

1 FEDERAL ENERGY REGULATORY  
2 COMMISSION  
3 PJM INTERCONNECTION, L.L.C.  
4 DOCKET NOS. ER17-718-000, ET AL  
5 WORKSHOP

6 FEDERAL ENERGY REGULATORY COMMISSION  
7 ROOM 3M-4 A AND B  
8 888 FIRST STREET, NE0  
9 WASHINGTON, DC 20426  
10 TUESDAY, JUNE 13, 2017  
11 9:00 A.M.

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1                                   P R O C E E D I N G S

2                   MR. CHRISTIANSEN: The ground rules -- I suspect  
3 most of you are familiar with these workshops or something  
4 like them but this is a staff-led workshop so any opinions  
5 that we express are the opinions only of staff and not  
6 necessarily those of the Commission or any of the  
7 individual Commissioners.

8                   Our format today will be as follows: Shortly we  
9 will begin with a few opening statements. The parties have  
10 requested to make opening statements. After that we will  
11 go through a series of staff-led questions. We will pause  
12 a couple of times when asking our questions for the parties  
13 to ask follow-up questions.

14                   We ask though that you limit any follow-up  
15 questions to matters directly related to the proceedings to  
16 that question. We do anticipate having some time at the  
17 end of the proceedings for parties to ask additional  
18 questions.

19                   We note however, as we have stated in the Notice  
20 of Workshop that we intend to keep this Workshop limited to  
21 the issues that were timely raised in the pre-Notice  
22 Dockets ER17-718, ER17-721 and ER17-729. That means that  
23 we won't be having any discussion of the cost allocation of  
24 a potential.

25                   When it comes time for the parties to ask

1 questions if you have one you would like to ask, we ask  
2 that you predicate that by turning your table card  
3 correctly. Staff will then call on you and we ask that  
4 before you start speaking you state your name and any  
5 organization with which you are affiliated with for the  
6 record.

7 Any questions so far? Great -- so let's turn it  
8 over to opening statements.

9 Seven parties have requested to make opening  
10 statements. We will start with the opening statements by  
11 the filing party. We have asked that the parties keep  
12 their opening statements to about three minutes not any  
13 longer.

14 We also ask that before you go into the opening  
15 statements please don't respond to other parties' opening  
16 statements. We prefer to keep any back and forth to the  
17 questions period at the end of the Workshop. That's all we  
18 have.

19 So in going through the opening statements we  
20 decided to proceed alphabetically so that means we will  
21 start with MISO.

22 MR. MOSER: Well thank you and good morning  
23 everybody. My name is Jesse Moser. I am the Director of  
24 the Transmission Planning Department of MISO. MISO  
25 appreciates the Commission staff interest in filing with

1 the PJM main on December 30th to revise the MISO/PJM to  
2 create a way to create a new project category to target  
3 market efficiency to establish inter-regional cost  
4 allocation for team efforts.

5 My colleagues today will be focused on the work  
6 MISO and PJM have done to collaborate, to develop planning  
7 along the MISO/PJM seam. My counterpart, Paul Linn from  
8 PJM -- we are going to talk about more of the specific  
9 characteristics of the team efforts.

10 After all of the participants have had an  
11 opportunity to make their opening comments we will be happy  
12 to answer any questions staff has or comments otherwise.

13 As Commission staff is aware MISO/PJM have a long  
14 and documented history of coordinating inter-regional  
15 planning to address known congestion issues along the seam.  
16 More recently the RTOs have been working to develop a team  
17 project type in direct response to Commission concerns  
18 about inter-regional planning as well as the concerns  
19 raised by the Northern Indiana public service company's  
20 Complaint filed in 2015.

21 One of the results of that effort is the team  
22 efforts which demonstrate a maturing planning process on  
23 the MISO/PJM seam into creating efficiencies also  
24 recognizing differences in regional processes. The team  
25 effort borne out of the RTOs joint planning studies and

1 what we call a "quick hit" study.

2 As you may recall in 2012 to 2014 timeframe  
3 MISO/PJM had conducted a multi-year long-term Joint  
4 Planning Study focused on immediate future congestion using  
5 the production cost modeling.

6 In that study multiple scenarios involving a  
7 range of assumptions were considered. The Joint Planning  
8 Study evaluated approximately 80 projects each intended to  
9 relieve future congestion by looking at multi-year,  
10 multi-scenario economic analysis measured against across  
11 border market efficiency project criteria contained in the  
12 PJM/MISO.

13 Of those 80 projects just two were passed to the  
14 inter-regional screening methods. If those projects could  
15 not be pursued due to voltage thresholds required at the  
16 time. The RTOs knew that we needed to do something  
17 different in order to allow these types of projects to move  
18 forward.

19 The Quick Hit study was the RTO's next attempt to  
20 take a different approach to addressing congestion issues  
21 on the MISO/PJM scene. In 2014 and '15 the RTOs designed  
22 the study to identify near term, high value inter-regional  
23 economic transmission projects to alleviate known cross  
24 border constrained facilities.

25 Under the Quick Hit's study the RTOs evaluated

1 known congestion on the MISO/PJM border and identified  
2 transmission solutions required to properly mitigate  
3 congestion. We did the study but an approval process in  
4 the JOA was missing. At the time the costs of the voltage  
5 thresholds would prevent the types of projects identified  
6 in the Quick Hit from being approved for inclusion in the  
7 regional plans.

8           With team app's we created a computation with  
9 less intensive, less time consuming study that focuses on  
10 historical data and real time congestion to show planning.  
11 This new process has identified projects that were not  
12 otherwise showing up in our future look at production  
13 across the line.

14           The type of study enhancement that has allowed  
15 the RTOs to focus on three key study considerations --  
16 first, it must be targeted at historical congestion,  
17 unknown reciprocal coordinate flow gates. Second, there  
18 must be stream lines so that the low cost and near term  
19 benefits would not be bogged down with study delays.

20           And lastly we must identify projects themselves  
21 that can be readily implemented because they are low cost  
22 in the short term.

23           The team study methodology is innovative, it  
24 compliments existing inter-regional planning processes.  
25 This has allowed the RTOs to realize efficiencies that

1 existing processes didn't. This is a good example of the  
2 work that can result from inter-regional collaboration  
3 between the RTOs.

4 Thank you for the opportunity and I look forward  
5 to the discussion.

6 MR. CHRISTIANSEN: Next we have Mr. Kramer on  
7 behalf of MISO TOs.

8 MR. KRAMER: Well I'm Dennis Kramer of Ameren  
9 Services. Today I am speaking on behalf of MISO  
10 Transmission owners.

11 Thank you for the opportunity to speak today. I  
12 am Dennis Kramer, I'm a Facility Director of Transmission  
13 Policy and Stakeholder Relations and Business Development  
14 for Ameren Services. I am here today on behalf of the MISO  
15 transmission owners.

16 I appreciate the opportunity to address the  
17 Commission staff in the filings submitted on December 30,  
18 2016 which provides MISO/PJM to create a new project  
19 category -- targeted market efficiency projects. TEMP as we  
20 call it, and establish inter-regional cost allocation for  
21 those TMPs.

22 As Commission staff is likely aware there is a  
23 long documented history of efforts on the part of MISO and  
24 PJM and the companies that own transmission along the  
25 MISO/PJM seam to address known congestion issues in a

1 coordinated inter-regional manner.

2           The tools developed to date have reached varying  
3 degrees of success in identifying cost effective  
4 opportunities to use chronic congestion and tell the RTOs,  
5 MISO/PJM. The TMEP includes the proposal to assess and is  
6 a product that has continuing efforts on the part of MISO  
7 and PJM.

8           MISO transmission owners joined MISO as a filing  
9 party in the underlying docket and want approval of the  
10 revisions to the MISO/PJM/JOA to create the TEMP category.

11           The TMEP category will compliment MISO and PJM's  
12 existing Order 1000 forward looking study processes into  
13 regional market efficiency projects and is currently  
14 included in the MISO/PJM/JOA.

15           The streamlined TMEP process will allow MISO and  
16 PJM to propose projects to properly address historic in the  
17 near term congestion with small law costs, short lead time  
18 upgrades. The cost of these projects will be allocated to  
19 MISO and PJM in proportion to the congestion benefits  
20 received by each region ensuring that the allocation will  
21 be for the beneficiaries of those new upgrades.

22           A small number of parties filed protests or  
23 negative comments in these documents. We will be providing  
24 brief copies and copies of the brief, written comments to  
25 the MISO TO owners explaining why we believe that these



1 arguments raised in opposition to the TMEP proposal missed  
2 their market. We will also file  
3 these written copies in these documents and I am happy to  
4 take questions on any of those points this morning. In  
5 short the MISO transmission owners believe that given the  
6 process is just and reasonable as filed and would urge this  
7 be approved without delay or any complexity so the RTOs can  
8 move forward on the TMEP that has been identified as  
9 eligible for proposal to the respective Board's group. I  
10 look forward to answering your questions and to address  
11 discussions that will follow thank you.

12 MR. MCGLYNN: Good morning. My name is Paul  
13 McGlynn and I am the Senior Director of TJM's Assisted  
14 Planning Division. I'm responsible for the development of  
15 PJM regional transmission expansion plan including regional  
16 and inter-regional transmission plans.

17 I would like to thank the Commission for holding  
18 this Conference to allow all of the different parties to  
19 better understand this unique project type developed to  
20 address the historical congestion issues along the PJM/MISO  
21 seam and allowing us to participate today.

22 In addition to our current forward-looking  
23 long-term plan for reliability and market efficiency  
24 projects already included in the MISO/PJM/JOA we proposed  
25 the process for targeted market efficiency markets also

1 known as TMEP's that looks forward and is attempting to  
2 address persistent actual or historical congestion on  
3 reciprocal coordinated flow gates.

4           It is in addition to our individual regional  
5 planning process. We found TMEP's could be used to fill  
6 the gaps we were seeing between natural system conditions  
7 and planned for or forecasted conditions used in our  
8 forward-looking traditional planning studies.

9           As we said in our pleadings the gap occurs  
10 because real time system conditions are never exactly like  
11 the plan for future conditions and the differences are more  
12 pronounced along the seam where there is an overlap between  
13 the two coordinated but separately operated systems like  
14 the seam between PJM and MISO.

15           Given the nature of the issue and the solution  
16 that this project is designed to address the congestion and  
17 the costs of known reciprocal coordinated flow gates  
18 identified in the JOA. These are projects that must be  
19 addressed by the RTOs at the inter-regional level.

20           The RTOs developed key study considerations to  
21 identify TMEP projects according to specific,  
22 narrowly-defined criteria that would identify targeted  
23 high-value projects of limited scope. With respect to the  
24 study it must target historical congestion in reciprocal  
25 coordinated flow gates, be streamlined to avoid delays of

1 implementation of such projects.

2           For an upgrade to quality as a TMEP it must be  
3 needed to address historical congestion and known  
4 reciprocal coordinated flow gates, have an estimated in  
5 service date no later than the third summer peak season  
6 from the year in which the project is approved, have an  
7 estimated installed cost of less than 20 million dollars.

8           We have expected congestion based on persistent  
9 historical congestion. We recommended by the Joint  
10 Reliability Planning Commission, JRPC as a TMEP project and  
11 be approved by each respective RTO Board of Managers or  
12 Directors.

13           The intent of this new and innovative project  
14 type is to fill in the gap left by long-term inter-regional  
15 market efficiency planning studies to address easily  
16 resolvable, historical congestion with low cost, high value  
17 upgrades that can be implemented in short order.

18           Finally as part of developing the TMEP process  
19 the RTOs conducted the proposed process, including the  
20 review and analysis of historical data with its  
21 stakeholders -- of the 50 reciprocal coordinated flow gates  
22 identified having significant historical congestion, the  
23 RTOs found 13 potential upgrades from which we identified 5  
24 TMEP upgrades, costing an estimated 17.25 million dollars  
25 to address the 7.8 million dollars in historical congestion

1 over 2 calendar years.

2 This results in approximately 100 million dollars  
3 in expected TMEP benefits over the first 4 years in  
4 service. We are prepared to recommend these 5 projects to  
5 our Boards upon acceptance of the proposal. Thank you.

6 MR. CHRISTIANSEN: Four other parties have  
7 requested to make opening statements. They are EDF  
8 Renewables, Exelon, Mississippi public services commission  
9 and NIPSCO. We will again take the four parties  
10 alphabetically beginning with EDF Renewables, Mr. Martino.

11 MR. MARTINO: Thank you, good morning. My name  
12 is Omar Martino I am with EDF Renewable Energy. First and  
13 foremost I want to thank you all for holding this Workshop  
14 and allowing me to speak. I think it is a very important  
15 topic, few important issues.

16 One of the overall messages I want to convey here  
17 today is that we support the MISO/PJM filing regarding the  
18 TMTED process. We believe that it is a process or is a  
19 step in the right direction.

20 Many of my colleagues, earlier colleague from PJM  
21 and MISO have indicated you know congestion is an issue at  
22 the seams and has been an ongoing issue. We see it as a  
23 persistent issue and we believe that this filing, these  
24 projects are going to target some of the congestion so we  
25 are definitely supporting that.

1           It makes us believe that we are all thinking  
2 about the right things and we are all thinking about you  
3 know how to solve you know a serious issue.

4           So again I want to thank you for continuing to be  
5 open for a dialogue. I will ask here today would be that  
6 the MISO and PJM filing gets approved on these five  
7 projects. It does relieve congestion on a number of  
8 operating assets and some of those operating assets that  
9 are situated at the seams have financially been harmed by  
10 the congestion and we ask the Commission staff to make the  
11 recommendation to approve this project.

12           However, we want to say that even though this is  
13 a step in the right direction we want to indicate, we want  
14 to say that there is some improvements, there are some  
15 issues that we still see that need to be mitigated or they  
16 need to be addressed.

17           One of the most fundamental issues there were 13  
18 projects for recommendation or 13 projects for evaluation  
19 and 8 or I should say 5 have been recommended for approval.  
20 So the first question is what happened to the other 8? Why  
21 are the other 8 not being considered?

22           Our concern is that the other 8 projects were  
23 addressed or were identified to relief congestion but not  
24 going forward with those 8 projects is going to indicate,  
25 it's going to show that you know, congestion is going to

1 persist and there is no solution to that congestion.

