activity in the day-ahead and

22 real-time energy markets is governed by the OATT.

23 **Q8. Why is there a need for PJM to be involved in financial settlements?**

1 A8. PJM acts as an intermediary or “traffic cop” between market buyers and market sellers.
2 Instead of contracting with each other directly, market buyers and sellers contract with
3 PJM. PJM bills market participants and disburses payments. Fundamentally, PJM
4 operates much like eBay. When a person buys or sells on eBay, they do not deal directly
5 with their counterparty. eBay collects money from the buyer and disperses it to the seller.
6 Both the buyer and seller must follow eBay’s rules. Thus, PJM’s OATT is much like
7 eBay’s terms of service. Where eBay and PJM differ is that with the former, transactions
8 are generally final once money changes hands. With PJM, transactions are subject to
9 resettlement for a certain period. I will discuss the resettlement process later in my
10 testimony.

11 **Q9. In general, what information does PJM rely on to settle transactions?**

12 A9. Just like eBay, PJM needs to know the identities of the market buyer and market seller,
13 what is being bought or sold, and the price. The price for energy and capacity is set
14 through PJM auctions or other pricing mechanisms administered by PJM, so PJM already
15 has this information. Everything else PJM needs to know for settlement purposes is
16 furnished by the market participants.

17 **Q10. Does Direct engage in wholesale transactions in order to supply retail load?**

18 A10. We do. Direct does not own generation resources. Therefore, we must purchase energy
19 and capacity on the wholesale market in quantities sufficient to meet our retail and
20 wholesale obligations. We also have to schedule delivery of this energy and capacity, and
21 arrange and pay for any related ancillary services.

22 **Q11. How does PJM account for energy and capacity delivered to the Companies’ service**
23 **area on Direct’s behalf?**

1 A11. PJM relies on end-user meter data furnished by the Companies. As stated in Section
2 XV.F.1 of the Supplier Tariff, "The Company shall upload required, aggregated customer
3 meter data information on behalf of Certified Suppliers to the Transmission Provider
4 including but not limited to real time hourly energy kWh data, capacity daily load share
5 data and transmission daily load share data for use with financial settlement purposes as
6 required by the Transmission Provider under the Transmission Provider's OATT."

7 **Q12. What does PJM do with the aggregated customer meter data?**

8 A12. PJM uses this information to generate month-to-date invoices to Direct on a weekly basis.
9 Direct must pay these invoices within three days. PJM remits funds paid by Direct to the
10 parties who provided the energy and capacity.

11 **Q13. What happens if someone suspects an invoice is incorrect because of a metering
12 error?**

13 A13. It depends when the error is caught. As I mentioned, the weekly invoices contain month-
14 to-date information. If an invoice for the first week of the month contains an error, an
15 adjustment can be made which will flow-through to the next weekly invoice. For
16 example, if an error is identified on the week 1 invoice, an adjustment can be made on the
17 week 2, 3, or 4 invoices. Additionally, Attachment K, Section 3.6.1, provides for a
18 monthly metering charge or credit, where metering errors can also be addressed. If errors
19 are identified and corrected by the end of the delivery month, there is no need for further
20 action.

21 **Q14. What happens if a meter error is discovered after the end of a delivery month?**

22 A14. This is addressed in Attachment K, Section 3.6.5, which allows meter error adjustments
23 submitted "not later than the last Business Day of the month following the end of the

1 monthly billing cycle applicable to the meter correction.” If, for example, an error is
2 discovered in the billing cycle that ends March 30, the “last business day of the month
3 following” would be April 30. As a practical matter, corrections under this section,
4 sometimes referred to “Resettlement B”, are limited to a maximum of 60 days.

5 **Q15. Is there any way to submit adjustments for meter errors identified after 60 days?**

6 A15. In limited circumstances, yes. Under Section 3.6.2, also known as “Resettlement C,”
7 market participants may agree between themselves to adjust load records to compensate
8 for meter error “if both Market Participants are willing” and “such adjustment does not
9 affect other parties.”

10 **Q16. Is there an absolute deadline for adjustments to correct meter errors?**

11 A16. Yes. Section 3.6.6 does not allow any market participant to assert a claim for an
12 adjustment “as a result of a meter error for any error discovered more than two years after
13 the date on which the metering occurred.” If an error is discovered within this two-year
14 period, any adjustment “shall be limited to bills for transactions occurring in the most
15 recent annual accounting period . . . in which the meter error occurred, and the prior
16 annual accounting period.”

17 **Q17. When did the Companies advise Direct of meter errors?**

18 A17. My understanding is that Direct was first advised of a metering issue in an email from the
19 Companies dated December 18, 2015. According to that email (included in Exhibit 1.3 of
20 Ms. Ringenbach’s testimony), the Companies became aware of the error “a few weeks”
21 before notifying Direct.

22 **Q18. Over what period of time do the Companies claim that the metering error impacted**
23 **invoices submitted to PJM?**

1 A18. The periods vary by customer, but the overall range starts on December 1, 2013 and ends
2 on September 9, 2015, according to the information in Exhibit 1.4 of Ms. Ringenbach's
3 testimony.

4 **Q19. Were PJM invoices for the September 2015 delivery month and earlier months**
5 **subject to the Resettlement B process?**

6 A19. No. None of these invoices fell within the 60-day limitation. Ms. Teamann's first email in
7 December 2015 acknowledges this.

8 **Q20. Was Direct required to enter into "out of market bilateral settlements through**
9 **PJM," as alluded to by Ms. Teamann?**

10 A20. Absolutely not. Bilateral agreements are, by definition, consensual. I am not aware of any
11 provision in Attachment K that requires one market participant to enter into a bilateral
12 agreement at the request of another market participant. To the contrary, the Resettlement
13 C process allows adjustments like the one proposed by the Companies "if both Market
14 Participants are willing" and "such adjustment does not affect other parties."

15 **Q21. Would such an adjustment have affected other parties?**

16 A21. Yes. Mr. Stein wrote in a January 15, 2016 email about "roughly 14 affected" suppliers.
17 The Companies' Answer to Direct's Complaint in this case, as well as the Companies'
18 separate Complaint, also discuss how their error affected many more suppliers than just
19 Direct.

20 **Q22. Have you reviewed any documentation concerning adjustments for the billing**
21 **periods identified by the Companies?**

22 A22. Yes. Exhibit 1.7 to Ms. Ringenbach's testimony is a document furnished by the
23 Companies, titled "PJM Interconnection, LLC Billing Adjustment." It is dated January

1 30, 2017. According to this document, the Companies entered a bilateral contract with a
2 supplier (FES) to debit the Companies' PJM account, and credit the supplier's account,
3 for "incorrectly assigned" load for the period December 1, 2013 through November 30,
4 2015.

5 **Q23. Does the PJM tariff permit or contemplate any additional resettlement beyond what**
6 **has already occurred between the Companies and FES?**

7 **Q24.** No. The bilateral agreement between the Companies and FES involves those parties only.
8 There is no provision in the PJM tariff that permits either of those parties to force Direct
9 into entering a bilateral contract.

10 **Q25. Does any provision of PJM's tariff either permit or require Direct to compensate**
11 **the Companies for whatever they paid to their resettlement counterparty?**

12 A23. No. Nor, to my knowledge, have the Companies identified any such provision.

13 **Q26. Does this conclude your testimony?**

14 A24. Yes.

CERTIFICATE OF SERVICE

I hereby certify that a copy of the foregoing Direct Testimony was served to the following by e-mail this 24th day of April 2018:

James F. Lang
Mark T. Keaney
Calfee, Halter & Griswold LLP
The Calfee Building
1405 East Sixth Street
Cleveland, Ohio 44114
jlang@calfee.com
mkeaney@calfee.com

/s/ Rebekah J. Gloyer

One of the Attorneys for Direct Energy

Intra-PJM Tariffs → OPEN ACCESS TRANSMISSION TARIFF → OATT VI. ADMINISTRATION AND STUDY OF NEW SERVICE REQUESTS; R → OATT ATTACHMENT K – APPENDIX → OATT ATTACHMENT K APPENDIX SECTION 3. ACCOUNTING AND BILLING → OATT Attachment K Appendix Sec 3.6 Metering Reconciliation

3.6 Metering Reconciliation.

3.6.1 Meter Correction Billing.

Metering errors and corrections will be reconciled at the end of each month by a meter correction charge (positive or negative). The monthly meter correction charge for tie meter corrections shall be the product of the positive or negative deviation in energy amounts, and the load weighted average real-time Locational Marginal Price for all hours of that month for all load buses in the PJM Region. The monthly meter correction charge for generator meter corrections, including Pseudo-Tie generator imports into the PJM Region, shall be the product of the positive or negative deviation in energy amounts and the generation weighted average Locational Marginal Price at that generator's bus for all hours of that month.

The monthly meter correction charge for Dynamic Schedule imports into the PJM Region, and non unit-specific Dynamic Schedule exports out of the PJM Region, shall be the product of the positive or negative deviation in energy amounts and the Dynamic Schedule's weighted average interface real-time Locational Marginal Price at the applicable Interface Pricing Point for all hours of that month.

The monthly meter correction charge for Pseudo-Tie generator exports and unit-specific Dynamic Schedule exports out of the PJM Region shall be the product of the positive or negative deviation in energy amounts and the difference between the weighted average interface real-time Locational Marginal Price at the applicable Interface Pricing Point, and the generation weighted average Locational Marginal Price at that generator's bus, for all hours of that month.

3.6.2 Meter Corrections Between Market Participants.

If a Market Participant or the Office of the Interconnection discovers a meter error affecting an interchange of energy with another Market Participant and makes the error known to such other Market Participant prior to the completion by the Office of the Interconnection of the accounting for the interchange, and if both Market Participants are willing to adjust hourly load records to compensate for the error and such adjustment does not affect other parties, an adjustment in load records may be made by the Market Participants in order to correct for the meter error, provided corrected information is furnished to the Office of the Interconnection in accordance with the Office of the Interconnection's accounting deadlines. No such adjustment may be made if the accounting for the Operating Day in which the interchange occurred has been completed by the Office of the Interconnection. If this is not practical, the error shall be accounted for by a correction at the end of the billing cycle. The Market Participants experiencing the error shall account for the full amount of the discrepancy and an appropriate debit or credit shall be applied to the Market Participants. For Market Participants that are Electric Distributors that request the debit and credit to be further allocated to all Network Service Users in their territory (as documented in the PJM Manuals), where all Load Serving Entities in the respective Electric Distributor territory agree, the appropriate debit or credit shall be applied among Network Service Users in proportion to their deliveries to load served in the applicable territory.

Intra-PJM Tariffs --> OPEN ACCESS TRANSMISSION TARIFF --> OATT VI. ADMINISTRATION AND STUDY OF NEW SERVICE REQUESTS; R --> OATT ATTACHMENT K - APPENDIX --> OATT ATTACHMENT K APPENDIX SECTION 3. ACCOUNTING AND BILLING --> OATT Attachment K Appendix Sec 3.6 Metering Reconciliation

3.6.3 500 kV Meter Errors.

Billing shall be adjusted to account for errors in meters on 500 kV Transmission Facilities within the PJM Pre-Expansion Zones (excluding Allegheny Power) or between the PJM Pre-Expansion Zones (excluding Allegheny Power) and Allegheny Power. The Market Participant with the tie meter or generator meter experiencing the error shall account for the full amount of the discrepancy and an appropriate debit or credit shall be applied among Electric Distributors that report hourly net energy flows from metered Tie Lines in the Pre-Expansion Zones (excluding Allegheny Power) in proportion to the load consumed in their territories. The error shall be accounted for by a correction at the end of the billing cycle. For Market Participants that are Electric Distributors that request the debit and credit to be further allocated to all Network Service Users in their territory (as documented in the PJM Manuals), where all Load Serving Entities in the respective Electric Distributor territory agree, the appropriate debit or credit shall be applied among Network Service Users in proportion to their deliveries to load served in the applicable territory.

3.6.4 Meter Corrections Between Control Areas.

An error between accounted for and metered interchange between a Party in the PJM Region and an entity in a Control Area other than the PJM Region shall be corrected by adjusting the hourly meter readings. If this is not practical, the error shall be accounted for by a correction at the end of the billing cycle. The Market Participant with ties or Dynamic Transfers with such other Control Area experiencing the error shall account for the full amount of the discrepancy. However, if the meter correction applies to a tie on the 500 kV system between the PJM Pre-Expansion Zones (excluding Allegheny Power) and other Control Areas, Electric Distributors that report hourly net energy flows from metered Tie Lines in the Pre-Expansion Zones (excluding Allegheny Power) shall account for the full amount of the discrepancy in proportion to the load consumed in their territories. The appropriate debit or credit shall be applied among Network Service Users in proportion to their deliveries to load served in the PJM Region. The Office of the Interconnection will adjust the actual or scheduled interchange between the other Control Area and the PJM Region to maintain a proper record of inadvertent energy flow.

3.6.5 Meter Correction Data.

Meter error data shall be submitted to the Office of the Interconnection not later than the last Business Day of the month following the end of the monthly billing cycle applicable to the meter correction.

3.6.6 Correction Limits.

A Market Participant may not assert a claim for an adjustment in billing as a result of a meter error for any error discovered more than two years after the date on which the metering occurred. Any claim for an adjustment in billing as a result of a meter error shall be limited to bills for transactions occurring in the most recent annual accounting period of the billing Market Participant in which the meter error occurred, and the prior annual accounting period.



Meeting Minutes

EXHIBIT
Direct 4
FENGAD 800-331-8888

**Market Settlements Subcommittee
Conference Call
November 17, 2015
1:00 p.m. – 4:00 p.m. EST**

Administration

PJM reviewed the Anti-Trust Policy, Code of Conduct and Media Participation Policy and performed roll call. The Subcommittee approved the minutes from the October 20, 2015 MSS meeting.

PJM discussed the November 19, 2015 SSO release to PowerMeter and InSchedule, and the date change for the December MSS meeting, which was moved from December 15th to the 14th.

Working Issues

1. Network Service Peak Load Data Submission

Mr. Ray Fernandez, PJM, reviewed the redline changes to Manual 27 related to the proposed Daily Zonal Scaling Factor changes in eRPM. The problem statement, issue charge, poll results, and first reading of the Manual 27 changes will be discussed at the December 2, 2015 MIC meeting.

2. FERC NOPR Update – Sub-Hourly Settlements

Mr. Ray Fernandez, PJM, provided an update on the FERC NOPR on sub-hourly settlements, which was published in the Federal Register on September 30, 2015. PJM will provide answers to the questions outlined by FERC in the NOPR on November 30, 2015.

PJM has set up a mailbox (priceformationnopr@pjm.com) for members to submit any questions, comments or concerns.

3. Third Settlement ("Settlement C") Business Process

Mr. Brian Shaffer, Pepco Holdings, Inc. provided education on the various causes of Settlement C requests and described how AMI metering can assist with identifying these issues but not eliminate them.

Mr. Jeffrey Whitehead, Direct Energy, provided education on the causes of Settlement C requests and the associated impacts.

The four packages in the Settlement C Matrix were discussed in detail. The updated Settlement C Matrix was posted under the November 17, 2015 subcommittee meeting materials on pjm.com. Members were asked to submit any new packages or provide updates to their existing packages by November 24, 2015. The subcommittee will continue to discuss the Settlement C Matrix packages at the December 14, 2015 MSS meeting. Emails related to Settlement C should be sent to mss@pjm.com.

4. To/From Dates for InSchedule



Meeting Minutes

Mr. Chris Werner, AEP, summarized an issue with the date fields in InSchedule. When the "From" date is selected from the calendar widget within the tool, the "To" date is automatically updated to the "From" date + 1 month. PJM will investigate potential solutions for this issue and provide an update at the December 14, 2015 MSS meeting.

Miscellaneous Staff Meeting Items

No recent report changes were discussed.

Future Agenda Item

Participants will have the opportunity to request the addition of any new item(s) to the agenda of a future meeting.

Future Meetings

December 14, 2015	1:00 p.m. – 4:00 p.m.	Conference Call
January 21, 2016	1:00 p.m. – 4:00 p.m.	Conference Call
February 18, 2016	1:00 p.m. – 4:00 p.m.	Conference Call
March 17, 2016	1:00 p.m. – 4:00 p.m.	Conference Call
April 21, 2016	1:00 p.m. – 4:00 p.m.	Conference Call
May 24, 2016	1:00 p.m. – 4:00 p.m.	Conference Call
June 16, 2016	1:00 p.m. – 4:00 p.m.	Conference Call
July 21, 2016	1:00 p.m. – 4:00 p.m.	Conference Call
August 18, 2016	1:00 p.m. – 4:00 p.m.	Conference Call
September 22, 2016	1:00 p.m. – 4:00 p.m.	Conference Call
October 13, 2016	1:00 p.m. – 4:00 p.m.	Conference Call
November 10, 2016	1:00 p.m. – 4:00 p.m.	Conference Call
December 8, 2016	1:00 p.m. – 4:00 p.m.	Conference Call

Meeting Attendees

Fernandez, Ray (Chair)	PJM Interconnection, LLC	Not Applicable
DiSciullo, Nicholas (Secretary)	PJM Interconnection, LLC	Not Applicable
Adams, Dana	Duke Energy Ohio, Inc. (EDC)	Transmission Owner
Atlas, Ted	Talen Energy Marketing, LLC	Generation Owner
Bertocchi, John	Metropolitan Edison Company	Transmission Owner
Bloom, David	Baltimore Gas and Electric Company	Transmission Owner
Bolan, Martin	FirstEnergy Solutions Corp.	Transmission Owner
Borradaile, Michael	PJM Interconnection, LLC	Not Applicable
Caruthers, Anna	FirstEnergy Solutions Corp.	Transmission Owner
Chesser, Kathrina	Power Costs Inc.	Not Applicable
Cicero, Nicholas	FirstEnergy Solutions Corp.	Transmission Owner
Cook, Patrick	Potomac Electric Power Company	Electric Distributor
Coyne, Suzanne	PJM Interconnection, LLC	Not Applicable
Curtis, Eileen	Commonwealth Edison Company	Transmission Owner
Davis, Connie	City of Cleveland, DPU, Div of Cleveland Public Pwr	Electric Distributor
Dessender, Harry	Customized Energy Solutions, Ltd.*	Not Applicable
Di Iorio, Michelle	PSEG Energy Resources and Trade LLC	Transmission Owner
Drakely, Nicole	PPL Electric Utilities Corp. dba PPL Utilities	Transmission Owner
Dugan, Chuck	East Kentucky Power Cooperative, Inc.	Transmission Owner
Farber, John	DE Public Service Commission	Not Applicable
Filomena, Guy	Customized Energy Solutions, Ltd.*	Not Applicable
Flamm, Sean	PJM Interconnection, LLC	Not Applicable
Foladare, Kenneth	IMG Midstream LLC	Generation Owner



Meeting Minutes

Fuess, James	PBF Power Marketing LLC	Generation Owner
Garcia, Max	Calpine Energy Services, L.P.	Generation Owner
Gleckler, Eric	Appalachian Power Company	Transmission Owner
Gondek, John	PSEG Energy Resources and Trade LLC	Transmission Owner
Grisolia, Albert	Public Service Electric & Gas Company	Transmission Owner
Hagaman, Derek	GT Power Group	Not Applicable
Hart, Joy	North Carolina Electric Membership Corporation	Electric Distributor
Hartman, Gary	Talen Energy Marketing, LLC	Generation Owner
Hemmert, John	Dayton Power & Light Company (The)	Transmission Owner
Hewett, Christopher	Virginia Electric & Power Company	Transmission Owner
Holdbrook, Ruth	Northern Virginia Electric Cooperative	Electric Distributor
Horstmann, John	Dayton Power & Light Company (The)	Transmission Owner
Hsia, Eric	PJM Interconnection, LLC	Not Applicable
Hugee, Jacquelyn	PJM Interconnection, LLC	Not Applicable
James, Denise	Dominion Energy Marketing, Inc.	Generation Owner
James, Louise	Dominion Energy Marketing, Inc.	Generation Owner
Jerry, Kelvin	Baltimore Gas and Electric	Transmission Owner
Johnson, Carl	Customized Energy Solutions, Ltd.*	Not Applicable
Jones, Ryan	Allegheny Electric Cooperative Inc	Electric Distributor
Jones, Sharron	North Carolina Municipal Power Agency # x	Other Supplier
Juhrden, Jane	Atlantic City Electric Company	Electric Distributor
Kendall, Brandon	Appalachian Power Company	Transmission Owner
Kenney, Susan	PJM Interconnection, LLC	Not Applicable
Kingston, Amber	ACES Power Marketing	Not Applicable
Kogut, George	New York Power Authority	Other Supplier
Kotras, Craig	Baltimore Gas and Electric Company	Transmission Owner
Krauss, Robert	PSEG Energy Resources and Trade LLC	Transmission Owner
Krishnaraj, Morgini	Brookfield Energy Marketing LP	Other Supplier
Labij, Christina	EcoGrove Wind, LLC	Generation Owner
Lattos, James	Noble Americas Energy Solutions LLC	Other Supplier
Lee, Tina	Cogen Technologies	Generation Owner
Levine, Christina	unknown	unknown
Levine, Jeffrey	IPR-GDF SUEZ Energy Marketing NA, Inc.	Other Supplier
Loudenburg, Zack	Pennsylvania Renewable Resources, Associates	Generation Owner
Lovely, Christina	Calpine Energy Services, L.P.	Generation Owner
Mabry, David	McNees Wallace & Nurick LLC	Not Applicable
McComb, John	PJM Interconnection, LLC	Not Applicable
McDevitt, Megan	PECO Energy Company	Transmission Owner
McDonald, Renee	Wabash Valley Power Association, Inc.	Electric Distributor
Mendez, Maria	Public Service Electric & Gas Company	Transmission Owner
Meridionale, Kevin	Jersey Central Power & Light Company	Transmission Owner
Million, Mark	PJM Interconnection, LLC	Not Applicable
Mollenkopf, Sandy	East Kentucky Power Cooperative, Inc.	Transmission Owner
Nichols, Lloyd	Commonwealth Chesapeake Company, LLC	Generation Owner
O'Donnell, Vilija	Commonwealth Edison Company	Transmission Owner
Peoples, John	Duquesne Light Company	Transmission Owner
Peters, James	ITC Mid-Atlantic Development LLC	Other Supplier
Phillips, Amanda	ACES Power	206.169.250.185
Pratzon, David	GT Power Group	Not Applicable
Pringle, Matthew	Union Electric Company d/b/a Ameren Missouri	Other Supplier
Rayhorn, Carolyn	Dominion Virginia Power	Not Applicable
Reid, Ryan	Buckeye Power, Inc.	Electric Distributor
Reilly, Carol	PECO Energy Company	Transmission Owner



Meeting Minutes

Reynolds, Karen
Salem, Jay
Sasser, Jonathan
Saxe, Barbara
Saxena, Richard
Scoglietti, Barbara
Semrau, Keith
Sensenig, Jim
Shaffer, Brian
Teamann, Cindy
Thantry, Ganesh
Thone, Daniel
Treadwell, Albert
Verduin, Glenn
Werner, Christopher
Whitehead, Jeffrey
Wilhite, Chad
Wong, Bryant
Wotherspoon, Brian
Yu, Joel
Zacconi, Bruno

Dominion Virginia Power
Pennsylvania Electric Company
Customized Energy Solutions, Ltd.*
Public Service Electric & Gas Company
Noble Americas Energy Solutions, LLC
Tangent Energy Solutions, Inc.
Cleveland Public Power
Pennsylvania Electric Company
Atlantic City Electric Company
FirstEnergy Solutions Corp.
Tenaska Power Services Co.
Commonwealth Edison Company
Allegheny Electric Cooperative, Inc.
PSEG Energy Resources and Trade LLC
Appalachian Power Company
Direct Energy Business Marketing, LLC
FirstEnergy Solutions Corp.
ABB Network Management
Energy Curtailment Specialists, Inc.
Rockland Electric Company
PECO Energy Company

Not Applicable
Transmission Owner
Not Applicable
Transmission Owner
Other Supplier
Other Supplier
Not Applicable
Transmission Owner
Electric Distributor
Transmission Owner
Generation Owner
Transmission Owner
Electric Distributor
Transmission Owner
Transmission Owner
Other Supplier
Transmission Owner
Not Applicable
Other Supplier
Transmission Owner
Transmission Owner

Author: Nicholas DiSciullo



Draft Meeting Minutes

Market Settlements Subcommittee
Conference Call
February 18, 2016
1:00 p.m. – 4:00 p.m. EST

Administration

PJM reviewed the Anti-Trust Policy, Code of Conduct and Media Participation Policy and performed roll call. The Subcommittee approved the minutes from the January 21, 2016 MSS meeting.

