RPPTF “In Person” Meeting

(corrected from “Teleconference” 4/17/13)

Toll-free call-in number 1 (866)-398-2885
Passcode: 934672

WebEx Details:
https://pjm.webex.com
Password: rpp0418pjm

April 18, 2013

9:30 am, Eastern Standard Time

Agenda

1. Call to Order, Announcements, Roll call, (Fran Barrett) 9:30 a.m.
   - Review Agenda, past Action Items,
2. FERC Order 1000 10:30 a.m.
   - Compliance Filings, etc. (Pauline Foley)
   - Interregional Compliance Filings (Paul McGlynn)
3. Multi-Driver Approach (Paul McGlynn, Aaron Berner, Steve Herling) 11:15 a.m.
   - Generation Interconnection considerations
   - Today's Objectives
   - Determine Generation Interconnection principles that may apply to MDA
4. RPPTF Schedule (Fran Barrett) 2:00 p.m.
   - Next Steps
   - NEW Meeting Date
   - Voting
5. Summarize Meeting and Action Items, Adjourn meeting 3:00 p.m.

Action Items - Status

#	Owner	Status	Date Opened	Date Closed	Item
Administration					
5	S. Herling/P. McGlynn	Closed	27-Mar	10-Apr	~~Review a connection/coordination point regarding CETL transparency with RPM~~ ***No additional coordination deemed necessary, Any changes should be pursued at Capacity Senior Task Force or Planning Committee***
Market Efficiency					
2	PJM	Closed	14-Mar	15-Apr	~~Refine and document process - How to include/exclude FSA units~~ ***PJM prepared document to share timing and process***
Interregional Coordination					
1		Open	14-Mar		Interregional Compliance Filing(s) - PJM to share "What" material to file and "When" it will be filed
Multi-Driver Approach					
7	PJM	Closed/Pending		10-Apr	~~Footnote 26 of Conditional Approval of TO Cost Allocation filing – Ensure a definition of Multi-Driver is developed~~ ***Discussion topic - Please see slide***
8	PJM	Open	14-Mar		Provide review on two Hybrid "con's" (notated in deck)
9	PJM	Closed	14-Mar	15-Apr	~~Develop MDA use case for "special" cases (i.e. undergrounding)~~ ***Discussion topic - Please see slide***
10	PJM	Closed	14-Mar	15-Apr	~~Definition - What constitutes "incremental" versus "non-incremental" (3/14/2013 original slides 18-19)~~ ***Discussion topic - Please see slide***
Filings/FERC Orders					
1	Pauline Foley	Closed	27-Mar	15-Apr	~~Create a listing of items "requiring clarification" from recent Orders~~
2	TO's	Closed	27-Mar	17-Apr	~~Share whether/if input forum(s) will be available for any remaining compliance filings w/r/t Order 1000 cost allocation~~

Action Item #2 – Market Efficiency

Refine and document process – "How to include/exclude FSA units"

- Status - The Market Efficiency (ME) discussion has been tabled
- Principles associated with the potential to include FSA units. An approach was requested to:
  - permit PJM to remove select item(s) from ME analysis,
  - reduce modeling error due to completion, technological or timing risks resulting from large generation (e.g. nuclear generation station) or FSA-related transmission (≥500kV) projects
  - ensure a large project and or associated planned transmission does not skew or mask likely congestion should the project not proceed
  - allow PJM to exercise judgment and care
  - be designed to enable transparent and clear communications to stakeholders, including posting of all FSA generation proposed as exclusions
  - address and remove any duplicates
  - ensure "suspended" ISA projects are not included and duly noted
  - ensure any true-up to the analysis would be made in the subsequent annual RTEPP
  - provide a forum, (such as the TEAC), to
    - challenge planned inclusions and or exclusions on the FSA listing
    - enable collective discussion and decision making

Action Item #2 – Market Efficiency

Refine and document process – "How to include/exclude FSA units"

January – "Issue Draft Machine List"
- Published approximately 1 week prior to PC/TEAC meeting - draft machine list
- Include all ISA and FSA units that PJM anticipates modeling in the case
- PJM will seek comments on this list from stakeholders