2           And we think that is unjust and unreasonable and  
3 we think that it really hurts. It doesn't hurt you know,  
4 the entire purpose of the RTOs ISO but think about the  
5 rate-payers. It hurts the rate-payers that are paying for  
6 a lot more additional you know power but we don't seem to  
7 agree that these 8 projects should go forward.

8           So the question that -- one of the questions that  
9 we are you know posing is do we have the right metrics? Do  
10 we have the right evaluation criteria? Why did not these 8  
11 projects you know get approved?

12           For example you know, I have heard again from my  
13 colleagues at PJM and MISO that you know we historically  
14 look -- can I go forward? We have said that we have these  
15 historically looked at you know -- I'll just take a pass.  
16 (Phone interruption)

17           MR. CHRISTIANSEN: Would anyone else in the room  
18 if you mind please muting your phone? Thank you.

19           MR. MARTINO: So the thought there is that you  
20 know why these projects have not been approved and we have  
21 said on many different occasions that we look at historical  
22 congestion and I think that's a flaw in the process.

23           We have here even in the presentation today that  
24 we look at congestion in 2014 and 2015, the fundamental  
25 question is what happened to 2015 or 2016 or 2017? Why can

1 we look at forward looking congestion so that we have a  
2 bigger pool of projects instead of trying to catch up on  
3 the mediation measures?

4 Our view is that instead of looking at things  
5 historically you know which is valid -- I think we should  
6 expand that and look at the present year and look at the  
7 future years because the information that we have from the  
8 market, which by the way was shared by NIPSCO in the  
9 Technical Conference last year.

10 I don't have that slide here but you know the  
11 information from the market is that congestion is going to  
12 increase and congestion is going to increase exponentially  
13 so looking at the future is a key -- it is a key measure  
14 for us.

15 The other point that I want to make is that you  
16 know perhaps these 8 projects were not approved because  
17 they were not looked at it you know, correctly. You know  
18 how we looked at the known transmission solutions, how we  
19 looked at other things that we can do better like for  
20 example you know, we had argued the use of high temperature  
21 conductors which is a minimal -- you know, a minimal you  
22 know, expense.

23 We have argued that years of dynamic line ratings  
24 maybe the metrics would have worked in this other transit  
25 solutions alternative transmission would have looked at by

1 other measures, you know was not the case.

2           So that's an overall message that we want to  
3 bring. The last message in my closing argument would be  
4 that we also see significance in the number of issues by  
5 not including averages in the congestion and we have  
6 information, we have representation that shows that outages  
7 are a significant driver of congestion in the market and  
8 the threshold for considering congestion projects can be  
9 lowered to 69 KV rather than 100.

10           So what the overall message that I want to say  
11 here today is that we are very highly supportive of the  
12 MISO/PJM filing. We would definitely like to have these 5  
13 projects go forward but at the same time we see a  
14 significant concern that 8 projects were left, you know --  
15 left on the table and there's no solution to that.

16           And we see the need to reduce it you know revise  
17 the metrics to see if we can bring you know, all of the 13  
18 projects you know back for approval. Thank you and I look  
19 forward to the discussion today.

20           MR. CHRISTIANSEN: Next we have Exelon.

21           MS. MIDGLEY: Hi, I'm Sharon Midgley I'm with  
22 Exelon's Government Regulatory Affairs and Policy Team. We  
23 really appreciate the opportunity to provide a statement  
24 regarding the TMEP concept and ongoing proceedings.

25           TMEP's are designed to improve congestion on



1 facilities along the PJM/MISO border by establishing a new  
2 project type. It provides an avenue for the completion of  
3 low cost high value, high impact projects that reduce  
4 congestion.

5 Congestion on the system reduces the ability for  
6 generation to serve customers cost effectively. It is no  
7 secret that many of the carbon free nuclear assets in the  
8 Midwest that my company owns are financially challenged.

9 Congestion while not the only cause contributes  
10 to this as many of these resources are impacted due to the  
11 inability of the transmission system to keep up with the  
12 proliferation of renewable generation over the years in  
13 MISO and PJM.

14 For example, Quad Cities was a pricing premium to  
15 NI HUB back in 2005. In 2016 Quad Cities was \$8.40 below  
16 NI HUB. Over the same period about 28 Terawatts of wind  
17 was added in Illinois and Iowa.

18 The Quad City station is very close to the  
19 PJM/MISO seam and the congestion reflected at the bust is  
20 influenced by congestion on reciprocal coordinated flow  
21 gates between PJM and MISO that the TMEP projects are  
22 designed to help alleviate.

23 Exelon's position is that the TMEP construct  
24 should create an expedited way to upgrade transmission when  
25 benefits clearly outweigh the costs. As discussed at the

1 PJM/MISO process the TMEP construct and the way the  
2 projects were originally intended to be improved in 2016,  
3 that would have required the first set of approved TMEP  
4 projects being serviced by the summer of 2019.

5 With cost allocation for MISO not yet filed,  
6 confidence for approval in 2017 is weakening. We recommend  
7 that the Commission approve the TMEP filing so that the  
8 RTOs can move the TMEP projects through the approval  
9 processes fully rather than waiting for the internal cost  
10 allocation and if necessary issue a deadline for MISO and  
11 its TOs to file the intra-MISO allocation.

12 If approved in 2018 the projects will be online  
13 in 2021 which is two year delay in the benefits of these  
14 projects. Exelon supports speedy resolution to the various  
15 issues raised by others in the docket and we certainly  
16 appreciate the opportunity to participate in the Workshop  
17 today.

18 Oh I'm sorry the wind quote was 28 Terawatt  
19 hours, sorry about that.

20 MS. GREEN: Thank you and thank you for the  
21 opportunity to speak today. My name is Valerie Green. I'm  
22 with the law firm of Michael Best and Friedrich and I am  
23 here today on behalf of the Mississippi Public Service  
24 Commission.

25 My client has participated in this proceeding as

1 part of a group of retail regulators in MISO south but I am  
2 here today only for the Mississippi Commission and not  
3 speaking for Arkansas, Texas, Louisiana or the Council of  
4 the City of New Orleans.

5           So with that out of the way generally the  
6 Mississippi Commission agrees with the concept of providing  
7 you know, high value low cost transmission projects to  
8 alleviate congestion when the benefits clearly outweigh the  
9 costs.

10           The problem that we have with this particular  
11 filing is that it is hard to tell if the benefits do truly  
12 outweigh the costs because the benefits analysis does not  
13 take congestion into account.

14           We feel that the option of revenue right, revenue  
15 and firm transmission rate revenue need to be added into  
16 the analysis so that customers who are fully hedged against  
17 congestion don't actually end up paying more as a result of  
18 these projects.

19           If the customer has fully hedged against  
20 congestion and projects are built that they don't need to  
21 deal with the congestion then they will end up paying for  
22 the cost of the project and you know, their costs will  
23 actually go up as a result of these projects.

24           The RTOs were including firm transmission right  
25 revenue in the process early on and then around I think

1 September of 2016 that process changed. And I understand  
2 that the idea is to have a less complicated analysis and to  
3 make this a quick process but I think throwing out that  
4 analysis to make the process quicker may have the result of  
5 a diminished impact on customers that are already fully  
6 hedged for congestion.

7           So that's I would say our main issue with the  
8 proposal as filed. You know another thing I would raise is  
9 we have asked the Commission for clarification as to  
10 whether these projects actually need to have a competitive  
11 bidding component.

12           Right now the proposal doesn't include a regional  
13 cost allocation piece which we also feel makes it  
14 incomplete and sort of premature for the Commission to act  
15 on at this point. I'm not going to talk about regional  
16 cost allocation because I know it is not an issue here but  
17 -- because there will be a regional cost allocation at some  
18 point and these costs will be allocated within MISO.

19           That seems to us like it is the kind of thing  
20 that the Commission intended for there to be a competitive  
21 bidding component to. So we just raise that for discussion  
22 with the parties and for consideration by FERC staff.

23           The last thing and this is you know, just sort of  
24 unfortunate that the name Targeted Market Efficiency  
25 Project is so close to MISO's Market Efficiency Project and

1 so we want to just make sure throughout this process that  
2 there is no confusion or conflation between those two kinds  
3 of projects and that a TMEP that is approved doesn't  
4 quality as a MISO MEP for purposes of cost allocation. And  
5 that should be clear because the names are so close we just  
6 want to keep making sure that that stays on everybody's  
7 name.

8 MR. CHRISTIANSEN: Last and by no means least we  
9 have NIPSCO.

10 MR. KELLY: Good morning everyone. I'll start  
11 out by telling a bit of the story of the NIPSCO customers  
12 here today, which I'm represent NIPSCO, I think first and  
13 foremost I'm really representing the customers on the PJM  
14 side of the market that we don't represent that stand to  
15 benefit from these projects.

16 And as you know, certainly NIPSCO has been very  
17 vocal on the MISO/PJM scene and today we have the distinct  
18 pleasure of being able to thank MISO and PJM for some  
19 really good work.

20 In fact when these projects began as Jesse had  
21 mentioned they were Quick Hits projects and we pointed to  
22 those in the Complaint proceeding to say that you know,  
23 these are outside of the JOA they do not conform, these are  
24 in violation. So we were kind of protesting.

25 And today we instead can come in and say MISO and

1 PJM did the right thing in the right way by taking this to  
2 the stakeholder process and showing projects that you know  
3 when you measure them on a four year payback, they just  
4 deliver so much value for consumers. And so today I'm  
5 really coming here with a customer interest just to say  
6 please take a hard look at these projects. They deliver  
7 considerable benefits and they provide a new tool or  
8 inter-regional coordination that didn't exist when Order  
9 1000 was written.

10 And then reviewing some of the information and  
11 protests it seemed like that may have been a sticking point  
12 but I just note that I think Order 1000 was written after  
13 TMEPs had been identified, the language would have  
14 accommodated that type of structure as a planning tool that  
15 the two markets could use to address this issue of  
16 historical congestion.

17 The other issue that I would hope to raise too is  
18 just that congestion is real and even though there can be a  
19 financial hedge component to that the reality is when you  
20 look at the congestion between the two markets and market  
21 to market payments, there isn't a hedge for that. There is  
22 no way to mask that and the reality is in looking at the  
23 last 12 months I think that PJM consumers paid to MISO  
24 about 60 million dollars in market to market payments.

25 That's real money that was not hedged.

1                   UNIDENTIFIED SPEAKER: Is there a microphone or  
2 anything that you could speak into, we can't hear anything  
3 on the phone?

4                   MR. KELLY: I think the answer is no. So those  
5 payments that were made between PJM and MISO were not  
6 hedged and we believe that targeted market efficiency  
7 projects are directly attributed to trying to reduce those  
8 payments. And so that delivers real value for the  
9 consumers and again based on that four year pay-back the  
10 reality is that they are likely to provide a much higher  
11 benefit to cost ratio than even the -- just slightly under  
12 6.0 that was calculated for this.

13                   So I just wanted to make and underscore that  
14 point that while hedging can be an issue within the side of  
15 the regional question when you are looking market to  
16 market, inter-regionally this is the congestion that these  
17 projects are targeted to try to reduce.

18                   And the last thing that I wanted to note too is  
19 that as I was counting here we had 6 out of the 7 opening  
20 statements I think robustly promoting these projects and  
21 then recognizing that there are benefits here for consumers  
22 to find and I just wanted to point that out that as I was  
23 reading the material it seemed like the parties that were  
24 closest to the scene, those that had experienced these  
25 issues firsthand and historically including my customers

1 are the ones that are supportive of this and they are  
2 willing to pay for these projects in order to see them come  
3 to fruition and start delivering those benefits.

4 But as you get a little bit more distant the  
5 interests start to change and I know that FERC staff is  
6 certainly taking a lot of time to look at this, we  
7 appreciate that review. I know that you will give it a  
8 fulsome consideration and that was just one observation I  
9 had in reviewing the material.

10 So in closing I would just like to ask -- I have  
11 a more fulsome statement that I have prepared. I would  
12 welcome the opportunity to put it in the record after  
13 today's Workshop and before the chance to continue the  
14 dialogue, thank you.

15 MR. CHRISTIANSEN: Thank you for that. Before we  
16 turn to the staff led question component can I just ask  
17 everyone to check again and make sure that their phones are  
18 off, we have a little static with the speakers here. Just  
19 double check we appreciate that.

20 We will now turn to a series of questions from  
21 staff. There will be an opportunity for parties to ask  
22 follow-up questions. Staff will allow time for that  
23 opportunity. If you do have a question please indicate  
24 that by turning your table tent quickly and again please  
25 remember to start by stating your name and the organization



1 that you are affiliated with. I would like to start out by  
2 asking MISO and PJM to just provide an overview of how the  
3 TMEP process will work in practice. We can actually bring  
4 the microphone, thank you.

5 MR. THOMS: Thank you I'm Eric Thoms, Manager of  
6 Planning Coordination and we brought with us a slide deck  
7 just to facilitate the discussion. The slide deck is  
8 really prepared into several pages, a little bit of -- it  
9 really gets down to why we are doing this, what are TMEPs  
10 and how it works with the lead-in question how does it  
11 work.

12 We really could skip most of the first slide and  
13 go right to I believe slide 9 which really is an attempt to  
14 view our visual process. I know we have some attorneys in  
15 here we tried to fit it all on one so this is our best  
16 attempt at that.

17 So really we have several phases. We really  
18 started looking at the reciprocal coordinated flow gates.  
19 We go to -- which is publically available information, the  
20 congestion dollars on those markets, specifically for the  
21 flow gates.

22 We add the congestion dollars up in the last two  
23 years on that reciprocal coordinated flow gates between  
24 MISO and PJM. If those congestion dollars are above 1  
25 million dollars it moves out of the process.

1           If the congestion dollars are less than 1 million  
2 dollars that falls off the table. From there it will move  
3 on to the -- basically the second box. If you all look at  
4 the congestion dollars we are taking from the data market  
5 and on the MISO side the real time DCS congestion data, on  
6 the PPM whatever you call it the balancing market.

7           So we are gathering it from two financial binding  
8 components and adding those up. So we are really casting  
9 our net wide if you will. So if it is a low dollar amount,  
10 if it's one million it is aggregated summed up for two  
11 years and through two financial methods.

12           From there we work with our facility owners on  
13 those reciprocal coordinated flow gates to see if there are  
14 upgrades possible. If working with the transmission owners  
15 on the facilities if it looks like there are some routing  
16 elements that could be upgraded it will proceed to the  
17 process.

