

1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25

BEFORE THE
FEDERAL ENERGY REGULATORY COMMISSION

- - - - - x
CALIFORNIA INDEPENDENT SYSTEM : Docket No.
OPERATOR CORPORATION : ER16-1518-000
- - - - - x

REVISED AND CORRECTED

EIM INTERTIE BIDDING TECHNICAL CONFERENCE

Friday, October 28, 2016
Room 3M-2A&B
Federal Energy Regulatory Commission
888 First Street, NE
Washington, DC 20426

The Technical Conference convened met at 10:00 a.m., when
were present:

- CHAIRMAN NORMAN C. BAY
- COMMISSIONER COLETTE HONORABLE

1 FERC STAFF:
2 LEOPOLDO SOTO, OFFICE OF ENERGY MARKET REGULATION
3 BRIAN BAK, OFFICE OF ENERGY POLICY AND INNOVATION
4 MONICA TABA, OFFICE OF ELECTRIC RELIABILITY
5 LINDA KIZUKA, OFFICE OF GENERAL COUNSEL
6 JENNIFER SHIPLEY, OFFICE OF ENERGY MARKET REGULATION
7 STEVEN RODGERS, OFFICE OF ENERGY MARKET REGULATION
8 GINNY COATS, OFFICE OF ENERGY MARKET REGULATION
9 ANGELA AMOS, OFFICE OF ENERGY MARKET REGULATION
10 ALEXANDER OVODENKO, OFFICE OF ENFORCEMENT

11

12

13

14

15

16

17

18

19

20

21

22

23

24

25

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

2 MS. SHIPLEY: My name is Jennifer Shipley. I'm
3 going to try to model good behavior by identifying myself.
4 We do have a transcriber who is going to be working
5 diligently to capture all the things we say, including some
6 of the weird things we say like "duck curve." So if you
7 can, please remember to state your name. That would be
8 great. We are going to open up today with some opening
9 remarks from Steve.

10 MR. RODGERS: I would like to welcome you to
11 today's technical conference on bidding at the external
12 interties of the California ISO energy imbalance market.
13 Staff appreciates the interest in this matter, represented
14 by those who are participating and attending today's
15 conference.

16 By way of background, CAISO's tariff currently
17 provides EIM entities with discretion to determine whether
18 to implement economic bidding at the EIM external
19 interties. We finally met with the Commission on April 28
20 of this year in Docket ER16-1518. CAISO proposed to
21 establish a prerequisite to exercising its discretion by
22 modifying this tariff to clarify that implementing economic
23 bidding at the EIM interties is to be postponed until there
24 have been further development of appropriate market rules.

25 In an order issued on June 30th in that docket,

1 the Commission rejected CAISO's proposed tariff revision
2 related to economic bidding at the EIM external interties.
3 However, the Commission also found in that order that the
4 concerns related to the implementation of intertie bidding
5 that were raised in that proceeding by the Western Power
6 Trading Forum in CAISO merited further discussion regarding
7 impediments and potential solutions to allow economic
8 bidding at the EIM external intertie and ways those
9 impediments might be overcome.

10 Accordingly, the Commission directed Staff to
11 convene a technical conference to gather additional
12 information regarding these impediments and solutions,
13 which is of course why we are gathered here today.

14 Today's conference is organized differently than
15 the typical Commission technical conference, as today's
16 conference will feature a series of roundtable discussions
17 that will hopefully facilitate a greater flow of
18 information and ideas on the subject of our meeting.

19 In addition to hearing about matters of concern
20 or obstacles to bidding at the EIM external interties,
21 Staff would also appreciate hearing proposed solutions to
22 the challenges.

23 Before entering into roundtable discussions,
24 however, Staff has invited several entities to provide
25 introductory statements on the subject of today 's

1 conference.

2 With that, I will turn things over to Jennifer,
3 who will be moderating today's meeting.

4 MS. SHIPLEY: Thank you, Steve.

5 For people entering, there are seats down here.

6 So again, I'm Jennifer Shipley. I'm with the
7 office of energy markets, west. We will be going around
8 the table in a moment to introduce who is at the table for
9 now. But you will notice that there are no microphones at
10 the tables. We expect everybody to speak loud enough so
11 you can be heard by everyone in the room.

12 Please note that those on the phone are hearing
13 through microphones that are turned on in the ceiling.
14 They will hear better than we will and will hear any
15 sidebar conversations. Feel free to swap out who is here
16 with your entity at the table.

17 We've given each entity a number of seats, and
18 as we discussed before, feel free to switch those out.
19 We've tried to ensure a diverse representation at the
20 table. It's impossible to get everybody at the same table.
21 So those of you who are sitting around the table and in the
22 row at the end -- the court reporter is having a hard time
23 hearing me. So I am going to, again, try to model good
24 behavior and speak up.

25 So diverse representation, as best we can achieve

1 it. For those of who are around the edges of the table,
2 please consider yourself a part of the discussion. Just
3 because we couldn't fit you at the table, it's easiest if
4 you have something to say if you can either coordinate with
5 the person sitting at the table for your entity, or feel
6 free to walk to the standing mike at the end of the room
7 from me.

8 The same for those people sitting in the chairs
9 at the end. If you would like to speak and be a part of
10 the table conversation, please come up and speak at the
11 mike.

12 During your discussion, once we have the opening
13 statements and we start the actual open roundtable, please
14 look to me to acknowledge you before you speak. If it
15 helps to set up your name tent to let me know that you're
16 wanting to wait to speak, that will help me out. But
17 please let me acknowledge you so we can sort of keep an
18 order going.

19 So quick logistics, unlike the Commission
20 meeting room, in this room you may have coffee and food.
21 So hopefully that's good news.

22 I will mention the bathrooms are at the end of
23 the hall by the elevator banks, and there's a cafeteria on
24 the second floor for our lunch break. It will be one hour.

25 In terms of fire exit, I have a bad history of

1 fire alarms going off during meetings I run. So just
2 outside these two doors, in the middle, there's a door
3 right there that says exit. That is the exit that you
4 would take.

5 Please turn off your cell phones at this point.
6 I will do the same with mine. Or put them on vibrate so
7 they don't interrupt.

8 The security badges you received when you walked
9 in, those are paper. That does not mean you should throw
10 them away when you walk out the door. If you want to come
11 back in, you will need them.

12 I'm going to turn quickly to Linda Kizuka, from
13 our Office of General Counsel, to quickly comment on ex
14 parte.

15 MS. KIZUKA: Good morning. Before we get
16 underway, I just wanted to briefly talk to you about the
17 Commission's ex parte rules, just so we're keeping them all
18 in mind as the day progresses. The Commission's ex parte
19 rules apply to on-the-record contested proceedings, and
20 that means we cannot discuss any matters that are currently
21 pending before the Commission. Should it appear to Staff
22 that the discussion is starting to get into some type of a
23 contested issue or a pending matter, we will interject.
24 And if during the course of the conference you're concerned
25 that something you want to say or a question that you want

1 to ask might run afoul of these restrictions, please let us
2 know. And if we can't give you an answer immediately, to
3 confirm whether it could be a problem, then we'll table the
4 discussion and we'll get back to it after we've had a
5 chance to look at it further. And thank you for keeping
6 these restrictions in mind as we go forward.

7 I'd also like to state that the views that are
8 expressed by individual Commission Staff members are the
9 views of those speakers, and they do not necessarily
10 reflect the views of the Federal Energy Regulatory
11 Commission, the Chairman, any individual commissioner, or
12 other members of the Staff.

13 Thanks.

14 MS. SHIPLEY: Great. Thank you, Linda.

15 I'd like to acknowledge that Chairman --
16 Commissioner Honorable and Chairman Bay are in the room
17 with us, and I'm going to turn to them, if you would like
18 to make some opening statements as well.

19 CHAIRMAN BAY: Thank you, Jennifer.

20 Good morning, everybody. Thank you for coming
21 to this technical conference.

22 In my view, one of the most exciting
23 developments in the West has been the growth and success of
24 EIM. Just yesterday, CAISO issued the Western EIM Benefits
25 Report. I'm sure everyone in the room has seen this. The

1 benefits are estimated to be over \$114 million since
2 November 2014, with more efficient dispatch, reduced
3 renewable energy curtailment, introduce flexibility
4 reserves needed in all balancing authority areas, really
5 significant benefits, very exciting to see.