Modeling considerations:
- Generation status (FSA, ISA, suspended, deactivation notification, retirement status, etc.)
- Network enhancements associated with machine list generation treated in same manner

February – "Discuss and consider Machine List based upon Stakeholder Feedback"
- Prior to February PC/TEAC, PJM will solicit and consider stakeholder feedback
- PC/TEAC - PJM/Stakeholders discuss units to be added, revised, deleted - PJM will continue to seek stakeholder feedback
- PJM will continuously revise list due to any change in project status

March – "Finalize Machine List"
- PJM will finalize, announce and publish the machine list
- Consistent transmission topology
- Analysis proceeds upon finalization of list

Assuming a reliability violation and determination of a discrete, "small" solution…

- A Multi-driver approach solution is one in which a "larger" project, via combination, or combinations, of Reliability, Market Efficiency and Public Policy projects, is formulated as a solution rather than the discrete, smaller Reliability project, with understanding that:
  - The resultant combination shall be of lower cost than the aggregate of R,ME &PP projects in isolation
  - MDA project will not alter cost allocation, and
  - Will not attempt to quantify underlying, secondary or retrospective benefits
- Final definition to be prepared to support filings

"Special" Case Treatment Principles

- "Special" cases involve Public Policy projects and involve items such as:
  - undergrounding,
  - re-routing,
  - other elements mandated via local order, local regulatory and or jurisdictional entities

- Per Public Policy and State Agreement principles,
  - "special" case costs viewed as an increase to the Public Policy project cost
  - cost collected via local jurisdiction / responsible party (i.e. EDC)

Action Item #10 – Multi-Driver

Definition - What constitutes "incremental" versus "non-incremental" for treatment of upgrades

Please See MISO filed definition (MS-WORD document posted with RPPTF Materials) of an “Upgrade”

Action Item #2 – FERC Filings/Legal

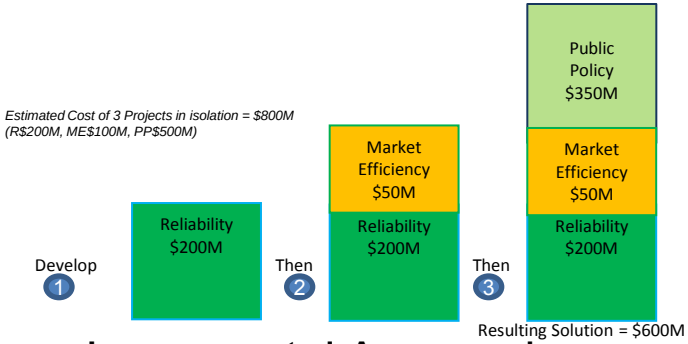
Share whether/if input forum(s) will be available for any remaining compliance filings w/r/t Order 1000 cost allocation

- "By June 21, the Attachment H TOs will provide to PJM for posting and distribution to the PJM stakeholders the Attachment H TO response to the cost allocation items that the FERC directed in its March 22 order. This posting and distribution will include instructions for submitting written comments to the Attachment H TOs by July 3."

Action Item #10 – Multi-Driver

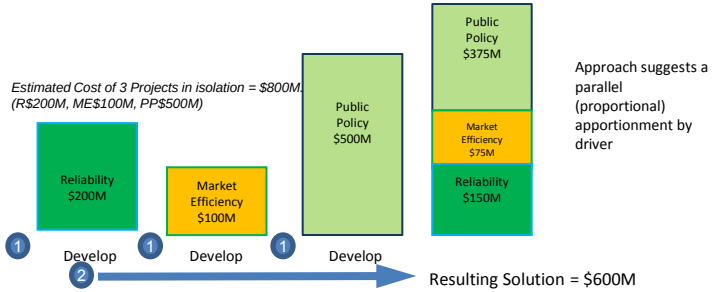
Definition - What constitutes "incremental" versus "non-incremental" treatment of upgrades

- Not an "upgrade[1]," then treated as "Parallel" apportionment
- Benefit/Cost on "standalone" ME project
- No Changes to Cost Allocation