18           Otherwise it would no longer be considered a  
19 TMEP. So this past year with the five projects that we had  
20 where we went from 15 down to 5, that was part of the  
21 reason why some of them fell off the table is that there  
22 was not a network upgrade available working with the  
23 facilities owners to upgrade it to a higher rating.

24           From there we worked with our operators to see if  
25 this congestion is believed to be persistent. So we have

1 worked with the IPSAC knowing how the intercept is causing  
2 this congestion. Is the congestion -- was there certain  
3 conditions going on that were specific to the nature of  
4 those?

5           And in the average experience we make that  
6 assessment that the congestion is going to be persistent  
7 that the answer is yes. We move on with the process. From  
8 there we move on to the fourth box in the diagram where we  
9 perform some analysis on these 5 projects that we have  
10 before us and we perform some overflow and production cost  
11 baseline simulations to verify the effectiveness.

12           If it looks like those upgrades would alleviate  
13 the congestion it moves on in the process, it moves on to  
14 the last box and from there we take the average cost of  
15 that congestion which we have an example in the preceding  
16 slides that calculates that.

17           I would like to move to that slide if you will,  
18 slide 10 as an example. If you look at 2014 and '15 on  
19 this example, we went to the real time next data  
20 congestion. We calculated installers, we offset them with  
21 the market payments and we came up with the total  
22 congestion dollars at the bottom of the table.

23           Those -- we average that out. And the key  
24 takeaway here is once we average it out, multiply that by 4  
25 times. If that dollar amount exceeds the cost of the

1 upgrades it proceeds in the process.

2           That is reflected on slide 11. So if the average  
3 congestion alleviation benefits multiplied by 4 is greater  
4 than the cost of the upgrade it proceeds in the process.  
5 We then proceed to figure out the benefit costs part of  
6 that. We add up the congestion that we calculated from  
7 publicly available information.

8           It is also used in the Selma process as well, we  
9 can offset the market to market gains and we calculate the  
10 adjusted benefit for each party. From there we do a last  
11 check to make sure that it qualifies for the criteria in  
12 the JOA, so it's a part of the CSP, the coordinated system  
13 plan.

14           So if it passes those key criteria then the  
15 projects can be in service by the third summer. If the  
16 projects are less than 20 million dollars it proceeds to  
17 become an approved TMEP as awarded on by the Joint RTO  
18 Climate Committee unless the other advantages pointed out  
19 in the application of the discussion today is it no longer  
20 goes through those second and third hurdles, if you will of  
21 the original review process.

22           There is a tightly jointly coordinated and  
23 transparent process over through the process and is  
24 eligible to be included by voltage and RTO awards. So  
25 that's really an attempt to streamline this process and

1 tackle some of the suggestions that we have seen.

2           So with that I would like to open it up for  
3 further questions or discussion on the process. I know it  
4 was a quick overview we certainly can answer further  
5 questions.

6           MR. CHRISTIANSEN: Thank you for that. If you  
7 have the presentation that we have been working on and we  
8 will add it to the record.

9           MR. SACKNOFF: Hi actually yeah, this is Robert  
10 Sacknoff from the Office of Management Market Regulation  
11 and my first question for the RTOs regarding the planning  
12 process is that after a TMEP study is completed the JOA  
13 indicates that there will be a stakeholder process  
14 involving the IPSAC Act.

15           Can you please explain how this -- including how  
16 the JOPC will make information available to the IPSAC as  
17 well as how IPSAC members can provide feedback on that  
18 information to the JOPC?

19           MR. THOMS: Sure I can tackle that question. In  
20 addition we do have our nuclear project lead on the scene  
21 with Solomon as well as Chuck Liebold manager of  
22 interregional planning so certainly guys if you want to  
23 chime in feel free. As part of that slide that was right  
24 on that process you will notice that we have stakeholder  
25 feedback throughout that process. In fact you can go to

1 all of the IPSAC proceedings from 2016 and you can look at  
2 each step of the way we are including that information and  
3 stakeholder feedback and will follow with what's in the  
4 JOA.

5 And so for instance the October IPSAC -- I don't  
6 have a slide deck here but you can go up to our website.  
7 When you walk through --

8 MR. CHRISTIANSEN: Can I stop you for a second?  
9 So there is static, if you could please turn your cell  
10 phones off. (Static issue) We are going to take a break  
11 until 10 o'clock.

12 (OFF RECORD 9:52)

13 MR. CHRISTIANSEN: Back on. (On Record 10:02)

14 MR. SACKNOFF: Hi, Robert Sacknoff again.

15 MR. THOMS: And I just had a quick follow-up  
16 question to my first question, specifically about how the  
17 IPSAC members can provide feedback on the information to  
18 the JRPC? My follow-up question is just what is the  
19 timeframe in which the IPSAC members will provide the  
20 feedback to the JRPC?

21 MR. SACKNOFF: Sure and I'll just try to speak up  
22 into this microphone. So if I can repeat your question is  
23 what -- how does the IPSAC stakeholders submit feedback?

24 MR. THOMS: Yes exactly.

25 MR. SACKNOFF: So we conduct IPSAC meetings

1 throughout the process of this TMEP process. Every stage  
2 or decision point would come back with an exact and provide  
3 that information. Many of our stakeholders including the  
4 transmission owning members and market participants, so  
5 they have a great deal of knowledge of this system and  
6 markets that are operating under it.

7           So we are presenting this information, there are  
8 subtle opportunities that we provide. You could have that  
9 dialogue right then and then. We may have a specific  
10 question when we seek feedback and provide instructions on  
11 how to get a hold of us if it's an email, if there's a  
12 template or survey that we are putting forth and we also  
13 have our contact information, our call numbers in slide  
14 decks.

15           The specific process or points in the JOA --  
16 there are some, I believe there are some deadlines in the  
17 JOA that we would follow, I don't have those memorized off  
18 the top of my head, it's a fairly new process but there is  
19 some definitive dates of 15 days, the day after such and  
20 such decision and so we certainly would follow what we have  
21 filed.

22           MR. MCGLYNN: I would say just to add to that I  
23 think if you looked at our past practice we have got  
24 through the TMEP cycle kind of twice now and as mentioned  
25 it normally evolves over the course of multiple website

1 meetings and in our material that we have posted for the  
2 different IPSAC meetings you will see the material that we  
3 covered.

4 We often seek stakeholder comments and often  
5 times post those comments as well within subsequent  
6 meetings. So the whole process again evolves over multiple  
7 meetings and is transparent throughout.

8 MS. TETTER: This is Valerie Tetter with the  
9 Office of Energy Policy and Innovation. I just want to  
10 make sure everyone can hear me. I just have a quick  
11 clarifying question and I think that this goes a little bit  
12 to what you were discussing before the break.

13 So from what I understand from your response the  
14 stakeholder -- the opportunities for stakeholder feedback  
15 with respect to the target market efficiency projects would  
16 really flow through the existing IPSAC process. So it  
17 wouldn't necessarily be special meetings to discuss  
18 targeted market efficiency projects, it would just be  
19 through the regularly scheduled IPSAC meetings. Could you  
20 just please confirm?

21 MR. MCGLYNN: That's correct.

22 MR. CHRISTIANSEN: Great. I believe the proposal  
23 also states that the JREC will solicit proposals for  
24 potential TMEPS. Can you talk a little bit about how that  
25 solicitation process works?



1           MR. MCGLYNN: So I think through the process I  
2 have mentioned as it evolves you know initially through the  
3 -- you know specific flow gates that we are -- you know  
4 that either have historic congestion on that we are trying  
5 to reconcile and to fix, you know we are posting that for  
6 everybody.

7           We will go and seek methods or approaches to  
8 resolving the congestion on it. You know quite frankly  
9 those discussions largely rely on and we work closely with  
10 the asset owners, the transmission owners to identify the  
11 specific limiting elements of the piece of equipment that  
12 we are seeing the congestion on.

13           So often times in the regional as well as our  
14 inter-regional studies the transmission line for example,  
15 you know, is often limited by equipment backing  
16 sub-stations and things like that. So we work with the  
17 transmission owners to identify the specific pieces of  
18 parts I should say of the overall element that we are  
19 trying to relieve and to identify what needs to be upgraded  
20 or replaced to address the congestion.

21           MR. CHRISTIANSEN: Do you have a sense of how  
22 long that period, the exact period that came out of the  
23 study information as it was originally presented to be  
24 exact?

25           MR. MCGLYNN: It can vary. Typically a month or

1 two type of a timeframe. As we have IPSAC meetings  
2 regularly kind of scheduled we will review the status of  
3 that you know throughout the process.

4 MR. CHRISTIANSEN: And if I am a stakeholder and  
5 I am interested in proposing a TMEP and how do I go about  
6 doing that? If I am a stakeholder I may not necessary want  
7 other transmission owners and I want to propose a  
8 particular upgrade -- how would I go about making that  
9 proposal?

10 MR. MCGLYNN: Parties are free to -- at the end  
11 of every IPSAC I think we always include contact  
12 information for either Eric or Chuck for parties to get  
13 back to if they have any questions or comments that they  
14 would like to offer.

15 MR. CHRISTIANSEN: Is there anything in  
16 particular that I would need to include in contacting you  
17 for a particular project?

18 MR. MCGLYNN: Certainly we would need to  
19 understand the -- we would need to understand what it was.  
20 We would need to have a discussion about whether it would  
21 satisfy the requirements of the TMEP in terms of you know,  
22 it's estimated cost and whether it can be implemented in  
23 the time frame you know that is required under the language  
24 that we filed for the TMEPs, those types of details.

25 MR. MAGOS: So are you saying that in order for a

1 stakeholder to pose a TMEP they have to give you how much  
2 it is going to cost and information that is proposed in the  
3 project to build?

4 MR. MCGLYNN: We would need to understand all of  
5 those things to see if it qualifies being a TMEP.

6 MR. MAGOS: So if I'm just a stakeholder saying,  
7 "Oh it looks like a project from this area to this area  
8 might work," and you would just say, "Well unless you give  
9 me more information I am not going to look at it?"

10 MR. MCGLYNN: Again I think we need to understand  
11 whether it would be -- whether it is reasonable to expect  
12 that it would cost 20 million dollars or less.

13 MR. MAGOS: So you would check it -- you would  
14 either say, "No, that's obviously going to be a 100 million  
15 dollar project," or -- what would you do? If a stakeholder  
16 says, "Have you looked at this type of project," did not  
17 give you a specific project?

18 MR. MCGLYNN: Well if people came back to us with  
19 a project that was clearly larger scope I think the intent  
20 of you know, again the TMEP process we were trying to be  
21 you know, strategic if you will and precise in identifying  
22 these --

23 MR. MAGOS: Let me back up because I could  
24 probably go down a different way. How does a stakeholder  
25 know what they need to give you? If I look at the tariff

1 language, how do I know what you need from me in the  
2 project?

3 MR. LIEBOLD: I'm Chuck Liebold, Manager of  
4 Inter-regional Planning with PJM. So early in the year if  
5 you just take this past year for an example somewhere  
6 around February or March exactly listed 50 at the time,  
7 market flow gate issues.

8 And you know, we at that time that begins the  
9 process that's really a dialogue with stakeholders through  
10 our course of annual meetings where we are looking for  
11 input both on issues and any suggestions that they might  
12 have to fix those problems.

13 At the same time simultaneously we let everyone  
14 know that we are going out with beginning the dialogue to  
15 try to determine what the limiting elements are on these  
16 because quite frankly to fit the criteria for the TMEP it's  
17 highly likely that the most obvious projects are going to  
18 be upgraded to existing facilities.

19 So we actively try to find out what those obvious  
20 projects are at the same time we are looking for  
21 stakeholder feedback to say if you have any other options  
22 that occur to you so they would have to present us you  
23 know, with some detail on those other options to indicate  
24 that they are indeed a competitive option with the upgrades  
25 that we are looking for and then it fits in right with you

1 know the next comments that Paul made. We need to get  
2 information about those projects, what the project is and  
3 what it costs and indeed convince us that this project is  
4 really a doable project in what really amounts to its three  
5 years from the approval year because approvals really come  
6 at the December Board processes for into the RTOs you are  
7 really talking -- you have to be able to get that project  
8 in two and half years from the word go right?

9           So it begins a battle. I mean yes we would  
10 listen to any stakeholder proposal and engage them to find  
11 out what their project was and determine what we needed to  
12 know to see if it was indeed going to be a more efficient  
13 or cost effective project than an alternative upgrade.

14           MR. MAGOS: Gotcha.

15           MS. FARINELL: This is Maria Farinell at FERC  
16 could you just further elaborate on when you were saying  
17 they must provide you with detail on the option and then  
18 you listed a couple of things. Is that the detail? And if  
19 not, what is the detail?

20           MR. LIEBOLD: We've never you know, it's not as  
21 formal a process. It's more like a workshop kind of thing  
22 right so it is really a work in process. We haven't laid  
23 out the exact elements of the project that have to be  
24 specified other than tell us everything about it that makes  
25 it a TMEP project.

1           So if they have an upgrade in mind we would be  
2 happy to have them describe that update. Is it  
3 re-conducting a line? Is it building a new line from A to  
4 B and if it indeed is building a new line, how long is it  
5 you know because that certainly is going to factor into  
6 whether or not you can get right-of-way and put that in in  
7 two and a half years from the word go right?

8           So we just need that kind of level of description  
9 of the project so that we can understand it and see if it  
10 is a viable project. And if indeed it supposedly has a  
11 whole host of other -- lots of interest in folks saying we  
12 can fix this congestive element and we get lots of  
13 proposals. That would likely be an indication to PJM and  
14 MISO that well there are questions about whether the TMEP  
15 you know waive track upgrade is indeed the most efficient  
16 or cost effective solution to this.

17           So we can pull back and we can then, we would not  
18 then drop interest in that project. What it becomes is it  
19 becomes a more complicated project that we have to balance  
20 through the more complicated evaluations that are available  
21 to us.

22           MR. MOSER: Just if I may add on Chuck's  
23 comments. I think there is some flexibility right in what  
24 stakeholders provide not only in identifying areas where  
25 you see issues but in the solutions.

1           I think they can give us something as simple as  
2 you should fix this path and we would work through that,  
3 sort of the narrative process through IPSAC to you know  
4 more fully develop what that looks like. You know that's  
5 one way for stakeholders to provide it, but they could also  
6 get all the way down to you know, upgrade this facility on  
7 my system. I think there is a range of specificity that  
8 stakeholders can provide in the development of the final  
9 TMEP projects in a given cycle.