6 And in early October, APS and Puget Sound
7 recently successfully integrated into the EIM. So my
8 congratulations both to APS, Puget Sound, EIM and the other
9 current members of EIM.

10 And I note that just last week, the Balancing
11 Authority of Northern California, BANC, and SMUD, announced
12 that they intend to begin examining joining the EIM.

13 So all of this is very exciting. We know that
14 some issues have arisen along the way, including the
15 question of bidding at the interties. We know these are
16 hard questions, and we look forward to hearing your views
17 on what the Commission should be doing about that
18 particular issue.

19 So I look forward to robust conversation and
20 appreciate everyone's participation in this important
21 technical conference as we observe the development and
22 continued growth and success of the EIM.

23 Thank you.

24 Colette?

25 COMMISSIONER HONORABLE: Thank you,

1 Mr. Chairman.

2 Good morning, everyone. Let me first thank you
3 for your presence, and let me acknowledge, for those of you
4 who are here from the West Coast, I know it's very, very,
5 very early, but thank you for being here. Most of all, I
6 want to thank you for the work that you have collectively
7 done thus far to advance markets in the West and for your
8 willingness to work consistently together to collaborate to
9 work cooperatively together. I agree with the Chairman.
10 So much of what is occurring in the West is so exciting.
11 It's so dynamic. I've met with a few of you over the last
12 few years, and I jokingly refer to it as the wild, wild
13 west, because there is so much going on, there is a lot to
14 be excited about.

15 But it also requires our vigilance and our
16 efforts and our focus and further collaboration. And
17 today's technical conference is yet another example of why
18 we need to be together in this room today. I certainly am
19 aware that the EIM is a voluntary market, and I say that
20 for those of you who are hesitant about what you think
21 about the EIM, what you think about the intertie bidding
22 process. We want to be here to support ways in which
23 you're working together, which is -- and these ways are
24 different than what is occurring in other places around the
25 country. But I've learned to embrace the diversity of

1 regions, and aiding you in working toward what works best
2 for you where you are.

3 So I'm delighted to be here. I think that as a
4 high-level matter we should continue to look for ways that
5 eliminate barriers to greater market participation, but
6 also provide greater opportunities for competition,
7 liquidity, and also more efficient use of resources. So I
8 applaud your willingness to come and sit at the table and
9 focus on just that.

10 I do believe that we do need to move forward but
11 cautiously keeping in mind the impacts of this work on the
12 markets, because we do want them to remain robust and
13 competitive.

14 And with that said, I believe that these
15 technical conferences and workshops are a great opportunity
16 for us to collectively roll up our sleeves and focus on the
17 challenging issues with bright minds who can help us
18 resolve them.

19 So I want to thank you again not only for your
20 presence but for your work, and I look forward to hearing
21 what comes of this technical conference.

22 Thank you.

23 MS. SHIPLEY: Thank you, Commissioner and
24 Chairman.

25 So I think we would like to start by going

1 around the table and announcing your name and your company,
2 your name as you would like it to be in the record for the
3 court -- for the transcriber.

4 MS. MC KENNA: Anna McKenna with the California
5 ISO.

6 MR. ROTHLEDER: Mark Rothleder, California ISO.

7 MR. RISTANOVIC: Petar Ristanovic, California
8 ISO.

9 MS. COOPER: Suzanne Cooper, Bonneville Power
10 Administration.

11 MR. JACOBS: Josh Jacobs, Puget Sound Energy.

12 MR. BEKKEDAHL: Larry Bekkedahl, Portland
13 General Electric.

14 MR. THOMPSON: Justin Thompson, Arizona Public
15 Service.

16 MR. SHAHZAD LATEEF: Shahzad Lateef, NV Energy.

17 MS. EDMONDS: Sarah Edmonds, PacifiCorp.

18 MS. PARK: Tess Park, Idaho Power Corp.

19 MR. OVODENKO: Alex Ovodenko, Federal Energy
20 Regulatory Commission.

21 MS. AMOS: Angela Amos, Federal Energy
22 Regulatory Commission.

23 MS. COATS: Ginny Coats, FERC Staff.

24 MS. SHIPLEY: Jennifer Shipley, FERC Staff.

25 MS. KIZUKA: Linda Kizuka, FERC Staff.

1 MR. BAK: Brian Bak, FERC Staff.

2 MR. RODGERS: Steve Rodgers, FERC Staff.

3 MS. TABA: Monica Taba, FERC Staff.

4 MR. DAVIS: Rob Davis, Chelan County PUD.

5 MS. HAMPTON: Therese Hampton, Public Generating
6 Pool.

7 MS. BAKER: Nancy Baker, Public Power Council.

8 MR. MAC DOUGALL: Mike MacDougall, Powerex.

9 MR. KINNEY: Scott Kinney, Avista.

10 MR. EVANS: Mike Evans, Shell Energy North
11 America, representing NIPPC.

12 MS. WOLFE: Ellen Wolfe for the Western Power
13 Trading Forum.

14 MS. LIOTIRIS: Caitlin Liotiris for Western
15 Power Trading Forum.

16 MS. MILLER: Susan Miller with Earthjustice.

17 MR. CROMWELL: Robert Cromwell, Seattle City
18 Light.

19 MS. SHIPLEY: Actually, we will stop there. I
20 think for the conversation at the table, as we progress
21 throughout the day, if you do come to the table, please
22 introduce yourself for the transcriber, and each time we
23 speak, we can introduce ourselves again.

24 So we're going to have opening remarks. I
25 believe we're starting with the California ISO. We're

1 going to give 15 minutes to each of the four who we have
2 given prepared opening remarks time to. After that, we
3 will open the floor and have opening remarks, five minutes
4 each, from other people who would like to give them before
5 we get into open discussion.

6 So who has control of the timer? Okay. Great.

7 So we will hit the timer, and CAISO, you are on.

8 MR. ROTHLEDER: Thank you.

9 I'm Mark Rothleder, vice president of market
10 quality/renewable integration, California ISO.

11 The California ISO would like to thank the
12 Commission and the Staff --

13 MS. SHIPLEY: If you could speak up.

14 MR. ROTHLEDER: All right. I will start back
15 again. I am Mark Rothleder, vice president of market
16 quality/renewable integration at the California ISO.

17 The California ISO would like to thank the
18 Commission and the Staff for creating this opportunity for
19 the California ISO to discuss greater participation in the
20 expansion of the energy imbalance market. The energy
21 imbalance market has functioned for two years now and is
22 working very well in providing benefits to the EIM
23 entities, market participants across the EIM footprint.
24 Indeed for the first time the western interconnection is
25 now benefiting from economic efficiencies of the energy

1 imbalance market, which include efficient economic
2 re-dispatch, transparent prices, enhanced ability to
3 integrate renewable energy resources, and greater
4 coordination across the neighboring areas.

5 The success of the energy imbalance market not
6 only benefits the -- well, the success of the energy
7 imbalance market is evidenced not only by the benefits
8 reported, as discussed earlier, 114 million since the
9 beginning of the energy imbalance market, but the benefits
10 are evidenced by the fact that there's increased interest
11 in entering the energy imbalance market.

12 Recently, we onboarded Arizona Public Service
13 and Puget Sound Energy. And again, last week, there was
14 announcements from the balancing area of Northern
15 California and SMUD of interest in participating in the
16 energy imbalance market. Further, we've got international
17 interest from the operator in Mexico to have the Baja,
18 Northern California, balancing area participate in the
19 energy imbalance market.

20 EIM is a very innovative market design and
21 strikes a careful balance among various competing interests
22 that provide benefits to the energy imbalance entrants,
23 market participants at a just-and-reasonable cost. We must
24 be careful not to impose requirements that degrade the
25 fundamental design elements of the energy imbalance market

1 that could ultimately unravel the benefits the western
2 markets are experiencing. At these early stages of the
3 energy imbalance market, there is no reason why the benefit
4 ratepayers are enjoying, or expect to enjoy, with new
5 entry, should be undermined by the imposition of changes
6 that pose challenges and do not provide apparent benefits.