Mr. Ray Fernandez, PJM, provided an update on the Daily Zonal Scaling Factor change, which was approved at the MRC on January 28, 2016. PJM is working with their software vendor for a time and cost estimate.

Mr. Ray Fernandez, PJM, provided an update on the InSchedule From/To Date change, which is targeted for a Q1 implementation.

Working Issues

1. Third Settlement ("Settlement C") Business Process

Mr. John McComb, PJM, presented education material on UFE, and Mr. Ray Fernandez, PJM, reviewed the Settlement C Poll results. The purpose of the poll was to quantify support for the various packages in the Settlement C Matrix, and the results showed that no package had more than 50% support.

The Subcommittee decided to conduct a second poll which will focus on high-level "theme" questions covering various aspects of the Settlement C issue. The goal of the poll is to determine whether or not the Subcommittee wants to move forward with the Settlement C issue, and if so, provide the package owners and Subcommittee members information on where interest lies for the various design components. The results of the poll will be discussed at the March 17, 2016 MSS meeting. Emails related to Settlement C should be sent to mss@pjm.com.

Miscellaneous Settlements Items

No recent report changes were discussed.

Future Agenda Items

Participants will have the opportunity to request the addition of any new item(s) to the agenda of a future meeting.

Future Meeting Dates

March 17, 2016	1:00 p.m. – 4:00 p.m.	Conference Call
April 21, 2016	1:00 p.m. – 4:00 p.m.	Conference Call
May 24, 2016	1:00 p.m. – 4:00 p.m.	Conference Call
June 16, 2016	1:00 p.m. – 4:00 p.m.	Conference Call
July 21, 2016	1:00 p.m. – 4:00 p.m.	Conference Call



Draft Meeting Minutes

August 18, 2016
September 22, 2016
October 13, 2016
November 10, 2016
December 8, 2016

1:00 p.m. – 4:00 p.m.
1:00 p.m. – 4:00 p.m.
1:00 p.m. – 4:00 p.m.
1:00 p.m. – 4:00 p.m.
1:00 p.m. – 4:00 p.m.

Conference Call
Conference Call
Conference Call
Conference Call
Conference Call

Meeting Attendees

Fernandez, Ray (Chair)	PJM Interconnection, LLC	Not Applicable
Disciullo, Nicholas (Secretary)	PJM Interconnection, LLC	Not Applicable
Adams, Dana	Duke Energy Ohio, Inc. (EDC)	Transmission Owner
Atlas, Ted	Talen Energy Marketing, LLC	Not Applicable
Bargas, Steven	Big Sandy Peaker Plant, LLC	Generation Owner
Bertocchi, John	Metropolitan Edison Company	Transmission Owner
Bloom, David	Baltimore Gas and Electric Company	Transmission Owner
Blume, Craig	UGI Energy Services, Inc.	Other Supplier
Bolan, Martin	FirstEnergy Solutions Corp.	Transmission Owner
Bonanni, John	NRG Power Marketing LLC	Generation Owner
Borradaile, Michael	PJM Interconnection, LLC	Not Applicable
Brito, Daisy	Long Island Lighting Company d/b/a LIPA	Other Supplier
Budney, Dave	PJM Interconnection, LLC	Not Applicable
Caruthers, Anna	FirstEnergy Solutions Corp.	Transmission Owner
Chesser, Kathrina	Power Costs Inc.	Not Applicable
Cicero, Nick	FirstEnergy Solutions Corp.	Transmission Owner
Coleman, Robert	BP Energy Company	Other Supplier
Cook, Patrick	Potomac Electric Power Company	Electric Distributor
Coyne, Suzanne	PJM Interconnection, LLC	Not Applicable
Davis, Connie	City of Cleveland, DPU, Div of Cleveland Public Pwr	Electric Distributor
Dessender, Harry	Customized Energy Solutions, Ltd.*	Not Applicable
Farber, John	DE Public Service Commission	Not Applicable
Filomena, Guy	Customized Energy Solutions, Ltd.*	Not Applicable
Flamm, Sean	PJM Interconnection, LLC	Not Applicable
Foladare, Kenneth	IMG Midstream LLC	Generation Owner
Fuess, James	PBF Power Marketing LLC	Generation Owner
Garcia, Max	Calpine Energy Services, L.P.	Generation Owner
Gleckler, Eric	Appalachian Power Company	Transmission Owner
Gondek, John	PSEG Energy Resources and Trade LLC	Transmission Owner
Grisolia, Albert	Public Service Electric & Gas Company	Transmission Owner
Hart, Joy	North Carolina Electric Membership Corporation	Electric Distributor
Hartman, Gary	Talen Energy Marketing, LLC	Generation Owner
Hemmert, John	Dayton Power & Light Company (The)	Transmission Owner
Hewett, Chris	Dominion Energy Marketing, Inc.	Generation Owner
Higgins, Sharon	Duke Energy Commercial Asset Management, Inc.	Generation Owner
Hugee, Jacquelyn	PJM Interconnection, LLC	Not Applicable
James, Denise	Dominion Energy Marketing, Inc.	Generation Owner
James, Louise	Dominion Energy Marketing, Inc.	Generation Owner
Jerry, Kelvin	Baltimore Gas and Electric Company	Transmission Owner
Johnson, Carl	Customized Energy Solutions, Ltd.*	Not Applicable
Jones, Sharron	North Carolina Municipal Power Agency # 1	Other Supplier



Draft Meeting Minutes

Juhrden, Jane
Kendall, Brandon
Kingston, Amber
Kotras, Craig
Krauss, Robert
Krishnaraj, Morgini
Loudenburg, Zack
Lovely, Christina
Mabry, David
Magee, Daphney
McComb, John
Menciano, Christina
Mendez, Maria
Miller, Sara
Mollenkopf, Sandy
Murphy, Francine
Myser, Carole
Nichols, Lloyd
Norton, Chris
O'Donnell, Vilija
Peoples, John
Phillips, Amanda
Pleavin, Cherie
Popella, Jeff
Pratzon, David
Quaintance, Dick
Rayhorn ES, Carolyn
Reid, Ryan
Rieger, Laura
Salem, Jay
Sasser, Jonathan
Saxe, Barbara
Sensenig, Jim
Suh, Jung
Teamann, Cindy
Verduin, Glenn
Walter, Laura
Werner, Christopher
Whitehead, Jeffrey
Wilhite, Chad
Wise, Eric
Zacconi, Bruno

Atlantic City Electric Company
Appalachian Power Company
North Carolina Electric Membership Corporation
Baltimore Gas and Electric Company
Public Service Electric & Gas Company
Brookfield Energy Marketing LP
Pennsylvania Renewable Resources, Associates
Calpine Energy Services, L.P.
McNees Wallace & Nurick LLC
Public Service Electric & Gas Company
PJM Interconnection, LLC
Energy Authority, Inc. (The)
Public Service Electric & Gas Company
EcoGrove Wind, LLC
East Kentucky Power Cooperative, Inc.
PJM Interconnection, LLC
Appalachian Power Company
Commonwealth Chesapeake Company, LLC
American Municipal Power, Inc.
Commonwealth Edison Company
Duquesne Light Company
Wabash Valley Power Association, Inc.
Duke Energy Ohio Inc
Dayton Power & Light Company (The)
GT Power Group
Appalachian Power Company
Dominion Virginia Power
Buckeye Power, Inc.
ACES Energy
Pennsylvania Electric Company
Customized Energy Solutions, Ltd.*
Public Service Electric & Gas Company
Pennsylvania Electric Company
Noble Americas Energy Solutions LLC
FirstEnergy Solutions Corp.
Public Service Electric & Gas Company
PJM Interconnection, LLC
Appalachian Power Company
Direct Energy Business Marketing, LLC
FirstEnergy Solutions Corp.
Energy Authority, Inc. (The)
PECO Energy Company

Electric Distributor
Transmission Owner
Electric Distributor
Transmission Owner
Transmission Owner
Other Supplier
Generation Owner
Generation Owner
Not Applicable
Transmission Owner
Not Applicable
Other Supplier
Transmission Owner
Generation Owner
Transmission Owner
Not Applicable
Transmission Owner
Generation Owner
Electric Distributor
Transmission Owner
Transmission Owner
Electric Distributor
Transmission Owner
Transmission Owner
Not Applicable
Transmission Owner
Not Applicable
Electric Distributor
Not Applicable
Transmission Owner
Not Applicable
Transmission Owner
Transmission Owner
Other Supplier
Transmission Owner
Transmission Owner
Not Applicable
Transmission Owner
Other Supplier
Transmission Owner
Other Supplier
Transmission Owner

Author: Nicholas DiSciullo



Settlement C Polling Results

Market Settlements Subcommittee
February 18, 2016

www.pjm.com

PJM©2016

EXHIBIT

Direct b

PENGAD 800-631-6989



Package Support Poll

- Purpose of Poll is to quantify support for the various packages in the Settlement C Matrix
- 119 responses received, 29 unique responders
- Poll Format
 - Executive Summary provided by Package Owner
 - “Can you support Package?”
 - Yes
 - No
 - Comments for Package



Package A

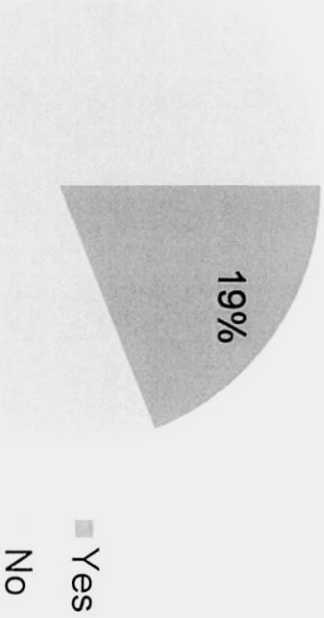
This package would make use of a billing services agreement for any adjustments after the current 60 day Settlement B deadline. The agreement would be signed by the parties that wish to be involved in the adjustment and PJM. Parties involved would perform all settlement calculations and provide PJM with bilateral adjustments netting to \$0. A nominal processing fee would be paid by the requesting party. PJM would perform the financial adjustments only, which would not require a rerun in the settlements system. EDCs would be required to coordinate with affected parties, and PJM would notify the affected parties with regards to the resettlement.

The main benefits to this package include:

1. Allows the EDCs to resettle with all parties that sign the billing services agreement. Full signoff of affected parties would no longer be necessary to resettle.
2. Gives members the ability to view all financial transactions through PJM's settlement system.

Results

Can you support Package A?



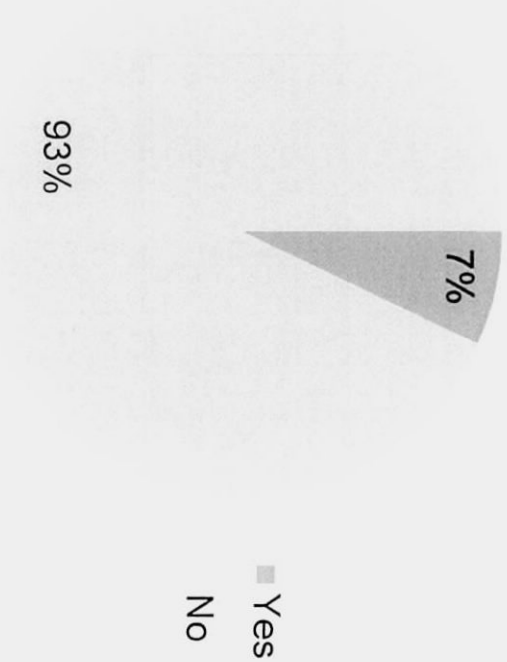


Results

Package B

The theory behind this proposal is that all competitive or contract retail energy providers in an EDC zone should have an interest in getting wholesale energy volumes and costs that are accurate and consistent with their retail energy customer list and revenues. Key features of this option are that every LSE in a zone must participate in a settlement C event, that Settlement C rebillings to not impact market participants other than the LSEs serving a zone, and that EDCs who perform retail billing for LSEs in their zone commit to performing any retail invoicing to bring LSE costs and revenues as much into line as possible.

Can you support Package B?



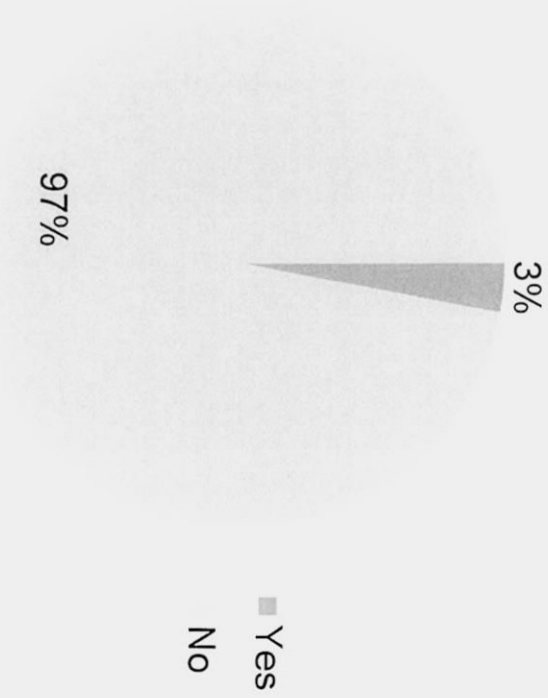


Package B-Prime

This proposal is identical to Proposal B, except that rebillings under Settlement C would not apply to customers with hourly retail meters unless those customers' initial meter readings had been estimated or otherwise were in error. Part of the original rationale for this option was the mistaken belief that EDC allocations of UFE to hourly metered customers would not change in most Settlement C events.

Results

Can you support Package B-Prime?



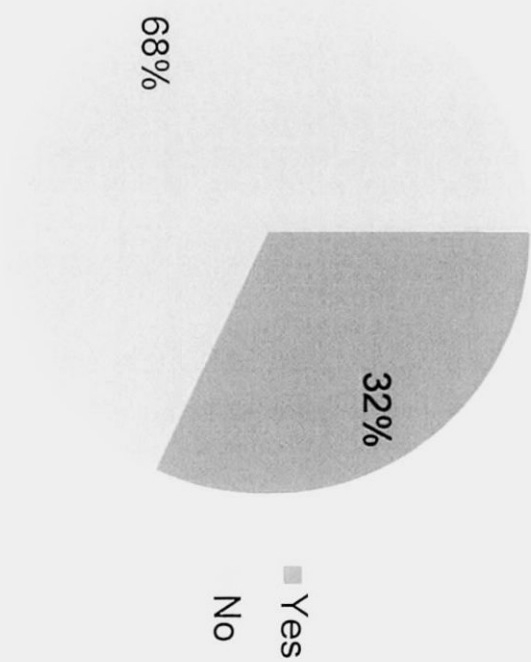


Results

Package C

This proposal is essentially "Status Quo." In an effort to improve the process, the Deadline for Adjustments will be reduced from 2 years to 18 months.

Can you support Package C?





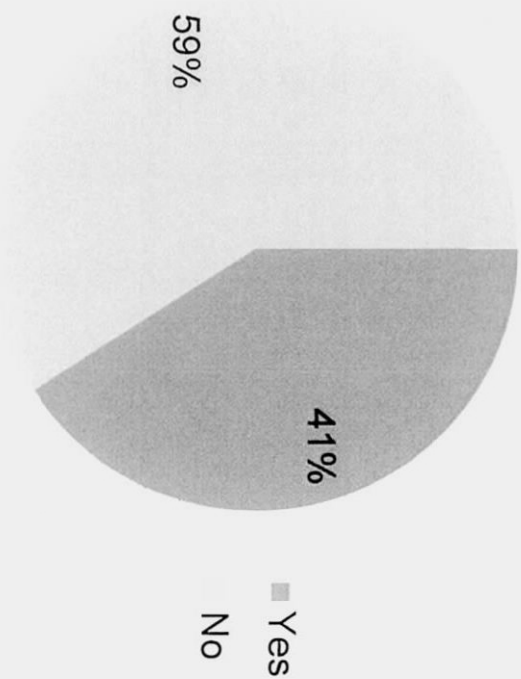
Results

Package D

This package proposal recommends that a full Settlement C be implemented and deployed at 6 months beyond the original Settlement A for the operating month at the EDC's option. No LSE sign offs would be required and there would be no dollar threshold for the Settlement C. There would be no change made to the current Settlement B (2 month lag) process.

There would be no bilateral adjustments permitted 2 years beyond the original Settlement A for the operating month, except in extenuating circumstances on a case by case basis with the approval of the MSS and PJM.

Can you support Package D?





Results

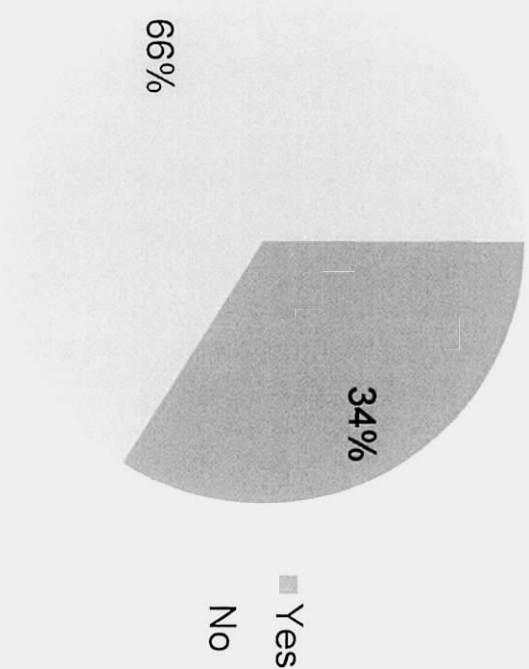
Package E

This package views Settlement C as a tool for the EDCs to use to properly settle their zones. It makes the assumption that when there is an issue, all parties work with the EDC to come up with a fair solution.

The main benefits of this package are:

1. It provides an official framework for resolving issues after Settlement B outside of just using Bilateral Agreements;
2. PJM is performing the billing, so it eliminates possible errors when parties try to calculate charges on spreadsheets; and
3. It allows the EDC to settle with the many changing retail providers without having to create a bilateral agreement between up to 100 parties.

Can you support Package E?





Settlement C Packages

- No Package received >50% support
- Next Steps:
 - Discuss poll comments posted with meeting materials
 - Consider combining packages
 - Further discussion or take to MIC?



Settlement C Theme Polling Results

Market Settlements Subcommittee
March 17, 2016



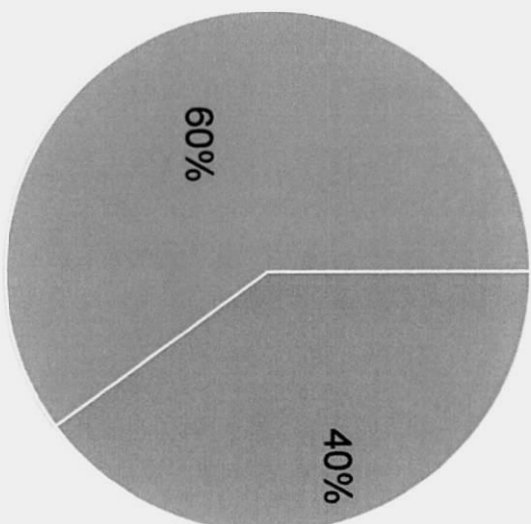
Settlement C Theme Poll

- Purpose of the poll is to determine whether or not the Subcommittee wants to move forward with the Settlement C issue, and if so, provide the package owners and Subcommittee members information on where interest lies for the various design components
- 119 responses received, 22 unique responders



Results

Is the lack of a Settlement C a problem worth pursuing?

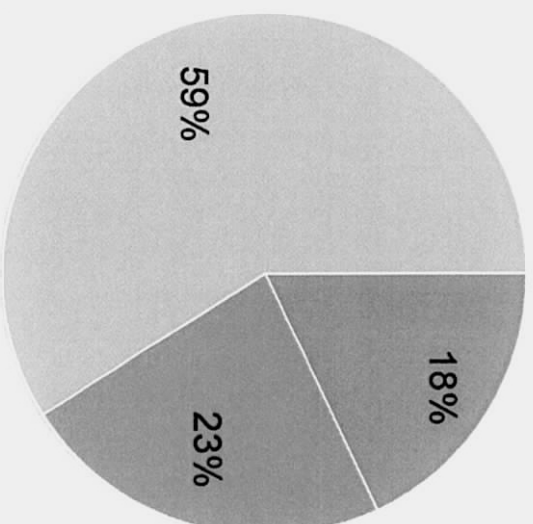


- Yes the current process has issues and we need to work towards a solution
- No - Maintain Status Quo



Results

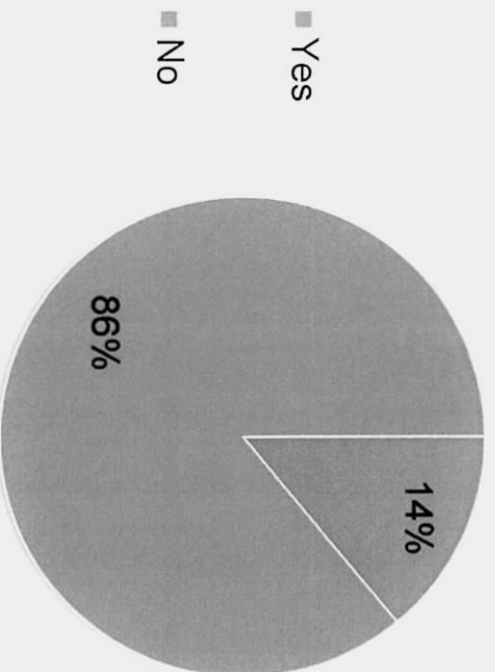
What consent should be required for Settlement C?