10           The last thing I would just say on an earlier  
11 comment we have our normal IPSAC meetings and every time we  
12 get together as a group we would call it an IPSAC but you  
13 know, if the circumstances are such we could have extra  
14 calls and things like that depending on what we have going  
15 on at the time.

16           MS. MURPHY: And I guess I would just clarify if  
17 we are -- I think what you are hearing the panel describe  
18 is so long as the projects -- we will entertain any type of  
19 projects as long as it meets the newly proposed 9.4.4.1.5,  
20 9.4.4.5 of the high level TMEP criteria.

21           So any project that folks want to raise in the  
22 course of the discussions that these folks have described  
23 that can meet rule 1, 2, 3 and 4 could be considered.

24           MR. CHRISTIANSEN: But it just depends. What I  
25 originally wanted to suggest was at that time I don't even

1 necessarily demonstrate that it will meet those four  
2 criteria.

3 MS. MURPHY: That is right, that is what you are  
4 hearing.

5 MS. FOLEY: Because it is a collaborative process  
6 and I think that if you look at actually -- a lot of  
7 numbers here, but I think it is the 9.3.7.2C which was  
8 where we first identified the project in our -- in the JOA.

9 In order to -- we will solicit proposals and what  
10 we said there was that meet the criteria of 9.3.7.2C and  
11 9.4 keeping in mind that they are going to maybe suggest  
12 limiting facility and say what can we do to upgrade this or  
13 we think you could do this to upgrade that facility.

14 Then PJM and MISO have to look at, you know, what  
15 they are thinking of operating and examine whether it could  
16 meet a lot of these criteria. And so again it's more of a  
17 working shop stakeholder process from what I gather of the  
18 IPSAC and it is more of a collaborative process where if it  
19 seems like it has possibilities the RTOs will look at it  
20 more closely and try to resolve the issues along the  
21 reciprocal flow gates.

22 MS. TETTER: So this is Valerie Tetter again.  
23 Just another quick follow-up question -- I have heard  
24 several times, I think several speakers talked about  
25 working with the incumbent transmission owners to get a



1 sense of what the limiting elements are and it almost  
2 seemed to suggest that I think he mentioned the most  
3 obvious solutions are going to be upgrades to existing  
4 facilities, whether that is you know, it is on the  
5 equipment to get higher ratings on the line, other kind of  
6 facility changes that could upgrade existing facilities.

7           Is there a possibility for new lines to be  
8 targeted market efficiency projects or was this category  
9 really only meant to cover regional operating and other  
10 upgrades to existing lines?

11           MR. MCGLYNN: I think it's a practical matter.  
12 No, to answer your question about whether it knew a line  
13 would be proposed. If you look at the other requirements  
14 that we have for TMEP projects we wouldn't explicitly or  
15 categorically throw it out as a TMEP.

16           It would seem to me it would be difficult for a  
17 project like you are describing to move on, a new  
18 substation, something along those lines to qualify as a  
19 TMEP. Again we have the 20 million dollar threshold and it  
20 would be implemented in the three year timeframe.

21           That's not to say though that that may not be a  
22 good project at some point. But to Chuck's earlier  
23 comments, evaluating those are likely higher dollar  
24 projects and we would you know, in all likelihood we would  
25 evaluate them for a greater inter-regional market

1 efficiency planning process.

2 MR. LIEBOLD: So we think it is unlikely, you  
3 know that kind of a new line facility would qualify. But  
4 you know we didn't want to categorically rule it out  
5 because substations are complex places and who is to say  
6 there can't be, you know, two lines close together in one  
7 span of conductor creating a new line and you know, a new  
8 configuration could be a beneficial thing you know.

9 So it's conceivable that very simply new types of  
10 projects that want upgrades could be possible, we don't  
11 really know that but we didn't want to categorically rule  
12 it out.

13 MS. TETTER: Okay, I'm sorry.

14 MS. MOSER: Real quick I think it's also possible  
15 a project can come in through its TMEP study but maybe it's  
16 a new facility, it's above 20 million but there is still a  
17 strong case for a project that can -- it may not pass as a  
18 TMEP but it may then find its way back into our longer term  
19 studies as a central cross border.

20 So you know, just because there's an issue and a  
21 project that looks good and it may not meet a certain  
22 criteria as one thing it doesn't mean it is excluded from  
23 coming back for consideration as something else.

24 MS. TETTER: Thank you, that's help, I just  
25 wanted to make sure there wasn't tariff language categories

1 categorically excluding these studies, thank you.

2 MR. SACKNOFF: This is Robert Sacknoff. Our next  
3 question is according to the proposal there will be a  
4 second stakeholder process involving IPSAC after the JRPC's  
5 analysis of the proposed TMEPs. Specifically this is a  
6 Section 9.3.7.2C3.

7 I'm wondering if you could please explain how  
8 this process will work and again also include how the JRPC  
9 will provide information to the IPSAC and how the IPSAC  
10 members can provide feedback on that.

11 MR. MCGLYNN: I think it's really the same  
12 process that we talked about earlier you know if IPSAC  
13 again needs to routinely re-review the results of our prior  
14 work since the last meeting with stakeholders.

15 So if we were at the point where we had  
16 identified limiting elements, had identified you know some  
17 potential fixes for the different problems, you know, as  
18 the JRCP we would review it and we would come back and we  
19 would share the results of PJM's and MISO's thoughts on  
20 those upgrades whether they would work, why they are  
21 valuable, whether it would satisfy the requirements of a  
22 TMEP.

23 We would share that at an IPSAC meeting not  
24 unlike the prior meetings like again we discussed some of  
25 the earlier stages or phases of projects, does that make

1 sense?

2 MS. FOLEY: And a good example of how that would  
3 work are really the presentations that proceeded the filing  
4 where we did do sort of run through the process and what it  
5 would look like.

6 And that's really what the whole process was  
7 based on. So you could go back and you could see those  
8 presentations and see the level of detail provided and the  
9 opportunity for stakeholders to address based on that  
10 issue.

11 MR. SACKNOFF: Would the timeframe for  
12 stakeholders participation, is that consistent with the  
13 prior discussion?

14 MR. MCGLYNN: Would the timeframe for --

15 MR. SACKNOFF: For a stakeholder participation,  
16 is that consistent?

17 MR. MCGLYNN: Sure, you know again we solicit  
18 comments from folks and typically we will talk about them  
19 at the next meeting as well.

20 MR. CHRISTIANSEN: And is it safe to say there's  
21 an ongoing IPSAC process and the difference between meeting  
22 A and meeting B is that meeting B will cover everything  
23 that's happened between meeting A and meeting B and there's  
24 no sort of formal agenda that needs to apply to each  
25 individual step throughout the process, is that a safe way

1 to say it?

2 MR. MCGLYNN: No, well yes, I think it's the same  
3 -- we don't have a formal agenda for say for the different  
4 IPSAC meetings or whatever but I think you could go back  
5 and look at the last series of IPSAC meetings and see how  
6 the projects have evolved and what the current status or  
7 current thinking of the RTOs are.

8 MR. MAGOS: This is Zeny from FERC, so to me we  
9 did go back and look at the you know -- provided the links  
10 at the level and we can come back and look at that. I  
11 would like if possible if we could define in general terms  
12 those steps to the JOA revisions you are making.

13 So for example if you look at slide 9 of the MISO  
14 presentation and if you look at the JOA, 9.3.7.2 If you  
15 look at 9.3.7.2C-I it says, "Issues identified in the  
16 targeted TMEP study will be reviewed."

17 First of all I guess is the first box on 9 what  
18 is that tied to for the JOA?

19 MR. LIEBOLD: I think that it's something Roman  
20 numeral C -- there's an identification of issues clause or  
21 whatever it is called in the JOA. So early in each year,  
22 each study cycle we identify issues. So that occurs  
23 beginning for example around December although I don't know  
24 if it is December or toward the end of the previous  
25 calendar year, right -- sometimes at the end of the

1 calendar year we do a review of issues.

2           And this is kind of all bound up in not just the  
3 TMEP process but the coordinated system planning process so  
4 that we will review PJM's and MISO's regional plans and  
5 regional issues and potential regional upgrades -- that's a  
6 key for requesting stakeholder input to tell us whether or  
7 not that they think they are more efficient in cost  
8 effective means to accomplish the regional plans other than  
9 what we have identified in that same process.

10           So that around December, sometime maybe in  
11 February --

12           MR. MAGOS: So is that first box --

13           (TALKING OVER EACH OTHER)

14           MR. LIEBOLD: Not the 9.3.7.2 it's the earlier  
15 general issues. General issues and then early in the year  
16 we do the identification of the TMEPs I believe it was in  
17 the March -- February and March IPSAC timeframes, there was  
18 a February IPSAC, there was a March IPSAC.

19           I know in the March IPSAC we presented the list  
20 of 50 market segments so that's a continuing discussion of  
21 regional issues right. So you will see at the end of the  
22 calendar year you will see more of the regional -- large  
23 regional issues and then beginning in the next year you  
24 know, following that identification of the regional issues  
25 the calendar year is over so we can accumulate very quickly

1 after that the congestion on the market to market flow  
2 gates, that information that we did early in 2016.

3 So that kicks off the full identification of  
4 issue's process and from that process you know, we have to  
5 review all of those issues immediately after identifying  
6 the TMEP market to market flow gates we begin sorting  
7 through them, trying to identify what the limited elements  
8 are and that is aimed at is it really an eligible TMEP?

9 If the limiting element is the conductor rating  
10 and the conductor is the same conductor for every mile of  
11 the 50 mile long line that's going to drop off the list.

12 MR. MAGOS: So that's still in box one of this  
13 list?

14 MS. FOLEY: Yes it would be under C.

15 MR. MAGOS: Box 1 and 2?

16 MS. FOLEY: Well I think we would start --

17 MR. MAGOS: Well as you can see that's part of  
18 the problem that I am having myself. What stands out as  
19 reasonable -- is there anywhere that that is memorialized?  
20 Like sure if I follow the process all of the time maybe  
21 I'll understand it.

22 Not just in the JOA, is there anywhere where I  
23 could go as a stakeholder and say okay, unless it is clear  
24 in the agenda --

25 MR. LIEBOLD: The JOA is our main reference for

1 what this process is.

2 MR. MCGLYNN: In 9, 3, 7, 2 -- in  
3 that paragraph there is relative to that first box on the  
4 slide gather congested flow gate -- there is a sentence in  
5 there identification of issues will include but not be  
6 limited to the RTOs determination based on historical  
7 operational information or any historical flow gate  
8 congestion.

9 MR. MAGOS: Is that covering projects one?

10 MR. MCGLYNN: No that's part of us -- I  
11 referenced back to going to looking at the market data, the  
12 information that we have and whether it was historic  
13 congestion.

14 MR. MAGOS: So that would be step one and then is  
15 there -- where do I know that you are saying that you are  
16 going to take that to the JRPC? Do you take that, is that  
17 the next step? You are going to do that and then go to the  
18 JRPC? So JRPC does this and then you take it to the next  
19 step.

20 MR. MCGLYNN: We would review that with the --

21 MS. FOLEY: Keep in mind it then says in that  
22 paragraph and a targeted market efficiency study initiated  
23 by the JRPCM to this section will then be conducted under  
24 the process defined in the CSP which is the much more  
25 detailed process.



1           So simply we would follow the CSP process and it  
2 seems there is some comfort around in terms of detail.

3           MR. MAGOS: So but is there, in that each one of  
4 these like 9372C each one of these enumerated steps is a  
5 step where it is a step stakeholders, step stakeholders, or  
6 is there some meshing of certain steps in that it looks  
7 like box one is 9372C.

8           Roman I -- issues identified in the target market  
9 efficiency study will be reviewed to determine. So my  
10 question would be does that mean review with stakeholders  
11 or JRPC is going to review that and if you could just tie  
12 -- up until you solicit proposals you tie -- what are the  
13 steps?

14          MR. MCGLYNN: I don't think we explicitly tried  
15 to build any you know, somebody does this we have a  
16 stakeholder meeting. The next thing happens -- there may  
17 be multiple steps that happen and get reviewed at an IPSAC  
18 meeting so we don't have the language in the JOA is not as  
19 prescriptive as to suggest that we need to do that, however  
20 each step in the process would certainly be covered and  
21 reviewed with stakeholders at an IPSAC meeting.

22          MR. THOMS: So we inserted the TMEP study process  
23 into the existing detailed CSP process in the JOA and so  
24 this is just an illustrative to try and get one slide of  
25 how do we go about this is the TMEP study process, how can

1 you get it all on one slide.

2 MR. MAGOS: And it was helpful so in my mind I'm  
3 trying to tie them like oh, okay this is how it works. How  
4 do I tie this to the JOA?

5 MR. THOMS: And so we can do that by giving us  
6 our first official TMEP study process we come back and  
7 often do our other studies and create a timeline or flow  
8 chart or something to help stakeholders understand that  
9 step by step assessment. That's something we could do.

10 MS. FARINELL: This is Maria. Does that mean  
11 that the answer to Zeny's question is that really we can't  
12 tie the boxes together?

13 MR. THOMS: So we can. We could painstakingly  
14 flip back through it here today if you want to or we could  
15 put something together and present it at the next IPSAC or  
16 do a follow-up and put a tariff or a column on the  
17 left-hand side and put in the tariff JOA section of it or  
18 something.

19 MR. LIEBOLD: Another consideration I would add  
20 too is get me done in a year. You know the more discreet  
21 our steps become, the more defined and it's really a pause  
22 then where we have to you know, then we aren't really  
23 productive and visit IPSAC too frequently because it takes  
24 us time to do work as well right.

25 So if we have to pause we are going to be really

1 taken too much perhaps to do something that really we can  
2 do on a continuous basis and report out monthly, so that's  
3 really what we are doing. We are working through steps as  
4 quickly as we can and presenting issues, requesting input,  
5 identifying issues, requesting more input, identifying  
6 limiting elements and you know and trying to come up with  
7 what potential projects are and we report out on where we  
8 are monthly and we take feedback on a continuous basis.

9 MR. CHRISTIANSEN: This is Matthew Christiansen  
10 again. Are there any points where you would not -- or any  
11 points in the planning processes you laid out where you  
12 would not go further without taking the information out to  
13 that point to IPSAC?