Incremental Approach

- If an "upgrade[1]", then treated as "Incremental" apportionment
- Benefit/Cost on "upgrade" portion of ME project
- No Changes to Cost Allocation



Parallel Approach

[1]For discussion purposes – we are defining "upgrade" similar to MISO filed definition

- Order 1000
  - Compliance Requirements (Please see separate list of 37 items)
  - Clarification/Rehearing of Order on PJM's Compliance Filing

- Order 1000 Interregional Filings
  - MISO
  - NYISO/ISONE
  - SERTP

Action Item #1 – FERC Filings/Legal

Create a listing of items "requiring clarification" from recent Orders

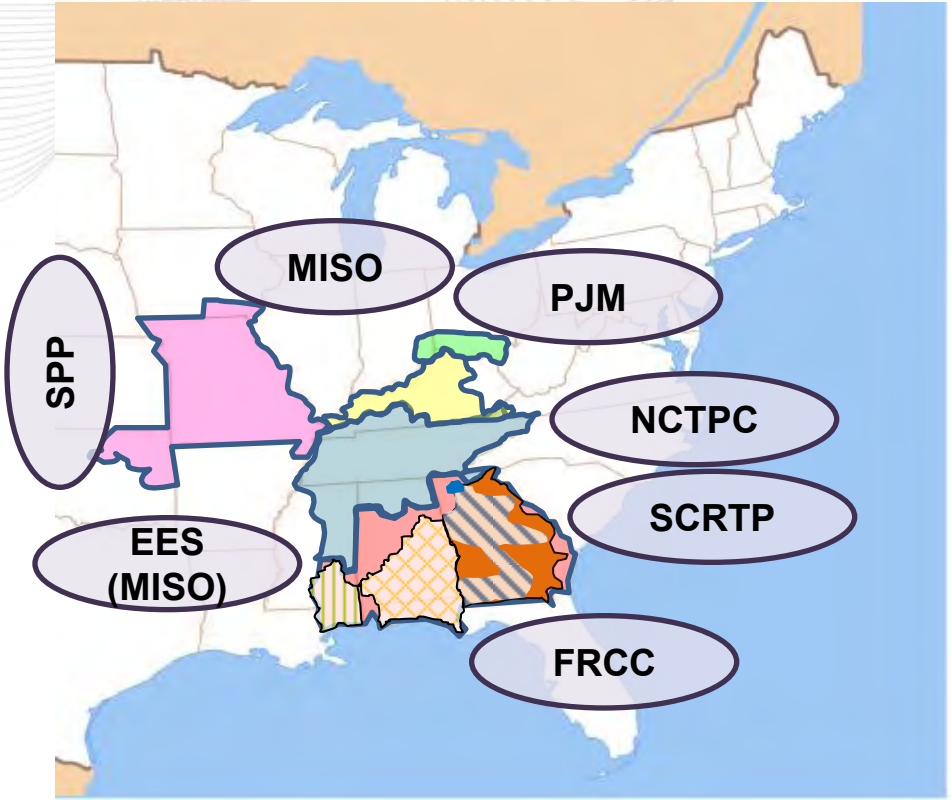
- Please reference MS-Excel sheet of compliance tasks

FERC Order 1000 - Interregional Update

SERTP - Order 1000 Strawman

SERTP Background

- Dalton Utilities (“Dalton”)
- Georgia Transmission Corporation (“GTC”)
- Municipal Electric Authority of Georgia (“MEAG”)
- PowerSouth Electric Cooperative (“PowerSouth”)
- South Mississippi Electric Power Association (“SMEPA”)
- Southern Companies (“Southern”)
- Associated Electric Cooperative Inc. (“AECI”)
- Louisville Gas & Electric and Kentucky Utilities (“LGE / KU”)
- Ohio Valley Electric Corporation (“OVEC”)
- Tennessee Valley Authority (“TVA”)



- Interregional Coordination
  - Representatives from the SERTP and each RTO will meet at least once per year to perform interregional coordination
    - Engage in Data Exchange/Joint Evaluation AND
    - Biennially, review each other's current regional plan(s) / other issues pertaining to the identification and/or evaluation of potential interregional facilities.
- Annual Data Exchange
  - Includes powerflow models used in the respective regions' processes, as well as current regional plans