- 100% consent by all affected LSEs
- No consent required
- No consent required but with a dispute process in place



Should Settlement C billing impact meter error corrections only?



Results

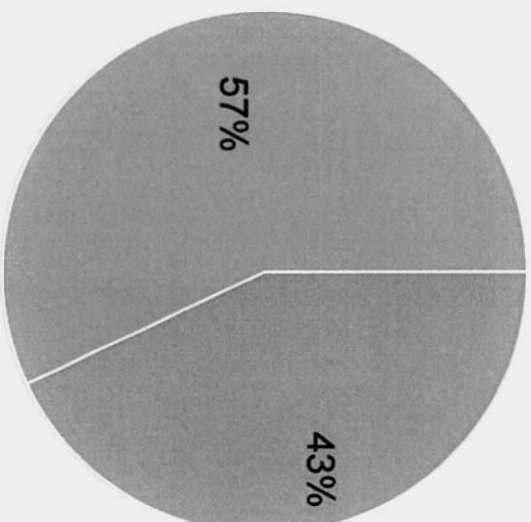
What other reasons should be allowed for a Settlement C rerun?

- Anything that changes a Supplier's kwh energy obligation should allow for Settlement C. For example, misassigned accounts, incorrect loss factor, incorrect load profile assignment, etc
- billing errors, enrollment errors, meter estimates
- Incorrect Account Assignments
- At the very least, we also know that incorrect assignment of customer accounts has had an impact.
- Any cause of an incorrect allocation of load responsibilities; e.g., incorrect UFE allocation, settlement / metering system failure, profile error, etc
- Any situation that results in an incorrect allocation of load responsibilities would result in the opportunity for a Settlement C, i.e., customer switching problems caused by upstream billing system problems, use of estimated profiles that could not be reconciled with actual data due to problems, system failures, and any other such problems that are not detected by the 60-Day Settlement B Reconciliation deadlines.
- Correction of any error in load allocations
- Any situation that requires a resettlement should be included in this process. EX: Billing or EDI items/issues
- system errors
- material changes to LMP



Results

Who are the impacted parties of a Settlement C rerun?

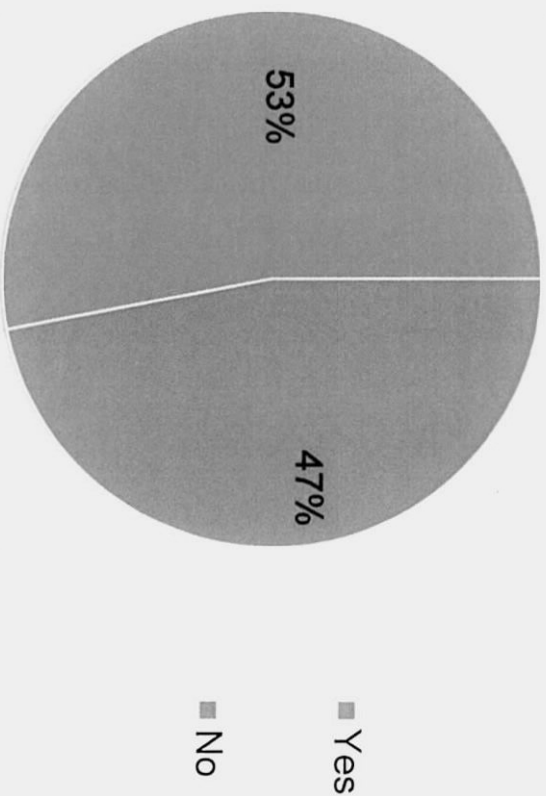


- Only the EDCs, LSEs (wholesale and retail) who are serving load or directly affected within the EDC zone
- Potentially all market participants in PJM due to the inclusion of load reconciliation data in certain charge allocations (e.g. Balancing Operating Reserve Charges for deviations)



Results

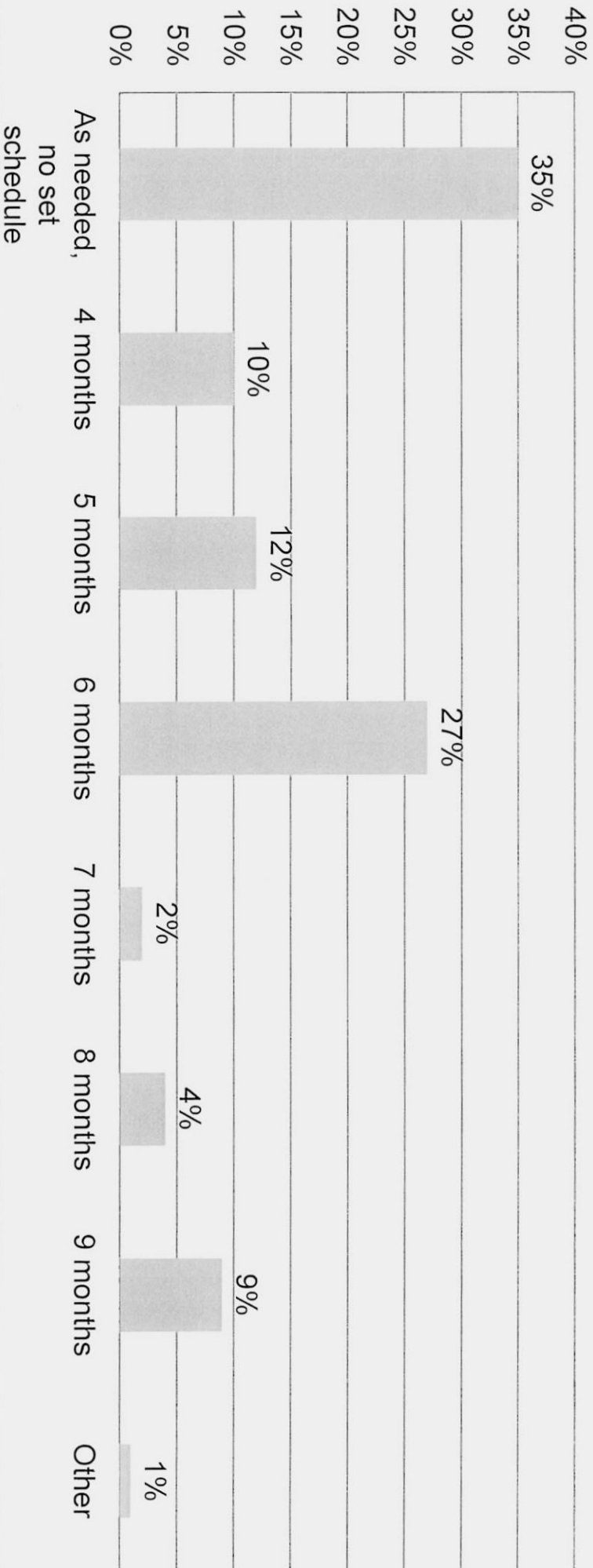
Do you support changing the Load Reconciliation (Settlement B) deadline for EDCs, so LSEs would have the opportunity to review the data before PJM executes the Settlement B Load Reconciliation process?
For example, if EDCs were required to submit load rec





Results

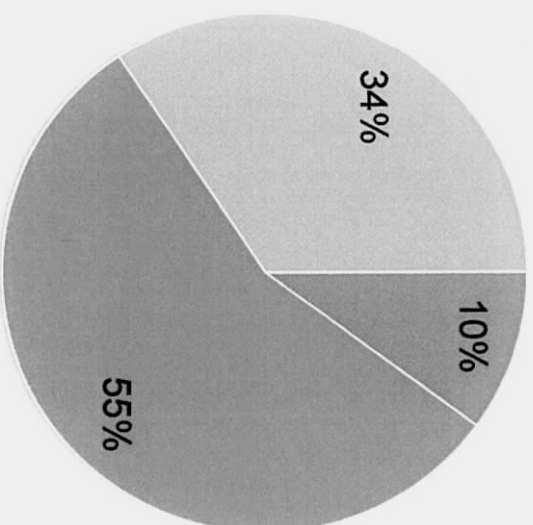
Which data submittal timeframe selections do you support, if any? Please select up to 3 choices, ranking them 1-3, with 1 being the most preferred selection. The Settlement C processing lag is in relation to the original billing month. For example, Feb





Results

Which deadline do you support for Settlement C adjustments?



- 18 months
- 2 years
- Other

If other, which deadline do you support for Settlement C adjustments?

- Our understanding of this question is that it applies to the current Settlement C voluntary process, which we see no reason to change
 - 1 year
 - 6 months
 - None



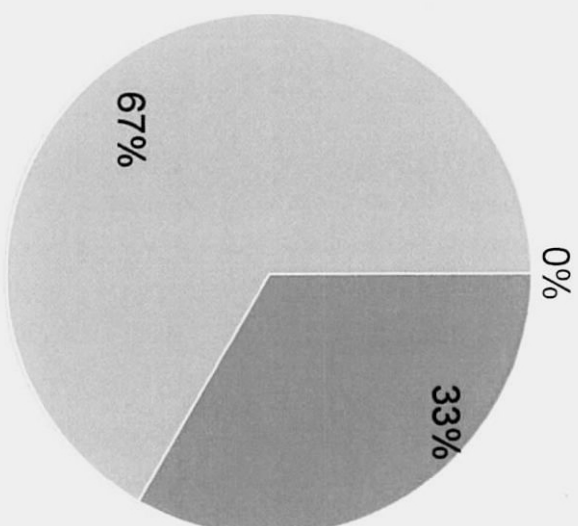
Discussion Points

- Majority support for maintaining status quo and not pursuing a solution for Settlement C.



Filtered Results (Removing Status Quo)

What consent should be required for Settlement C?



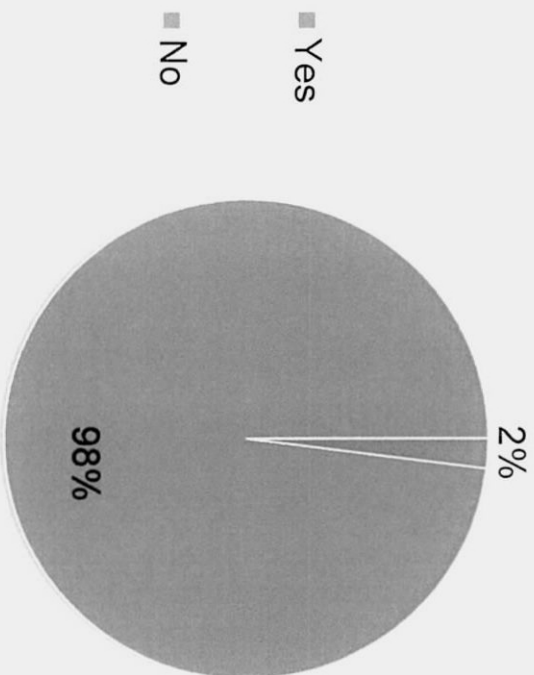
■ 100% consent by all affected LSEs

■ No consent required

■ No consent required but with a dispute process in place



Should Settlement C billing impact meter error corrections only?



Filtered Results (Removing Status Quo)

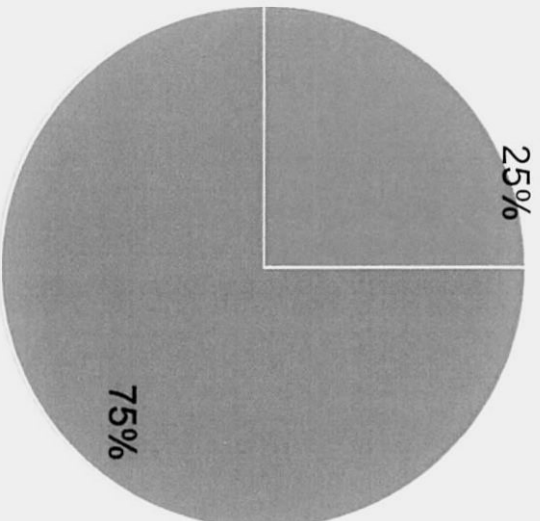
What other reasons should be allowed for a Settlement C rerun?

- Anything that changes a Supplier's kwh energy obligation should allow for Settlement C. For example, misassigned accounts, incorrect loss factor, incorrect load profile assignment, etc
- billing errors, enrollment errors, meter estimates
- Incorrect Account Assignments
- At the very least, we also know that incorrect assignment of customer accounts has had an impact.
- Any cause of an incorrect allocation of load responsibilities; e.g., incorrect UFE allocation, settlement / metering system failure, profile error, etc
- Any situation that results in an incorrect allocation of load responsibilities would result in the opportunity for a Settlement C, i.e., customer switching problems caused by upstream billing system problems, use of estimated profiles that could not be reconciled with actual data due to problems, system failures, and any other such problems that are not detected by the 60-Day Settlement B Reconciliation deadlines.
- Correction of any error in load allocations
- Any situation that requires a resettlement should be included in this process. EX: Billing or EDI items/issues
- system errors
- material changes to LMP



Filtered Results (Removing Status Quo)

Who are the impacted parties of a Settlement C rerun?



- Only the EDCs, LSEs (wholesale and retail) who are serving load or directly affected within the EDC zone

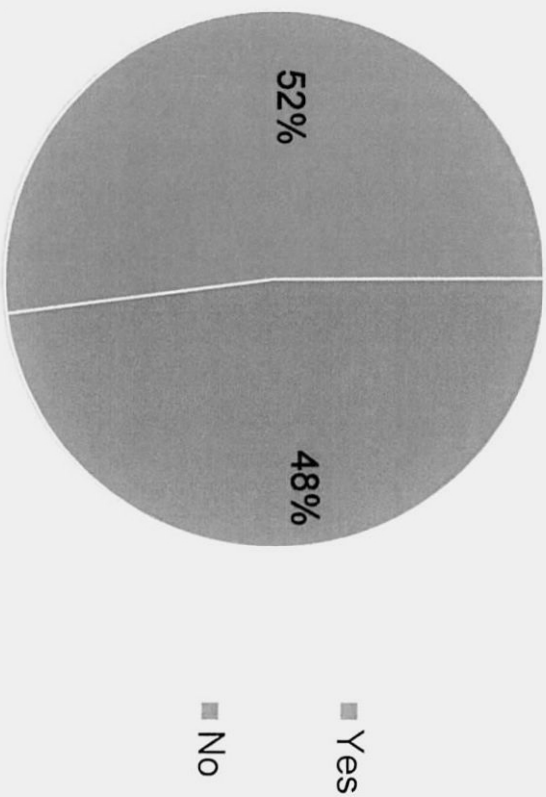
- Potentially all market participants in PJM due to the inclusion of load reconciliation data in certain charge allocations (e.g. Balancing Operating Reserve Charges for deviations)



Filtered Results (Removing Status Quo)

Do you support changing the Load Reconciliation (Settlement B) deadline for EDCs, so LSEs would have the opportunity to review the data before PJM executes the Settlement B Load Reconciliation process?

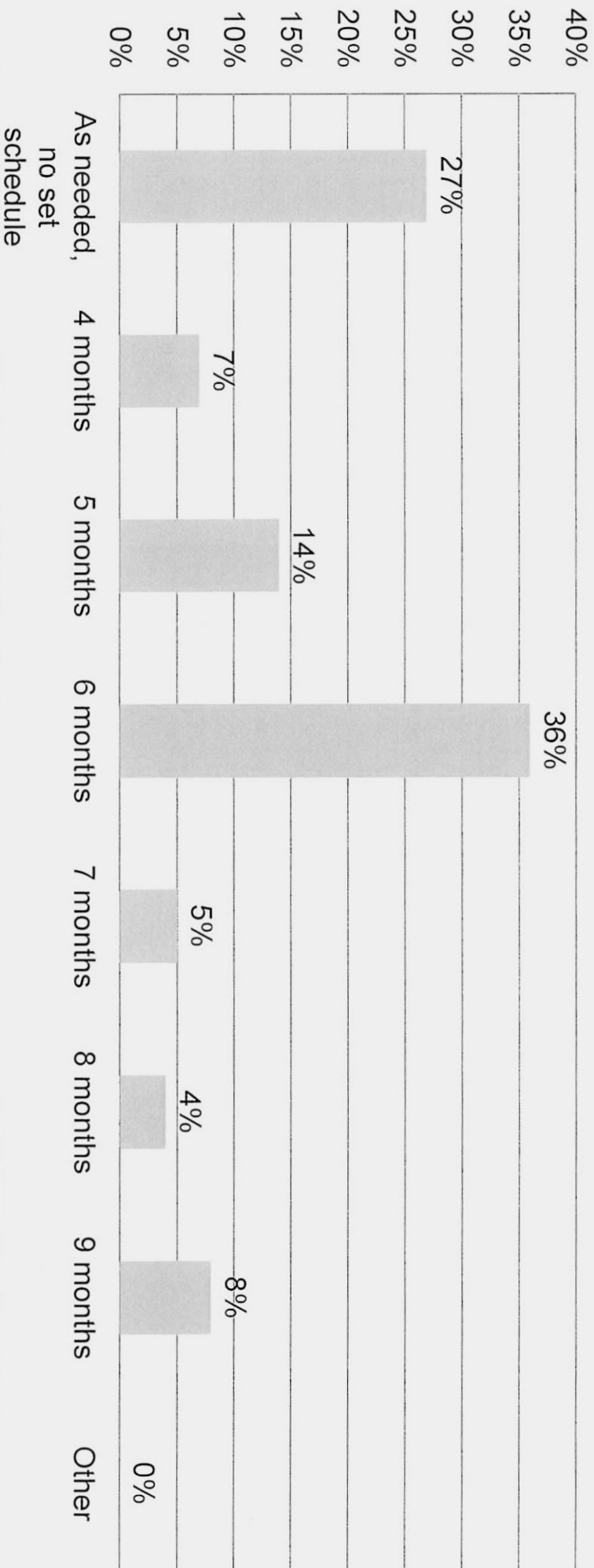
For example, if EDCs were required to submit load rec





Filtered Results (Removing Status Quo)

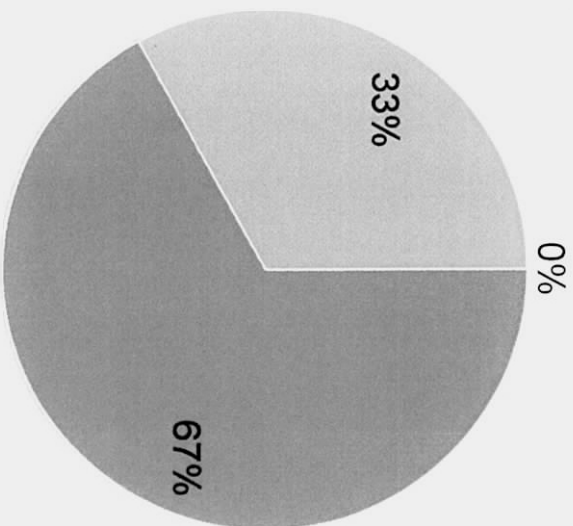
Which data submittal timeframe selections do you support, if any? Please select up to 3 choices, ranking them 1-3, with 1 being the most preferred selection. The Settlement C processing lag is in relation to the original billing month. For example, Feb





Filtered Results (Removing Status Quo)

Which deadline do you support for Settlement C adjustments?



- 18 months
- 2 years
- Other

If other, which deadline do you support for Settlement C adjustments?

- Our understanding of this question is that it applies to the current Settlement C voluntary process, which we see no reason to change
- 1 year
- 6 months
- None



Meeting Minutes

Market Settlements Subcommittee

Conference Call

April 21, 2016

1:00 p.m. – 4:00 p.m. EST

Administration

PJM reviewed the Anti-Trust Policy, Code of Conduct and Media Participation Policy and performed roll call. The Subcommittee approved the minutes from the March 17, 2016 MSS meeting.

Working Issues

1. Third Settlement ("Settlement C") Business Process

Mr. Ray Fernandez, PJM, reviewed the Settlement C discussion from the April 6, 2016 MIC meeting. At the MIC, Ray provided an update on the process followed by the MSS and the results of the two Settlement C polls. The MIC conducted a vote to determine whether the Subcommittee should continue to work the Settlement C issue or terminate the work. The results of the MIC vote were 98 in favor of terminating the work, 53 in favor of the MSS continuing to work the issue, and 23 abstentions. As a result, the Settlement C agenda item will be removed from discussion at the MSS.

2. Capacity Performance Charges and Bonus Performance Credits

Mr. Ed Rich, PJM, discussed the upcoming billing and report changes related to Capacity Performance. Based on feedback received during the meeting, PJM will be designing the MSRS reports and billing statements to show Non-Performance Charges and Bonus Performance Credits in a single line item for all events billed within a month. PJM will summarize these designs at the May 24, 2016 MSS meeting.

3. ARR Ownership Reassignments

Ms. Cheryl Cloud, PJM, provided a presentation on ARR Ownership Reassignments and the June 1 implications. While the process has not changed from previous years, PJM is interested in minimizing any issues that may arise.

In order for PJM to accurately maintain and process the ARRs for an organization, PJM Settlements encourages and requests members to submit any known modeling changes that affect ARRs, and a list of any Directed Transfer Requests (dating back to February 29, 2016), to their Client Manager and/or the PJM Settlements prior to the upcoming June 1st processing day.

The Subcommittee will discuss this topic again at the May 24, 2016 MSS meeting.

Miscellaneous Settlements Items

Mr. Sean Flamm, PJM, discussed the upcoming change to the MSRS application, which will be migrated to the Single Sign On (SSO) login process on May 4, 2016. The Regulation Credits and Load Response Regulation Credits report changes were released to Production on Monday, April 25, 2016. Details on the report updates were communicated to the MSS distribution list on April 4, 2016.



Meeting Minutes

Future Agenda Items

Participants will have the opportunity to request the addition of any new item(s) to the agenda of a future meeting.