7 It is important not to alter the basic design
8 principles that could impose high risk for the viability of
9 the future of the EIM. The request made by certain
10 stakeholders in the docket poses such a risk. There is a
11 misperception that there is an easy plug-and-play format of
12 intertie bidding that can work, bidding that the EIM can
13 simply adopt. That is not the case. Indeed, the ISO has
14 commenced stakeholder discussions to consider implementing
15 economic bidding at all the EIM interties, and the
16 stakeholders quickly determined that there is no such
17 ability and identified several fundamental issues to be
18 considered.

19 That is because the EIM design addresses a set
20 of necessary but complicated and interrelated issues, such
21 as resource sufficiency, transmission utilization and
22 compensation, resource flexibility, market power
23 mitigation, greenhouse gas accounting, feasibility of flows
24 across the network, feasibility of the resource dispatches
25 and performance monitoring, pricing, settlements, and more

1 recently recognition that there is also additional
2 available capacity within the EIM area that needs to be
3 recognized within the construct of the EIM. One cannot
4 simply superimpose additional market design elements
5 without considering carefully how these complicated and
6 interrelated design elements are affected.

7 That said, the ISO continues to be very open in
8 wanting to enhance and improve the EIM design so that the
9 participation model can maximize the benefits and reduce
10 barriers for EIM new entrants and new participation.

11 The growth of the EIM over the past two years
12 has shown that the most effective way to increase
13 participation and liquidity in the EIM is to expand
14 participation in the EIM through balancing authority entry.

15 Indeed, we were here about a year and a half ago
16 talking about some of the early transitional issues, and we
17 identified then that there needs to be better recognition
18 and better communication data about what's happening in the
19 balancing area. We introduced available balancing
20 capability.

21 But since then, we have added new EIM entities,
22 and adding those new EIM entities has increased transfer
23 capability between areas. And that, probably the number
24 one reason, is why we've seen decreased infeasibilities and
25 increased liquidity between the EIM areas.

1 Therefore, improvements to the EIM that make it
2 more cost-effective for new entities to join and operate
3 should be considered through the ISO stakeholder process.

4 And in particular, the ISO supports enhancements
5 that do not contradict or frustrate the existing EIM design
6 principles. The ISO and stakeholders have invested
7 significant effort to build and offer EIM as a flexible,
8 cost-effective market platform that enhances competition,
9 enhances accuracy and feasibility of market solutions. Any
10 expansion considerations of other participation models need
11 to be carefully considered so that they do not undermine
12 the operational improvements and efficiencies that have
13 accrued and that we've gained under the EIM operation.

14 EIM balancing authorities still operate under
15 predominantly a bilateral paradigm, and the bilateral
16 paradigm has to be compatible and has to coexist with any
17 energy imbalance market operation. The success of the
18 energy imbalance market is largely due to some simple but
19 important design characteristics that must be -- must not
20 be overlooked.

21 First, the EIM is designed around the concept of
22 a balancing authority area, enabling economic transfers to
23 other balancing areas that have enabled energy imbalance
24 markets that are supported by resource-specific dispatches,
25 that are feasible relative to the flows and the network

1 constraints of the transmission system, and are feasible
2 from the perspective of the resources' capability that are
3 dispatched on -- based on their physical characteristics.

4 Two, the balancing authority area participation
5 is voluntary, and they continue to operate independently as
6 balancing authority areas. They are balancing authority
7 areas. They're also transmission providers. They are not
8 participating transmission owners, as other -- as they are
9 in the California ISO balancing area. The balancing areas
10 contribute load, resources and transmission to the
11 imbalance market.

12 Four, the EIM is comparable, compatible, and
13 complimentary to bilateral markets in the West.

14 Five, the market operator in the balancing
15 authority area has full visibility on how schedules and
16 dispatches affect the power flows and how they interact
17 from a resource-specific basis.

18 And lastly, the balancing authority has
19 discretion how market prices are used to ultimately settle
20 imbalancing within the balancing authority area.

21 Generic intertie bidding as requested by
22 Intervenors is not consistent with these fundamental
23 principles of the EIM. After the two years of successful
24 operation, there is also no evidence that the EIM has
25 imposed hardship on bilateral markets in the west. That

1 said, Intervenors have raised hypothetical concerns, and
2 the ISO agrees that the EIM should not impose undue
3 hardships on bilateral markets.

4 We cannot solve a problem unless the problem
5 exists. Therefore, we need to seek to understand and
6 understand if -- and what those issues are, and then seek
7 to identify solutions that address specific problems, if
8 they exist.

9 Moreover, we cannot waste the ISO, stakeholder
10 time and resources that are not wanted by other market
11 participants as a whole. And the cost of missing the
12 opportunity to develop other needed enhancements across the
13 market that provide more benefits at a more costly -- at a
14 more costly and -- reasonable cost.

15 The ISO, like all independent not-for-profit
16 market operators, must carefully manage its resources and
17 where it vests its efforts to ensure it maximizes benefits
18 from the market as a whole and does not impose undue
19 hardships on any small number of market participants and
20 does so while minimizing its costs.

21 To do so, the ISO has developed a robust
22 initiative prioritization process to carefully consider
23 these factors. It is imperative that the ISO and its
24 stakeholders have the ability to define the issues,
25 prioritize its efforts, and chart a course of enhancements

1 through this process.

2 Through the stakeholder process, ISO can best
3 consider cost benefits of the EIM enhancements, and
4 mitigate all obstacles and remove barriers for EIM
5 participation. In an objective way and in a way that does
6 not create unintended adverse impacts on EIM or other
7 non-EIM operations, including bilateral energy markets.
8 Intertie bidding and greater participation in the EIM are
9 currently under consideration in the stakeholder road map
10 process and will be considered fairly among many other
11 potential enhancements to the market as a whole and the
12 energy imbalance market specifically.

13 Stakeholders in the ISO can carefully consider
14 possible changes and ensure that they do not undermine the
15 significant investments made and the improvements the EIM
16 has already provided.

17 At this time, there is no reason to believe that
18 the generic intertie bidding on the EIM border is the best
19 solution, and the stakeholder process considering
20 enhancements for greater participation should not be
21 premised with the presumption that generic intertie bidding
22 at the EIM border is the best solution for increasing
23 participation in the EIM.

24 Indeed, intertie bidding, as requested by some
25 Intervenors, is not compatible with the fundamental design

1 of the EIM and poses significant risk to the EIM. It is
2 neither just nor reasonable to impose market enhancements
3 that do not address real issues or undermine the design of
4 a successful market and at best provide some entities an
5 opportunity to trade at interties at minimal cost, while
6 those trades potentially impose significant operational and
7 market inefficiencies on other EIM ratepayers.

8 Thank you very much.

9 MS. SHIPLEY: All right. You came in under
10 time. If you can hand your microphone to -- yes, WPTF.

11 MS. WOLFE: My name is Ellen Wolfe. I'm here
12 for the Western Power Trading Forum, and I appreciate the
13 opportunity to make these comments and especially to be
14 here in this forum today. I think Mark did a good job of
15 laying out some of the issues, and I just thought I would
16 give a little perspective from WPTF's vantage point.

17 We see this issue of participation at the EIM
18 interties as raising a number of fundamental design
19 questions critical to expanding markets, and in particular
20 the extent to which access will be allowed into the EIM
21 markets from the borders. This is important both in terms
22 of charting new territory but also in terms of marrying the
23 existing bilateral markets with the EIM markets. And Mark
24 mentioned that actually it was interesting at a dinner
25 conversation last night to hear that someday maybe we will

1 all be one pool in the West. And then life will be pretty
2 easy actually. It's right now kind of in this kind of
3 middle state where we're getting parts of the markets that
4 are in pools and parts of the markets that are not in pools
5 that is particularly challenging.

6 So addressing these issues also raises several
7 fundamental market design principles. Open access, who
8 gets to participate and who doesn't? Are barriers being
9 enacted or allowed to persist without a strong basis for
10 them remaining in place? Market efficiency, not only is
11 the ISO and EIM market at stake here, we mustn't forget
12 about the bilateral market that operates in and around the
13 EIM markets, as the bilateral market continues to be vital
14 to western market efficiency.