- Joint Evaluation
  - Each region will evaluate identified interregional facilities, acting through their respective regional transmission planning process, to determine which projects included in the regional plans could be displaced by the proposal
    - Assumptions, as necessary, will be coordinated for the joint evaluation, including:
      - Expected timelines/milestones associated with evaluation
      - Study assumptions (i.e. years under study)
      - Regional benefit calculations
    - The status of the joint evaluation will be regularly reviewed and discussed

- Transparency
  - Stakeholders will have an opportunity to provide input and feedback related to interregional facilities identified, analysis performed, and any determinations.
  - Stakeholders may participate in both regions' processes to provide input and feedback related to interregional coordination
    - Links to where stakeholders can register for committees/ distribution lists of the adjacent region will be made available
  - Data utilized will be made available to stakeholders, subject to appropriate clearances/agreements

Multi-Driver Approach

Consideration of Impacts due to Generation Interconnection

RPPTF

April 18, 2013

Today's Focus

- Review Generation Interconnection impact to Multi-Driver Approach
- Answer question – Whether and how Generation Interconnection should play a role in a Multi-Driver Approach proposal?
- Review use cases with PJM–specific queue attributes
- Seek to document principles and concepts
- Document all questions and answers for circumstances when a project exits the queue

Generation Interconnection

- PJM interconnection studies consider the cumulative impact of queued customer requests
  - Customer 1 drives violation on line A-B and requires upgrade X
  - Customer 2 drives a violation on line C-D and requires upgrade Y and contributes to the violation on line A-B (requiring upgrade X)
  - Customer 3 contributes to violation A-B and violation C-D but requires upgrade Z to resolve both violations
    - With upgrade Z, upgrade X and upgrade Y are no longer needed
    - Need for upgrade Z assumes Customer 1, 2, and 3 moves forward

Generation Interconnection

- Considerable uncertainty around required upgrades X, Y, and Z based on commitment of Customer 1, 2, and 3 to move forward
  - Upgrade required for customer 3 may change if customer 1 or 2 drops out
  - Upgrade required for customer 2 may change if customer 1 drops out
- Studies for later queued projects are updated as needed to incorporate decisions of prior queued developers

Multi-Driver Approach

- Given the dynamic nature of the interconnection queue, should PJM consider generator interconnection as a driver for a Multi-Driver Project?
  - Should the driver for upgrade Z in the previous example be considered when developing a project to address baseline reliability and/or market efficiency and/or state agreement?

- If yes, how do you apportion between reliability, market efficiency, state agreement and interconnection drivers?

Multi-Driver Approach

- Issue – How do you apportion the multi-driver project amongst reliability, market efficiency, generator interconnection and state agreement?
  - Use the incremental approach or parallel approach?
  - Referring to the example, do you use upgrade X, Y, or Z for the calculation?
- Issue - Should we consider all interconnection customer requests?
  - Only requests at a certain stage? All of them or just a percentage of them considering historic drop out rates? Future ones for locationally constrained resources?

Multi-Driver Considering Generation Interconnection

- Issue – How do you apportion the contribution to the need for the multi-driver project to the interconnection customers?
  - Access Fee
    - $/MW – Based on historical upgrades. May not be representative of actual upgrade costs. Use for all generators or just renewables? Could leave some portion of project cost borne by network service customers
  - Cap based on the cost of upgrade Z then apportion the costs amongst customer 1, 2, 3 based on their relative impact to the need for Z
    - What if customer 1, 2 or 3 drop out? Cost for remaining customer would go up. Could hold the security of the project that dropped out

Multi-Driver Considering Generation Interconnection

- Issue – How do you apportion the contribution to the need for the multi-driver project to the interconnection customers?
  - Offer capability through some form of solicitation process
    - Solicitation would need to be completed quickly and move projects to execution of an ISA
    - How do you treat generators that sign up for the capability?
    - Do they jump over higher priority queued projects not willing to subscribe to the multi-driver project?