Future Meeting Dates

May 24, 2016	1:00 p.m. – 4:00 p.m.	Conference Call
June 23, 2016	1:00 p.m. – 4:00 p.m.	Conference Call
July 21, 2016	1:00 p.m. – 4:00 p.m.	Conference Call
August 18, 2016	1:00 p.m. – 4:00 p.m.	Conference Call
September 22, 2016	1:00 p.m. – 4:00 p.m.	Conference Call
October 13, 2016	1:00 p.m. – 4:00 p.m.	Conference Call
November 10, 2016	1:00 p.m. – 4:00 p.m.	Conference Call
December 8, 2016	1:00 p.m. – 4:00 p.m.	Conference Call

In-Person Attendees

Fernandez, Ray (Chair)	PJM Interconnection, LLC	Not Applicable
DiSciullo, Nicholas (Secretary)	PJM Interconnection, LLC	Not Applicable
Johnson, Carl	Customized Energy Solutions, Ltd.*	Not Applicable
Pratzon, David	GT Power Group	Not Applicable
Borradaile, Michael	PJM Interconnection, LLC	Not Applicable
Budney, David	PJM Interconnection, LLC	Not Applicable
Cloud, Cheryl	PJM Interconnection, LLC	Not Applicable
Coyne, Suzanne	PJM Interconnection, LLC	Not Applicable
Flamm, Sean	PJM Interconnection, LLC	Not Applicable
McComb, John	PJM Interconnection, LLC	Not Applicable
Rich, Ed	PJM Interconnection, LLC	Not Applicable

Attendees via Teleconference

Kingston, Amber	Aces Power Marketing	Not Applicable
Phillips, Amanda	Aces Power Marketing	Not Applicable
Reid, Ryan	Aces Power Marketing	Not Applicable
Treadwell, Albert	Allegheny Electric Cooperative, Inc.	Electric Distributor
Ondayko, Brock	Appalachian Power Company	Transmission Owner
Werner, Christopher	Appalachian Power Company	Transmission Owner
Juhrden, Jane	Atlantic City Electric Company	Electric Distributor
Shaffer, Brian	Atlantic City Electric Company	Electric Distributor
Bloom, David	Baltimore Gas and Electric Company	Transmission Owner
Jerry, Kelvin	Baltimore Gas and Electric Company	Transmission Owner
Coleman, Robert	BP Energy Company	Other Supplier
Bernier, Monica	Calpine Energy Services, L.P.	Generation Owner
Garcia, Max	Calpine Energy Services, L.P.	Generation Owner
Nichols, Lloyd	Commonwealth Chesapeake Company, LLC	Generation Owner
O'Donnell, Vilija	Commonwealth Edison Company	Transmission Owner
Scherer, Paul	Commonwealth Edison Company	Transmission Owner
Chaudhry, Sanaa	Constellation Energy Power Choice	Other Supplier
Filomena, Guy	Customized Energy Solutions, Ltd.*	Not Applicable
Sasser, Jonathan	Customized Energy Solutions, Ltd.*	Not Applicable
Farber, John	DE Public Service Commission	Not Applicable
Whitehead, Jeffrey	Direct Energy Business Marketing, LLC	Other Supplier
Jaffary, Rafi	Dominion Energy Marketing, Inc.	Generation Owner
James, Louise	Dominion Energy Marketing, Inc.	Generation Owner
Hopkins, Sandra	Dominion Virginia Power	Not Applicable



Meeting Minutes

Tew, Linda
Riling, Marnie
Plevin, Cherie
Peoples, John
Dugan, Chuck
Miller, Sara
Menciano, Christina
Wise, Eric
Ainspan, Malcolm
Ahuja, Sarang
Eagles, Suzanne
Midgley, Sharon
Bolan, Martin
Caruthers, Anna
Cicero, Nick
Marton, David
Teamann, Cindy
Wilhite, Chad
Martinson, Tia
Hagaman, Derek
Wilson, Rob
Foladare, Kenneth
Mabry, David
Bertocchi, John
Kogut, George
Saxena, Richa
Jones, Sharron
Schott, John
Koropey, Boris
Kauffman, Brian
Fuess, James
Sensenig, Jim
Loudenburg, Zack
Holter, Natasha
Hsia, Eric
Hugee, Jacquelyn
Million, Mark
Cook, Patrick
Chesser, Kathrina
Hemmert, John
Drakely, Nicole
Di Iorio, Michelle
Gondek, John
Grisolia, Albert
Krauss, Robert
Mendez, Maria
Saxe, Barbara
Verduin, Glenn
Atlas, Ted
Hartman, Gary
Hoatson, Tom

Dominion Virginia Power
DTE Energy Supply, Inc.
Duke Energy Ohio, Inc.
Duquesne Light Company
East Kentucky Power Cooperative, Inc.
EcoGrove Wind, LLC
Energy Authority, Inc. (The)
Energy Authority, Inc. (The)
Energy Curtailment Specialists, Inc.
Exelon Generation Co., LLC
Exelon Generation Co., LLC
Exelon Generation Co., LLC
FirstEnergy Solutions Corp.
FirstEnergy Solutions Corp.
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FirstEnergy Solutions Corp.
FirstEnergy Solutions Corp.
Grand Ridge Energy LLC
GT Power Group
Illinois Municipal Electric Agency
IMG Midstream LLC
McNees Wallace & Nurick LLC
Metropolitan Edison Company
New York Power Authority
Noble Americas Energy Solutions LLC
North Carolina Municipal Power Agency # 1
Northeast Maryland Waste Disposal Authority
Northern Virginia Electric Cooperative
NRG Curtailment Solutions
PBF Power Marketing LLC
Pennsylvania Electric Company
Pennsylvania Renewable Resources, Associates
PJM Interconnection, LLC
PJM Interconnection, LLC
PJM Interconnection, LLC
PJM Interconnection, LLC
Potomac Electric Power Company
Power Costs Inc.
Powerex
PPL Electric Utilities Corp. dba PPL Utilities
PSEG Energy Resources and Trade LLC
PSEG Energy Resources and Trade LLC
Public Service Electric & Gas Company
Public Service Electric & Gas Company
Public Service Electric & Gas Company
Public Service Electric & Gas Company
Public Service Electric & Gas Company
Talen Energy Marketing, LLC
Talen Energy Marketing, LLC
Unison Energy

Not Applicable
Other Supplier
Transmission Owner
Transmission Owner
Transmission Owner
Generation Owner
Other Supplier
Other Supplier
Other Supplier
Generation Owner
Generation Owner
Generation Owner
Transmission Owner
Transmission Owner
Transmission Owner
Transmission Owner
Transmission Owner
Transmission Owner
Generation Owner
Not Applicable
Electric Distributor
Generation Owner
Not Applicable
Transmission Owner
Other Supplier
Other Supplier
Other Supplier
Generation Owner
Electric Distributor
Other Supplier
Generation Owner
Transmission Owner
Generation Owner
Not Applicable
Not Applicable
Not Applicable
Not Applicable
Electric Distributor
Not Applicable
Other Supplier
Transmission Owner
Transmission Owner
Transmission Owner
Transmission Owner
Transmission Owner
Transmission Owner
Transmission Owner
Transmission Owner
Generation Owner
Generation Owner
Not Applicable

Author: Nicholas DiSciullo

**BEFORE THE
PUBLIC UTILITIES COMMISSION OF OHIO**

Direct Energy Business, LLC,)	
)	
Complainant,)	
)	Case No. 17-791-EL-CSS
v.)	
)	
Ohio Edison Company and The Cleveland)	
Electric Illuminating Company,)	
)	
Respondents.)	
)	

**OHIO EDISON COMPANY AND THE CLEVELAND ELECTRIC ILLUMINATING
COMPANY’S OBJECTIONS AND RESPONSES TO DIRECT ENERGY BUSINESS
LLC’S FIRST SET OF INTERROGATORIES AND REQUESTS FOR PRODUCTION
OF DOCUMENTS**

Pursuant to Rules 4901-1-19 and 4901-1-20 of the Ohio Administrative Code, Respondents Ohio Edison Company and The Cleveland Electric Illuminating Company (collectively, the “Companies”) object and respond to Complainant Direct Energy Business, LLC’s First Set of Interrogatories and Requests for Production of Documents as follows:

*Direct Energy Business, LLC v.
Ohio Edison Company and The Cleveland Electric Illuminating Company*
Public Utilities Commission of Ohio, Case No. 17-0791-EL-CSS

DIRECT ENERGY SET 1

RESPONSES TO FIRST SET OF INTERROGATORIES

As to Objections: Legal

1-INT-001 Identify the “Previous Supplier” referenced in paragraph 11 of
Respondents’ Answer.

RESPONSE The Companies object to this request because it seeks irrelevant, third-
party information and/or information not reasonably calculated to lead to
the discovery of admissible evidence.

Direct Energy Business, LLC v.
Ohio Edison Company and The Cleveland Electric Illuminating Company
Public Utilities Commission of Ohio, Case No. 17-0791-EL-CSS

DIRECT ENERGY SET 1

As to Objections: Legal

1-INT-002 Identify each provision of Respondents' Electric Generation Supplier Coordination Tariff that imposed a legal obligation for Respondents to reimburse the Previous Supplier.

RESPONSE The Companies object to this request because it seeks irrelevant information and/or information not reasonably calculated to lead to the discovery of admissible evidence. The Companies further object to this request because it seeks information protected from disclosure by the attorney-client privilege and/or attorney work product doctrine. The Companies also object because the Electric Generation Supplier Coordination Tariff speaks for itself. The Companies further object because this request seeks improperly the legal reasoning and theories of Respondent's defenses.

Direct Energy Business, LLC v.
Ohio Edison Company and The Cleveland Electric Illuminating Company
Public Utilities Commission of Ohio, Case No. 17-0791-EL-CSS

DIRECT ENERGY SET 1

As to Objections: Legal

1-INT-003 Identify each provision of the PJM Open-Access Transmission Tariff that imposed a legal obligation for Respondents to reimburse the Previous Supplier.

RESPONSE The Companies object to this request because it seeks irrelevant information and/or information not reasonably calculated to lead to the discovery of admissible evidence. The Companies further object to this request because it seeks information protected from disclosure by the attorney-client privilege and/or attorney work product doctrine. The Companies also object because the Electric Generation Supplier Coordination Tariff speaks for itself. The Companies further object because this request seeks improperly the legal reasoning and theories of Respondent's defenses.

*Direct Energy Business, LLC v.
Ohio Edison Company and The Cleveland Electric Illuminating Company*
Public Utilities Commission of Ohio, Case No. 17-0791-EL-CSS

DIRECT ENERGY SET 1

As to Objections: Legal

1-INT-004 Identify each contract that imposed a legal obligation for Respondents to reimburse the Previous Supplier.

RESPONSE The Companies object to this request because it seeks irrelevant information and/or information not reasonably calculated to lead to the discovery of admissible evidence. The Companies further object to this request because it seeks information protected from disclosure by the attorney-client privilege and/or attorney work product doctrine. The Companies also object because the Electric Generation Supplier Coordination Tariff speaks for itself. The Companies further object because this request seeks improperly the legal reasoning and theories of Respondent's defenses.

*Direct Energy Business, LLC v.
Ohio Edison Company and The Cleveland Electric Illuminating Company*
Public Utilities Commission of Ohio, Case No. 17-0791-EL-CSS

DIRECT ENERGY SET 1

As to Objections: Legal

1-INT-005

To the extent not identified in response to Interrogatory Nos. 2-4 above, identify any other agreement, tariff, statute, or other authority that Respondents contend imposed a legal obligation to reimburse the Previous Supplier.

RESPONSE

The Companies object to this request because it seeks irrelevant information and/or information not reasonably calculated to lead to the discovery of admissible evidence. The Companies further object to this request because it seeks information protected from disclosure by the attorney-client privilege and/or attorney work product doctrine. The Companies also object because the Electric Generation Supplier Coordination Tariff speaks for itself. The Companies further object because this request seeks improperly the legal reasoning and theories of Respondent's defenses.

Direct Energy Business, LLC v.
Ohio Edison Company and The Cleveland Electric Illuminating Company
Public Utilities Commission of Ohio, Case No. 17-0791-EL-CSS

DIRECT ENERGY SET 1

As to Objections: Legal

1-INT-006 Identify each of the eleven suppliers referenced in Paragraph 1 of the Affirmative Defenses section of Respondents' Answer.

RESPONSE The Companies object to this request because it seeks irrelevant information and/or information not reasonably calculated to lead to the discovery of admissible evidence. The Companies further object to this request because it seeks information protected from disclosure by the attorney-client privilege and/or attorney work product doctrine. The Companies also object because the Electric Generation Supplier Coordination Tariff speaks for itself. The Companies further object because this request seeks improperly the legal reasoning and theories of Respondent's defenses.

*Direct Energy Business, LLC v.
Ohio Edison Company and The Cleveland Electric Illuminating Company*
Public Utilities Commission of Ohio, Case No. 17-0791-EL-CSS

DIRECT ENERGY SET 1

As to Objections: Legal

1-INT-007

For each supplier identified in response to Interrogatory No. 6, identify:

- a. The suppliers that “cooperated with the Companies to make the proper settlements with PJM,” as referenced in Paragraph 1 of the Affirmative Defenses section of Respondents’ Answer;
- b. The suppliers that did not “cooperate[] with the Companies to make the proper settlements with PJM,” as referenced in Paragraph 1 of the Affirmative Defenses section of Respondents’ Answer; and
- c. All documents and communications between or among Respondents and the suppliers concerning rebilling, resettlement, or other adjustment of PJM market costs.

RESPONSE

The Companies object to this request because it seeks irrelevant information and/or information not reasonably calculated to lead to the discovery of admissible evidence. The Companies further object to this request because it seeks information protected from disclosure by the attorney-client privilege and/or attorney work product doctrine. The Companies also object because the Electric Generation Supplier Coordination Tariff speaks for itself. The Companies further object because this request seeks improperly the legal reasoning and theories of Respondent’s defenses.

*Direct Energy Business, LLC v.
Ohio Edison Company and The Cleveland Electric Illuminating Company*
Public Utilities Commission of Ohio, Case No. 17-0791-EL-CSS

DIRECT ENERGY SET 1

As to Objections: Legal

1-INT-008 Identify each fact witness Respondents intend to produce at hearing.

RESPONSE The Companies object to this request because it is premature, and it seeks information protected from disclosure by the attorney-client privilege and/or attorney work product doctrine. Subject to and without waiving the foregoing objection: Respondent has not decided which fact witnesses, if any, may be called at hearing. Respondent will provide the identity of its fact witness(es) in accordance with Commission rules and orders at the appropriate time.

*Direct Energy Business, LLC v.
Ohio Edison Company and The Cleveland Electric Illuminating Company*
Public Utilities Commission of Ohio, Case No. 17-0791-EL-CSS

DIRECT ENERGY SET 1

As to Objections: Legal

1-INT-009 Identify each expert witness Respondents intend to produce at hearing.

RESPONSE The Companies object to this request because it is premature, and it seeks information protected from disclosure by the attorney-client privilege and/or attorney work product doctrine. Subject to and without waiving the foregoing objection: Respondent has not decided which expert witnesses, if any, may be called at hearing. Respondent will provide the identity of its expert witness(es) in accordance with Commission rules and orders at the appropriate time.

*Direct Energy Business, LLC v.
Ohio Edison Company and The Cleveland Electric Illuminating Company*
Public Utilities Commission of Ohio, Case No. 17-0791-EL-CSS

DIRECT ENERGY SET 1

As to Objections: Legal

1-INT-010 Identify each exhibit Respondents intend to introduce at hearing.

RESPONSE The Companies object to this request because it is premature, and it seeks information protected from disclosure by the attorney-client privilege and/or attorney work product doctrine. Subject to and without waiving the foregoing objection: Respondent has not decided which exhibits, if any, may be introduced at hearing. Respondent will identify its hearing exhibits in accordance with Commission rules and orders at the appropriate time.

*Direct Energy Business, LLC v.
Ohio Edison Company and The Cleveland Electric Illuminating Company*
Public Utilities Commission of Ohio, Case No. 17-0791-EL-CSS

DIRECT ENERGY SET 1

RESPONSES TO FIRST SET OF REQUESTS FOR PRODUCTION OF DOCUMENTS

As to Objections: Legal

1-RFP-001 All documents identified in response to Interrogatories No. 1-10 above.

RESPONSE The Companies object to this request because it is overbroad, unduly burdensome, and it seeks irrelevant information and/or information not reasonably calculated to lead to the discovery of admissible evidence. The Companies further object to this request because it seeks information protected from disclosure by the attorney-client privilege and/or attorney work product doctrine.

*Direct Energy Business, LLC v.
Ohio Edison Company and The Cleveland Electric Illuminating Company*
Public Utilities Commission of Ohio, Case No. 17-0791-EL-CSS

DIRECT ENERGY SET 1

As to Objections: Legal

1-RFP-002 The settlement and release agreements referenced in Paragraph 16 of the Complaint filed in Case No. 5:17-cv-00746, U.S. District Court.

RESPONSE The Companies object to this request because it seeks confidential documents and information that is irrelevant and/or not reasonably calculated to lead to the discovery of admissible evidence. The Companies further object to this request because it improperly seeks documents and information related to a lawsuit pending in a different forum.

*Direct Energy Business, LLC v.
Ohio Edison Company and The Cleveland Electric Illuminating Company*
Public Utilities Commission of Ohio, Case No. 17-0791-EL-CSS

DIRECT ENERGY SET 1

As to Objections: Legal

1-RFP-003 All documents relating to, or constituting, any assignment of rights from
the Previous Supplier to Respondents.

RESPONSE The Companies object to this request because it is overbroad, unduly
burdensome, and it seeks confidential and irrelevant information and/or
information not reasonably calculated to lead to the discovery of
admissible evidence. The Companies further object to this request
because it seeks information protected from disclosure by the attorney-
client privilege and/or attorney work product doctrine.

*Direct Energy Business, LLC v.
Ohio Edison Company and The Cleveland Electric Illuminating Company*
Public Utilities Commission of Ohio, Case No. 17-0791-EL-CSS

DIRECT ENERGY SET 1

As to Objections: Legal

1-RFP-004 All documents provided to, or received from, the Previous Supplier concerning the “Supplier Mismatch Issue” (as defined in Paragraph 16 of the Complaint filed in Case No. 5:17-cv-00746, U.S. District Court).

RESPONSE The Companies object to this request because it seeks confidential documents and information that is irrelevant and/or not reasonably calculated to lead to the discovery of admissible evidence. The Companies further object to this request because it improperly seeks documents and information related to a lawsuit pending in a different forum.

*Direct Energy Business, LLC v.
Ohio Edison Company and The Cleveland Electric Illuminating Company*
Public Utilities Commission of Ohio, Case No. 17-0791-EL-CSS

DIRECT ENERGY SET 1

As to Objections: Legal

1-RFP-005 All documents provided to, or received from, PJM concerning the
Supplier Mismatch Issue.

RESPONSE The Companies object to this request because it seeks confidential
documents and information that is irrelevant and/or not reasonably
calculated to lead to the discovery of admissible evidence. The
Companies further object to this request because it improperly seeks
documents and information related to a lawsuit pending in a different
forum.

*Direct Energy Business, LLC v.
Ohio Edison Company and The Cleveland Electric Illuminating Company*
Public Utilities Commission of Ohio, Case No. 17-0791-EL-CSS

DIRECT ENERGY SET 1

As to Objections: Legal

1-RFP-006 Documents referring, reflecting, or relating to Respondents' investigation of systems and processes that caused or contributed to the Supplier Mismatch Issue.

RESPONSE The Companies object to this request because it seeks confidential documents and information that is irrelevant and/or not reasonably calculated to lead to the discovery of admissible evidence. The Companies further object to this request because it improperly seeks documents and information related to a lawsuit pending in a different forum.



PROCEDURE MANUAL FOR FIRSTENERGY OHIO OPERATING COMPANIES

Determination of Supplier Total Hourly Energy Obligation

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Introduction

This document is intended to provide a comprehensive explanation of the methodology and mechanics FirstEnergy Operating Companies of Ohio Edison, Cleveland Electric Illuminating and Toledo Edison (FEOH or Company) and Certified Retail Electric Suppliers will apply to calculate and coordinate the information transfer needed to support retail open access associated with Suppliers' energy obligations at PJM. At PJM the counterparty nomenclature is Ohio Edison Company.

As further explained below, the Company will report to PJM in a timeframe imposed by PJM the Supplier's Total Hourly Energy Obligation (THEO). The THEO will contain hourly interval metered usage for customers with Advanced Meters where available and profiled hourly-usage for customers without such meters. The hourly-usage estimate for non-interval metered customers will be the product of a Usage Factor (UF) and the hourly typical-class usage determined from daily Load Profile data provided by sampling meters on the day of usage. The UF will be calculated with billed usage data available from the immediately-prior billing cycle and the aggregate Load Profile for the corresponding period. This UF will be recalculated at the closing of each billing cycle. The THEO will include an allocation of Unaccounted for Energy (UFE). The UFE is the difference between the Company zonal load and the sum of the suppliers' daily loads.

PJM will utilize the hourly THEO values reported for each supplier to determine the hourly energy-interchange accounting and reconciliation under the terms of the PJM Operating Agreement, the PJM Open Access Transmission Tariff and FEOH's Supplier Tariff. The determination of the customer's usage for use in the THEO and the calculation of the THEO are the subject of this manual.

Please see Exhibit A for a simplified sample calculation of Energy Obligation for monthly non-interval metered customers. A discussion of the Company's load profiling methodology is posted on the Company's Supplier website.

Determination of the Total Hourly Energy Obligation - For Initial Interchange Billing

The Supplier's Primary Total Hourly Energy Obligation (THEO) will be reported to PJM as 24 hourly numbers. Each hourly number will be the sum of the totals in each customer class for those customers served by the supplier. The Total Hourly Energy Obligation is comprised of the following components:

Primary THEO_{daily} = IM+NIM+NM+ZLA; Where

IM = Sum[(Interval metered)_p * (Loss Factor)_p], and

NIM = Sum[(Non-interval metered)_p * (Loss Factor)_p]

NM = Sum [(Non-metered)_p * (Loss Factor)_p]

ZLA = Zonal Load Allocation of Unaccounted For Energy

p = Profile Group

Interval Metered Data

The interval metered data will be the sum of the products of the hourly usage recorded by each interval meter in a customer class and that class's loss factor. If, for any reason, an interval meter fails to report hourly data in a given time period, the missing data will be estimated using that customer's historic usage for a similar time period.

Non-interval Metered Data

The non-interval meter data will be the sum of the product of the customer's load-profile usage (CLP) in a customer class for that hour and that class's loss factor.

The hourly CLP will be calculated as follows:

CLP_k=(UF)_k*(Class-Profile Hourly Usage)_p

Where UF = Usage Factor

Where k = customer

Usage Factor

The UF used to estimate a customer's usage for a given hour will be determined as the ratio of the customer's electric use for the immediately-prior billing period to the aggregate hourly Load Profile for the same period.

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DETERMINATION OF SUPPLIER TOTAL HOURLY ENERGY OBLIGATION

The estimated customer hourly usage will be this UF multiplied by the typical class use for that hour as reported by the Load Profile.

If a new customer has no historic or billed usage, an estimated hourly UF of one (1) will be imputed to that customer. All others will have a UF equal to the ratio of the customer's prior total billed consumption to the total typical usage in that class.

Non- metered Data

Unmetered service – typically street lighting and/or traffic lights. These customers electric usage is represented by Fixed Hourly Distribution (FHD) profiles. The same profile is used for each day in a given month.

Zonal Load Allocation for Unaccounted For Energy

Unaccounted for Energy (UFE) will be determined by comparing the aggregate load of all Certified Suppliers and the Company at the generation level including losses to the FEOH zone load less non retail load for each respective hour. The difference will then be allocated based on a ratio of each Certified Supplier's load to the total load of the Certified Suppliers and the Company on an hourly basis.