15 Comparability and compatibility, without a
16 design that is consistent or at least compatible across
17 markets, the CAISO traditional market and the EIM, we may
18 create distortions and unintended results. And then cost
19 causation, transmission rate design has been an important
20 consideration to EIM membership and in EIM participation,
21 and if there are concerns about free riders, for example,
22 we need to address those.

23 So opening the EIM boundaries to economic
24 participation supports many critical elements of market
25 design principles that I just mentioned, and the agenda

1 today seems to really dig into these issues.

2 So I wanted to first address the topic of this
3 first morning panel about current bidding and scheduling
4 practices and how they could change with EIM participation.

5 So let's talk first about access. In the
6 current practice within the EIM -- within an EIM area, the
7 EIM entity and a small number of third-party participants
8 can bid into the EIM economically. The participants at the
9 boundary cannot. Instead, they have to be price takers for
10 any within-the-hour adjustments. And at the CAISO
11 traditional boundary, participants can offer into the FMM,
12 or 15-minute market, economically. But at the EIM
13 boundary, participants cannot offer into the market
14 economically on either a 15-minute basis or a five-minute
15 basis.

16 Let's talk about what does happen today at the
17 EIM boundaries. Currently, for fixed schedules into the
18 EIM at the border, there is not resource-specific schedule
19 requirements. Similarly, for fixed schedules at the
20 boundary, there's no market power test, nor any test for
21 withholding energy, for example.

22 So I wanted to raise one other point with
23 respect to how things work today, because in fact, the
24 marketplace, it seems, has lost some functionality with the
25 advent of EIMs. And Mark referred to this. What really is

1 the problem here. And this may illustrate why as an
2 association, WPTF, we're here to advocate for the ability
3 to bid economically, and non-resource-specific energy
4 actually, into the EIMs at their boundaries.

5 For this, it requires not only to understand how
6 things work today but how things used to work before EIMs.
7 In particular, before the EIMs, a party that had system
8 energy could schedule that through a utility service area
9 and change their schedule up to 20 minutes before the hour
10 without a price impact.

11 Now, with EIM, we've lost the ability to do
12 that. Now essentially any schedule changes within the hour
13 are subject to the price risk of the EIM, and the parties
14 scheduling have no way of expressing any willingness to pay
15 or not pay those costs.

16 Perhaps an analogy would be helpful. Consider
17 the service by Amazon called Amazon Prime. Now, for the
18 couple of you in the room that might not know what Amazon
19 Prime is, it's a service offered by Amazon wherein you pay
20 \$99 a year, and for a large suite of Amazon products,
21 Amazon will let you decide two days ahead to make a
22 purchase, or in some cases one day ahead, and they have
23 those products delivered in that last-minute shopper time
24 period for no added charge. In my house, it means we can
25 let the dog food, then, get pretty low, hit the order

1 button, and I know two days later our dog's favorite dog
2 food will arrive at the door. That's pretty nice.

3 In terms of energy delivery, in the WECC,
4 practices have traditionally allowed for these last-minute
5 delivery requests for economy energy that accommodate
6 changes within the hour, up to 20 minutes before the hour,
7 with no fee other than the original point-to-point or
8 network service fee.

9 But when the utility through which your
10 transaction is scheduled becomes an EIM, these
11 within-the-hour deliveries, these schedule changes are no
12 longer free. And that's reasonable, but what's unfortunate
13 is that the customers have no idea what the fee will be for
14 such changes. In my Amazon analogy, it would be as if
15 Amazon started telling me as a customer there will now be a
16 charge for your \$2 delivery, but they cannot tell you
17 whether it will be 99 cents or \$999.

18 For you Amazon Prime users, imagine how useless
19 the two-day delivery would be under that case. Certainly,
20 I would not order my 35-pound bag of dog food that way, if
21 I didn't know what the fee would be. I would go back to
22 having to pick five- to seven-day delivery.

23 So what would really be required to resolve that
24 if Amazon did such a thing would be for the Amazon order
25 screen to have a little box where I could enter how much I

1 would be willing to pay for two-day delivery. It would be
2 pretty straightforward. I could tell Amazon I would rather
3 pay \$7 to have them deliver my dog food than to drive
4 down to the dog food store to get it, or that I would only
5 be willing to pay 50 cents to get my paper clips in two
6 days rather than seven days. This analogy is meant to say
7 that, without the ability to express a willingness to pay
8 for short-term delivery costs as opposed to being a price
9 taker for them, the value of the short-term delivery is
10 rendered essentially useless.

11 So despite Order 764 encouragement of
12 within-the-hour schedule changes, parties at the EIM
13 boundary are exposed to unmanageable EIM price risk to use
14 such a mechanism. And I know I spent some time on this
15 point, but it's important, because it may be WPTF's
16 distinguishing point here today and not otherwise heard
17 necessarily widely. WPTF certainly is not opposed to
18 opening up the EIMs to resource-specific participation. So
19 don't take it to mean that.

20 But excluding those who are buying and selling
21 energy off the western system from participating continues
22 to leave a new and growing gap in the ability to transact
23 imbalanced systems within the hour as a result of EIMs.

24 So let me just talk a little bit about EIM
25 participation under WPTF's model. The way we think it

1 should work is that with intertie participation,
2 participants at the boundaries can also participate
3 economically. Those that can make the within-the-hour
4 adjustments simply offer a bid curve, and the California
5 ISO deploys them economically as a part of the ISO's market
6 runs.

7 The mechanisms for accepting these bid curves
8 are already in place in the ISO systems, and we expect
9 maybe there would be two modes of operations for this,
10 resources that can adjust every five minutes could be
11 deployed every five minutes, most likely through some sort
12 of automated mechanism or dynamic signal. But the balance
13 of offers could be deployed on a 15-minute basis.

14 And again, the Commission has already made a
15 strong stance for the ability for transmission providers
16 who adjust schedules on a 15-minute basis. Most of the
17 transmission providers in the West already have this in
18 place. The CAISO would simply fold those offers into its
19 EIM runs and dispatch them with other EIM resources with
20 little or no burden on the EIM entity.

21 In short, we see no particular impediment in
22 allowing economic offers along with or in place of the
23 fixed schedule flows that are run in the markets today.
24 CAISO would simply include the offers in its market model
25 and dispatch that offer stack. If deployed, external

1 offers would have the same performance obligation as
2 internal offers, and they would be subject to the same
3 imbalance energy risks for failing to perform. The
4 resultant market solution would offer added efficiency of a
5 deeper bid stack. Such offers may provide valuable hedge
6 qualities, both for those scheduling flows, like WPTF
7 members, as well as for the EIM footprints themselves in
8 balancing shortages of energy and excess energy.

9 So let me turn for a couple minutes to some of
10 the perceived impediments that we've heard. There's an
11 indication that resource-specific information is needed.
12 We look forward to hearing more about this. But consider
13 as a bookend to this conversation that transmission
14 providers are already obligated to make 15-minute schedule
15 changes. This means that WPTF members already have the
16 ability to change their schedule, and the receiving or
17 sending balancing authority manages these changes.

18 However, now an entity has to make these changes
19 blind to the price impacts on the EIM. Allowing parties to
20 offer price preferences, and having the utilities select to
21 make the change if it helps their system, and not make the
22 change if it hurts their system, based on the ISO's optimal
23 dispatch, should make the management of these schedule
24 changes much easier, not much worse.

25 So the idea that, especially on a 15-minute

1 basis, the EIM entity's management of system energy flows
2 would be more difficult with economic bids doesn't seem to
3 make sense.

4 The issue of market power has been raised, and I
5 hope we have the chance to talk about that some more today.
6 I think it requires some strong discernment. Certainly
7 adding bids to the stack from third parties would help
8 alleviate the market concentration that exists in many of
9 the EIMs today.