Multi-Driver Considering Generation Interconnection

- Issue – Timing of Multi-Driver approach project
  - Multi-driver solution is likely to take longer to implement than incremental upgrade that a developer would be responsible for using existing procedures.
    - Would need to calculate interim deliverability rights.
    - May present operational issues while larger multi-driver solution is being implemented

Multi-Driver Considering Generation Interconnection

- Issue – Interconnection studies need baseline transmission topology defined
  - When customer 4 enters the queue will his studies be based on the multi-driver project or upgrades X, Y, and Z?
    - Not practical for PJM to study customer 4 both ways
    - If the answer is you study it with the multi-driver project, any potential impact that customer 4 would have on the flow on line A-B or C-D would be masked

Questions

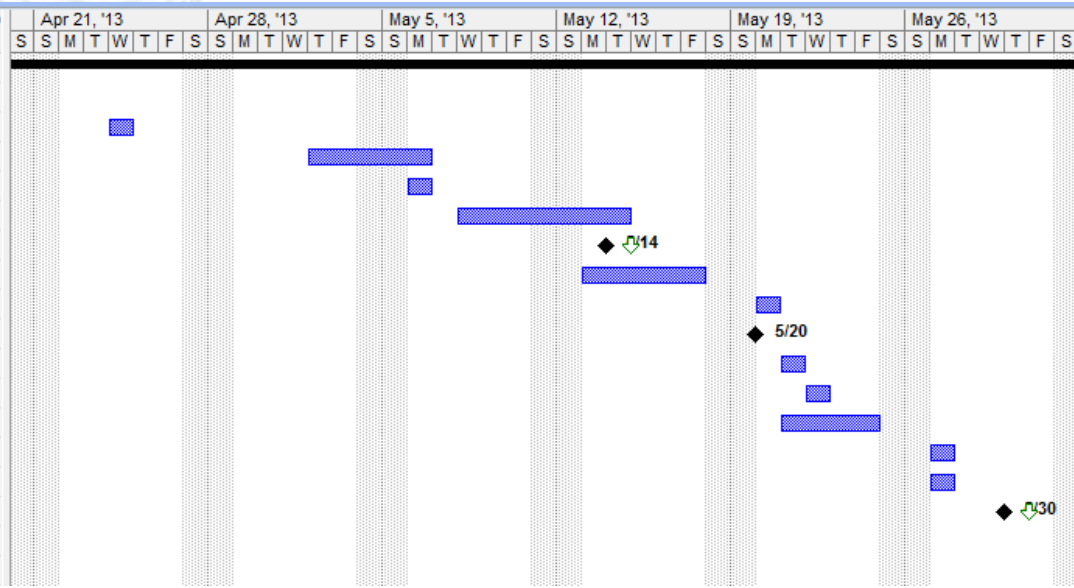
Remaining RPPTF Tasks

- Market Efficiency
  - Benefit/Cost (tabled)
  - Generator Expansion (tabled)
  - Adjusted Production Cost (tabled)
  - Consideration of Large Projects-Inclusion of ISA&FSA Units (pending)
- Multi-Driver Approach
  - Reliability (in process)
  - Market Efficiency (in process)
  - Public Policy (in process)
  - Generator interconnection (in process)
- Order 1000
  - Regional Compliance Filing (filed)
  - Interregional Compliance Filing (in process)