ZLA_{Hourly} = Zonal Load Allocation calculated hourly

Where

$$UFE_{Hourly} = (\text{Final Daily Zonal Load}_{Hourly} - \text{Sum (Daily THEO}_{Hourly}))$$

$$ZLA_{Hourly} = UFE_{Hourly} * (\text{Supplier Daily THEO}_{Hourly} / \text{Sum (Daily THEOs}_{Hourly}))$$

Responsibilities for Coordination

To ensure successful coordination the parties will be responsible as follows:

Supplier's Responsibilities

- The Supplier will schedule its physical energy with PJM following PJM requirements.
- The Supplier, or any third parties acting as agents, contractors, or delegates of the Supplier and in possession of any relevant data, will cooperate with reasonable audit requests by the Company or professional auditing firms acting on the Company's behalf. Such audits are intended to provide the Company with a reasonable confidence in the validity and accuracy of any information that the Company obtains from the Supplier or the third party. The Company shall bear the cost of the audit as well as the Supplier's or third party's time and expense for cooperation with the audit. The scope of the audit and the terms of payment are to be agreed upon by the Company and the Supplier or the third party prior to commencement of the audit.

Company's Responsibilities

- The Company will compute and report daily to PJM the Supplier's THEO in a day-after-the-fact basis. This THEO will constitute the initial estimate of the Supplier's hourly load for its customers served in the FEOH Zone for the purpose of hourly energy interchange accounting by PJM.
- The Company will report the Supplier's THEO to PJM as in accordance with PJM's Operating Agreements and OATT.
- The Company will not forecast the Supplier's THEO.
- The Company will cooperate with reasonable audit requests by Suppliers or professional auditing firms acting on their behalf. Audits are intended to provide the Supplier with reasonable confidence that the Company is calculating the Supplier's energy obligations in accordance with the user manual. The Supplier shall bear the cost of the audit as well as the Company's time and expense for cooperation with the audit. The scope of the audit and the terms of payment are to be agreed upon by the Company and the Supplier prior to commencement of the audit. Specific customer information (unless released by the customer) and proprietary

PROCEDURE MANUAL FOR FIRSTENERGY OHIO OPERATING COMPANIES
DETERMINATION OF SUPPLIER TOTAL HOURLY ENERGY OBLIGATION

information shall not be provided by the Company. The Company will address audit requests on a first come, first served basis.

- To facilitate the Supplier's calculation and understanding of the Company's reports, the Company will make available via its website (<http://www.firstenergycorp.com/supplierservices>), supporting information and sample calculations illustrating the Company's methodology applied in the determination of the Supplier's obligation.

Energy Reconciliation and PJM Settlement

As mentioned above, the Primary THEO will be the basis for the initial hourly energy interchange accounting by PJM which shall result in a monthly market-energy interchange bill. Subsequently, the Company will calculate adjustments to the Primary THEO based upon additional, more accurate customer meter data that the Company typically obtains by the end of the full meter-reading cycle.

Additionally, these adjustments will account for errors including but not limited to, those due to failed meter data transmission, the inherent inaccuracies of using a one-month lagging UF for non-interval meters, and additional errors that may result from the timing differences between the actual reading of the meters and closing of the billing cycle. These errors may occur during the first and last few days of a Supplier contract with a customer, since the initial obligation is calculated upon the number of customers in a Supplier's list of customers as of the last billing date; while the Supplier's final obligation is calculated for the period between meter readings. The Company will endeavor to read meters on the estimated date offered to the Supplier and close the billing cycle as soon as practicable following the meter readings.

A Secondary THEO will be calculated similarly to the Primary THEO where estimated usage is now replaced with actual metered usage where available. The Company will determine the hourly differences between the Primary THEO and the Secondary THEO for each Supplier and report those hourly MWh values to PJM. These adjustments will be provided to PJM and the Supplier within two months following the month subject to adjustment. This will constitute a monthly energy reconciliation process.

For customers with non-interval meters the Secondary THEO will employ a usage factor based on the customer's current bill period. (Recall that the Primary THEO used the usage factor based on the customer's previous bill period.)

Secondary THEO calculation:

Secondary THEO = IM+NIM+NM+ZLA;

Where

IM = Sum[(Interval metered)_p * (Loss Factor)_p], and

NIM = Sum[(Non-interval metered)_p*(Loss Factor)_p]

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$$NM = \text{Sum} [(Non-metered)_p * (Loss Factor)_p]$$

ZLA = Zonal Load Allocation of Unaccounted for Energy

$$\text{Non-interval metered} = \text{Sum} [(UF)_p * (\text{Hourly Class Load Profile Usage})_p * LF_p]$$

Where UF = Usage Factor

Where LF = loss factor

$$UF_p = (\text{Hourly Class Load Profile Usage for Customer bill period})_p / (\text{Customer bill period Usage})_p$$

ZLA_{Hourly} = Zonal Load Allocation calculated hourly

Where

$$UFE_{\text{Hourly}} = (\text{Final Monthly Zonal Load}_{\text{Hourly}} - \text{Sum (Secondary THEO}_{\text{Hourly}}))$$

$$ZLA_{\text{Hourly}} = UFE_{\text{Hourly}} * (\text{Supplier Secondary THEO}_{\text{Hourly}} / \text{Sum(Secondary THEO}_{\text{Hourly}}))$$

The Hourly Adjustment to the monthly bill is: Primary THEO – Secondary THEO.

“Third-Tier” Reconciliation

In addition to the adjustments mentioned above, PJM's monthly bills to the Company and Supplier or scheduling coordinator shall be subject to adjustment for any errors in arithmetic, computation, meter readings or other errors as agreed upon by the Company and the Supplier or Scheduling Coordinator. Third Tier Reconciliation shall be accomplished by FEOH calculating associated PJM line items using a Third Tier THEO in accordance with PJM Reconciliation Processes as provided for in the PJM Operating Agreement and PJM OATT. Disputes shall be resolved through the PJM Dispute Resolution process.

Behind the Meter Generation

For those customers that have elected to install generation and net the output of that generation against their delivered load obligations, a bidirectional meter is installed to measure (1) the energy delivered or consumed by the customer and (2) the energy received or injected to the distribution system.

For these customers, only the register of the meter capturing the energy delivered to the customer is used in the calculations referenced in this manual. The meter register capturing received energy to the distribution system is not netted against these values.

Exhibit A

Sample Calculation:

Hourly Obligation Calculation:

Determine the Total Hourly Energy Obligation to be reported to PJM for a Supplier serving three (3) customers in Ohio's RS No Heat Profile Group during the hour ending at 10 on March 15, 2012.

Available data from Prior (February) Bill

Customer	Bill Dates	Billed Usage	Class Usage Days
#1	2/3~3/6	2477 kWh	1717 kWh 32
#2	2/4~3/5	1100 kWh	1620 kWh 30
#3	2/3~3/7	1429 kWh	1756 kWh 33

The Class Profile Usage for the 10th hour of March 15th was **2.3 kWh**.

Usage Factor and Hourly Obligation:

Customer	Usage Factor	Class Profile usage	Obligation
#1	1.44	2.3 kWh	3.312
#2	0.68	2.3 kWh	1.564
#3	0.81	2.3 kWh	1.863
Total	2.94		6.739 kWh

The Supplier's Total Hourly Energy Obligation reported to PJM for Class RS on the 16th for hour 10 on the 15th is:

$6.739 \text{ kWh} * 1.0718 = 7.223 \text{ kWh}$ Where 1.0718 = customer class loss factor

To illustrate the calculation of ZLA for the same hour, assume the following:

Zonal Load Hour 10 on March 15th: 2000 MWh

Total Primary THEO Hour 10 on March 15th: 1998 MWh

$UFE_{3/15, HR10} = 2000\text{MWh} - 1980\text{MWh} = 20 \text{ MW or } 2000 \text{ kWh}$

$ZLA_{3/15, HR10} = 20000 \text{ kWh} * (7.223 \text{ kWh} / 1980 \text{ MWh}) = .00730 \text{ kWh}$

Final Primary THEO = 7.223 kWh + .00730 kWh = 7.296 kWh

Note: These calculations would be repeated for each class in which the Supplier serves customers.

Hourly Total:

The hourly total will be the sum of the hourly interval metered values upgraded for losses plus the hourly totals of the non-interval metered values upgraded for losses calculated following the methodology described above.

Monthly Adjustments/Reconciliation:

Following the completion of the monthly meter-read cycles applicable to that month, the Company will recalculate the Usage Factors for the period previously estimated.

Hence, based on metered usage corresponding to the month of March, the adjustment for hour 10 on March 15th will be calculated as follows:

New/Actual data available for the Month of March

Customer	Bill Dates	New Usage	Class Usage	Days
#1	3/7~4/7	2315 kWh	2021	32
#2	3/6~4/ 4	1200 kWh	1894	30
#3	3/8~4/9	1630 kWh	2084	33

The Class Profile Usage for the 10th hour of March 15th continues to be **2.3 kWh**.

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DETERMINATION OF SUPPLIER TOTAL HOURLY ENERGY OBLIGATION

Usage Factor and Hourly Obligation:

Customer	Usage Factor	Class Profile usage	Obligation
#1	1.15	2.3 kWh	2.645
#2	0.63	2.3 kWh	1.449
#3	0.78	2.3 kWh	1.794
Total	2.56		5.888 kWh

Total Hourly Energy Obligation for Class RS = $5.888 \text{ kWh} * 1.0718 = 6.311 \text{ kWh}$

where 1.0718 = customer class loss factor

To illustrate the calculation of ZLA for the same hour, assume the following:

Zonal Load Hour 10 on March 15th: 2000 MWh

Total Secondary THEO Hour 10 on March 15th: 1998 MWh

$UFE_{3/15, HR10} = 2000\text{MWh} - 1998\text{MWh} = 2 \text{ MW or } 2000 \text{ kWh}$

$ZLA_{3/15, HR10} = 2000 \text{ kWh} * (6.311 \text{ kWh} / 1998 \text{ MWh}) = .00635 \text{ kWh}$

Final Secondary THEO = $6.311 \text{ kWh} + .00635 \text{ kWh} = 6.317 \text{ kWh}$

The Company will submit to PJM a calendar-month adjustment file containing adjustment amounts for each hour on that calendar month. The adjustment amounts will be reported on kWh units. For this example the adjustment amount for hour 10th on March 15th will be $(7.296 \text{ kWh} - 6.317 \text{ kWh}) = 0.979 \text{ kWh}$.



Market Settlements Subcommittee
Conference Call
March 17, 2015
1:00 p.m. – 4:00 p.m. EST

Administration

PJM reviewed the Anti-Trust Policy, Code of Conduct and Media Participation Policy and performed roll call. The Subcommittee approved the minutes from the February 17, 2015 MSS meeting.

Mr. Fernandez, PJM, provided an update on the Power Meter and InSchedule data submittal deadlines item. The tariff language approved by stakeholders in 2014 will be submitted to FERC at the end of March with a requested effective date of 6/1/2015.

The subcommittee was informed of the upcoming Residual Metered Load Pricing training sessions being held on March 19th and May 14th.

Ms. Suzanne Coyne, PJM, reminded the subcommittee of important dates regarding any Billing Line Item Transfers that were created via hard copy DOAs and were automatically entered by PJM in the production BLI Transfer Tool. Unless changes have already been made to these legacy transfers, they will expire on May 31, 2015 or on their original termination date, if earlier. Parties are required to extend continuing BLI Transfer requests via the BLI Tool before 5/31/2015 to ensure continuity. After 5/31/2015, hard copy DOAs will become void and PJM will rely on information submitted in the BLI Tool.

Working Issues

1. Power Meter/InSchedule Holiday Submission Timing

Ms. Susan Kenney, PJM, reviewed the updated Power Meter Business Rules and InSchedule User Guide that reflect the submission timing exception related to two-day holidays falling on a Thursday and Friday.

2. Capacity Performance Settlements Impacts

Ms. Susan Kenney, PJM, provided an update on internal discussions regarding the feasibility of providing separate billing for Capacity Performance settlements. The RPM Auction Credit report available in MSRS provides participants the ability to separate credits specific to the Auction in which resources clear. PJM is still in the process of determining whether the tariff language as submitted with the Capacity Performance filing provides a way to bill Locational Reliability Charges separately. PJM will continue to investigate and asked members to clarify the level at which the charges and credits calculated need to be separate.

Issue Tracking: Capacity Performance



3. FERC EQR Report Discussion

Ms. Susan Kenney, PJM, informed the subcommittee the request to modify the date formatting of the FERC EQR report will not be pursued in light of receiving confirmation from several members that the current date formatting of the FERC EQR report was able to be submitted with no errors. Any members that receive errors are asked to contact PJM.

Ms. Renee McDonald, ACES, presented information received from FERC regarding the preferred formatting of Meter Correction data. Members are asked to review and bring any questions or comments to the April meeting.

4. Sub-hourly Settlements

Mr. Ray Fernandez, PJM, sought initial feedback from members regarding the concept of sub-hourly settlements. General comments were that this initiative is a long-term project with large impacts to both PJM and members from an implementation and cost perspective. Comments were also made that this item needs to go through the senior committee (MIC/MRC) for sponsorship.

Miscellaneous Settlements Items

Ms. Susan Kenney, PJM, provided an update on the recently released designs of MSRS reports to support the Residual Metered Load Pricing implementation.

Future Agenda Items

Participants will have the opportunity to request the addition of any new item(s) to the agenda of a future meeting.

In-Person Attendees

Fernandez, Ray (Facilitator)	PJM Interconnection, LLC	Not Applicable
Borradale, Michael	PJM Interconnection, LLC	Not Applicable
Budney, David	PJM Interconnection, LLC	Not Applicable
Burdis, Tim	PJM Interconnection, LLC	Not Applicable
Coyne, Suzanne	PJM Interconnection, LLC	Not Applicable
Esterly, Terri	PJM Interconnection, LLC	Not Applicable
McComb, John	PJM Interconnection, LLC	Not Applicable
Million, Mark	PJM Interconnection, LLC	Not Applicable
Rich, Edward	PJM Interconnection, LLC	Not Applicable
Kenney, Susan (Secretary)	PJM Interconnection, LLC	Not Applicable

WebEx/Teleconference Attendees

Teamann, Cindy	Allegheny Power	Transmission Owner
Gleckler, Eric	Appalachian Power Company	Transmission Owner
Medley, Jennifer	Appalachian Power Company (Kentucky Power Dedicated)	Transmission Owner
Purdum, Denise	APX	Not Applicable
Juhrden, Jane	Atlantic City Electric Company	Electric Distributor
Shaffer, Brian	Atlantic City Electric Company	Electric Distributor
Maroney, Eileen	Commonwealth Edison Company	Transmission Owner

Dessender, Harry	Customized Energy Solutions, Ltd.*	Not Applicable
Filomena, Guy	Customized Energy Solutions, Ltd.*	Not Applicable
Johnson, Carl	Customized Energy Solutions, Ltd.*	Not Applicable
Sasser, Jonathan	Customized Energy Solutions, Ltd.*	Not Applicable
James, Denise	Dominion Energy Marketing, Inc.	Generation Owner
Wilmoth, Emily	Dominion Virginia Power	Not Applicable
Peoples, John	Duquesne Light Company	Transmission Owner
Dugan, Chuck	East Kentucky Power Cooperative, Inc.	Transmission Owner
Labij, Christina	EcoGrove Wind, LLC	Generation Owner
Hagaman, Derek	GT Power Group	Transmission Owner
Bertocchi, John	Metropolitan Edison Company	Transmission Owner
Kogut, George	New York Power Authority	Other Supplier
Hart, Joy	North Carolina Electric Membership Corporation	Electric Distributor
Jones, Sharron	North Carolina Municipal Power Agency # 1	Other Supplier
Chesser, Kathrina	Other	None
Hairston, KC	Other	None
Salem, Jay	Pennsylvania Electric Company	Transmission Owner
Stein, Edward	Pennsylvania Electric Company	Transmission Owner
Anders, David	PJM Interconnection, LLC	Not Applicable
Disciullo, Nicholas	PJM Interconnection, LLC	Not Applicable
Holland, Risa	PJM Interconnection, LLC	Not Applicable
Million, Mark	PJM Interconnection, LLC	Not Applicable
Hartman, Gary	PPL Electric Utilities Corp. dba PPL Utilities	Transmission Owner
Leh, Nicole	PPL Electric Utilities Corp. dba PPL Utilities	Transmission Owner
Atlas, Ted	PPL EnergyPlus, L.L.C.	Transmission Owner
Saxe, Barbara	Public Service Electric & Gas Company	Transmission Owner
Tew (ES), Linda	Virginia Electric & Power Company	Transmission Owner
McDonald, Renee	Wabash Valley Power Association, Inc.	Other Supplier

Future Meeting Dates

April 21, 2015	1:00 p.m. – 4:00 p.m.	Conference Call
May 26, 2015	1:00 p.m. – 4:00 p.m.	Conference Call
June 16, 2015	1:00 p.m. – 4:00 p.m.	Conference Call
July 21, 2015	1:00 p.m. – 4:00 p.m.	Conference Call
August 18, 2015	1:00 p.m. – 4:00 p.m.	Conference Call
September 22, 2015	1:00 p.m. – 4:00 p.m.	Conference Call
October 20, 2015	1:00 p.m. – 4:00 p.m.	Conference Call
November 17, 2015	1:00 p.m. – 4:00 p.m.	Conference Call
December 15, 2015	1:00 p.m. – 4:00 p.m.	Conference Call

Author: Susan Kenney

**BEFORE THE
PUBLIC UTILITIES COMMISSION OF OHIO**

OHIO EDISON COMPANY and THE)	
CLEVELAND ELECTRIC ILLUMINATING)	
COMPANY,)	
)	
Complainants,)	
)	Case No. 17-1967-EL-CSS
v.)	
)	
DIRECT ENERGY BUSINESS, LLC,)	
)	
Respondent.)	

**OHIO EDISON COMPANY AND THE CLEVELAND ELECTRIC ILLUMINATING
COMPANY'S OBJECTIONS AND RESPONSES TO DIRECT ENERGY BUSINESS,
LLC'S FIRST SET OF INTERROGATORIES AND REQUESTS FOR PRODUCTION
OF DOCUMENTS**

Pursuant to Rules 4901-1-19 and 4901-1-20 of the Ohio Administrative Code, Complainants Ohio Edison Company and The Cleveland Electric Illuminating Company (collectively, the "Companies") object and respond to Respondent Direct Energy Business, LLC's ("Direct") First Set of Interrogatories and Requests for Production of Documents as follows



*Ohio Edison Company and The Cleveland Electric Illuminating Company v.
Direct Energy Business, LLC*
Public Utilities Commission of Ohio, Case No. 17-1967-EL-CSS

DIRECT ENERGY SET 1

RESPONSES TO FIRST SET OF INTERROGATORIES

As to Response: Edward Stein

1-INT-001 Regarding Paragraph 3 of the Complaint, what is the factual basis for the Companies' allegation that Direct is an "electric light company" under R.C. 4905.03(C)?

RESPONSE According to information Direct has provided or made accessible to the public, Direct is engaged in the business of supplying electricity for light, heat, or power purposes to consumers within the state of Ohio. For example, on its website among its self-styled "Products and Services" offerings, Direct provides "electricity supply" in the state of Ohio. Further, Direct has a PUCO certificate to provide power marketing services in the state of Ohio, and a power marketer is an electric light company under R.C. 4928.01(A)(7), (A)(9) and R.C. 4905.03(C).

***Ohio Edison Company and The Cleveland Electric Illuminating Company v.
Direct Energy Business, LLC***
Public Utilities Commission of Ohio, Case No. 17-1967-EL-CSS

DIRECT ENERGY SET 1

As to Response: Edward Stein

1-INT-002 Regarding Paragraph 3 of the Complaint, what is the factual basis for the
Companies' allegation that Direct is an "electric services company"
under R.C. 4928.01?

RESPONSE See response to 1-INT-001.

***Ohio Edison Company and The Cleveland Electric Illuminating Company v.
Direct Energy Business, LLC***
Public Utilities Commission of Ohio, Case No. 17-1967-EL-CSS

DIRECT ENERGY SET 1

As to Response: Edward Stein

1-INT-003 Identify "Customer 1" referenced in Paragraph 8 of the Complaint.

RESPONSE



*Ohio Edison Company and The Cleveland Electric Illuminating Company v.
Direct Energy Business, LLC*
Public Utilities Commission of Ohio, Case No. 17-1967-EL-CSS

DIRECT ENERGY SET 1

As to Response: Edward Stein

1-INT-004

Identify "Customer 2" referenced in Paragraph 9 of the Complaint.

RESPONSE

[REDACTED]

*Ohio Edison Company and The Cleveland Electric Illuminating Company v.
Direct Energy Business, LLC*
Public Utilities Commission of Ohio, Case No. 17-1967-EL-CSS

DIRECT ENERGY SET 1

As to Response: Edward Stein

1-INT-005 Identify "Customer 3" referenced in Paragraph 10 of the Complaint.

RESPONSE

[REDACTED]

***Ohio Edison Company and The Cleveland Electric Illuminating Company v.
Direct Energy Business, LLC***
Public Utilities Commission of Ohio, Case No. 17-1967-EL-CSS

DIRECT ENERGY SET 1

As to Objections: Legal
As to Response: Edward Stein

1-INT-006 Identify the entity(ies) responsible for reporting the Affected Customers' (as defined in Paragraph 10 of the Complaint) switch to Direct as their new CRES provider.

RESPONSE The Companies object to this request because it is vague, overbroad, unduly burdensome, and it seeks irrelevant information and/or information not reasonably calculated to lead to the discovery of admissible evidence. Subject to and without waiving the foregoing objections, Direct was responsible for reporting to the Companies that the Affected Customers had signed a contract with Direct and were switching to Direct.

***Ohio Edison Company and The Cleveland Electric Illuminating Company v.
Direct Energy Business, LLC***
Public Utilities Commission of Ohio, Case No. 17-1967-EL-CSS

DIRECT ENERGY SET 1

As to Objections: Legal

1-INT-007 Identify the entity(ies) responsible for programming and maintaining the computer system that sustained the “internal computer error” described in Paragraphs 11 and 12 of the Complaint.

RESPONSE FirstEnergy Service Company.

***Ohio Edison Company and The Cleveland Electric Illuminating Company v.
Direct Energy Business, LLC***
Public Utilities Commission of Ohio, Case No. 17-1967-EL-CSS

DIRECT ENERGY SET 1

As to Objections: Legal
As to Response: Edward Stein

1-INT-008 Identify the entity(ies) responsible for metering the electrical usage of the Affected Customers during the period December 1, 2013 through November 30, 2015.

RESPONSE The Companies object to this request because it is vague, overbroad, unduly burdensome, and it seeks irrelevant information and/or information not reasonably calculated to lead to the discovery of admissible evidence. Subject to and without waiving the foregoing objections, the Companies state that Article IX of the Supplier Tariff addresses metering services and obligations.

*Ohio Edison Company and The Cleveland Electric Illuminating Company v.
Direct Energy Business, LLC*
Public Utilities Commission of Ohio, Case No. 17-1967-EL-CSS

DIRECT ENERGY SET 1

As to Objections: Legal

1-INT-009 Identify the entity(ies) responsible for calculating the supplier charges owed by the Affected Customers during the period December 1, 2013 through November 30, 2015.

RESPONSE The Companies object to this request because it is vague, overbroad, unduly burdensome, and it seeks irrelevant information and/or information not reasonably calculated to lead to the discovery of admissible evidence.