10 To suggest that some level of economic bids at
11 the boundary will itself have market power within the EIM
12 is a little bit difficult to understand. What needs to be
13 parsed out today is whether this is actually concern over
14 market concentration or a concern, rather, over scarcity
15 pricing. The ISO has referred to challenges with the
16 available balancing capacity mechanism. Economic bids at
17 the boundary would help reduce scarcity and could reduce
18 the triggering of the available balancing capacity
19 mechanisms. To preclude the acceptance of economic bids
20 because the ISO doesn't yet know what to do with them if
21 the mechanism is triggered doesn't seem like a good reason
22 to stop. It seems like throwing the baby out with the
23 bathwater.

24 So we look forward to diving particularly into
25 that issue.

1 I will let my colleague, Caitlin, talk about
2 another perceived impediment.

3 MS. LIOTIRIS: Thank you.

4 Caitlin Liotiris, here today on behalf of the
5 Western Power Trading Forum. I did want to talk a little
6 bit about another impediment that we've seen.

7 WPTF recognizes that compensation for the use of
8 EIM entities' transmission capacity may be an impediment to
9 the EIM entities enabling EIM bidding at the external ties.

10 Today, under the EIM transmission reciprocity
11 framework, EIM participating resources are not necessarily
12 required to pay incremental transmission costs for
13 transactions in the EIM. However, in the hour-ahead and
14 greater time frame, there is a requirement to pay for any
15 transmission service that is used.

16 So we recognize the potential that for -- EIM
17 intertie bidding to shift transactions from that hour-ahead
18 market into the EIM, potentially resulting in transmission
19 revenue erosion for the EIM entities. WPTF has long
20 recognized that this is an issue and would welcome the
21 opportunity to explore ways to ensure that the EIM
22 entities' concerns are addressed, while market participants
23 are provided with cost certainty and, to the extent
24 possible, comparability and compatibility between the EIM
25 and the non-EIM market is ensured.

1 Just one more point on process. For many
2 reasons, we expect there will be cause for moving forward
3 with economic access on the EIM interties and doing so in
4 short order, to capture all the benefits that those would
5 bring.

6 The California ISO's recommendation for where we
7 go from here has and still seems to be to have this item
8 ranked to its stakeholder catalog. WPTF has made some
9 comments before on our experience with the stakeholder
10 catalog, and I won't repeat those here. Needless to say,
11 I'm not particularly bullish on that process providing a
12 reasonable outcome in this scenario. I think what's
13 important to point out is that issues of open access are
14 not, in our opinion, appropriately left for a process that
15 depends on a popular vote. Rather, issues of open access
16 seem of the category of right versus wrong, and sometimes
17 right is not the most popular.

18 So it makes WPTF very uncomfortable to leave to
19 a popular vote who gets to participate in these EIM markets
20 and who does not. We hope that there can be a little more
21 discussion about that aspect of the process today and that
22 the Commission will decide whether they believe open access
23 is appropriate for such a voting and ranking process, or
24 rather may warrant some Commission oversight.

25 We look forward to participating in the balance

1 of the day and appreciate the opportunity to make these
2 comments.

3 MS. SHIPLEY: Thank you.

4 The EIM entities, I believe, for the morning
5 identified someone to speak on behalf of all the EIM
6 entities, to the extent that you have common concerns. We
7 will get into more of the specifics between each of the EIM
8 entities as we progress through the day.

9 MS. EDMONDS: Good morning. Sarah Edmonds with
10 PacifiCorp, but this morning, I speak on behalf of the EIM
11 entity group.

12 Thank you for the opportunity to speak with you
13 and share with our perspectives as it pertains to the
14 subject matter of this technical conference.

15 I very much appreciate the opening remarks of
16 Chairman Bay noting all of the balancing authority entry
17 that we have seen since PacifiCorp's implementation with
18 ISO of the energy imbalance market, November 2014, and we
19 are also very excited about the announcements of new public
20 power balancing authority areas that are looking to join
21 the energy imbalance market. And while the growth has been
22 significant in terms of its expansion, it is still a
23 developing market. It is still growing into itself, and
24 with every balancing authority area we add, it changes the
25 configurations. And I was reminded as to the go-live date

1 of Arizona and Puget that every time we do that it is a
2 go-live date for the entire EIM footprint. We all sort of
3 relearn how to run the system when a new entrant comes on.

4 To understand our perspective and our comments
5 today, it's important to understand that the current
6 expansion model for the EIM is based upon balancing
7 authority area entry within a voluntary market that has
8 been purposefully designed to have ease of entry and ease
9 of exit. We're not just market participants. Our primary
10 aims are to ensure customer benefits in the form of energy
11 savings, reduced renewable curtailment, reduced carbon
12 emissions, and most importantly to ensure reliability and
13 integrity of the grids that we operate in tandem with the
14 ISO. So to clarify, the energy imbalance market footprint
15 is not a part of the ISO-controlled grid.

16 Critical to the design of the EIM and the value
17 proposition of the balancing authority area entry model is
18 all of the meeting and modeling technologies that EIM
19 entities take on, invest in, and implement, which the ISO
20 uses to operate the EIM. From these grid enhancements
21 comes improved reliability from the use of common models
22 which are able to manage the complexity between the
23 balancing area authorities through enhanced system
24 visibility.

25 And this is particularly critical in the West,

1 because of the highly interconnected nature of our various
2 systems that we operate there. It's this entry model that
3 each balancing authority area that's in or that's looking
4 to join relied upon and used to make its decision, and in
5 some cases, this decision was or is made in consult with
6 state public utility commissions.

7 From this perspective, we evaluate potential
8 changes to the EIM very carefully to determine potential
9 reliability impacts as well as cost impacts. Our main
10 message today is that we fully support EIM expansion and
11 are extremely encouraged by the steady stream of new entry
12 that we've seen. The EIM entity community, in general, has
13 embraced a very open culture of promoting expansion by
14 having what we call our EIM market implementation lessons
15 learned, which we've had an offer really to any utility
16 that is interested.

17 In addition, it should be clarified that each
18 EIM entity that's in this market allows for external
19 resource participation through either pseudo ties or
20 dynamic schedules. In the case of some open access
21 transmission tariffs in the EIM, both.

22 What concerns us is the development of
23 alternatives to the EIM expansion model which are built,
24 again, on a concept of balancing authority area entry.
25 BAAs that implement the EIM bring each of the three

1 critical elements needed for effective diversity, a sort of
2 three-legged stool, if you will. Of course, that consists
3 of participating resources, but it also consists of the
4 load and the transmission that the balancing authority
5 areas bring, that third element being a particular benefit
6 that we share reciprocally across the footprint.

7 Alternatives or derivatives to full
8 participation that deviate from these fundamentals could
9 threaten the long-term success of the EIM as well as its
10 continued growth, and could pose a risk of cost or risk
11 shifting to EIM entity balancing authority areas in a
12 manner that is not sustainable. This would include the
13 exponential operational impacts associated with an EIM
14 entity balancing authority area that must take
15 responsibility for balancing multiple remote sources of
16 non-balancing-authority-area control generation potentially
17 at multiple intertie points. In some cases for this group,
18 as many as 50 new points use PacifiCorp, as an example.

19 Further, we don't agree the current EIM
20 construct is the cause of some of the issues or concerns
21 related to bilateral market constraints that have been
22 cited as a part of the technical conference. We do not
23 feel that EIM intertie bidding is the effective solution
24 for this concern, and it shouldn't be assumed that intertie
25 bidding is a natural or automatic overlay to the energy

1 imbalance market. We agree with ISO that how to expand the
2 EIM, how to address bilateral market constraints, should be
3 addressed as a part of the ISO stakeholder process, which
4 ensures that the matter is subject to a range of
5 stakeholder comments through a transparent process,
6 including setting a priority of all of the relative
7 initiatives that the ISO is undertaking, not just for the
8 EIM but for its market offerings as a whole.

9 The EIM market and governance structures have
10 been careful and thoughtfully developed. Altering the
11 market design away from the fundamentals that I've talked
12 about in these opening remarks at such an early phase to
13 address intertie bidding may very well destabilize a
14 developing market.

15 Further, such an extension will likely transform
16 EIM entities more into market facilitators or market
17 monitors at those interties when that was neither our
18 desire nor our intent.