14 I guess I'm thinking particularly about after  
15 identifying that the TMEP met the elements, can you proceed  
16 to identify potential TMEPs before going through the IPSAC  
17 process or would you stop and go first with the IPSAC  
18 process before starting --

19 MR. LIEBOLD: I'd say we never stop work, you  
20 know we always keep on going. And we report out on it and  
21 we take feedback you know whenever we could. So like just  
22 because we are identifying potential TMEP projects and  
23 limiting elements it does not preclude input on those very  
24 same limiting elements because there are no decisions made  
25 on this until the very end.

1           MS. MURPHY: And it may be helpful I think Zeny,  
2 I think what you may be looking for is a section in the JOA  
3 that says TMEPs only and this is what you do. And what I  
4 think we have tried to make it here is this is now another  
5 tool in the toolbox of the overall planning efforts that we  
6 do.

7           So this is now our method into existing processes  
8 and it is a continuous cycle and will be continuous, it is  
9 just that we now have a project type that we weren't  
10 capturing before that we will now, it's not a separate and  
11 apart process, it comes in part of the overall process.

12           So I think what Eric said is true we can and will  
13 you know go through and identify where this stuff is  
14 happening but it is happening in the continuous broader  
15 piece where we are developing the longer term projects, the  
16 larger projects but we are also identifying these types of  
17 projects that will augment and compliment those broader  
18 processes.

19           So it is not a separate, necessarily section that  
20 says we are going to do these study processes you know  
21 uniquely -- you know it is part of the broader process so  
22 we don't have a new drop in section of the DOA.

23           MR. MAGOS: And just to clarify I think I asked  
24 the question and you answered it about how you hand tie  
25 them. Of course I can't tell you to do that and you

1 shouldn't do it just in response to my question, so we are  
2 not telling you to do that.

3           MR. CHRISTIANSEN: Going back to that same time  
4 we are going to go 9.3.7.2 the coordinated system plan  
5 study it may improve target markets projects, I mean how do  
6 you determine whether or not the target market study is  
7 part of that?

8           MR. LIEBOLD: My response to that would be that  
9 the process of beginning at the end of the year where we  
10 identify regional issues and the beginning of the next year  
11 where we summarize the congestion that will be a major  
12 important feedback we get on that will be a major input to  
13 what studies we want to undertake in a particular year.

14           Resources I think are going to be a major factor  
15 factoring into that as well. If PJM and MISO have you know  
16 -- if we undertake a major long-term product study it you  
17 know might be hard to do simultaneously you know, some  
18 smaller studies.

19           I would say the smaller studies are going to be  
20 more prevalent because we tend to look at those every year  
21 and look and see if there are obvious things. I think  
22 resources are going to factor in to what we can do but  
23 certainly the identification and the issues will give us  
24 and stakeholder feedback will give us an indication of  
25 where we should go next.

1           So we intend to look at TMEPs you know, the data  
2 every year doesn't mean we -- I think most years we would  
3 do a TMEP analysis of some sort but it doesn't mean we  
4 won't skip a year when we need to. We skipped this year  
5 right because there is a lot going on otherwise so it just  
6 didn't work.

7           MR. MCGLYNN: Or imagine you guys approved the  
8 TMEPs and we go through a cycle and we identify a couple  
9 more projects and we get them done, get them through and  
10 tell people to go out and implement them and then we look  
11 at the next round of congestion that we had for the  
12 preceding year and we go through the list and it is the  
13 same congestion that we had seen on projects that we had  
14 just put forth you know projects for.

15           We wouldn't go back and do another TMEP study  
16 knowing we have projects in the pipeline that is going to  
17 address those or further those issues.

18           MR. CHRISTIANSEN: So it sounds like the main  
19 determinative whether or not you do a TMEP study would be  
20 how much congestion you see in the flow gates and to reduce  
21 this congestion using this type of project is that right,  
22 issues driven.

23           MR. KELLY: I was just going to offer up in the  
24 JOA for your question of 9.3.7.2A, Subsection 2E to the  
25 specific point of the JRPCM whether it conducts a

1 coordinated system plan which further on it is going to  
2 include part of the study like the TMEP.

3           So obviously they explained it well but there's a  
4 decision point.

5           MR. CHRISTIANSEN: At this point we will pause  
6 and take any questions from any parties related to the  
7 questions that have been asked so far. I see we have one  
8 that's not here.

9           MR. MARTINO: Okay so I don't really have any  
10 questions. I have a statement if I may and I want to  
11 preface my statement by saying that we do support the  
12 MISO/PJM filing and we do want the 5 projects to go  
13 forward.

14           But there are really some underlying issues that  
15 have to be addressed and I don't think MISO and PJM have  
16 actually addressed those here.

17           The first issue I want to point out is you know  
18 we take a look at this piece of paper right which we are on  
19 page number 9. I would like to understand you know,  
20 there's a lot of you know, TO -- transmission owners and  
21 transmission owners and facility owners and MISO and PJM.

22           My first question would be where is the  
23 generation community here? Where is the generation  
24 community, where are the IPPs? Where can IPP generation  
25 can actually put comments into the process and I know that

1 the response is the stakeholders but I think you know we  
2 should have a bigger say or an equal say, or at least some  
3 say specifically when it comes to potential transmission  
4 upgrades and I am going to get into that in a second.

5 The reason I am going in this direction is  
6 because I think the data requirements of the TMEP for short  
7 -- I actually find them unjust and unreasonable. And the  
8 reason for that is because you know we are generators. We  
9 don't know what the transmission system looks like.

10 You know I think everyone is familiar at this  
11 table and we want to ask MISO for information on the  
12 transmission line we have to you know basically sign our  
13 life away on this MPAs and CII's which is fine but the  
14 point I am trying to make is that we don't know the  
15 transmission system as you guys know it.

16 So to ask for very specific details and solutions  
17 on the transmission system from the generation community I  
18 think is unjust and unfair. I think we should have another  
19 option which is can we identify binding constraints and we  
20 identify issues.

21 For example we have a list of 5, 6, 7, or 10  
22 lines that are binding constraints and those lines are  
23 creating so much congestion so instead of proposing fixed  
24 systems to those particular lines because again we don't  
25 know the information that the TO's know or MISO knows.



1           You know can MISO and PJM under the TMEP consider  
2 you know binding constraints you know rather than  
3 transmission solutions. And also you know the solicitation  
4 process is also not clear, it's not very clear to us.

5           And in fact I can give you some very specific  
6 examples. You know we have proposed under this last IPSAC  
7 meeting, and I don't know the day but it was fairly reached  
8 and we proposed exactly that, you know binding constraint.  
9 These are the binding constraints, this is what we see the  
10 issues are and then the response that we receive from MISO  
11 and PJM are based on qualified.

12           So there seems to be a lack of, you know,  
13 understanding what a solicitation process is. There seems  
14 to be a lack of understanding what you know a stakeholder  
15 involvement really is and a lack of transparency of why  
16 they don't quality you know instead of you know, we tried  
17 to be very active and we tried to put solutions into the  
18 market.

19           And we are willing to define binding constraints,  
20 we actually run our economic models and we identified a  
21 number of different issues. And for MISO and PJM to come  
22 back and say you know these don't quality and we don't  
23 really have an explanation, I think that's really a lack of  
24 transparency and maybe there's not so much a lack of  
25 transparency or a lack of misunderstanding of the

1 solicitation but maybe the solicitation process itself  
2 needs to be reviewed as well.

3           That's a suggestion that you know, we would like  
4 to make we think the solicitation process needs to be  
5 reviewed.

6           Another point I want to make is that you know we  
7 -- I think we have heard from either Paul or Chuck that you  
8 guys identified 50 elements. So the question I have really  
9 for -- I mean for the panel, for all of the stakeholders I  
10 mean is there really a rational explanation?

11           How can we identify 50 elements, 50 binding  
12 constraints, 50 elements that create congestion and how is  
13 it possible that we have only approved 5? I mean what  
14 happened to the 45? Are we saying that we are okay just  
15 living with congestion?

16           Are we saying that TMEP isn't robust enough? Do  
17 we have to revisit some of the, you know, criteria? But  
18 again we are supportive of this filing but I am just you  
19 know, extending underlying issues. Take a look at it from  
20 the big picture.

21           Do we have an explanation how we could go from 50  
22 to 5? Or let's do it easier because I mean that's a big  
23 step. Let's do it easier. How can we go from 13 to 5?  
24 What happened to the other 8?

25           MR. CHRISTIANSEN: Sorry to interrupt you, I

1 think we did have some questions on that and since we have  
2 other questions pending right now we will move on to those.

3 MR. MCGLYNN: Yes I think -- this is Paul  
4 McGlynn, we could certainly review the basis for why  
5 certain projects were not pursued at TMEP projects. You  
6 know we have language that we incorporated into the JOA  
7 that talks about you know other factors that we would  
8 consider you know, if congestion that we were seeing on the  
9 system is expected to be relieved by some future RTEP or  
10 MTEP project, obviously we would want to put it -- you know  
11 spend the money to put an upgrade in that's going to be  
12 resolved by something else, some other upgrade that we have  
13 planned in the future.

14 There was some other extenuating circumstances  
15 that were driving congestion such as an outage, an  
16 unprecedented one time outage type of a thing where we  
17 wouldn't want to -- you know, perhaps it wouldn't make  
18 sense to put a re-enforcement in to address an issue like  
19 that.

20 So there's any number of reasons why we wouldn't  
21 pursue. Another example could be if there were -- if the  
22 limiting elements looks like you know the line was not  
23 limited or the facility was not limited by something simple  
24 or easily resolvable and it's not likely to satisfy you  
25 know the 20 million dollar criteria that we have.

1           So there's any number of reasons why we would not  
2 pursue a TMEP project and again we reviewed those through  
3 with stakeholders at the IPSAC meetings.

4           MR. LIEBOLD: I can add though that you know we  
5 identified the list of 50 and posted it in March. By the  
6 April meeting we posted the list of 50 indicating at least  
7 20 of them had dropped off because of identified upgrades  
8 that were already targeted, probably alleviating you know  
9 that chunk so that took a big chunk out.

10           And then all the enumerating factors, outages,  
11 identified upgrades you know that were the causes of the  
12 congestion. You know by the time we reached May so like I  
13 said these things are continuous and ongoing. We kind of  
14 had to look out there -- we dropped from then the 30 down  
15 to 11 to 13 in various IPSAC's that occurred.

16           We probably didn't go through in full detail of,  
17 you know, how we got from the 30 to the 15 but it is easy  
18 answers that we could provide -- its outages and other  
19 identified upgrades that were the reasons.

20           All of those then could end up popping up in the  
21 longer term process. But I think another part of the  
22 response to your questions Omar is, you know, this process  
23 is specifically limited to market flow gates. Why market  
24 to market flow gates -- because those are by definition in  
25 regional issues.

1           We are aware of other binding issues and it looks  
2 like some stakeholders may be interested in presenting  
3 other issues that may not be market to market issues. We  
4 are sensitive to those as well but they are much more  
5 difficult because it may be in the area of the seam but it  
6 may be primarily a regional issue.

7           So if it is not market to market flow okay we  
8 don't know by definition that it is an inter-regional  
9 issue. Especially in fact if it was on the seam and it had  
10 control generation by both sides and it was a congestion  
11 issue in all probability it would already be a market.  
12 There are hundreds of market to market flow gates -- only a  
13 subset of them actually bind.

14           So the answer to how about proposals related to  
15 other binding constraints on the seam. I think the proper  
16 forum for those is first in the regional processes to, you  
17 know, to present them as issues in the regional process and  
18 we can work through there.

19           MR. MOSER: The last thing just to be clear too  
20 on the IPSAC's stakeholder process is open to all  
21 stakeholders and that includes all aspects of the process.  
22 So input on how we do the studies, input on issues that are  
23 identified, input on solutions, that is open to anyone and  
24 everyone who wants to participate in that process.

25           Some of the stuff you know is really not in our

1 control. The CEII requirements and certain information is  
2 considered confidential where you have to go through those  
3 steps. They exist for everybody and we have to deal with  
4 them. So there are times and situations where, you know,  
5 some information is not available to every party unless  
6 they go through those steps to get access to that data but  
7 certainly any resulting projects come back in the public  
8 forum, the details of those projects there's additional  
9 opportunity to raise concerns and questions around those  
10 projects.

11 So the point is that the process is open to  
12 everybody. There are steps that have some direct  
13 interaction with the transmission owners. That doesn't  
14 mean that other stakeholder groups are excluded in the  
15 process.

16 MR. THOMS: Specifically addressing the 8  
17 projects that you brought up Omar in the October IPSAC  
18 there are slides specific to those 8 projects and the list  
19 of specific criteria of why we didn't pursue those. And  
20 they were either the costs exceed the benefits, there's  
21 already a planned outage or it would simply move congestion  
22 to other areas so we just did several of the criteria and  
23 spoke to that earlier.

24 MR. CHRISTIANSEN: I think we are --

25 MR. MARTINO: Yes, very briefly one minute. I

1 think what I just heard from PJM is that there is a  
2 transparency issue I mean from Chuck you basically said  
3 that you could be more open to going from 50 to 5 and --

4 MR. LIEBOLD: Between 30 and 13.

5 MR. MARTINO: Yes but it seems like we don't have  
6 the details.

7 MR. LIEBOLD: Yes, we could provide.

8 MR. MARTINO: Yes, so that could be very helpful.  
9 So basically I am highlighting that there is a transparency  
10 issue. If you could provide the details I think that would  
11 be a very good step forward in the right direction.  
12 Unfortunately we don't have that today so that's good that  
13 would be a first good step.

14 And I think you know, responding to Jesse you  
15 know, I understand stakeholders are participating and you  
16 did take into but the real question is what do you do with  
17 that input? I mean do you really take it? How do you  
18 consider it? You know again if a generator -- if I submit,  
19 you know, binding constraint and I say to MISO and PJM  
20 these are real issues for us, these are really financial,  
21 calling the financial projects.

22 And you come back to us and say these don't  
23 qualify you know that's basically hard to take when you  
24 know the philosophy itself would be more transparent and  
25 maybe we could have more, you know, time for response.

1           MR. CHRISTIANSEN: I think we can move on, thank  
2 you. I see there are a handful of other questions up. I  
3 will take them as I saw them.

4           MS. GREEN: Hi thanks, this is Valerie Green on  
5 behalf of the City Public Service Commission. I'll try to  
6 be quick. This does actually sort of follow on to the  
7 questions I heard about the solicitation process and Omar's  
8 comments about -- from the generator's perspective.