***Ohio Edison Company and The Cleveland Electric Illuminating Company v.
Direct Energy Business, LLC***
Public Utilities Commission of Ohio, Case No. 17-1967-EL-CSS

DIRECT ENERGY SET 1

As to Objections: Legal
As to Response: Edward Stein

1-INT-010 Identify the entity(ies) responsible for billing Direct's customers for their electric usage during the period December 1, 2013 through November 30, 2015.

RESPONSE The Companies object to this request because it is vague, overbroad, unduly burdensome, and it seeks irrelevant information and/or information not reasonably calculated to lead to the discovery of admissible evidence. Subject to and without waiving the foregoing objections, the Companies state that Article X of the Supplier Tariff addresses billing services and obligations.

***Ohio Edison Company and The Cleveland Electric Illuminating Company v.
Direct Energy Business, LLC***
Public Utilities Commission of Ohio, Case No. 17-1967-EL-CSS

DIRECT ENERGY SET 1

As to Response: Edward Stein

1-INT-011 Identify the entity(ies) responsible for reporting Direct's load obligation to PJM during the period December 1, 2013 through November 30, 2015.

RESPONSE The Companies and FirstEnergy Service Company.

*Ohio Edison Company and The Cleveland Electric Illuminating Company v.
Direct Energy Business, LLC*
Public Utilities Commission of Ohio, Case No. 17-1967-EL-CSS

DIRECT ENERGY SET 1

As to Objections: Legal

1-INT-012

Regarding the “computer error” alleged in Paragraph 18 of the Complaint, identify:

- a. The date it was discovered;
- b. Who discovered it;
- c. How it was discovered;
- d. The date the error was corrected; and
- e. All documents and communications concerning the “computer error.”

RESPONSE

The Companies object to this request because it is vague, overbroad, unduly burdensome, and it seeks irrelevant information and/or information not reasonably calculated to lead to the discovery of admissible evidence. The Companies further object to this request because it seeks information protected from disclosure by the attorney-client privilege and/or attorney work product doctrine. The Companies also object to this request because the Companies have already furnished information responsive to this request in emails exchanged with Direct on or around December 18, 28, and 31, 2015 and as described in the Complaint in paragraphs 18 through 27.

***Ohio Edison Company and The Cleveland Electric Illuminating Company v.
Direct Energy Business, LLC***

Public Utilities Commission of Ohio, Case No. 17-1967-EL-CSS

DIRECT ENERGY SET 1

As to Objections: Legal
As to Response: Edward Stein

1-INT-013 Identify each Disadvantaged Supplier referenced in Paragraph 18 of the Complaint.

RESPONSE The Companies object to this request because it seeks confidential documents and information that are irrelevant and/or not reasonably calculated to lead to the discovery of admissible evidence. Subject to and without waiving the foregoing objections, FirstEnergy Solutions Corp. and two other suppliers.

*Ohio Edison Company and The Cleveland Electric Illuminating Company v.
Direct Energy Business, LLC*
Public Utilities Commission of Ohio, Case No. 17-1967-EL-CSS

DIRECT ENERGY SET 1

As to Objections: Legal
As to Response: Edward Stein

1-INT-014 Identify each Advantaged Supplier referenced in Paragraph 18 of the Complaint.

RESPONSE The Companies object to this request because it seeks confidential documents and information that is irrelevant and/or not reasonably calculated to lead to the discovery of admissible evidence. Subject to and without waiving the foregoing objections, four suppliers consist of the Advantaged Suppliers.

***Ohio Edison Company and The Cleveland Electric Illuminating Company v.
Direct Energy Business, LLC***
Public Utilities Commission of Ohio, Case No. 17-1967-EL-CSS

DIRECT ENERGY SET 1

As to Objections: Legal

1-INT-015

Identify each Advantaged Supplier that did not cooperate with the Companies, as alleged in Paragraph 19 of the Complaint.

RESPONSE

The Companies object to this request because it seeks confidential documents and information that is irrelevant and/or not reasonably calculated to lead to the discovery of admissible evidence. The Companies further object to this request because it seeks information protected from disclosure by the attorney-client privilege and/or attorney work product doctrine.

*Ohio Edison Company and The Cleveland Electric Illuminating Company v.
Direct Energy Business, LLC*
Public Utilities Commission of Ohio, Case No. 17-1967-EL-CSS

DIRECT ENERGY SET 1

As to Objections: Legal
As to Response: Edward Stein

1-INT-016 Identify each employee of the Companies, or an affiliate, that communicated with an Advantaged Supplier about the computer error alleged in Paragraph 18 of the Complaint.

RESPONSE The Companies object to this request because it seeks confidential documents and information that is irrelevant and/or not reasonably calculated to lead to the discovery of admissible evidence. The Companies further object to this request because it seeks information protected from disclosure by the attorney-client privilege and/or attorney work product doctrine. Finally, the Companies object to this request because it is vague, overbroad, and unduly burdensome. Subject to and without waiving the foregoing objections, the Companies state that the Companies have furnished information responsive to this request in emails exchanged with Direct on or around December 18, 28, and 31, 2015.

*Ohio Edison Company and The Cleveland Electric Illuminating Company v.
Direct Energy Business, LLC*
Public Utilities Commission of Ohio, Case No. 17-1967-EL-CSS

DIRECT ENERGY SET 1

As to Objections: Legal

1-INT-017 Identify each employee of the Companies, or an affiliate, that communicated with a Disadvantaged Supplier about the computer error alleged in Paragraph 18 of the Complaint.

RESPONSE The Companies object to this request because it seeks confidential documents and information that is irrelevant and/or not reasonably calculated to lead to the discovery of admissible evidence. The Companies further object to this request because it seeks information protected from disclosure by the attorney-client privilege and/or attorney work product doctrine. Finally, the Companies object to this request because it is vague, overbroad, and unduly burdensome.

*Ohio Edison Company and The Cleveland Electric Illuminating Company v.
Direct Energy Business, LLC*
Public Utilities Commission of Ohio, Case No. 17-1967-EL-CSS

DIRECT ENERGY SET 1

As to Objections: Legal
As to Response: Edward Stein

1-INT-018 Identify each provision of the Companies' Supplier Tariff Direct allegedly violated.

RESPONSE The Companies object to this request because it is vague, overbroad, and unduly burdensome. The Companies further object to this request because it seeks information protected from disclosure by the attorney-client privilege and/or attorney work product doctrine. Subject to and without waiving the foregoing objections, to the extent this request is limited in scope and subject matter to the allegations made by the Companies in the Complaint, Direct has violated Section III(C) of the Supplier Tariff as more fully described in the Complaint.

***Ohio Edison Company and The Cleveland Electric Illuminating Company v.
Direct Energy Business, LLC***
Public Utilities Commission of Ohio, Case No. 17-1967-EL-CSS

DIRECT ENERGY SET 1

As to Objections: Legal

1-INT-019 Identify each provision of the PJM OATT that Direct allegedly violated.

RESPONSE The Companies object to this request because it assumes facts that have not been established, is vague, overbroad, and unduly burdensome, and is irrelevant and/or not reasonably calculated to lead to the discovery of admissible evidence. The Companies further object to this request because it seeks information protected from disclosure by the attorney-client privilege and/or attorney work product doctrine.

*Ohio Edison Company and The Cleveland Electric Illuminating Company v.
Direct Energy Business, LLC*
Public Utilities Commission of Ohio, Case No. 17-1967-EL-CSS

DIRECT ENERGY SET 1

As to Objections: Legal
As to Response: Edward Stein

1-INT-020 Apart from Direct's "refus[al] to cooperate by paying the full amount of the Affected Customers' load obligation," as alleged in Paragraph 28 of the Complaint, identify each additional action or failure to act by Direct that the Companies allege constitutes a breach of the duty to cooperate.

RESPONSE The Companies object to this request because it is vague, overbroad, unduly burdensome, and calls for an improper narrative response. *See Penn Cent. Transp. Co. v. Armco Steel Corp.*, 271 N.E.2d 877 (Montgomery Co. 1971) (improper use of discovery device or interrogatory to require detailed narrative response). Subject to and without waiving the foregoing objections, the factual allegations relating to Direct's breach of the duty to cooperate are more fully described in the Complaint.

***Ohio Edison Company and The Cleveland Electric Illuminating Company v.
Direct Energy Business, LLC***
Public Utilities Commission of Ohio, Case No. 17-1967-EL-CSS

DIRECT ENERGY SET 1

As to Objections: Legal
As to Response: Edward Stein

1-INT-021 Identify the provision(s) of the Companies' Supplier Tariff that allegedly requires suppliers to "ensure that the market functions properly," as alleged in Paragraph 43 of the Complaint.

RESPONSE The Companies object to this request because it assumes facts that have not been established. The Companies further object to this request because it is vague, overbroad, and unduly burdensome. The Companies further object to this request because it seeks information protected from disclosure by the attorney-client privilege and/or attorney work product doctrine. Subject to and without waiving the foregoing objections, see all sections of the Supplier Tariff.

***Ohio Edison Company and The Cleveland Electric Illuminating Company v.
Direct Energy Business, LLC***

Public Utilities Commission of Ohio, Case No. 17-1967-EL-CSS

DIRECT ENERGY SET 1

As to Objections: Legal
As to Response: Edward Stein

1-INT-022 How have the Companies been damaged by Direct's alleged violations,
as alleged in Paragraphs 47 and 52 of the Complaint?

RESPONSE The Companies object to this request because it is vague, overbroad,
unduly burdensome, and calls for an improper narrative response. *See*
Penn Cent. Transp. Co. v. Armco Steel Corp., 271 N.E.2d 877
(Montgomery Co. 1971) (improper use of discovery device or
interrogatory to require detailed narrative response). Subject to and
without waiving the foregoing objections, the Companies have been
damaged by Direct's refusal to pay \$5,602,981.39 for the full retail load
obligations of the Affected Customers.

***Ohio Edison Company and The Cleveland Electric Illuminating Company v.
Direct Energy Business, LLC***

Public Utilities Commission of Ohio, Case No. 17-1967-EL-CSS

DIRECT ENERGY SET 1

As to Objections: Legal
As to Response: Edward Stein

1-INT-023 Regarding paragraph (d) in the Request for Relief in the Complaint, what is the basis for requiring Direct to pay restitution to the Companies?

RESPONSE The Companies object to this request because it is vague, overbroad, unduly burdensome, and calls for an improper narrative response. *See Penn Cent. Transp. Co. v. Armco Steel Corp.*, 271 N.E.2d 877 (Montgomery Co. 1971) (improper use of discovery device or interrogatory to require detailed narrative response). The Companies further object to this request because it seeks information protected from disclosure by the attorney-client privilege and/or attorney work product doctrine. Subject to and without waiving the foregoing objections, the Companies seek restitution of amounts the Companies paid to Disadvantaged Suppliers on account of Direct's refusal to pay \$5,602,981.39 for the full retail load obligations of the Affected Customers.

*Ohio Edison Company and The Cleveland Electric Illuminating Company v.
Direct Energy Business, LLC*
Public Utilities Commission of Ohio, Case No. 17-1967-EL-CSS

DIRECT ENERGY SET 1

As to Objections: Legal
As to Response: Edward Stein

1-INT-024

Describe how the Companies allegedly sustained a “loss of capital,” as alleged in paragraph (e) of the Request for Relief?

RESPONSE

The Companies object to this request because it is vague, overbroad, unduly burdensome, and calls for an improper narrative response. *See Penn Cent. Transp. Co. v. Armco Steel Corp.*, 271 N.E.2d 877 (Montgomery Co. 1971) (improper use of discovery device or interrogatory to require detailed narrative response). Subject to and without waiving the foregoing objections, as more fully described in the Complaint, by unlawfully refusing to surrender its windfall, Direct has withheld \$5,602,981.39 in capital belonging to the Companies.

*Ohio Edison Company and The Cleveland Electric Illuminating Company v.
Direct Energy Business, LLC*
Public Utilities Commission of Ohio, Case No. 17-1967-EL-CSS

DIRECT ENERGY SET 1

RESPONSES TO FIRST SET OF REQUESTS FOR PRODUCTION OF DOCUMENTS

As to Objections: Legal

1-RFP-001 Any documents identified in response to Interrogatories No. 1-24 above.

RESPONSE The Companies object to this request because it is overbroad, unduly burdensome, and it seeks irrelevant information and/or information not reasonably calculated to lead to the discovery of admissible evidence. The Companies further object to this request because it seeks information protected from disclosure by the attorney-client privilege and/or attorney work product doctrine. The Companies also object to this request because the Companies have already furnished non-privileged information responsive to this request in emails sent to Direct on or around December 18 and 28, 2015.

*Ohio Edison Company and The Cleveland Electric Illuminating Company v.
Direct Energy Business, LLC*
Public Utilities Commission of Ohio, Case No. 17-1967-EL-CSS

DIRECT ENERGY SET 1

As to Objections: Legal

1-RFP-002

Facts and data used to calculate the dollar amount referenced in Paragraph 13 of the Complaint.

RESPONSE

The Companies object to this request because it is overbroad, unduly burdensome, and it seeks irrelevant information and/or information not reasonably calculated to lead to the discovery of admissible evidence. The Companies further object to this request because it seeks information protected from disclosure by the attorney-client privilege and/or attorney work product doctrine. The Companies also object to this request because the Companies have already furnished information responsive to this request in emails sent to Direct on or around December 18 and 28, 2015.

*Ohio Edison Company and The Cleveland Electric Illuminating Company v.
Direct Energy Business, LLC*
Public Utilities Commission of Ohio, Case No. 17-1967-EL-CSS

DIRECT ENERGY SET 1

As to Objections: Legal

1-RFP-003

Facts and data used to calculate the dollar amount referenced in Paragraph 14 of the Complaint.

RESPONSE

The Companies object to this request because it is overbroad, unduly burdensome, and it seeks confidential and irrelevant information and/or information not reasonably calculated to lead to the discovery of admissible evidence. The Companies further object to this request because it seeks information protected from disclosure by the attorney-client privilege and/or attorney work product doctrine. The Companies also object to this request because the Companies have already furnished information responsive to this request in emails sent to Direct on or around December 18 and 28, 2015.

***Ohio Edison Company and The Cleveland Electric Illuminating Company v.
Direct Energy Business, LLC***
Public Utilities Commission of Ohio, Case No. 17-1967-EL-CSS

DIRECT ENERGY SET 1

As to Objections: Legal

1-RFP-004

Facts and data used to calculate the dollar amount referenced in Paragraph 15 of the Complaint.

RESPONSE

The Companies object to this request because it is overbroad, unduly burdensome, and it seeks confidential and irrelevant information and/or information not reasonably calculated to lead to the discovery of admissible evidence. The Companies further object to this request because it seeks information protected from disclosure by the attorney-client privilege and/or attorney work product doctrine. The Companies also object to this request because the Companies have already furnished information responsive to this request in emails sent to Direct on or around December 18 and 28, 2015.

***Ohio Edison Company and The Cleveland Electric Illuminating Company v.
Direct Energy Business, LLC***
Public Utilities Commission of Ohio, Case No. 17-1967-EL-CSS

DIRECT ENERGY SET 1

As to Objections: Legal

1-RFP-005

Facts and data used to calculate the dollar amount referenced in Paragraph 16 of the Complaint.

RESPONSE

The Companies object to this request because it is overbroad, unduly burdensome, and it seeks confidential and irrelevant information and/or information not reasonably calculated to lead to the discovery of admissible evidence. The Companies further object to this request because it seeks information protected from disclosure by the attorney-client privilege and/or attorney work product doctrine. The Companies also object to this request because the Companies have already furnished information responsive to this request in emails sent to Direct on or around December 18 and 28, 2015.

*Ohio Edison Company and The Cleveland Electric Illuminating Company v.
Direct Energy Business, LLC*
Public Utilities Commission of Ohio, Case No. 17-1967-EL-CSS

DIRECT ENERGY SET 1

As to Objections: Legal

1-RFP-006

The “internal investigation” and remediation efforts described in Paragraph 18 of the Complaint.

RESPONSE

The Companies object to this request because it is overbroad, unduly burdensome, and it seeks confidential and irrelevant information and/or information not reasonably calculated to lead to the discovery of admissible evidence. The Companies further object to this request because it seeks information protected from disclosure by the attorney-client privilege and/or attorney work product doctrine. The Companies also object to this request because the Companies have already furnished information responsive to this request in emails sent to Direct on or around December 18 and 28, 2015.

*Ohio Edison Company and The Cleveland Electric Illuminating Company v.
Direct Energy Business, LLC*
Public Utilities Commission of Ohio, Case No. 17-1967-EL-CSS

DIRECT ENERGY SET 1

As to Objections: Legal

1-RFP-007 Communications with or including the Disadvantaged Suppliers
referenced in Paragraph 18 of the Complaint.

RESPONSE The Companies object to this request because it is overbroad, unduly
burdensome, and it seeks confidential and irrelevant information
concerning third-parties and/or information not reasonably calculated to
lead to the discovery of admissible evidence. The Companies further
object to this request because it seeks information protected from
disclosure by the attorney-client privilege and/or attorney work product
doctrine. Subject to and without waiving the foregoing objections, the
Companies have furnished emails responsive to this request dated
December 18, 28, and 31, 2015.

*Ohio Edison Company and The Cleveland Electric Illuminating Company v.
Direct Energy Business, LLC*
Public Utilities Commission of Ohio, Case No. 17-1967-EL-CSS

DIRECT ENERGY SET 1

As to Objections: Legal

1-RFP-008 Communications with or including the Advantaged Suppliers referenced in Paragraph 18 of the Complaint.

RESPONSE The Companies object to this request because it is overbroad, unduly burdensome, and it seeks confidential and irrelevant information concerning third-parties and/or information not reasonably calculated to lead to the discovery of admissible evidence. The Companies further object to this request because it seeks information protected from disclosure by the attorney-client privilege and/or attorney work product doctrine. Subject to and without waiving the foregoing objections, the Companies have produced e-mails responsive to this request dated December 18, 28, and 31, 2015.

***Ohio Edison Company and The Cleveland Electric Illuminating Company v.
Direct Energy Business, LLC***
Public Utilities Commission of Ohio, Case No. 17-1967-EL-CSS

DIRECT ENERGY SET 1

As to Objections: Legal

1-RFP-009 The settlement and release agreements referenced in Paragraph 43 of the Complaint.

RESPONSE The Companies object to this request because it is overbroad, unduly burdensome, and it seeks confidential and irrelevant information concerning third-parties and/or information not reasonably calculated to lead to the discovery of admissible evidence. Subject to and without waiving the foregoing objections, the Companies will produce responsive documents at a mutually agreeable time and place.

*Ohio Edison Company and The Cleveland Electric Illuminating Company v.
Direct Energy Business, LLC*
Public Utilities Commission of Ohio, Case No. 17-1967-EL-CSS

DIRECT ENERGY SET 1

As to Objections: Legal

1-RFP-010 Payments from the Companies to any Disadvantage Supplier.

RESPONSE The Companies object to this request because it is overbroad, unduly burdensome, and it seeks confidential and irrelevant information concerning third-parties and/or information not reasonably calculated to lead to the discovery of admissible evidence. Subject to and without waiving the foregoing objections, the Companies will produce responsive documents at a mutually agreeable time and place.

*Ohio Edison Company and The Cleveland Electric Illuminating Company v.
Direct Energy Business, LLC*
Public Utilities Commission of Ohio, Case No. 17-1967-EL-CSS

DIRECT ENERGY SET 1

As to Objections: Legal

1-RFP-011

Communications between the Companies and FirstEnergy Solutions regarding the subject matters alleged in the Companies' complaint.

RESPONSE

The Companies object to this request because it is overbroad, unduly burdensome, and it seeks confidential and irrelevant information concerning third-parties and/or information not reasonably calculated to lead to the discovery of admissible evidence. The Companies further object to this request because it seeks information protected from disclosure by the attorney-client privilege and/or attorney work product doctrine.

**BEFORE
THE PUBLIC UTILITIES COMMISSION OF OHIO**

In the Matter of Complaint of Direct
Energy Business, LLC

Complainant,

v.

Duke Energy Ohio, Inc.

Respondent.

Case No. 14-1277-EL-CSS

DIRECT PREPARED TESTIMONY OF TERESA L. RINGENBACH
ON BEHALF OF DIRECT ENERGY BUSINESS, LLC

April 14, 2015



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1 **QUALIFICATION OF THE WITNESS**

2 **Q1. Please state your name and business address.**

3 **A1.** My name is Teresa Ringenbach. My business address is 21 East State Street, 19th Floor
4 Columbus, Ohio.
5

6 **Q2. By whom are you employed and in what capacity?**

7 **A2.** I am the Senior Manager of Government and Regulatory Affairs for the Midwest for
8 Direct Energy, LLC ("Direct Energy").
9

10 **Q3. How long have you been employed in your current position?**

11 **A3.** I have been employed in my current position with Direct Energy since 2009.
12

13 **Q4. Please explain the job responsibilities and duties in your current position.**

14 **A4.** I am the key market lead for Ohio and responsible for directing the monitoring, advocacy,
15 regulatory, and legislative activities that affect Direct Energy's ability to serve customers
16 in Ohio, Illinois, and Michigan. My responsibilities cover electric, natural gas, and home
17 services issues for all levels of customers from residential to large industrial.
18

19 **Q5. Please describe your educational background and relevant work experience prior to**
20 **joining Direct Energy.**

21 **A5.** I hold a Bachelor of Business Administration with a concentration in International
22 Business from the University of Toledo. I started in the energy industry in 2001 with
23 Integrys Energy Services, Inc., formerly WPS Energy Services, Inc., as a Customer
24 Service and Marketing Specialist promoting and managing the recently opened Ohio

1 residential and small commercial electric offers. In 2002, I accepted the position of
2 Account Manager – Inside Sales where I sold and managed the Government Aggregation
3 Programs for both gas and electric. In 2005, I accepted the position of Regulatory
4 Specialist. In this position I was responsible for regulatory compliance and state
5 registrations throughout the United States and Canada. In 2006, I accepted the position
6 of Regulatory Affairs Analyst – East covering New England, New York, New Jersey,
7 Ohio and Pennsylvania gas and electric issues. In the spring of 2008, I accepted the
8 Regulatory Affairs Analyst position for the Midwest region covering Ohio, Michigan,
9 Illinois, Indiana, Kentucky, and all of Canada. In this position, I directed the regulatory
10 and legislative efforts affecting Integrys Energy's gas and electric business. In August
11 2009, I joined Direct Energy as the Manager of Government and Regulatory Affairs for
12 the Midwest. In June 2011 I was promoted to Senior Manager of Government and
13 Regulatory Affairs for the Midwest covering Ohio, Illinois, Kentucky, Pennsylvania and
14 Michigan. As of December 2013, my position changed to key market lead for Ohio and
15 lead for Illinois and Michigan. As stated above this position advocates, protects and
16 monitors regulatory and legislative activities affecting the gas, electric and home services
17 business interests of Direct.

18
19 **Q6. Have you ever testified before a regulatory agency?**

20 **A6.** Yes. I have testified before the Connecticut Department of Public Utility Control, the
21 Pennsylvania Public Utility Commission, the Public Utilities Commission of Ohio, the
22 Illinois Commerce Commission and the Public Service Commission of Kentucky.