19 In sum, we want to be clear that we fully
20 support growth of the EIM, and we've done a lot of work
21 along those ends. But it needs to happen in a manner that
22 recognizes and respects the fundamental value proposition
23 of the energy imbalance market, including that balancing of
24 benefits and risks.

25 Thank you very much.

1 MS. HAMPTON: Hi. My name is Therese Hampton,
2 the executive director for Public Generating Pool. My goal
3 when we started today was to not have to use the
4 microphone, but we're going to go ahead and do it. It
5 seems to be the norm now.

6 So I want to thank FERC for having this
7 conference and the opportunity to discuss these issues. I
8 particularly appreciate the opportunity for PGP to give
9 perspective.

10 I want to start a little bit to talk about PGP.
11 First, we did submit some written comments in advance of
12 the conference. So folks can kind of look to those if they
13 want to better understand some of our issues. I'm going to
14 do a high-level flyover of those. But in that set of
15 material, we provided a map of where we exist, because for
16 a lot of folks, they want to ask the question where are the
17 PGP utilities, and where do they exist both from a service
18 territory standpoint and also from their resource base.

19 PGP is comprised of 10 consumer-owned utilities
20 in Oregon and Washington. Collectively PGP members own and
21 operate more than 6,000 megawatts of generation. 86
22 percent of that generation is hydro. 96 percent of it is
23 renewable. Three of those utilities operate their own
24 balancing authority areas. One of them is a nested
25 balancing authority area or a nested BA inside Bonneville's

1 BA, and the rest are either in Bonneville's BA or one of
2 them is an investor-owned utility BA that is not a member
3 of EIM at this point.

4 PGP utilities were actively involved in the
5 process to develop a Northwest energy imbalance market, and
6 it was through that process that we learned about how an
7 EIM works and the benefits associated with it. And we
8 understand there are benefits with the energy imbalance
9 market. We see the reports, and we appreciate that there
10 are benefits. But we also learned in that process that the
11 benefits accrued differently depending upon what your
12 system looked like, what your portfolio is, and even where
13 your system is within the WECC.

14 The benefits are greater for the utilities that
15 have a diverse resource portfolio that includes thermal in
16 their portfolio, that have variable energy resources, that
17 may have congestion on their system, or that could benefit
18 from the efficient re-dispatch of the system itself.

19 But as I mentioned, PGP utilities are
20 predominantly hydro utilities. They have limited
21 transmission, limited congestion, and even limited
22 independent users of their system. So PGP utilities just
23 won't yield the same level of benefits as other systems.
24 What we do know, though -- and folks have been very
25 helpful, I think, in sharing what it looks like to start up

1 and to be an EIM entity and what the start-up and
2 investment costs are.

3 Those costs can be significant. For those that
4 can capture the full suite of benefits from the EIM, it's
5 easy to take those on. For PGP utilities, when we are
6 looking at a more limited set of benefits, the ability to
7 take on those costs and make the argument to ratepayers is
8 a little more challenging.

9 So the question we ask is, if you're a PGP
10 utility and you've got surplus capacity on your system,
11 you've got surplus flexibility that's dispatchable within
12 hour that you are willing to make available to the market,
13 what are your options right now? They feel very limited.
14 You can either, as a BA, make a decision to fully join and
15 take on all of the costs and the benefits that I've kind of
16 identified we don't fully need, or you have to move your
17 resources into an EIM balancing authority area, which
18 really isn't practical or a feasible option for many of the
19 PGP utilities, because they're using those to serve their
20 load and to serve their balancing authority area needs.

21 So we believe there should be another option.
22 We believe there should be an option where external
23 resources can participate in the energy imbalance market.
24 And over the last year, we've been out trying to have a
25 conversation about that, what does that look like, what can

1 that be, and why is there some kind of resistance to this
2 concept.

3 We started -- early on when we started having
4 this conversation, we were asking specifically about
5 intertie bidding. Intertie bidding exactly as it's done
6 within the ISO markets. It was through conversations,
7 though, that we came to appreciate the operational
8 challenges associated with that, and understand how the EIM
9 is structured on a resource-specific basis, and how -- kind
10 of dealing with intertie bids where you don't have a sense
11 for where the power is coming from would create
12 complications.

13 We are comfortable, we are open to market rules
14 that would ask for information from an external resource in
15 order to participate in the EIM.

16 We would also ask, though, that if we're looking
17 at kind of resource-specific rules for people to
18 participate in EIM, that you consider aggregation of
19 resources. Hydro resources are typically on a river
20 system, in a similar watershed, they have similar resource
21 characteristics and similar flow impacts to the system. We
22 know that they're allowing a certain amount of aggregation
23 in -- for some of the EIM entities today. We would ask for
24 that to be considered for external resources that might
25 participate.

1 We've also heard concerns similar to what Sarah
2 mentioned about the administrative burdens associated --
3 that would be applied to the EIM entities if they had to
4 take on external resource participation. This is an area
5 we would love to have more conversation about. We don't
6 fully appreciate it or understand it. From our early
7 concept of this, we have always assumed that the market
8 operator would develop the market rules and administer
9 external resource participation. This has dual benefit of
10 not putting burden on the EIM entities but also making sure
11 that the rules were consistent for -- across all EIM
12 entities and for external resources that might want to
13 participate. It doesn't seem right that if you're a
14 resource near one EIM entity, you might have to play by
15 different rules than if you're a resource near a different
16 EIM entity. We see that today where there's dynamic
17 scheduling often in one area but maybe not in other areas
18 of the system.

19 We've also heard concern about performance of
20 external resources and the potential impact on reliability.
21 Again, this is an area we would like to have more
22 conversation about. We have assumed that the external
23 resources would be in a different balancing authority area
24 that's not a part of the EIM and that the host balancing
25 authority would be responsible for the performance of that

1 external resource, and we are open to market rules that
2 could demonstrate performance relative to dispatch signals,
3 and also a demonstration that you have sufficient internal
4 resources to meet their own load obligations.

5 Probably the first concern we've heard and we
6 hear the most often is this concept of free riders. I just
7 want to say here, we've never intended, or want, to be free
8 riders. We recognize there would be appropriate
9 administrative costs that we would have to pay, and we
10 definitely need to address the transmission issue. We're
11 open to all kinds of conversations on transmission, and
12 don't want that to be something that gets in the way,
13 because that feels like a solvable issue.

14 Ultimately, our ideal outcome is that there is a
15 stakeholder process that's started, that it's started soon,
16 that it doesn't even need to wait for the whole stakeholder
17 catalog process, because this is a high-priority issue that
18 has a timeliness to it. You can't continue to let the EIM
19 market evolve without letting the external participation
20 model be developed and designed. No matter how big it
21 gets, there's always going to be somebody that's external
22 to the market. So we need to define those rules.

23 We would ask, too, that the stakeholder process
24 have a very explicit objective of defining market rules for
25 external participation with a goal of implementation by

1 some date certain. And we think it's important that it
2 have that very explicit objective so that it doesn't
3 somehow morph into something else or get merged with other
4 ISO or EIM issues.

5 We're really looking forward to the conversation
6 the rest of today and this afternoon. This is a complex
7 issue. We can't solve it here, and we probably even -- in
8 this discussion here today determine whether there is --
9 this is worth the benefit of pursuing external resources.
10 There's a question on the agenda that says what's going to
11 be the liquidity in this market.

12 We can't possibly know that until we develop the
13 market rules. But what we do know is that there are
14 external resources like the resources in the Public
15 Generating Pool that have surplus capacity flexibility that
16 are willing and want to participate. They are dispatchable
17 on a five-minute basis, and we are looking for another
18 option for how to participate.

19 Thank you.

20 MS. SHIPLEY: Thank you. We did allow some time
21 for other entities who are here who might want to make sort
22 of an opening remark. We will give five minutes to each
23 one who would like to speak before we actually get into the
24 roundtable discussion.

25 Is there anyone who would like to do that?

1 MR. EVANS: Thank you. My name's Mike Evans.
2 I'm representing the Northwest Independent Power Producers
3 Coalition. I work for Shell Energy. We manage a number of
4 resources in the California ISO and in the Pacific
5 Northwest. We support the California ISO and the FERC's
6 efforts to increase participation in the EIM and to look at
7 practical ways to potentially increase the ability to bid
8 economically at the interties.