9           As a public -- a State Public Service Commission,  
10 you know, the Mississippi Commission is concerned with what  
11 the rate-payers of its jurisdictional entities will end up  
12 paying and it participates in the stakeholder processes but  
13 it does seem through this TMEP process that although it is  
14 open and you will solicit, you know, projects and feedback  
15 from anybody, there's sort of a presumption that the  
16 projects that meet the criteria and get considered  
17 seriously are probably going to come from the incumbent  
18 transmission developers, particularly those along the  
19 seams.

20           So I don't want to talk about Order 1000 too much  
21 because I know both RTOs went through long arduous  
22 processes to make all their compliance filings but you know  
23 I just have to raise again -- are we creating perhaps  
24 inadvertently a new federal right of first refusal for  
25 projects that are going to end up regionally allocated



1 within the RTOs and are these the kinds of projects that  
2 the Commission intended to have a competitive bidding  
3 requirement for?

4 MR. CHRISTIANSEN: Response?

5 MR. MCGLYNN: I would just point to we have gone  
6 with the TMEP process twice now with the Quick Hit study  
7 and the most recent projects that we had out there. I  
8 think we have identified all of those have been upgrades to  
9 existing facilities and as such as quite frankly, reserved  
10 for the access owner.

11 MS. GREEN: Right, sorry you said the process --  
12 is it limited to upgrades if a new line --

13 MR. MCGLYNN: As a practical matter given the,  
14 you know, given the way we structured the TMEP projects in  
15 all likelihood they are going to continue to be upgrades to  
16 existing facilities. That's not to say or preclude that  
17 you know, a green field project could not be done.

18 We didn't write language into the JOA that would  
19 prevent that from happening but it is just not likely in my  
20 opinion from planning for a few years now.

21 MS. GREEN: So would you say if a new green co.  
22 Project was submitted and met the TMEP criteria would that  
23 have to be competitively bid?

24 MR. MCGLYNN: Would it have to be competitively  
25 bid?

1 MS. GREEN: Yes. If a new line was proposed and  
2 that project was presumably low cost enough and met the  
3 other TMEP criteria who would get the opportunity to build  
4 that project?

5 MR. MCGLYNN: I think we would go back and we  
6 would follow the -- you know a project like that likely  
7 need to be proposed in the regional process that we have  
8 for evaluating inter-regional projects and it would be --  
9 it would follow the rules under each of those regional,  
10 different regional processes which are different in PJM and  
11 MISO.

12 MR. MOSER: What I would say too is that each RTO  
13 has their own process and requirements for the competitive  
14 solicitation so you know, in your scenario you would have  
15 to look at what a project was, whether or not it would fit  
16 into one of those categories.

17 You know there's a long process for what goes  
18 into the MISO competitive transmission administrative  
19 process. I don't know off-hand what the name of the PJM  
20 process is but you would have to look and see if it fits  
21 into that process and then make a determination.

22 I would say you know from a planning perspective  
23 to kind of double back to an earlier comment. Our goal is  
24 to find the best solution. We don't care where it comes  
25 from. It can come from an incumbent, it can come from an

1 IPP, it can come from any number of stakeholders.

2 Our goal is to figure out what the best answer is  
3 and then put that into the plan so we are not coming into  
4 it limiting ourselves on which ideas are considered. Our  
5 goal is to find the best.

6 MS. GREEN: Sure and our concern is that the  
7 project is built at the least cost.

8 MR. MOSER: Sure.

9 MS. MURPHY: We want these projects to be high  
10 value projects. It means that they need to be cheap and  
11 they need to be able to go in quick and they need to show,  
12 you know, relief that's real. I don't think we are  
13 unaligned on that at all, we want them to be low cost too.

14 MR. THOMS: We are getting outside of the JOA but  
15 currently the MISO tariff would define competitive  
16 transmission projects as market efficiency projects so if  
17 this were to be competitively bid we would have to change  
18 the definitions in our regional tariff from a practical  
19 standpoint, the competitive transmission and administrative  
20 process is a year-long process. With that additional time  
21 for that facility to go into service is something that is a  
22 valuable standpoint.

23 MR. CHRISTIANSEN: Alright thank you.

24 MR. NAUMAN: Steve Nauman from Exelon. I would  
25 like to make three points. First something Chuck Liebold

1 said about flexibility in this process. We actually agree  
2 because if you start -- every time we have started seeing  
3 to have steps done in Syriata it slows it down and slowing  
4 down here is death for the projects.

5 As Sharon said we have projects identified much  
6 earlier. In fact if you go back as the IPSAC folks said we  
7 were sitting in a Commission hearing room last year with  
8 the IPSAC complaint proceeding, we were discussing Quick  
9 Hit projects and those haven't gone anywhere.

10 We have now got 5 projects identified that are  
11 supposed to save tens of millions of dollars and to the  
12 extent you say we have to go back and go step by step by  
13 step you have now added time. You have added time, the  
14 congestion -- it doesn't get interest in the bank.

15 In fact, if you are paying, you paid for that and  
16 you will continue to pay for that. So I would urge to give  
17 the RTOs the flexibility they need here because it is going  
18 to go to my second point -- because this is a very targeted  
19 -- I use the word targeted not as a pun but it is a  
20 targeted process and a targeted small subset of what should  
21 be done to try to relieve congestion quickly for projects  
22 that wouldn't necessarily make it through the full process.

23 That goes to my second point. All of these other  
24 points are you should look at this type of congestion and  
25 this type of congestion, do this and do that -- that's all

1 fine. That's not what the proposal is. To the extent you  
2 start mucking with the proposal and make it more and more  
3 complicated, it is going to run longer and longer and  
4 longer and longer.

5           So now in fact you are in 2017 you have analysis  
6 based on congestion 2013 and 2014. I don't even know if  
7 someone is going to say well you have to go back and redo  
8 all of that because it is all stale data and now we are --  
9 you know again we have had all of this congestion going on.

10           And we just think this needs to be evaluated  
11 based on what is filed. That doesn't mean that going  
12 further in the future is not just and reasonable, but it is  
13 not unjust and unreasonable to have a limited proposal that  
14 deal with a specific issue.

15           And again as Sharon said our generators and I  
16 should have taken a step back. My general comments here on  
17 behalf of MISO and PJM, but switching hats for a second.  
18 Our generators have been hurt and they are continuing to be  
19 hurt and they will continue to be hurt until some of these  
20 little congestion issues are dealt with.

21           And to just repeat to something I said in the  
22 Technical Conference in a commented zone we just dealt with  
23 some of this stuff ourselves. The supplemental project  
24 will eliminate congestion because we couldn't wait.

25           The third point is a practical point and I am not

1 questioning that in theory you could have a green field  
2 project if it could be under 20 million dollars. If it  
3 could be completed and that means sited with all the  
4 permits and all that other stuff within that period of  
5 time.

6 But to do that evaluation I think needs as a  
7 practical matter to understand what the evaluation means.  
8 If you are upgrading a wave trap or a car transformer,  
9 that's not changing the topology.

10 You don't have to do much more than look at the  
11 congestion. If you are putting in a new line you are  
12 changing the topography. That does a couple of things.  
13 One, it may move the congestion somewhere else so that for  
14 all the money you are investing you are really not going to  
15 get all that much help.

16 Number two -- what we have seen at least in PJM  
17 is someone proposes a new line and what it does is now it  
18 has to be evaluated on a no-reliability harm basis because  
19 you could fix congestion here and it can cause a  
20 reliability problem. That all is going to take time.

21 That's not to say that can't be done but I think  
22 setting expectations needs to be realistic here, thank you.

23 MR. CHRISTIANSEN: Thank you, I think at this  
24 point for time reasons I am going to ask you to save other  
25 questions to the end to see if there is any time, we want

1 to move on to get through this.

2 MR. SACKNOFF: Now we are going to be turning to  
3 the selection criteria questions. The first question I  
4 have for the RTOs is will every project that meets the  
5 proposed TMEP criteria be recommended to the RTO's Boards  
6 of Directors?

7 MR. MCGLYNN: If it satisfies the criteria yes.

8 MR. MOSER: Same thing, yes. If we can show that  
9 it meets the criteria if there is not otherwise projects in  
10 the pipeline that will address the issue, there is some  
11 unique circumstance like an interconnection at the top we  
12 can show the congestion is persistent.

13 As long as all of those things hold true then  
14 those projects would all go forward for approval.

15 MR. CHRISTIANSEN: So to clarify a comment we  
16 heard earlier. The reason that 8 of the 13 that were  
17 identified were not recommended is because they didn't meet  
18 the prior criteria is that right?

19 MR. THOMS: Some of them there was an outage that  
20 was causing the congestion, some of them the costs exceeded  
21 the benefits. I believe one of them it was determined that  
22 the congestion -- sorry there are a variety of reasons so  
23 in short yes.

24 Some of the reasons were the costs exceeded the  
25 benefits, there weren't enough benefits to all of the

1 parties, there was an outage causing the congestion, I  
2 believe for one of them the congestion was simply as Exelon  
3 mentioned moving somewhere else in the system.

4 So those are all evaluation decisions that are  
5 made throughout the process.

6 MR. CHRISTIANSEN: Got it, if there were two  
7 potential TMEPS that could satisfy the criteria it would be  
8 at the same flow gate? I don't know if that's possible but  
9 if it is how would you decide which of the two to move  
10 forward with?

11 MR. MOSER: We would look at which solution  
12 provides the most value. So it may not necessarily be the  
13 cheapest you know, it still has to meet all of those other  
14 criteria but I think we would do a value assessment and see  
15 if there was one solution that would provide more benefits  
16 than another and we would move forward with that.

17 MR. CHRISTIANSEN: Is there anything you would  
18 change now in how you would make that determination?

19 MR. MOSER: I don't believe there is.

20 MR. MCGLYNN: So to Jesse's point there is an  
21 analysis that gets done to look at the expected congestion  
22 that would be relieved by the upgrades and the costs  
23 presumably for the two different upgrades. You know  
24 there's a simple calculation looking at the benefits versus  
25 the cost, you know, it is a straightforward calculation and



1 we try to evaluation which of the two at least using that  
2 comparison which project may be better.

3           You know there potentially are other issues that  
4 we would consider such as the, you know, how quickly one  
5 could be done versus another one but you know we could have  
6 all of those discussions as part of the, as part of the  
7 process and share those thoughts with stakeholders at the  
8 IPSAC as we kind of own it on which project we believe to  
9 be the more effective and efficient project.

10           MR. CHRISTIANSEN: Thank you. The proposal  
11 states that the benefits of the TMEP will be net of any  
12 anticipated increases in congestion at nearby flow gates.  
13 Will the proposal also consider as benefits any reductions  
14 in congestion on your by-flow gates?

15           MR. THOMS: I'd say that looking at Adam and  
16 factoring that all into the calculations, if we were  
17 specifically interested in the long flow.

18           MR. MCGLYNN: We are interested in -- we want to  
19 make sure through our analyses that we are not just you  
20 know, going to relieve one flow gate right and push the  
21 congestion on over to a different, another flow gate.

22           We do analyses on each of the proposed upgrades  
23 to see what their benefits are to ensure that they are you  
24 know, going to resolve the particular flow gate that we  
25 were looking at. I think if they were also going to you

1 know, create issues on other flow gates we would note that  
2 and share that with folks and it would be factored into our  
3 decisions about which projects should move forward.

4 MR. LIEBOLD: One of the biggest reasons for that  
5 is that we are not doing this analysis on a prospective  
6 future model. What we are doing is we are modeling the  
7 historic congestion that occurred so you know, we are not  
8 speculating about what additional congestion benefits could  
9 be.

10 But if in relief we are looking at one specific  
11 side of the flow gate, does it fix that flow gate? And in  
12 that analysis if it shows oh by the way you know, a very  
13 near by-flow gate is getting the additional flow, we would  
14 take that into account and indeed we did this past 2016  
15 analysis did encounter some.

16 MS. TETTER: So if I -- this is Valerie Tetter.  
17 Let me just clarify my understanding. I think what I'm  
18 hearing is that this analysis is really meant to focus on  
19 particular flow gates, you are not looking at whether or  
20 not a particular project, an efficiency project could  
21 reduce congestion at multiple flow gates.

22 The idea of looking at congestion at flow gates  
23 other than the one that the targeted market efficiency  
24 project is meant to address is just to make sure that there  
25 really are benefits and that that congestion isn't just

1 getting pushed off to another flood gate, is that --

2 MR. MCGLYNN: That's correct and this may be  
3 getting too far in the weeds. When we talk about a flow  
4 gate, we are talking about a monitored element for a  
5 specific facility that is overloaded and some contingency  
6 may be coming out of service that may be driving or loading  
7 across a specific element.

8 From those statements we actually had an example  
9 in the most recent round of TMEPS where we had the same  
10 line that was overloaded, it was overloaded for multiple  
11 purposes and you know we worked through the process to  
12 figure out so there would be benefits if you will, to  
13 fixing that, whatever was limiting on that one particular  
14 line. It would address congestion on it from a couple of  
15 different flow gates and you know it is factored into the  
16 analysis.

17 MS. TETTER: I'm sorry I didn't catch that last  
18 part. So you were looking at the idea that a single --  
19 addressing a single limited element could address  
20 congestion on multiple flow gates?

21 MR. MCGLYNN: Multiple flow gates that had a  
22 common limiting element. You know say you could have an  
23 overload of line A to B for the loss supplying C and D and  
24 you would have an overload on line A to B for the loss of  
25 line D to C.

1           And if we were to upgrade line A to B it would  
2 address the congestion that we saw on both of those flow  
3 gates.

4           MS. TETTER: So on the single limiting element  
5 over two contingencies which are considered two separate  
6 flows?

7           MR. MCGLYNN: Correct.

8           MS. TETTER: Got you, thank you.

9           MS. SCOTT: Hi everyone I'm Katherine Scott. I'm  
10 an OMER at FERC and we are going to ask a couple of  
11 questions regarding the congestion hedging issue that has  
12 been raised. And these will start off being projects who  
13 are RTO's.

14           So as noted in the comments here hedges were  
15 initially included in the benefits for TMEPs so we would  
16 just like the RTO's to explain how they came to the  
17 conclusion to not integrate congestion hedges in the cost  
18 analysis?

19           MR. MOSER: So I can start with some comments.  
20 You know that was an issue that to be cumulative, was  
21 mentioned and discussed thoroughly with stakeholders in the  
22 IPSAC. Something that was raised and went through several  
23 rounds of discussion and I know we had at least one survey  
24 of stakeholder's views on that.