1 **Q7. What is the purpose of your testimony?**

2 A7. The purpose of my testimony is to explain the solutions available to the Commission to
3 put Direct Energy back in the place it would have been if not for Duke's metering error.
4 Additionally, I note I am not a lawyer and my testimony is not meant to provide a legal
5 opinion. My testimony is meant only to explain to the Commission how Direct Energy
6 would like to solve this problem and to explain why certain steps are needed for
7 particular aspects of the solution. Direct Energy Business, LLC (DEB) witness Kennelly
8 will explain the metering errors made by Duke and the steps taken to this point to correct
9 Duke's errors.

10
11 **EXPLANATION OF SOLUTIONS**

12 **Q8. What is your preferred mechanism to make DEB whole for Duke's errors?**

13 A8. Direct Energy's preferred option is the Commission order Duke to make Direct Energy
14 whole for the metering errors. As witness Kennelly points out, this is ultimately a
15 metering error issue. Witness Kennelly also explains the details behind the amounts
16 Direct Energy requests as a remedy in this case. While Direct Energy's complaint
17 includes an option to require Duke to revisit the Resettlement C process, this matter is not
18 a dispute with PJM. Resettlement C is a possible solution, but ultimately the metering
19 error was Duke's, not PJM's. As a result, this matter is appropriate for resolution by the
20 Commission. Requiring Duke to repay Direct Energy this amount is the simplest route to
21 take and is appropriate in light of Duke's metering errors. Simply put, if the Commission
22 finds Duke made the metering error alleged by Direct Energy, then this route properly
23 holds the party responsible for the metering errors accountable for the results of its

1 mistakes. This would merely put DEB back in the place it would otherwise be in if not
2 for Duke's metering error.

3
4 I understand the lawyers in this case will address the legality of this recommendation, but
5 as a factual matter I believe this is a fair outcome. DEB is simply asking for what it is
6 owed as a result of Duke's metering error and the carrying costs associated with that
7 metering error. The Commission is no stranger to the carrying cost concept and DEB is
8 only asking that the Commission recognize this cost for DEB, just as it routinely does for
9 Ohio's regulated utilities.

10
11 **Q9. Doesn't the fact that Duke is Direct Energy's meter data management agent**
12 **("MDMA") eliminate Duke's responsibility for the metering errors?**

13 **A9.** Duke's supplier tariff does purport to exonerate Duke for its errors in its role as MDMA.
14 However, this is not an MDMA issue; it is a utility metering issue. An MDMA is the
15 entity that communicates to PJM what amount of load to bill a CRES provider. In some
16 states DEB itself is the MDMA. It is only a coincidence of the Ohio market that Duke is
17 also the MDMA for their service territory. An MDMA is not the same as the utility; it
18 may be a role that the utility undertakes or it may not be. If DEB had been its own
19 MDMA or used another company to be the MDMA, the same issue would have existed
20 because the MDMA receives meter data from the utility. Ultimately this is not an
21 MDMA or a PJM settlement issue; it is an issue of Duke providing PUCO jurisdictional
22 metering services, making mistakes, and those mistakes leading to financial harm to
23 DEB. Anything related to the MDMA is irrelevant to this case.

1
2
3 **Q10. You mentioned revisiting the Resettlement C process in your previous answer. Can**
4 **you explain what you mean by resettlement?**

5 A10. The electric utilities do not directly bill load serving entities (“LSE”) for the power
6 delivered to the LSEs’ customers by the utility. Instead, the utility sends meter data to
7 PJM and then PJM bills and collects from the LSEs. When a problem or error arises as it
8 relates to what PJM billed or collected from the LSEs, a process called resettlement is
9 available to correct those problems or errors.
10

11 **Q11. Has Duke already attempted the Resettlement C option?**

12 A11. Yes. As noted by witness Kennelly, Duke attempted Resettlement C in September 2013,
13 but only 5 of 44 affected LSEs affirmatively consented to the resettlement.
14

15 **Q12. What is your understanding of the Resettlement C mechanism?**

16 A12. Outside of a 60 day window following the month of delivery, the Resettlement C process
17 is available for resettlements by the utility. As laid out in the attached letter from Duke
18 counsel, the Resettlement C process is an informal process and there is no billing manual
19 or tariff that governs it. TLR Attachment 1. DEB understands that after the 60 day
20 window, PJM requires all affected LSEs to affirmatively consent to the resettlement.
21

22 **Q13. Who are the other LSE’s and why do all of the other LSE’s have to consent to**
23 **resettlement?**

1 A13. Other LSEs in this instance are largely other CRES providers serving customers in
2 Duke's territory. I do not know why PJM requires the other LSEs to consent to the
3 resettlement, but it is my understanding this is required based on information provided by
4 both Duke and PJM. As this is an informal process, there are not many defined
5 parameters to rely upon to explain why or how the process works the way it does.
6

7 **Q14. Do you have concerns about attempting the Resettlement C process again?**

8 A14. Yes. Using Resettlement C is more complicated than simply requiring Duke to pay
9 Direct Energy for its losses resulting from Duke's metering error. As noted previously,
10 only 5 of the 44 affected LSEs affirmatively consented to resettlement last time. I believe
11 the likelihood of a greater number of LSEs consenting to resettlement, let alone all of
12 them, is very unlikely without some action by the Commission. The amount of time that
13 has passed since January and February of 2013 makes this task even more difficult and
14 unlikely. Direct Energy suggested Resettlement C in a show of goodwill, but the matter
15 is ripe for resolution by the Commission without involving PJM.
16

17 **Q15. What are you recommending the Commission order in this case to make the**
18 **Resettlement C process work this time?**

19 A15. The Commission should require Duke to undertake the Resettlement C process, including
20 any steps that PJM may require of Duke, given that the Resettlement C process is an
21 informal process. Further, to ensure completion of the process, the Commission should
22 mandate that each supplier (CRES provider or their designated Transmission Scheduling
23 Agent or "TSA") affected by the resettlement that is regulated by the Commission

1 affirmatively consent in writing to the resettlement or risk consequences in its licensing
2 docket before the Commission. The Commission should also instruct Duke to provide
3 Staff a list of the affected suppliers or their successors and for Staff to work with
4 docketing to send a paper copy of the order to the regulatory contact of every affected
5 CRES provider or its successor identified by Duke.

6
7 Finally, the Commission should find that, even if another supplier does not affirmatively
8 consent, that a non-response to Duke's request for affirmative consent constitutes consent
9 by the supplier. In Direct Energy's discussions with PJM counsel on February 6, 2015
10 regarding the Resettlement C process, Direct Energy learned that Duke will need
11 affirmative consent from all affected LSEs to run resettlement for January 2013 and
12 February 2013. In other words, a Commission order deeming consent by a non-
13 responsive supplier is not good enough for PJM.

14
15 While such a Commission determination may not have any direct impact on Duke
16 attempting the Resettlement C process again, it will aid Direct Energy in the event a
17 complaint at the Federal Energy Regulatory Commission ("FERC") is required to cause
18 PJM to actually run a resettlement for January 2013 and February 2013. PJM counsel
19 indicated that PJM would be bound to accept an order from FERC to run the resettlement
20 even if there are LSEs who have not affirmatively consented. Therefore, Direct Energy
21 believes a Commission order finding other suppliers who do not affirmatively consent
22 will be deemed to have consented to the resettlement would provide Direct Energy an

1 important tool in a FERC complaint attempting to restore Direct Energy to the place it
2 should have been, but for Duke's metering error.
3

4 **Q16. Has Duke previously indicated that the Commission has authority to deem CRES**
5 **providers to have consented to a resettlement?**

6 A16. Yes, in its most recent electric security plan case (14-841-EL-SSO), Duke proposed to
7 add a new provision in its supplier tariff (at Section XIV, paragraph 14.4) to address
8 adjustments and resettlements related to interval data. Duke's proposed language reads
9 as follows:¹ "The Company shall have no obligation to authorize or initiate a billing
10 adjustment or resettlement under the RTO's rules, regulations, or agreements for any
11 Certified Supplier or their designated TSA. However, in the event the Company
12 authorizes or initiates any such billing adjustment or resettlement, each Certified Supplier
13 or their designated TSA shall consent to such billing adjustment or resettlement within
14 ten business days after receiving such notice from the Company." Duke never explained
15 what led them to ask for such a provision in their tariff, but its inclusion in the proposed
16 electric security plan demonstrates that Duke believes the Commission has the authority
17 to require CRES providers to consent to a resettlement. While the ramifications of non-
18 consent are not specified, the Commission has tools at its disposal to ensure consent.
19

20 **Q17. Does this conclude your testimony?**

21 A17. Yes. However, I reserve the right to supplement my testimony as needed or as
22 subsequent information becomes available.
23

¹ Duke Ex. 13 at Attachment DLJ-1 at 22.

This foregoing document was electronically filed with the Public Utilities

Commission of Ohio Docketing Information System on

4/14/2015 5:18:35 PM

in

Case No(s). 14-1277-EL-CSS

Summary: Testimony of Teresa Ringenbach electronically filed by Mr. Gerit F. Hull on behalf of Direct Energy Business, LLC



**BEFORE
THE PUBLIC UTILITIES COMMISSION OF OHIO**

In the Matter of the Application of Duke)	
Energy Ohio, Inc. for Authority to Establish)	
a Standard Service Offer Pursuant to R.C.)	Case No. 14-841-EL-SSO
4928.143, in the Form of an Electric)	
Security Plan.)	

In the Matter of the Application of Duke)	
Energy Ohio for Authority to Amend its)	Case No. 14-842-EL-ATA
Certified Supplier Tariff, P.U.C.O. No 20.)	

**APPLICATION FOR REHEARING AND MEMORANDUM IN SUPPORT OF DIRECT
ENERGY SERVICES, LLC AND DIRECT ENERGY BUSINESS, LLC**

Pursuant to Section 4903.10, Revised Code, and Rule 4901:1-35, Ohio Administrative Code, Direct Energy Services, LLC and Direct Energy Business, LLC (collectively, "Direct Energy") respectfully file an Application for Rehearing in this matter. Specifically, Direct Energy alleges the April 2, 2015 Opinion and Order is unreasonable in the following respects:¹

1. The Opinion and Order is unreasonable inasmuch as it fails to approve Duke's request to require Certified Suppliers to consent to billing adjustments or resettlement upon request by Duke, or in the alternative, narrow the situations in which the required consent applies.

WHEREFORE, Direct Energy respectfully requests that the Public Utilities Commission of Ohio ("Commission") grant its Application for Rehearing in this matter and modify its Opinion and Order in the manner suggested by Direct Energy.

¹ Direct Energy's decision not to address any other aspects of the Commission's Opinion and Order should not be construed as Direct Energy's agreement with those aspects of the Opinion and Order.

Respectfully Submitted,

/s/ Joseph M. Clark

Joseph M. Clark (Counsel of Record)

21 East State Street, 19th Floor

Columbus, Ohio 43215

Phone – (614) 220-4369 Ext 232

Fax – (614) 220-4674

joseph.clark@directenergy.com

**Attorney for Direct Energy Services, LLC and
Direct Energy Business, LLC**

MEMORANDUM IN SUPPORT

On April 2, 2015, the Commission modified and approved an electric security plan (“ESP”) for the period of June 1, 2015 through May 31, 2018. Direct Energy hereby files its request for rehearing in this case. Direct Energy also supports the Application for Rehearing filed by the Retail Energy Supply Association (“RESA”).

Direct Energy’s Application for Rehearing narrowly focuses on the Commission’s decision not to approve Duke’s request to require Certified Suppliers to consent to billing adjustments or resettlement upon request by Duke. Opinion and Order at 90-91. The Commission acknowledged it can be burdensome to acquire all of the necessary consents to run the resettlement, but found it unreasonable to force a competitive retail electric service (“CRES”) provider’s consent where it may not exist. Opinion and Order at 91.

Direct Energy (specifically Direct Energy Business, LLC) has a current, real life example where this very situation is playing out. Direct Energy is directly affected by Duke’s current inability to require Certified Suppliers to resettle or accept billing adjustments upon request by Duke. Direct Energy has a pending Complaint at the Commission (Case No. 14-1277-EL-CSS) that may be directly impacted by this tariff change. As explained in the Direct Energy testimony filed in that case,² a metering error by Duke (as alleged by Direct Energy) caused Direct Energy to be overbilled by PJM. However, a remedy to the error (resettlement) was attempted outside of the ordinary 60-day settlement process and therefore PJM requires consent from all affected load serving entities (“LSE”) to run the resettlement in that circumstance (called Resettlement C). However, when Duke instituted the process of acquiring the necessary consents, very few LSEs actually responded. And, according to PJM, the consent must be affirmative consent – e.g.

² Direct Energy notes the testimony in case number 14-1277 was filed after the Commission issued its Opinion and Order in this case.

affected LSEs who do not respond cannot be deemed/assumed to have consented by their silence.

The Commission should grant rehearing on this matter and approve Duke's request. Duke should have no incentive (financial or otherwise) to ask for resettlements or billing adjustments except to make corrections due to errors or reconciliations – in other words to do the right thing. Affected CRES providers should have no objections inasmuch as Duke would simply be correcting an error or making a reconciliation. Further, because PJM will not run a resettlement without affirmative consent of the other affected LSEs, the proposed tariff is an important step in filling in a gap to ensure market participants are treated fairly in a well-functioning market.

In the alternative, if the Commission feels the tariff language is too broad, the Commission should narrow the situations in which the required consent applies to metering errors where resettlement is needed to keep a party whole. Such a change would address real world, current situations affecting CRES providers where a gap needs filled.

CONCLUSION

Direct Energy respectfully requests the Commission grant Direct Energy's Application for Rehearing and approve Duke's requested tariff addition, or in the alternative, narrow and approve the situations where required consent applies.

Respectfully submitted,

/s/ Joseph M. Clark

Joseph M. Clark

Direct Energy

21 East State Street, 19th Floor

Columbus, Ohio 43215

(614) 220-4369 Ext. 232

joseph.clark@directenergy.com

Attorney for Direct Energy Services, LLC and
Direct Energy Business, LLC

CERTIFICATE OF SERVICE

In accordance with Rule 4901-1-05, Ohio Administrative Code, the PUCO's e-filing system will electronically serve notice of the filing of this document on the following parties. In addition, I hereby certify that a service copy of the foregoing *Application for Rehearing of Direct Energy Services, LLC and Direct Energy Business, LLC* was sent by, or on behalf of, the undersigned counsel to the following parties of record this 1st day of May 2015 via e-mail.

/s/ Joseph M. Clark
Joseph M. Clark

Duke Energy Ohio, Inc. (amy.spiller@duke-energy.com, Rocco.D'Ascenzo@duke-energy.com, jeanne.kingery@duke-energy.com, and elizabeth.watts@duke-energy.com)

Ohio Energy Group (dboehm@bkllawfirm.com, mkurtz@bkllawfirm.com, kboehm@bkllawfirm.com, and jkylercohn@bkllawfirm.com)

FirstEnergy Solutions Corp (haydenm@firstenergycorp.com, scasto@firstenergycorp.com, and jmcdermott@firstenergycorp.com)

Energy Professionals of Ohio (schmidt@sppgrp.com)

Ohio Consumers' Counsel (maureen.grady@occ.ohio.gov, joseph.serio@occ.ohio.gov, dstinson@bricker.com, and dborchers@bricker.com)

The Dayton Power and Light Company (judi.sobecki@aes.com)

OMA Energy Group (bojko@carpenterlipps.com, allison@carpenterlipps.com)

Interstate Gas Supply, Inc (joliker@igsenergy.com)

Industrial Energy Users-Ohio (mpritchard@mwncmh.com, fdarr@mwncmh.com, sam@mwncmh.com)

Ohio Partners for Affordable Energy (cmooney@ohiopartners.org)

Ohio Environmental Council (trent@theoec.org)

Sierra Club (callwein@keglerbrown.com and tony.mendoza@sierraclub.org)

People Working Cooperatively (asonderman@keglerbrown.com and mkimbrough@keglerbrown.com)

Greater Cincinnati Health Council (dhart@douglasshart.com)

Kroger (hussey@carpenterlipps.com)

Constellation New Energy, Inc, and Exelon Generating Company, LLC (glpetrucci@vorys.com, mhpetricoff@vorys.com, mjsettineri@vorys.com, david.fein@exeloncorp.com, cynthia.brady@constellation.com, lael.campbell@constellation.com)

Retail Energy Supply Association (glpetrucci@vorys.com, mhpetricoff@vorys.com, mjsettineri@vorys.com)

University of Cincinnati (mhpetricoff@vorys.com)

Miami University (mhpetricoff@vorys.com)

Environmental Law and Policy Center (rkelter@elpc.org and jvickers@elpc.org)

Natural Resources Defense Council (swilliams@nrdc.org)

Enernoc (gpoulous@enernoc.com, sechler@carpenterlipps.com)

City of Cincinnati (tobrien@bricker.com)

Ohio Power Company (stnourse@aep.com, mjsatterwhite@aep.com, and yalami@aep.com)

Wal-Mart/Sam's East (dmason@ralaw.com, mtraven@ralaw.com, and rchamberlain@okenergylaw.com)

Ohio Development Services Agency (dstinson@bricker.com and dborchers@bricker.com)

PUCO Staff (steven.beeler@puc.state.oh.us, thomas.lindgren@puc.state.oh.us, ryan.orourke@puc.state.oh.us)

Attorney Examiners (christine.pirik@puc.state.oh.us and nicholas.walstra@puc.state.oh.us)

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in

Case No(s). 14-0841-EL-SSO, 14-0842-EL-ATA

Summary: Application for Rehearing and Memorandum in Support electronically filed by
JOSEPH CLARK on behalf of Direct Energy Services, LLC and Direct Energy Business, LLC

From: Teamann, Cynthia A <cteamann@firstenergycorp.com>
Sent: Friday, December 18, 2015 1:02 PM
To: DEBUtilityOperations@directenergy.com; Carl.Boyd@directenergy.com; Juan.Padron@directenergy.com
Cc: Stein, Edward B.; Caruthers, Anna M
Subject: RE: Missing accounts in calculated load obligations reported to PJM for JCPL zone
Attachments: Strategic Energy Customer Analysis Energy & Capacity Impacts JCP&L Account.xlsx

Here is the additional JCPL account information referred to in the email below. Second email is due the 20 MB size limitation on email attachments.

Thank you,
Cindy Teamann
Manager, Regulated Settlements
FirstEnergy Service Corp
724-838-6672

From: Teamann, Cynthia A
Sent: Friday, December 18, 2015 12:53 PM
To: 'DEBUtilityOperations@directenergy.com'; 'Carl.Boyd@directenergy.com'; 'Juan.Padron@directenergy.com'
Cc: Stein, Edward B.; Caruthers, Anna M
Subject: Missing accounts in calculated load obligations reported to PJM for OEEDC zone
Importance: High

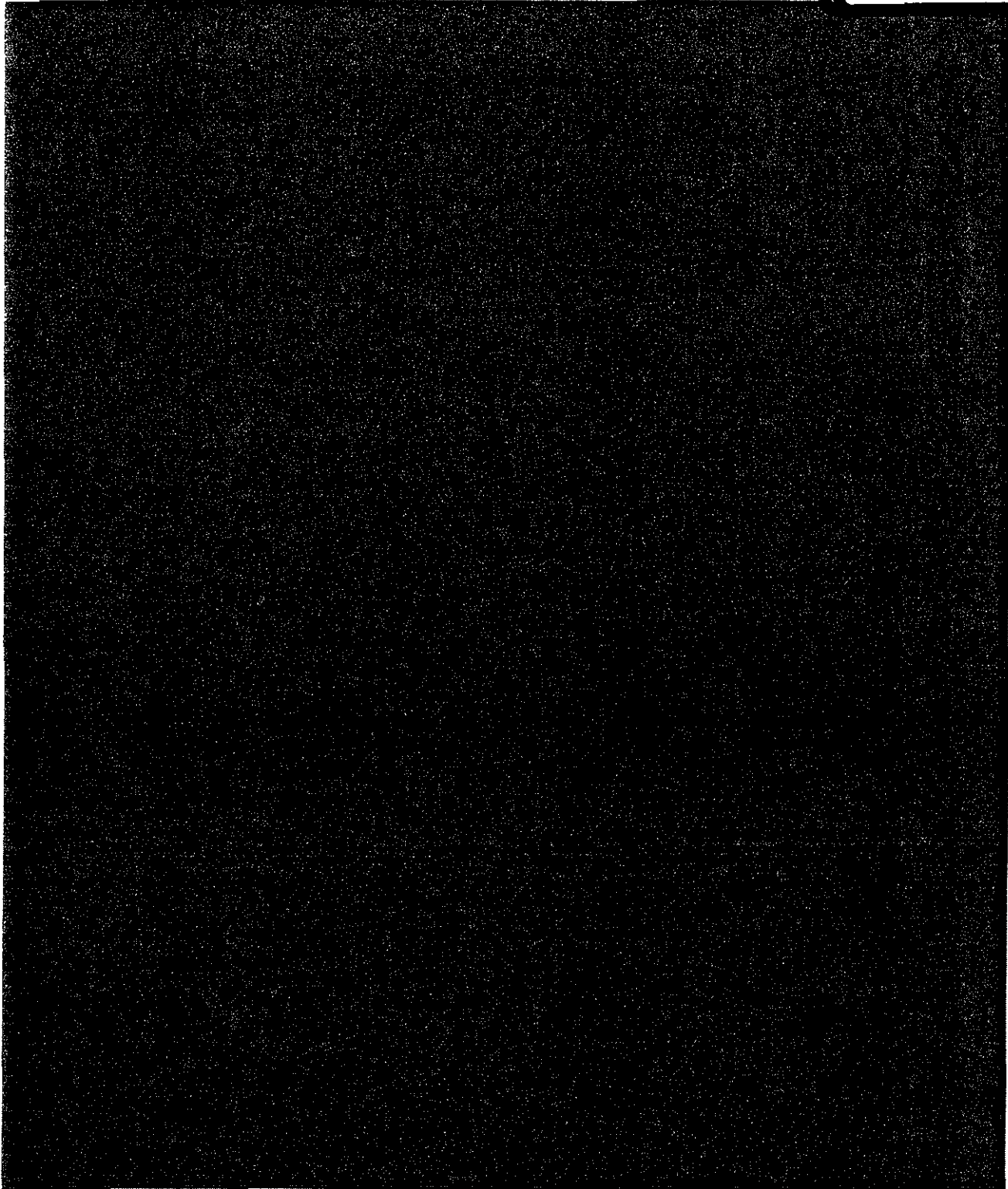
We have determined that the load for three customers was not accounted for in Direct Energy Business's load obligation submitted to PJM respective to the OEEDC zone as follows:

- 08007225331130000103 [REDACTED] from 12/1/13 to 6/30/15
- 08004637570000532552 [REDACTED] from 5/22/14 to 9/30/15
- 08033869131930101652 [REDACTED] from 6/5/14 to 9/30/15

During this time, these customers' load obligation remained assigned to their previous supplier. Unfortunately, your company has received the revenue from these customers while other suppliers paid for energy and capacity services. Additionally, we have also identified one account in NJ, where DEB was the harmed party, i.e. continued to pay for a customer's energy services while its active supplier collected the revenue.