9 We believe that there's a substantial amount of
10 resources available, primarily driven by the need for
11 firming and integrating renewables, primarily in California
12 and primarily driven by solar.

13 There's a similar issue of balancing wind in the
14 Pacific Northwest that would bring value to be able to, in
15 particular, bid in on a 15-minute basis and schedule on a
16 15-minute basis absent the limitations now in the
17 hour-ahead scheduling process, which is substantially
18 limited and really not a 15-minute dispatchable intertie.

19 We see the ISO making great progress with the
20 other balancing authorities in having this ability to
21 dispatch and settle on a 15-minute basis and are very
22 encouraged with that work. In fact, we are working with
23 the ISO on other mechanisms to participate in the market.
24 But we think addressing the 15-minute settlement would be a
25 very substantial improvement to the market.

1 I do believe that increasing participation will
2 reduce the inequities that currently exist between EIM
3 participants and non-EIM participants relative to the
4 export fee. An additional \$12 fee on ISO exports
5 substantially changes the market dynamics.

6 The other issue that we would like to address is
7 that allowing market participants to adjust their bids
8 within the hour will bring, we believe, substantial benefit
9 to grid reliability and to integrating resources. And just
10 an example of that would be intra-hour wind comes up
11 substantially in the Pacific Northwest, and if we were --
12 if NIPPC members were able to reduce a bid to the
13 California ISO, we could have a source for that energy to
14 be delivered.

15 With that, my time is shared by JJ Jamieson, who
16 has some direct experience with integrating some external
17 resources. And so then I would like to share that time
18 with JJ at this point.

19 MR. JAMIESON: Thank you.

20 JJ Jamieson with Perennial Power Holdings,
21 representing NIPPC as well. We have a unique situation in
22 which we co-own a plant with the PacifiCorp company on an
23 undivided 50/50 basis. This plant is structured in a way
24 that doesn't, in my mind, support the argument that you
25 have to be a BA to participate in the EIM and gives you the

1 ability to look at intertie bidding.

2 What we have structured, and I will just give a
3 brief outline, is a plant that is consisting of two units,
4 each of the units are in a separate BA, so there's a
5 PacifiCorp unit in the PacifiCorp BA. There's the
6 Hermiston Generating Company, which Perennial Power owns,
7 in their own BA. We switched those units between each BA.
8 So at one point in time, unit 1 will be in the PacifiCorp
9 BA. The next month, it could be in unit -- unit 2 would be
10 in PacifiCorp BA and vice versa.

11 So we go back and forth. What this has done has
12 given us the ability to structure an infrastructure that
13 addresses all of the data concerns that are necessary to
14 participate in the EIM. We have identical data going to
15 PacifiCorp, CAISO, BPA, RPA, and the Peak Reliability
16 Coordinating Company. This information is further backed
17 up by ICCP links between PacifiCorp and our balancing
18 authority area.

19 So in case there is some issue with the data
20 being transmitted, we can automatically divert the signal
21 from the PacifiCorp BA back to our BA or vice versa.

22 My point in this is the data that is being
23 exchanged and is necessary for the participation in the
24 balancing authority is available. It's easy to set up.
25 It's technically achievable. And I hope in the later

1 sessions to be able to dive a little deeper into this to
2 give a very clear picture of what the situation is.

3 MS. SHIPLEY: Thank you, JJ.

4 Anyone else?

5 Yes?

6 MR. THOMPSON: I'm Justin Thompson with Arizona
7 Public Service Company. I want to thank everybody for the
8 opportunity to speak today. We went live, as Chairman
9 Bay -- thank you. We went live with EIM on October 1st,
10 and it is going very, very smoothly, and we are very
11 excited about EIM participation. We are supportive of EIM
12 market expansion, and we've actually hosted numerous
13 utilities to come to our office and observe our lessons
14 learned and how to get up and running in the EIM market.
15 We believe that further expansion of the market allows
16 entities to improve their efficiency of operation and help
17 support larger amounts of renewable integration without
18 having to resort to curtailment at times.

19 We are starting to see real benefits for our
20 customers already, and we're going to continue to work
21 diligently to ensure that they continue to see those
22 benefits. The way our retail rates are structured, our
23 customers receive all of the benefits of EIM participation.
24 Nothing goes to the shareholders. It's all a benefit on
25 the fuel and purchased power costs.

1 This next topic is a very important item to
2 understand about EIM. It's different than other organized
3 markets in that participating balancing authority areas are
4 responsible to balance our system every minute of the day,
5 independent of, let's say, the Cal ISO. So we have to
6 meet -- we have to have enough generation online every
7 minute to meet our loads, sales, and reserve obligations.
8 We cannot lean on the market.

9 So it's very, very important that we have
10 visibility of where resources are coming from and also the
11 transmission that they're coming in on and how that could
12 be impacted. The EIM is becoming very, very popular and
13 growing rapidly. We are very excited about that. There's
14 a lot of balancing authorities that have recently
15 announced, and I think there's several more that are kind
16 of on the cusp of joining as well.

17 But we have some concerns about allowing
18 intertie bidding, two specific ones. Number one, some of
19 our neighbor utilities that are contemplating joining EIM,
20 instead of joining the full market, they can just intertie
21 bid at our boundaries and participate that way and take up
22 all of our transmission that we're using for EIM
23 participation. So we're very concerned about that. If
24 they do that, we don't get the full kind of reciprocity
25 benefit that Sarah and Mark had mentioned earlier, because

1 those entities will just be bringing energy for short
2 periods of time but not kind of sharing the transmission
3 system and dealing with the overall load and the balancing
4 issue that I had already mentioned.

5 The other thing I'm concerned about, we have a
6 lot of jointly-owned transmission in Arizona where we're
7 sharing transmission lines with others. We spent a
8 significant amount of time and money designing custom
9 software to be able to manage that joint-owned transmission
10 in our system. We think it's very, very important to honor
11 other entities' rights, other transmission rights. So we
12 don't want to infringe on them. So we built custom
13 software to be able to manage it so we aren't infringing on
14 their transmission rights.

15 We currently have 69 intertie points with other
16 utilities on our system. So if we had to accommodate
17 intertie bidding at 69 points, that whole software suite
18 that we built, we probably have to start over and rebuild
19 it and the concern is well, who pays for that.

20 The other thing I wanted to point out was we
21 went through the due diligence process to join EIM, who
22 worked with our state utility commission, and they were
23 very supportive of it, but they were also very nervous
24 about market expansion. We signed up to be a market
25 participant but not a market operator, and if we go with

1 intertie bidding, we're going to turn into a quasi-market
2 operator, which is something that we just did not
3 contemplate when we decided to join.

4 Thank you.

5 MS. SHIPLEY: Anybody else?

6 MS. PARK: So I am Tess Park from Idaho Power,
7 and thanks for the opportunity to talk here about intertie
8 bidding.

9 I think Idaho Power is uniquely situated in the
10 circumstances because we're at the beginning stages of EIM
11 implementation. And similar to the Public Generating Pool,
12 Idaho Power is largely hydro. We also have a large
13 renewable fleet, some thermal resources, and we come to the
14 market, the EIM market with very small incremental benefits
15 over the costs for us joining. We're doing it from the
16 perspective that it enhances the market and that it expands
17 the market footprint, and at some point, it will be a
18 better market for everyone.

19 The problem we're in today is, because there are
20 such slight benefits for us for participation, if this
21 cost/benefit structure shifts as far as a result of EIM
22 intertie bidding, we are likely not to participate, because
23 we are on the cusp. It would be hard for us with our
24 regulators to come forward to join and continue this
25 process if something else is available that could be less

1 costly for us to join.

2 And I don't know that if that's the intent, but
3 the other piece for us is, we strongly believe that this is
4 still a new developing market. It's in its infancy stages.
5 And in order for participants to continue to join as
6 balancing areas, we need the market to stay as it is and
7 with slight changes, not major changes, to allow the
8 efficiencies of the market to be fully utilized before we
9 move forward with something that could significantly change
10 how the market operates for those that would be
11 participating at our intertie borders.