25           So it was something that was determined and

1 stakeholders were involved in that decision process. I  
2 would come back to Paul's comments in his opening  
3 statements that our starting point is that market  
4 congestion relief, those are real costs borne by customers  
5 irrespective of potential hedges on particular paths.

6           The last thing that I would add to in our  
7 internal review of the magnitude of the hedges something on  
8 the order of 20% of those flow gates have some financial  
9 value. I think that gets into a question of timing so even  
10 if you have a partial hedge maybe your pay-off is a year  
11 later than it otherwise would be but we feel like these  
12 projects still have value to customers.

13           MR. MCGLYNN: Yeah, I would add that the -- you  
14 know the projects, the way we structured the TMEP's they  
15 are simple low cost projects that have very high benefits  
16 and the benefits accrue quickly. You know if you looked at  
17 the projects that probably have gone through with the last  
18 iteration of the TMEP process anyhow, you know we are  
19 looking at projects that have a 4 year payback right?

20           You know so if you were to do a benefit to cost  
21 calculation, you know, that had very high benefit to cost  
22 calculations that the hedging and factoring in the hedging,  
23 you will -- so if a project satisfies the TMEP criteria you  
24 know if there were some hedging in lieu of it being, you  
25 know, perhaps a worthwhile project in four years, it may be

1 five years before the project would be "beneficial".

2           There are still highly beneficial projects within  
3 the near term and you know they are reviewing just in an  
4 effort to try to streamline the process and keep the  
5 process simple we have elected to not include the hedging,  
6 and that's part of the overall calculation.

7           MS. SCOTT: So what additional analysis would be  
8 needed to include the congestion --

9           MR. SOLOMON: This is Adam Solomon from MISO. So  
10 we would have to work with our STR department and within  
11 that department they know the annual revenue requirements  
12 at the ARR's and the financial transmission right the FTRs  
13 and they calculate those based on paths which are from  
14 source to sync and if those don't align with the flow gates  
15 that we have been talking about -- so they have to do an  
16 analysis where they calculate the amount that each path  
17 would have on each of the flow gates and they would  
18 multiply out the distribution factors of those times the  
19 megawatts that we have on the ARR's and MTR's to determine  
20 the level for each target's market flow gate, how much each  
21 one of those is hedged.

22           They went into a little bit in the IPSAC's about  
23 how we could even value those because the ARR's and MTR's  
24 are different and FTR's can be valued based on the  
25 day-ahead market. ARR's can be valued on options' results

1 and so it gets very complicated and to Jesse's point there  
2 are varying levels of hedging money to market to market  
3 flow gates that we looked at but on that ridge it is around  
4 19-20%.

5 MS. SCOTT: So I understand that some of the  
6 stakeholder discussions and maybe building on it as well,  
7 that program congestion hedges could introduce errors into  
8 the TMEP and vibrations so I would like you all to please  
9 elaborate on that and if possible estimate the magnitude of  
10 any potential errors in terms of estimating those cost  
11 effects.

12 MR. MOSER: Yeah I would kind of come back and  
13 sort of outline there would be a lot of steps. There's not  
14 exact alignment between the paths and the flow gates so you  
15 are making assumptions of the level of hedge at each of  
16 those flow gates.

17 So I think as you add complexity and as you add  
18 steps you also have the potential for error so I can't say,  
19 I can't quantify for you here but I do think that just in  
20 general as you add complexity, as you add steps and I think  
21 most importantly that a lateral alignment between the paths  
22 and the flow gates could lead to having errors.

23 MS. SCOTT: Congestion helping remedies are  
24 included in the benefit calculation for TMEP's. Would it  
25 be necessary or appropriate to consider other benefit

1 measures such as production cost benefit measures in order  
2 to accurately measure the benefits of the TMEP?

3 MR. MOSER: Sure I think I would come back to  
4 what was said a few times which is to try to keep this  
5 simple, looking at in the near term, identifying those low  
6 cost near term solutions, keeping the process simple so  
7 that we can quickly move those projects into service.

8 We have other processes in our overall  
9 inter-regional coordination with PJM that looks at those  
10 longer term projects, looks at those other benefits like  
11 adjusted production cost and things like that, so there is  
12 a place for that. The TMEP is just sort of a different  
13 need.

14 MR. LIEBOLD: Yeah I would like to add to that  
15 you know you as it stands our current process we could not  
16 calculate it into the metric because they would require a  
17 remodeling and it is just that we did not undertake the  
18 facility which is a long, complex build a model exercise  
19 and produce that simulation which would enable the category  
20 to move into the detailed metrics like we do in a  
21 futuristic process.

22 MS. MARSH: And you mentioned the internal  
23 estimates that maintain the 20% growth just to clarify is  
24 that hedged by load?

25 MR. MOSER: Yeah I mean I think that those hedges



1 are available to other players as well I think  
2 predominantly.

3 MS. MARSH: Thanks and do you have a sense of the  
4 congestion hedges owned are concentrated in certain areas  
5 or fairly evenly distributed along the seam?

6 MR. SOLOMON: Based on what we looked at there  
7 were some plug ins that had 100% hedged and there were some  
8 that had zero percent hedge, so this was just an average of  
9 all of them. So we had looked at the 50 that we had  
10 considered in this previous cycle, so those 50 that 19% was  
11 the average.

12 MS. MARSH: And so those ones are closer to 100%,  
13 are those located at any particular area?

14 MR SOLOMON: We did not do that analysis but I  
15 would add to that which I did mention earlier is that we  
16 are looking back at congestion benefits but the ARR's and  
17 NTR's were making assumptions about them going forward and  
18 they are not all guaranteed to have roll-over rights or to  
19 be available in the future.

20 So now they just connect between how we are  
21 trying to walk backwards and then also trying to project  
22 forward.

23 MR. LIEBOLD: So I would add that in visualizing  
24 that question that you are asking the hedges they belong to  
25 the loads and I think to a larger extent we are only

1 talking here about save 1A which are only 50% of the loads,  
2 that's the only ARR's to which the load is entitled right?

3           And so the load if you have as an example where  
4 it would spread all over PJM, all of the load has you know,  
5 some degree of hedges. And then it's the paths --  
6 resources to loads that create the hedges. So the load all  
7 over PJM is vital to those hedges -- we are talking about a  
8 limited subset of the flow gates that happen to occur on  
9 the border between PJM and MISO which are very remote from  
10 much of the load.

11           So that would dilute you know, the ARR's of those  
12 remote located loads for example. So if you think of it  
13 geographically a little visually like that it helps relate  
14 to what's going on.

15           MS. MARSH: Thank you and do you have an estimate  
16 of the extent to which the individual benefit cost  
17 calculations for the proposed TMEPs would change if the  
18 congestion hedges were calculated with that calculation?

19           MR. MOSER: I mean I think I would either come  
20 back to our rough estimate of that 20%, throw that into the  
21 entire industry. So if you included hedges would you  
22 consider that a longer pay-back period? I would you know  
23 again these are value added projects with a short pay-off.

24           If you include the hedges you will see that 20%  
25 in four and a half years.

1 MS. MARSH: Got you. And I have one last  
2 question. I don't know if you have a copy of the joint  
3 PJM/MISO Answer that was filed on March 7th in this  
4 proceeding? If you don't have it I can share this one, I'm  
5 looking at page 5.

6 MS. GREEN: I have a copy if anyone wants to  
7 borrow mine.

8 MS. MARSH: And in the second part, about  
9 two-thirds of the way down there's a sentence pursuant to  
10 -- that says TMEPs are selected based on these total  
11 coordination benefits to the combined markets, not net  
12 benefits to any particular market. And that phrase total  
13 coordination of benefits to the combined markets, we need  
14 to clarify that.

15 MR. LIEBOLD: Right in referencing the relief of  
16 the congestion on a market to market flow gate which is the  
17 total congestion on the flow gate experienced by PJM plus  
18 MISO in the day ahead and balancing and/or ECF markets and  
19 it includes all notes in the system to create the  
20 congestion, generator notes and load notes.

21 MR. CHRISTIANSEN: At this time we are going to  
22 take questions. I want to just give the people who have  
23 had their placards up if they didn't get a chance to speak  
24 first up.

25 MR. KRAMER: Thank you Dennis Kramer with Ameron

1 services on behalf of MISO Transmission. And I guess it is  
2 kind of a general question with PJM and MISO in that our  
3 understanding is that one of the watch words of PMPs is  
4 immediacy.

5           And there are kind of three factors around it.  
6 It's occurring today and it has been going on for the last  
7 two years so we know that the data is looking exactly at  
8 the last two years but there's an immediacy in that it  
9 needs to be in service during the third summer period and  
10 that the immediacy is an asset of the pay-back within four  
11 years.

12           So I guess number one is we want to confirm that  
13 but I guess one of the questions we have is if you start  
14 adding additional process steps, if you start adding  
15 additional -- trying to find additional metrics or trying  
16 to complicate this process that we write out here, isn't  
17 that going to actually work against the immediacy that's  
18 actually driving the plan?

19           MR. MCGLYNN: This is Paul McGlynn. I think it  
20 would, certainly the more time we spend evaluating, the  
21 more analyses that we do you know is certainly going to  
22 prolong the decision and make it harder to get these  
23 projects done within the time frame that we would like to  
24 get them done so that we can begin to realize the benefits  
25 of the lower congestion.

1           MR. MOSER: I would say that in the meantime you  
2 are experiencing real congestion on those flow gates that  
3 adds a cost to your customers, you push out your timeline  
4 you are either limiting the overall value of the project  
5 because you are having fewer years of that benefit or if it  
6 pushes out too far you can completely miss it and then you  
7 have just paid for more congestion that you didn't have to.

8           MR. KRAMER: If I could just ask just one  
9 follow-up question. Isn't there also an issue around for  
10 lack of a better term "stable dust" -- in other words you  
11 have been looking at this data the last two years and if  
12 you push out the in service dates four, or five or six  
13 years, isn't there a risk of lack of matching between what  
14 you expect in four or five years when it is in service  
15 versus the data you have to justify it?

16           So isn't that one of the drivers for the CEU's?

17           MR. MCGLYNN: I think what you are saying is  
18 possible. You know I think that the timeline that we  
19 proposed is realistic and to Jesse's point you know it gets  
20 the upgrade in service and allows us to realize the  
21 benefits of having it there and not having the congestion  
22 and the need for the coordination around the specific  
23 flowgate.

24           MR. KRAMER: Thank you.

25           MR. CHRISTIANSEN: Mr. Holtz?

1           MR. HOLTZ: Matt Holtz from IPSCO. Part of my  
2 functions as Director of Transmission and Planning and some  
3 operations planning functions and also even history and  
4 operations planning so in the control room observing the  
5 close -- how systems congest at certain points, the  
6 persistent points don't go away. That's why there are  
7 market flow gates.

8           There's a test to define them. A lot of them  
9 have standing operating guides so if they are persistent  
10 and it hits sometimes on a daily basis so they are not --  
11 and I know these are the upgrades that they are focusing in  
12 on, targeted market efficiency projects so it is a good  
13 method of identifying projects, potential projects.

14           It's a gap that MISO and PJM identified earlier  
15 that you know, traditional market efficiency planning  
16 process can take out these persistent operating issues and  
17 they were looking at what options were available to  
18 actually first focus on those flow gates but also then how  
19 do we get some low cost upgrades to really open up the  
20 system.

21           And you know these aren't necessarily discreet  
22 items, they are not discreet lines. They work together  
23 with higher voltage systems so you know this pinch-point is  
24 choking up the rest of the transmission session and can't  
25 power across more practically so using that existing system

1 you know, from our point of view, we had in our compliance  
2 that longer term original process was missing the promise,  
3 we had a lot of points of views on different aspects but  
4 this was one of them.

5           And we feel that this is addressing that gap.  
6 MISO and PJM have identified and it is really focused on --  
7 it's a help to get the rest of that high voltage system to  
8 take advantage of that in the transmission system to get  
9 power and benefits to markets.

10           And when we talk about the existing planning  
11 cycles, planning cycles aren't discreet either. If there  
12 is an issue that is seen in the system and it is showing up  
13 in the long-term market efficiency process then it will be  
14 sited in one cycle that stakeholders can put in solutions  
15 for including upgrades. If it is not addressed within that  
16 planning cycle it is not like it just goes away.

17           I think it is rolled over year after year and the  
18 way that we see this is getting into that overall planning  
19 process of it is not fixed in that longer term key window  
20 between the RTOs this is a way to fill that gap and address  
21 those low-cost items that for some reasons did not happen  
22 in the longer term process.

23           So overall it is an effective way of identifying  
24 this cheap and quick, it opens up that existing system then  
25 fits into the overall planning process year over year to

1 address those persistent issues.

2 MR. KELLY: Please if I could just on the  
3 congestion hedging a question of -- so in reading some of  
4 the materials there was a statement made about what we  
5 should be treating to manage congestion, not eradicate it,  
6 but I would just ask as the RTOs look at this, is the  
7 policy at the top down planning level, is it a better  
8 approach to be mitigating cost effectively congestion where  
9 you can with longer term solutions?

10 So for instance you could use a hedge  
11 consistently year over year over year to try to mitigate  
12 congestion that we know is going to be there but you are  
13 never really solving it you are just trying to find a  
14 synthetic solution for it.

15 As you look at your role as RTOs, do you feel  
16 like the planning process is maybe one relief valve for  
17 bringing longer term more efficient market solutions?

18 MR. MOSER: Yeah I guess I would say that the  
19 mission is not to relieve all congestion right -- you  
20 wouldn't do that at all. You would get to a point where  
21 the transmission was more expensive than the congestion so  
22 that the planning goal is to find those cost effective  
23 congestion relief projects.

24 You have to make your case that the benefits you  
25 will receive are less than the costs you are going to pay



1 for a particular project. So I definitely see planning as  
2 a mechanism for dealing with the underlying congestion that  
3 drives up costs for consumers.

4 We will continue to look for those cost effective  
5 projects and find ways to -- if processes aren't working we  
6 are going to look for upgraded new ways to address those  
7 issues and TMEPs are an example of that.

8 But I think coming back to your first point no,  
9 it won't relieve all congestion at all costs, we will find  
10 cost effective solutions.

11 MR. MOSER: I guess I would add that you know if  
12 you look at the tools that we have in our toolbox for  
13 addressing issues on the system from a planning perspective  
14 we clearly need to do and are interested in doing and do do  
15 long-term planning to long-term issues.