DRAFT RPPTF Schedule -

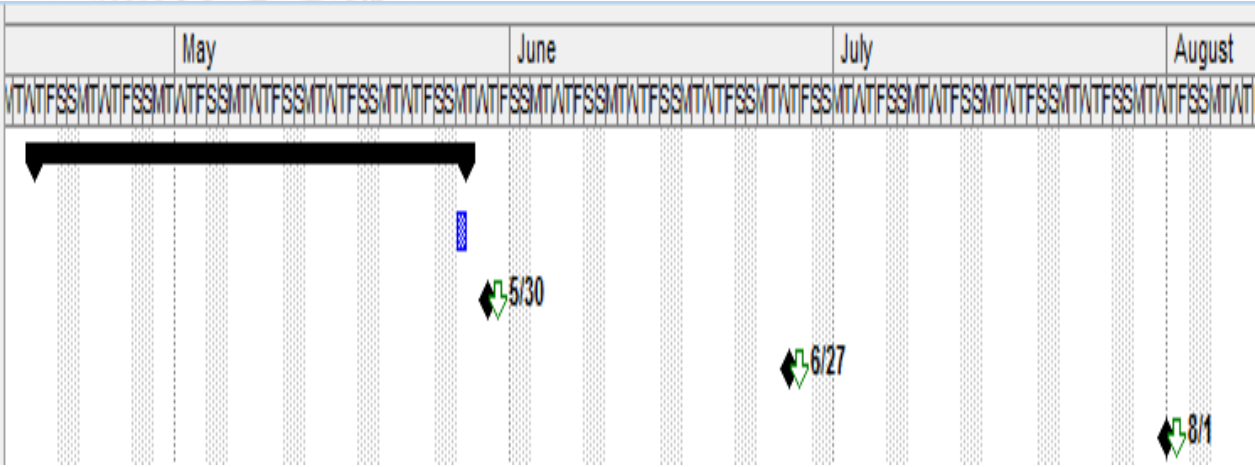
Looking Forward

	Task Name	Duration	Start	Finish	P
1	**RPPTF - Mkt Eff & MultiDriver**	**75 days?**	**Thu 4/18/13**	**Thu 8/1/13**	
2	Meeting	1 day	Thu 4/18/13	Thu 4/18/13	
3	Teleconference	1 day	Wed 4/24/13	Wed 4/24/13	
4	Prepare/circulate voting questions	3 days	Thu 5/2/13	Mon 5/6/13	
5	New Meeting - review final packages	1 day	Mon 5/6/13	Mon 5/6/13	
6	Open Voting Window	5 days	Wed 5/8/13	Tue 5/14/13	
7	Close Voting Window	1 day	Tue 5/14/13	Tue 5/14/13	
8	PJM Annual Meeting	5 days	Mon 5/13/13	Fri 5/17/13	
9	Assemble Results (Erin)	1 day	Mon 5/20/13	Mon 5/20/13	
10	Publish Voting Results	0 days	Mon 5/20/13	Mon 5/20/13	
11	Meeting	1 day	Tue 5/21/13	Tue 5/21/13	
12	Teleconference	1 day	Wed 5/22/13	Wed 5/22/13	
13	Draft RPPTF Report to MRC	4 days	Tue 5/21/13	Fri 5/24/13	
14	Publish and Post Report (No Later Than)	1 day?	Mon 5/27/13	Mon 5/27/13	
15	MRC/MC Status Webinar	1 day?	Mon 5/27/13	Mon 5/27/13	
16	MRC Meeting - First Read	1 day?	Thu 5/30/13	Thu 5/30/13	
17	MRC Meeting - Vote	0 days	Thu 6/27/13	Thu 6/27/13	
18	MC Meeting & Vote	0 days	Thu 8/1/13	Thu 8/1/13	



MRC & MC Meeting Dates

	Task Name	Start	Finish
1	RPPTF - Mkt Eff & MultiDriver	Thu 4/18/13	Mon 5/27
15	MRC/MC Status Webinar	Mon 5/27/13	Mon 5/27
16	MRC Meeting - First Read	Thu 5/30/13	Thu 5/30
17	MRC Meeting - Vote	Thu 6/27/13	Thu 6/27
18	MC Meeting & Vote	Thu 8/1/13	Thu 8/1



Questions?

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You may not discuss any topics that violate, or that might appear to violate, the antitrust laws including but not limited to agreements between or among competitors regarding prices, bid and offer practices, availability of service, product design, terms of sale, division of markets, allocation of customers or any other activity that might unreasonably restrain competition. If any of these items are discussed the chair will re-direct the conversation. If the conversation still persists, parties will be asked to leave the meeting or the meeting will be adjourned.

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As a mandatory condition of attendance at today's meeting, attendees agree to adhere to the PJM Code of Conduct as detailed in PJM Manual M-34 section 4.5, including, but not limited to, participants' responsibilities and rules regarding the dissemination of meeting discussion and materials.

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