These errors are beyond PJM's 60 day window so we will need to remediate this with out of market bilateral settlements through PJM.

As background, FirstEnergy Settlements was notified a few weeks ago that an Ohio LSE had noticed that its largest account's load was missing from the load obligations we report to PJM for billing. A thorough investigation was performed by our IT group which determined that a flag had been accidentally activated on this account that caused no record to be created for the Settlement system's daily extract file that contains any supplier changes or other updates made to this account. Because our Settlement system received no supplier change record, it continued to report the customer's load obligation to this customer's previous supplier. We were unaware that the flag existed or what the consequences were when the flag is made active on any account. The flag serves no purpose in our CCS system and would only be activated as a result of user error. Our IT group reviewed the entirety of our FE operating companies' accounts and found a few additional accounts that also had this flag in an active state. All accounts were fixed in our CCS



From: Teamann, Cynthia A [<mailto:cteaman@firstenergycorp.com>]

Sent: Monday, December 28, 2015 2:22 PM

To: Padron, Juan; _DEB Utility Operations; Williams, Angela

Cc: Stein, Edward B.; Caruthers, Anna M

Subject: RE: Missing accounts in calculated load obligations reported to PJM for OEEDC zone - Energy
only costs for three Ohio accounts

only costs for three Ohio accounts

Juan and Angela, Attached is the file contained the financial calculation for energy costs as it relates to the three accounts where DEB owes money to these customers' current Suppliers due to an error in our CCS system. A second file containing the related capacity costs will be sent in a separate email.

Thanks for your attention to this matter.

Sincerely,

Cindy Teamann
Manager, Regulated Settlements
FirstEnergy Service Corp
724-838-6672
724-331-5328 (cell)

From: Padron, Juan [<mailto:Juan.Padron@directenergy.com>]
Sent: Monday, December 28, 2015 1:32 PM
To: Teamann, Cynthia A <cteaman@firstenergycorp.com>; _DEB Utility Operations <DEBUtilityOperations@directenergy.com>; Boyd, Carl <Carl.Boyd@directenergy.com>; Williams, Angela <Angela.Williams@directenergy.com>
Cc: Stein, Edward B. <steineb@firstenergycorp.com>; Caruthers, Anna M. <acaruthers@firstenergycorp.com>
Subject: RE: Missing accounts in calculated load obligations reported to PJM for OEEDC zone

Confirm that I received one of the spreadsheet (where we are being charged). I am missing the one that calculates what we are being credited. I am included Angela, as she is the one settling our PJM accounts, to bring her in the know. Thanks!

From: Teamann, Cynthia A [<mailto:cteaman@firstenergycorp.com>]
Sent: Monday, December 28, 2015 9:01 AM
To: _DEB Utility Operations; Boyd, Carl; Padron, Juan
Cc: Stein, Edward B.; Caruthers, Anna M
Subject: RE: Missing accounts in calculated load obligations reported to PJM for OEEDC zone
Importance: High

Juan or Carl, Can you please confirm that you received two files from me on Dec 18th that provided the supporting cost calculations respective to the three FirstEnergy Ohio accounts and one JCPL account as described in the email below? I received messages from Outlook that the attachments exceeded size limitations and so I made several attempts to send the documentation.

Also, please let me know if you have any questions or concerns that you would like to discuss further.

We will follow up with PJM bilateral forms for your signature to correctly assign the energy and capacity costs respective to all four of these accounts that were assigned to the wrong supplier in



From: Teamann, Cynthia A
Sent: Monday, December 28, 2015 3:26 PM
To: Padron, Juan <Juan.Padron@directenergy.com>; _DEB Utility Operations <DEBUtilityOperations@directenergy.com>; Williams, Angela <Angela.Williams@directenergy.com>
Cc: Stein, Edward B. <steineb@firstenergycorp.com>; Caruthers, Anna M <acaruthers@firstenergycorp.com>
Subject: RE: Missing accounts in calculated load obligations reported to PJM for OEEDC zone - Capacity only costs for three Ohio accounts 2 of 2

Juan and Angela, This is the second file (referred to in previous email) which contains the related capacity costs for the three accounts where DEB owes money to these customers' current Suppliers due to an error in our CCS system. Thanks for your attention to this matter.

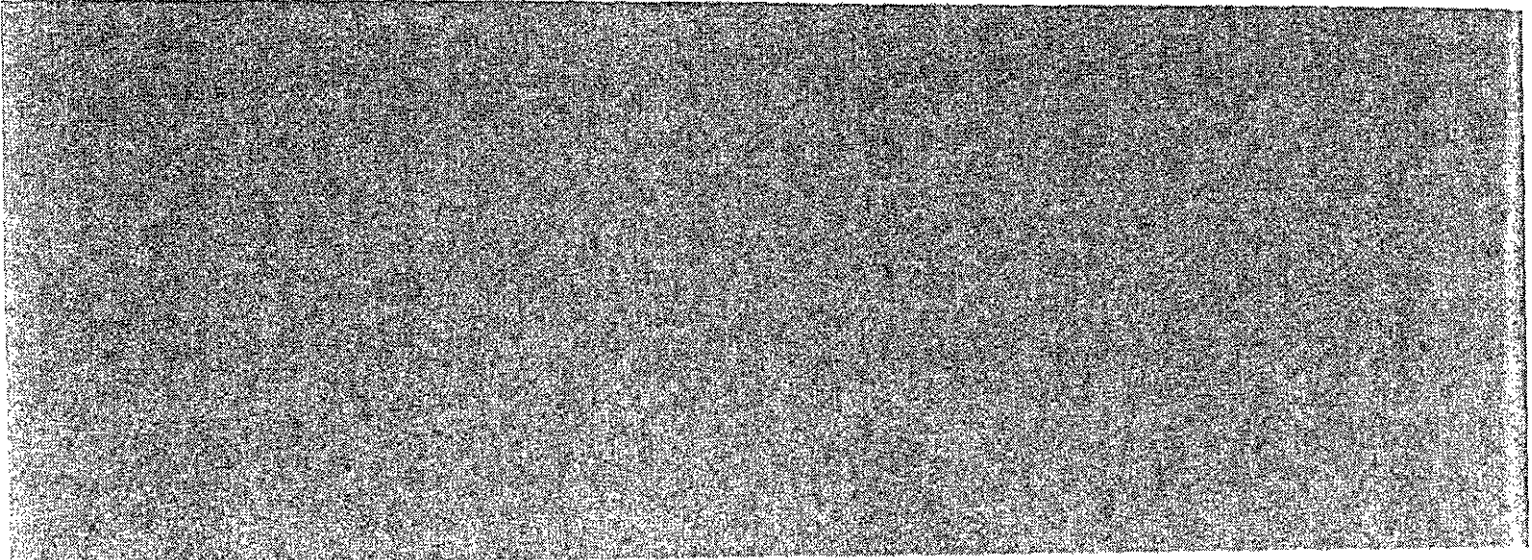
Sincerely,

Cindy Teamann
Manager, Regulated Settlements
FirstEnergy Service Corp
724-838-6672
724-331-5328 (cell)

From: Padron, Juan [<mailto:Juan.Padron@directenergy.com>]
Sent: Monday, December 28, 2015 1:32 PM
To: Teamann, Cynthia A <cteamann@firstenergycorp.com>; _DEB Utility Operations <DEBUtilityOperations@directenergy.com>; Boyd, Carl <Carl.Boyd@directenergy.com>; Williams, Angela <Angela.Williams@directenergy.com>
Cc: Stein, Edward B. <steineb@firstenergycorp.com>; Caruthers, Anna M <acaruthers@firstenergycorp.com>
Subject: RE: Missing accounts in calculated load obligations reported to PJM for OEEDC zone

Confirm that I received one of the spreadsheet (where we are being charged). I am missing the one that calculates what we are being credited. I am included Angela, as she is the one settling our PJM accounts, to bring her in the know. Thanks!

From: Teamann, Cynthia A [<mailto:cteamann@firstenergycorp.com>]
Sent: Monday, December 28, 2015 9:01 AM
To: _DEB Utility Operations; Boyd, Carl; Padron, Juan
Cc: Stein, Edward B.; Caruthers, Anna M



PJM Manual 28:

Operating Agreement Accounting

Revision: 79

Effective Date: April 1, 2018

Prepared by
Market Settlements Development Department

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- o Each Market Participant's five minute interval real-time energy injections and energy withdrawals (MW)
- o The hourly RTO system-wide Day-ahead System Energy Price (\$/MWh)
- o The five minute RTO system-wide Real-time System Energy Price (\$/MWh)
- PJM calculates the Day-ahead Spot Market Energy charge (positive or negative) for each hour for each Market Participant as:

$$\begin{aligned} \text{Day-ahead Spot Market Energy Charge} = & \\ & \left[\frac{(\text{Day-ahead Scheduled Energy Withdrawals}) *}{(\text{Day-ahead System Energy Price})} \right] \\ & - [(\text{Day-ahead Scheduled Energy Injections}) * (\text{Day-ahead System Energy Price})] \end{aligned}$$

- PJM calculates the Balancing Spot Market Energy charge (positive or negative) for each five minute interval for each Market Participant as:

$$\begin{aligned} \text{Balancing Spot Market Energy Charge} = & \\ & \left[\frac{(\text{Five minute Real-time withdrawals} - \text{Five minute Day-ahead scheduled withdrawals})}{* (\text{Five minute Real-time System Energy Price}) + 12} \right] \\ & - [(\text{Five minute Real-time injections} - \text{Five minute Day-ahead scheduled injections}) \\ & * (\text{Five minute Real-time System Energy Price} + 12)] \end{aligned}$$

3.9 Reconciliation for Spot Market Energy Charges

PJM will calculate reconciled Spot Market Energy charges for EDCs and Retail Load Aggregators (a.k.a. Electric Generation Suppliers) for past monthly billings on a two month lag. The reconciliation kWh data must be supplied to PJM by the EDCs no later than the last day of the billing month that is two months after the original billing month. For example, all reconciliation data for January must be submitted by March 31 at 23:59. The reconciliation kWh data represents the difference between the scheduled Retail Load Responsibility or Wholesale Load Responsibility InSchedule (in MWh) and the "actual" usage based on metered data. This hourly kWh data must be reported separately for each applicable InSchedule contract.

PJM calculates the Spot Market Energy charge reconciliations by multiplying the kWh data (de-rated for transmission losses) by the real-time PJM System Energy Price for that hour. These charge reconciliations are then totaled for the month for each EDC or Retail Load Aggregator. Note that the reconciliation for Spot Market charges for a month may be either a positive or a negative value, and may even be such that the reconciled load responsibility MWh results in a negative load quantity.



MSS Settlement C Package Proposal

Direct Energy
PHI





Settlement C Package

- Impacted LSE consent no longer required
- PJM and EDC notify all LSEs in impacted zone
 - PJM and EDC notify all zonal LSEs of Settlement C initiation
 - PJM coordinates with zonal EDC and LSEs on timing, bills impacted, etc.
- Only affected zone resettled
- Retain 2 year window



Settlement C Package

- Reporting of all Settlement C instances through MSS/MRC/MC
 - Include nature of issue leading to resettlement, dollar amount, number of impacted LSEs, LSE, EDC, others?
 - Establish metrics to trigger additional review (specific number of Settlement Cs in an EDC zone?)
 - Any additional review conducted through MSS – PJM and relevant EDC/LSE



Settlement C Package - Areas for Discussion

- Include all RLR & WLR InSchedule changes in the zone after Settlement B?
- Allow LSE validation of RLR/WLR by providing for regular Settlement C (by zone)?



Consent No Longer Required

- Two Distinct Settlement Processes Occurring – Retail and Wholesale
- Retail level rebilling *will* occur for specific customer(s) regardless of whether wholesale resettlement occurs
- Without wholesale resettlement imbalance/cross-subsidy is created

PJO reconciliation settlements ensure that LSE wholesale costs align with revenues billed through the retail market



Two Distinct Settlement Processes

- **Retail Billing** - Conducted based on EDI transactions between EDC and LSE
- **Wholesale Billing** - Conducted based on RLR transactions between RTO and LSE utilizing RLR schedules submitted by EDC to RTO



EDC Zone
Zonal Load 8 KWH

LSE 1
RTP 2.5 KWH

LSE 2
RTP 2.5 KWH

LSE 3
RTP 2.5 KWH

LSE 2
RTP 2.5 KWH

LSE 3
RTP 2.5 KWH

LSE 4
RTP 2.5 KWH

RTO Bills LSE 1
3 KWH x LMP

RTO Bills LSE 2
5 KWH x LMP

LSE Bills Customers
Customer 1 - 1 KWH x Rate
Customer 2 - 2 KWH x Rate
3 KWH

LSE Bills Customers
Customer 1 - 1 KWH x Rate
Customer 2 - 4 KWH x Rate
5 KWH



LSE Customer Billing



EDC Zone
Zonal Load 8 KWH

LSE 1
Electricity 1 KWH

LSE 2
Electricity 3 KWH

Customer 1 - 1 KWH	Customer 2 - 2 KWH
Customer 1 - 1 KWH	Customer 2 - 4 KWH

RTO Bills LSE 1
3 KWH x LMP

RTO Bills LSE 2
5 KWH x LMP

LSE Bills Customers
Customer 1 - 1 KWH x Rate
Customer 2 - 2 KWH x Rate
3 KWH

LSE Bills Customers
Customer 1 - 1 KWH x Rate
Customer 2 - 4 KWH x Rate
5 KWH



RTO LSE Billing

- EDC develops LSE RLR schedules based on aggregated meter reads and PJM requirement that sum of aggregated meter reads tie to PJM pMTR Load with Losses
- EDC provides LSE RLR schedules to RTO
- RTO bills LSE based on RLR schedule



Issues Causing Reconciliation and Impacts

- Specific issues that can result in incorrect RLRs:
 - Customer incorrectly assigned to LSE - can occur even with AMI because EDI/legacy systems still utilized for customer registrations, timing of registration processing
 - Meter programming protocol errors (in the field or within systems)
 - Calculation error – systems, spreadsheets, human error
 - Enrollment errors
 - Estimation errors due to:
 - Accessibility issues
 - Meter failure
 - Multiple read cycles (i.e., more than twice)



EDC Zone
Zonal Load & KWH

「おれは、**下町に生れた**
下町の人間だ」

2	5
7	6
1	0
4	1
8	3
3	4
6	2
9	7
5	8
0	9

[illegible][illegible][illegible][illegible]

**RTO Bills LSE 1
34 KWH x LMP**

RTO Bills LSE 2
54 KWH x LMP

LS&B Bills Customers

Customer 1 - 1 KWH x Rate
Customer 2 - 2 KWH x Rate
3 KWH

Use Bills Customers

Customer 1 - 1 KWH x Rate
Customer 2 - 4 KWH x Rate
5 KWH



Impact

- LSE's Retail Customer Billing
 - No impact
- RTO LSE Settlement
 - LSEs billed based on improper volume by RTO

- LSE Customer Billing
 - None
- RTO LSE Settlement
 - Both LSEs billed based on proper RLR volumes

Reconciliation sets proper supply volume/cost for both LSEs



Customer Meter Read Fails

- Customer 1's meter isn't read



EDC Zone
Zonal Load 8 KWH

LSE
R10 200 KWH

LSE
R10 500 KWH

LSE
R10 200 KWH

LSE
R10 500 KWH

LSE
R10 200 KWH

LSE
R10 500 KWH

RTO Bills LSE 1
23 KWH x LMP

RTO Bills LSE 2
65 KWH x LMP

LSE Bills Customers
Customer 1 - 04 KWH x Rate
Customer 2 - 2 KWH x Rate
23 KWH

LSE Bills Customers
Customer 1 - 1 KWH x Rate
Customer 2 - 4 KWH x Rate
5 KWH

- LSE Customer Billing
 - LSE 1 (EDC in rate ready) bills Customer 1 based on improper EDI meter data
- RTO LSE Settlement
 - Both LSEs billed based on improper volume by RTO

- LSE Customer Billing Reconciliation
 - LSE 1/EDC rebills Customer 1 based on EDI meter value correction
- RTO LSE Settlement
 - Both LSEs billed based on proper RLR volumes

Reconciliation ensures RTO settlement/LSE cost aligns with LSE Customer Billing Reconciliation

Problem Statement / Issue Charge

Third Settlement ("Settlement C") Business Process

A Third Settlement process, informally known as "Settlement C," allows Electric Distribution Companies ("EDCs") the ability to true-up the market for significant errors at some defined period after the 60 day Settlement ("Settlement B") is performed. As currently employed by PJM and utilized by EDC members, the Settlement C has limited efficacy because of the requirement that all affected parties must consent to a resettlement. Even if there is no meaningful dispute that a billing error has in fact occurred, there are instances when it can be difficult and time-consuming to obtain unanimous consent to resettle when multiple parties are affected.

Brief Background

PJM issues month-to-date invoices on a weekly basis. Under its correction limits proviso, (Section 3.6.6 of the Operating Agreement), a member has up to two years from the date of the error to request a PJM billing adjustment for a metering error, and such adjustments are limited to the most recent annual accounting period of the impacted market participant. In 2008, PJM and some of its members recognized that there needed to be a protocol for a third settlement, and the Market Settlements Reporting System ("MSRS") that was implemented by PJM in August 2008 allowed the implementation of a Settlement C within PJM. The proposal that was advanced through the PJM stakeholder process in 2009 was ultimately not adopted and, instead, a modified Settlement C process was developed. This Settlement C allows the resettlement of bills not more than two years after the first date on which the billing for the month occurred. PJM will toll the two year period when notified of an error. However, under Section 3.6.2, if a metering error is discovered, and both impacted participants agree there is an issue and notify PJM of its existence, and no other parties are affected, PJM will correct the error. If, however, the error involves a metering error as reported by an EDC, the likelihood is that all Load Serving Entities ("LSEs") would be affected by resettlement and unanimous consent is required to resettle. (A resettlement to correct a metering under-registration error, for example, would require that the LSE serving the customer purchase more power from PJM and collect more from the customer. At the same time, most other market participants would likely benefit because they would receive a credit against the amount they paid for the pro-rata share of the unaccounted for difference between the aggregated load of the retail meters of the EDC and the PJM zonal load for the EDC's zone.) Because unanimous consent can at times be difficult to obtain, the result has been that even large and indisputable metering errors have gone uncorrected.

PJM has interpreted its tariff to allow resettlements of metering and other billing errors beyond 60 days and up to two years, provided that all affected LSEs agree. PJM has interpreted its tariff such that LSE agreement is determined by every LSE consenting in writing to the resettlement. There is no formal process for how such agreement is obtained, so it is up to the parties affected by the error to contact all parties. With the increased growth of retail competition, this has become a highly impracticable solution. In one case where PJM received erroneous meter data, 44 parties would have had to agree to resettlement. Ultimately all 44 parties were contacted and only 5 responded, all affirmatively, but to no avail. In informal discussions, PJM stated that even if the state utility commission issued an order recognizing the error and supporting correction, that order would not satisfy or override the requirement that LSEs must agree to resettlement. Thus the provisions of the Settlement C business process as currently employed are unjust and unreasonable from a few perspectives. First, it can be

challenging to secure sign off from a market participant if the participant believes they would be harmed by a resettlement, even if all parties acknowledge a significant billing error. Secondly, there is no process or rules on how to contact affected parties, when they must respond, what to do when no response is received, or only one materially impacted party refuses to sign off.

Metering is essentially in a transitional stage – with increased retail competition, conversion from older forms of metering to the use of AMI metering, more complicated metering arrangements with shifting load, demand-side management and behind the meter generation, etc. In spite of all parties' best efforts to get the right metering data and to verify the data on their bills, it has proven to be impossible to ensure that all errors are identified and corrected within 60 days. If it is only two parties involved in the error, then they may have two years to correct the error. But that is rarely the case; and if there are more than two parties involved, even an indisputable error with precisely quantifiable results may be left uncorrected because of the structure of Settlement C. While the expectation is over time we will have fewer and fewer incidents of metering and other errors as the AMI technology expands and parties adapt and transition to its use, at the present moment they do occur, and they can have huge effects on the aggrieved parties. When a significant error is found, the market should provide a more reliable and equitable process to right the wrong.

Market participants have considered the issue before and hence the development of Settlement C. In fact, this issue was revisited in 2013 by the Market Settlements Subcommittee (MSS), and that group ultimately agreed to defer any action until the issue of the extension of PJM PowerMeter and InSchedule deadlines was resolved. Now that the resolution of those issues has been implemented (June 1, 2015), some EDCs and other PJM members believe it is time to again examine Settlement C in the PJM market. Settlement C is intended to provide additional time to correct metering and other billing errors, while providing some finality to billing invoices. Experience has shown, however, that the current Settlement C process does not work in all cases. Requiring that all metering errors be discovered within a 60 day time-period (meeting Settlement B criteria) or that all affected parties must agree to a rebilling is impracticable. Given the increase in market participants, switching that takes place between default and competitive suppliers, more sophisticated meter readings and as traditional meter readings that require actually going out to the field and transmitting data, a more equitable treatment of metering and other billing errors discovered beyond 60 days is warranted.

Changing Settlement C will not affect PJM resettlement capabilities. PJM currently has the capability to resettle errors beyond the 60 day period.

Commissioner Moeller in a recent concurrence in a New York Independent System Operator matter noted the need for RTOs to have adequate resettlement processes in hand. In contrast to the PJM approach, because of the wording of the NYISO tariff, it is clear that NYISO may resettle bills and correct errors that are identified for periods well beyond the 60 day Settlement B process that PJM has.

Problem Statement / Issue Charge

The PJM Settlement C process is still not sufficient to allow for correction of agreed to metering and other billing errors.

The Settlement C process is not a fair approach to correcting legitimate metering and other billing errors, and PJM's interpretation as to how to achieve LSEs' "agreement," is not reasonable.

Metering and other billing errors will continue but ultimately diminish over time as market participants adjust to new technology, AMI is implemented on a wider scale throughout the region, and more parties are involved in receiving and settling bills involving shared meter readings.

- Consider a formal third Settlement process within PJM settlements, or an official Settlement C that would be similar to, and in addition to, the current 60-Day Settlement B reconciliation process
- Consider a superior method to allowing for resettlement of errors involving more than two parties
- Consider extending the two year window for resettlements

Issue Source

The Dayton Power and Light Company

Direct Energy

PepcoHoldings, Inc.

Potomac Electric Power Company

Delmarva Power & Light Company

Atlantic City Electric Company

Stakeholder Group Assignment

Recommendation would be for the MSS to develop potential solutions and include a recommended approach.

Key Work Activities

1. Establish benefits of this activity and their value.
2. Determine a final pro/con list
3. PJM and stakeholders to identify specifics of any potential solutions
4. Determination of tariff and business manual language to implement proposed solutions.
5. Vote on proposals.
6. File at FERC, if necessary.

Expected implementation third quarter 2016.

Expected Deliverables

See Key Work Activities Above

Expected Overall Duration of Work

9-12 months

Decision Making Method

Tier 1 consensus (near-unanimity) on a single proposal (preferred) or Tier 2, multiple alternatives.