16 The TMEPs are another tool that we can add in our  
17 tool kit for addressing near term, simple,  
18 easily-resolvable issues. So it is really I think from my  
19 perspective having another tool, another way that we can  
20 address issues along this.

21 MR. CHRISTIANSEN: Okay thank you, Mr. Martino?

22 MR. MARTINO: Okay thank you, I just want to make  
23 a few comments. I'll try to be brief and to the point.  
24 You know we are not really trying or we are not going to  
25 say that we want to make a process improvement that is

1 going to delay everything.

2 I don't think we are saying that at all. I think  
3 what we are saying is that we have to understand that there  
4 are a number of congestive flow gates and it is persistent  
5 and it is not clear you know why the flow gates have not  
6 relieved.

7 And to continue to that I would like to offer  
8 some things that I call a very low hand in foot solutions  
9 and I think that a number of different things that I am  
10 going to say now you know, MISO and PJM are already doing  
11 it so it's just a slight enhancement to an established  
12 process.

13 So for example when we talk about that the costs  
14 does not exceed the benefit, I could understand why those 8  
15 projects went out so they were not approved but the  
16 question that I really have for you is how you look at  
17 alternatives.

18 What other alternatives have you looked at? You  
19 are already evaluating a flow gate and you are already  
20 evaluating a process. Have you looked at no transmission  
21 solutions? Have you looked at dynamic line ratings --  
22 which are only hundreds of thousands of dollars versus  
23 millions of dollars?

24 Have you looked at high performance conductors  
25 which can increase the capacity by two or three times and

1 they can be installed in the same structures at a fraction  
2 of the cost which is usually one-third of the cost of other  
3 proposed solutions.

4           So the low hanging fruit there is that can we  
5 evaluate additional alternatives to see if there is really  
6 a cost benefit you know that can actually work and make  
7 those flow gates go away.

8           Because at the end of the day it is affecting  
9 generation and it is affecting rate payers, so that's the  
10 first point that I want to make. Let's look into  
11 additional alternatives.

12           The second point that I want to make is that you  
13 know you are looking at not making sure that you don't  
14 increase congestion which is good, highly appreciated. But  
15 we are not really capturing all of the benefits. I think  
16 if you really decrease congestion on flow gates, that's a  
17 direct benefit to the grid and what I heard today is that  
18 you are not capturing the decrease of congestion of flow  
19 gates so you are not really capturing all of the benefits.

20           And that's a huge benefit. You know that means  
21 that you know, passed on to rate payers customers can get  
22 lower priced energy right? Because you know instead of  
23 having the flow gate so let's say that you are just  
24 monitoring an increase in the flow gate but if you don't  
25 monitor a decrease I mean there's a huge thing that is

1 missing there and again you could say very low hanging  
2 fruit solution for the next cycle because you are already  
3 looking at flow gates, you are already looking at more  
4 trained devices -- so the question would be can we add that  
5 to the metrics and at a very incremental time so we are not  
6 proposing something that is going to delay the process.

7           So that is an enhancement that we would propose.  
8 The third enhancement would be instead of looking at just  
9 historical congestion which is fine. I think it is very  
10 important to look at present day congestion. At the very  
11 least we would argue that we should look at one or two  
12 years ahead.

13           And I think we can be very accurate in what that  
14 congestion is going to be. We are not asking you to look  
15 at 5 years, we are not asking you to look at 10 years, we  
16 are just asking you to look at present days and if we are  
17 lucky I'll take next year and two years.

18           So the point I am trying to make this is that  
19 this is very near term congestion but I think we can agree  
20 and I hope that we can agree that as you are managing the  
21 grid -- MISO and PJM you can have a fairly good sense of  
22 what that congestion is going to be.

23           It's no surprise we are just looking at the year  
24 ahead or maybe two years, just not 5 or 10 years. So again  
25 I think just enhancing what we have can go a very, very

1 long way just by doing present year and perhaps the next  
2 two years.

3 MR. CHRISTIANSEN: Do you have any responses?

4 MR. MCGLYNN: I would say that we had processes  
5 in the JOA that look at future planning and it incorporates  
6 the near term future years. Again the TMEPs are another  
7 tool in our toolbox if you will that we can use to address  
8 known issues on the grid.

9 MR. MOSER: I think that timing is critical to  
10 the needs, keeping that process simple is important for  
11 allowing all of these started as something we call Quick  
12 Hits, trying to keep them fast, trying to keep it simple.

13 I'm not sure if this is exactly what Omar is  
14 getting to but when we view our benefits we are looking at  
15 sort of past congestion and projecting it into the future  
16 to determine that congestion will persist and this solution  
17 will address it.

18 So it may not be exactly what it's getting at but  
19 I do think there is a forward element to it, it's just  
20 based on historical, factual information rather than model  
21 information.

22 MR. CHRISTIANSEN: I think that giving the time  
23 constraints I think we should move on.

24 MR. GROHEN: I just have a quick comment  
25 follow-up and that is we talk a lot about how the TMEP is

1 going to fill the gap but as we have heard the discussion  
2 from 50 down to 30 and then down to 13 and then down to 5,  
3 projects are falling off. Some will pick up we said like  
4 the first 20 in the longer term as already exists under the  
5 JOA, but are we really confident this is going to fill the  
6 gap every which way?

7           It sounds to me like a lot of stuff is not being  
8 picked up or at least it is not transparent to everybody  
9 that these areas that have congestion on them are actually  
10 going to be picked up somewhere and I'm not sure that's  
11 flushed out or understood in the process, that's just one  
12 thing.

13           MS. GREEN: Thanks, Valerie Green from the  
14 Mississippi Public Service Commission. I won't go through  
15 everything that was included in the MISO self-regulator  
16 comments but just a couple points on the congestion hedging  
17 issue.

18           And you know the first thing is that MISO did  
19 include the long-term FTR's in the process or did  
20 contemplate including those in the analysis originally.  
21 And you know, then there was a stakeholder survey.

22           I just want to make the point that it is not like  
23 the stakeholder survey results were overwhelmingly in favor  
24 of ditching congestion hedging. I mean from the September  
25 30th presentation -- this is from MISO's websites

1 publically available there were 15 survey respondents who  
2 said they didn't support including congestion hedges.

3           There were 12 that said they did. So that's  
4 pretty close. There was pretty significant stakeholder  
5 support for including the congestion hedges. So I guess my  
6 question to you is you know we have heard it would  
7 complicate it, it would be more complex, but if you have  
8 some flow gates where you have 100% hedges and it seems  
9 pretty clear that if a project is built around that flow  
10 gate there are going to be some customers who actually  
11 don't see a benefit -- at least until they change their  
12 hedging strategy.

13           So my question to you is how much longer would it  
14 take to include this? Would it sink this whole process  
15 because I don't think it would? I think this sounds like  
16 something you could do it would just be a little harder for  
17 you to do.

18           MR. MCGLYNN: It would be harder it would  
19 certainly complicate the analysis. As Adam started to talk  
20 about things that we would need to do, the calculations  
21 that would be involved, the inconsistencies between a  
22 particular flow gate that we are trying to resolve with the  
23 TMEP projects and where everybody's different hedges were,  
24 you know that data is within our markets.

25           All the other data that we are talking about the

1 basic congestion is publicly available, it is posted on I  
2 think our market monitor is probably posted in the reports  
3 that they do. If not, even PJM and MISO so it would  
4 significantly complicate the analysis as well and  
5 potentially delay and make less transparent, perhaps harder  
6 to understand by individual entities and at the end of the  
7 day I think the scenario that you are talking about where  
8 some party may be 100% hedged on a particular flow gate is  
9 probably very unlikely.

10 MS. GREEN: Okay well we heard that they found  
11 some flood gates where they are 100% hedged and it is the  
12 averaging out that got you to 19-20%. But just to make  
13 sure that I am understanding this and I think Rachel  
14 pointed to that line in the joint Answer that said that  
15 MISO and PJM are not looking at any benefits to any  
16 particular market participant.

17 This is a benefit to the MISO and PJM joint  
18 operation. So I see this as you are asking the Commission  
19 to find a proposal just and reasonable despite the fact  
20 that it may actually increase costs to some customers  
21 because you see benefits to MISO and PJM as a whole, is  
22 that accurate for anybody?

23 MR. MOSER: I'm going to say that the goal is an  
24 allocation that is commensurate. You are never going to  
25 get a cost allocation or project type to the penny that's



1 due the beneficiaries and I don't think that's the standard  
2 that we are trying to meet.

3           So many planning processes, many project types  
4 you are going to have some differences. You are going to  
5 have uncaptured benefits that are considered in Omar's  
6 comment earlier, the criteria and metrics are very fine and  
7 very specific, but that is not saying there are not  
8 additional benefits to these projects.

9           You relieve congestion at the seam, you are  
10 improving your economics of your dispatch, you are  
11 improving the overall liability of the system because you  
12 can move more power back and forth in times of emergencies.

13           You may be avoiding other liability-based  
14 projects so there are benefits that are not captured. So I  
15 think to forego those projects or make it more complicated  
16 about the hypothetical goal -- well it's true not everyone  
17 would get exactly benefit costs.

18           You know I think as the overall market would be  
19 missing out on that project.

20           MS. GREEN: Thanks Jesse, just one final plan and  
21 I'll be done. Just to be clear you know, the Mississippi  
22 Commission is not saying that this process should go away  
23 entirely. We are generally in favor of finding some low  
24 cost high value transmission solutions.

25           But we just want to make sure that it is you

1 know, the process by which you determine value is accurate  
2 and it just seems without including the congestion hedging  
3 revenue information it is difficult to get there and it is  
4 difficult to judge the impacts on particularly rate payers  
5 in Mississippi because there is no regional cost allocation  
6 component of this proposal.

7           So I think it is hard for us to determine whether  
8 it is just and reasonable as filed and I would imagine it  
9 might be hard for the Commission as well.

10           MR. MOSER: I'm going to add one more thing too  
11 for comparison. If you look at just the MISO retail market  
12 efficiency projects, the forward looking long-term  
13 projects, we do not adjust for ARR's and FDR's there  
14 either.

15           MR. CHRISTIANSEN: Thank you. I see we have two  
16 more questions, we are almost out of time so be brief if  
17 you can with those two questions.

18           MR. HOLTZ: And it will be brief -- just  
19 reiterating now on the points that Omar was bringing up.  
20 He is really pointing out future enhancements to the  
21 process of long term and targeted market efficiency  
22 process.

23           And NIPSCO agrees and we have shared with the  
24 stakeholder community that there is room for improvement in  
25 both processes and you know I would advocate that we keep

1 moving forward and investigating and including some of the  
2 items that Omar brought up.

3           But I certainly don't want to lump it into this,  
4 it's kind of like the backbone and that starting point you  
5 know, we get it in place and then look for enhancements  
6 that in the future better capture benefits.

7           And then on the congestion hedging case you know  
8 the hedging is a right within the regional markets and  
9 supplied under each of the RTO's tariffs and I believe we  
10 even had different hedging profits.

11           So there is really not one to one alignment so  
12 you know as far as the near regional space of what we are  
13 discussing today I am not sure if those regional rights  
14 really should dictate that split between MISO and PJM.

15           It's really a regional cost allocation issue and  
16 how you include those regional rights into that regional  
17 cost allocation methodology and I believe that was  
18 Mississippi's point. But they don't see a regional cost  
19 allocation yet so they can't determine.

20           And at the same point you know those hedging  
21 rights I think Chuck had pointed out earlier that those are  
22 typically geographically located close to the upgrade  
23 because of the way that the ARR's are allocated from load  
24 generation -- so you know you really kind of expect that to  
25 happen closer to the seam of those entities that are

1 impacted by those upgrades.

2 And in general support from those entities inside  
3 of this filing that they believe they are still good  
4 projects and that they should go forward. So that's really  
5 it.

6 MR. MALMAN: In the interest of time, one quick  
7 comment. Steve Malman speaking right now for the PJM TO's.  
8 From what Omar said there is nothing that says you can't  
9 look at replacing the conductor and putting a high  
10 temperature conductor.

11 However that's theory. Again in practice if you  
12 replace the conductor you have to take the line out of  
13 service. If you are taking a line out of service, it is  
14 part of that flow gate that is causing congestion when the  
15 line is in service.

16 So now you need to evaluate within this four year  
17 period all the additional congestion that has been caused  
18 while the line is out of service and you are replacing it.  
19 So it's -- yes it can be considered but again as a  
20 practical matter it shouldn't dictate solutions.

21 Yes, when a line -- when you are replacing a line  
22 it has to be taken out of service. We don't do that hot  
23 right? You would have to take the line out of service to  
24 take it down and put up a new line and that causes  
25 congestion.

1 MR. MARTINO: You can do that hot by the way.

2 MR. MALMAN: Well you --

3 MR. MARTINO: We couldn't do that 50 years ago,  
4 but we can do that and that's okay.

5 MR. MALMAN: Again and I don't want to get into  
6 but if you are asking a transmission owner to do something  
7 to their line they have to do it -- I'm giving you just  
8 practical comments in accordance with their safety  
9 procedures and their union contracts and everything else.

10 And to say that this is a slam dunk to use this  
11 solution or that solution I guarantee you some of those  
12 things made in siting, some of those things for whatever  
13 reason may not work on the tower but yes it is theoretical.

14 All I am saying is once you get into replacement  
15 conductors and I think Paul McGlynn has discussed why when  
16 the conductors limit it becomes a problem. Taking it out  
17 to replace it causes congestion for that time period which  
18 is in the short term and you are causing a lot of problems.

19 So that may well be a bigger project later but as  
20 a practical solution I think you need then to consider all  
21 of the consequences of what you are saying you are doing.

22 Again we have to be practical here if you are  
23 going to do something quickly.

24 MR. CHRISTIANSEN: Thank you very much. That is  
25 the end of our Workshop. Thank you again for taking the

1 time to prepare and plan it, we really appreciate it.

2 (Concluded at 11:51 a.m.)

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CERTIFICATE OF OFFICIAL REPORTER

This is to certify that the attached proceeding before  
the FEDERAL ENERGY REGULATORY COMMISSION in the Matter of:

Name of Proceeding: PJM Interconnection, LLC

Docket No: ER17-718-000, et al.

Place: Washington, DC

Date: Tuesday, June 13, 2017

were held as herein appears, and that this is the original  
transcript thereof for the file of the Federal Energy  
Regulatory Commission, and is a full correct transcription  
of the proceedings.

David Voigtsberger

Official Reporter