12 Thank you.

13 MS. SHIPLEY: I think Bonneville wanted to
14 speak.

15 MS. COOPER: Thank you.

16 Good morning, and I want to say, we really
17 appreciate --

18 MS. SHIPLEY: Identify yourself.

19 MS. COOPER: I'm sorry. I'm Suzanne Cooper with
20 the Bonneville Power Administration. We really appreciate
21 the opportunity to have this dialogue today about this very
22 important topic.

23 For a little bit of background about BPA and
24 maybe why we are interested in this issue, we are -- we are
25 a power marketing authority under the Department of Energy,

1 and we also market electricity from about 24,000 megawatts
2 of installed capacity. The vast majority of that is hydro
3 power. So similarly situated to a couple of the others who
4 have spoken.

5 We also operate 15,000 circuit miles of
6 transmission in the region, and nearly any generation in
7 the Northwest that is transacting in the EIM will rely in
8 some way on our transmission system.

9 Our balancing authority also hosts about 10,000
10 megawatts of independent power marketer projects, and we
11 are adjacent to a number of other balancing authorities.
12 Some of these BAs we also have loads in that are also EIM
13 entity balancing authorities. So we have public utility
14 customers whose load service we provide, but they reside in
15 other balancing authorities. So then they are subject to
16 the imbalance costs that come out of the market. So our
17 feeling is the more generation that is available to the
18 market, there can be more benefits and reduced costs
19 ultimately to loads.

20 We believe that the participation of external
21 resources in the market would increase benefits for all the
22 market participants. The EIM participants receive a slew
23 of benefits in terms of reduced imbalance costs, lower
24 congestion-driven costs, reduced costs to their retail
25 consumers. Price volatility could be further reduced with

1 more market participants because it would add liquidity, of
2 course, to the market.

3 And then there's the possibility of improved
4 operational reliability. So building on the benefits that
5 the EIM entities are already receiving, adding generators
6 with the -- through -- to the market could further improve
7 operational reliability to the EIM entity BAs, the CAISO
8 BA, as well as neighboring balancing authorities like
9 Bonneville's, because there would be more robust modeling
10 of a broader footprint even.

11 So these expected -- or we expect the broad
12 slate of benefits that -- to continue and that they would
13 drive others to join the market as EIM participants as
14 opposed to being an incentive to not join.

15 We feel strongly that the requirements for
16 broader participation should be just, reasonable, and
17 mitigate potential risks, that they need to be rooted in
18 growth, technical requirements and market requirements, for
19 the effective operation of the market so that it can have
20 reliable dispatch and assured performance of generators
21 that are participating in the market. And we believe there
22 are a number of different ways that that can be done.

23 We have successfully worked with the CAISO and
24 EIM entities to enable EIM operations in our balancing
25 authority in a manner that ensures reliable operation of

1 the grid. And this was done without metering upgrades,
2 changes to scheduling behavior, or demonstrations of
3 resource sufficiency. And we firmly believe that the
4 potential risks to the EIM presented by external
5 participation can be similarly mitigated if we work
6 together to find those solutions to strike that balance.

7 We believe that transmission compensation is a
8 big issue that needs to be worked through. We have a large
9 transmission system as well. As noted, folks use it to
10 operate in the EIM. So we would very much look forward to
11 working on a comparable treatment of transmission in
12 allowing external generators to participate in the market.

13 We also believe that the appropriate market
14 design would establish desired outcomes and not necessarily
15 dictate specifically how those are met, because there could
16 be differences across generators or across balancing
17 authorities in terms of where their systems are at and how
18 they can help demonstrate performance of generators,
19 et cetera.

20 MS. SHIPLEY: Suzanne, I'm going to ask you to
21 conclude.

22 MS. COOPER: Yes. So as I've said, we've worked
23 very successfully and collaboratively with the CAISO and
24 EIM entities on an objective-based-oriented collaborative
25 problem-solving manner, and believe that that can continue.

1 MS. SHIPLEY: Thank you.

2 Do we have more?

3 MR. BEKKEDAHL: Yes. Good morning. Larry
4 Bekkedahl, Portland General Electric. Thank you for the
5 time to make a few comments here today.

6 So prior to joining Portland General Electric
7 two years ago, I was the senior vice president for BPA and
8 had the opportunity to help in the technical development of
9 this new EIM, PacifiCorp coming to Bonneville at the time
10 and wanted to join with Cal ISO.

11 Throughout that time, many discussions, long
12 hours, and some of the best technical minds in the industry
13 came together and began developing requirements. New
14 operational standards, tools, with a few common goals in
15 mind. Number one, integrating additional variable energy
16 resources; number two, maximizing the transmission system
17 as we know it today and moving ourselves closer to a
18 dynamically operated system while retaining high
19 reliability. New concepts started to emerge. Variable
20 transfer rates. Allowable generation ramp rates. Dynamic
21 transfer capabilities and flow gate controls.

22 BPA, CAISO, and PacifiCorp, with a lot of input
23 from stakeholders, were working to solve the issues and
24 develop new standards of operation within the western
25 interconnection.

1 So fast forward two years, and here I sit with
2 PGE joining the newly developed EIM, having to create a
3 full network model that conforms to common standards,
4 installing generation transmission outage systems,
5 settlement tools, and linking up secure communication
6 systems with metering and sensing equipment to operate in
7 this new EIM, none of which would have happened without the
8 stimulation of the new EIM.

9 We look forward to going live here in October of
10 2017, but there's still a significant amount of work to do.

11 Today, PGE has 18 intertie points, and we own a
12 portion of the California-Oregon Intertie. If intertie
13 bidding is going to develop, we, like Idaho, should stop
14 and think about the development and do we really want to
15 continue with the spending of the \$30 million that we're
16 doing to enhance and benefit our systems.

17 The basic principles of bringing generation,
18 transmission, load through a BAA at 5-minute intervals is a
19 sound foundation for the EIM. Managing net scheduled
20 interchange without visibility into the source and sink or
21 allowing aggregation of resources outside the BAA and
22 passing it through with no visibility will certainly have
23 impacts on operating.

24 Since the EIM is dispatched by a central market
25 clearing algorithm, intertie bidding would require that the

1 EIM entity, the BA, rely on others outside the BA to remain
2 in balance. This will increase regulating reserves
3 obligations for that BAA. The BA does not manage the
4 transmission leading into the BAA, and if it is cut, the BA
5 would not know what schedule to cut to remain in balance.

6 For the EIM entity BAs would need the visibility
7 to dynamically manage outside resources impacting their BA.
8 When and if the intertie bidding is considered by CAISO
9 through its stakeholder process, a significant effort must
10 be undertaken to develop new standards, much like the
11 initial EIM start-up, to maintain the significant efficient
12 and reliable operation.

13 As a market participant, we see much greater
14 value to all of the western interconnection to encourage
15 all BAAs to join the EIM and find new and creative ways for
16 smaller operations to join, while not compromising
17 reliability and the advancements that are being made in the
18 overall system operation.

19 Thank you.

20 MS. SHIPLEY: Thank you.

21 Those around the perimeter as well are welcome
22 to give comments, if you would like. We've got one here
23 from Powerex.

24 I'm sorry. We will start with NV.

25 MR. SPANSEL: Thank you.

1 Walter Spansel from NV Energy. Thank you for
2 the opportunity to speak. I just wanted to mention, we at
3 NV have been in the market participating in EIM since last
4 December. It's gone exceptionally well. The key for us is
5 we have seen is enabling other EIM participants to join,
6 enabling that road map and the growth.

7 As we joined, it opened up the market in the
8 West for PacifiCorp East, and the bottom line is, we have
9 to enable and encourage additional EIM participation, and
10 that's key. When we launched, each of our businesses had
11 to do a business case, and that business case had to be
12 approved at the state level.

13 So our model is set forth under the premises
14 that Sarah talked about, that Justin talked about and Larry
15 talked about. We have to manage the grid from a
16 reliability perspective, which is key. Decisions are made
17 in the very short window, 15-minute window that we have
18 once everything gets through the algorithms at the ISO.
19 The balancing authority still is responsible for
20 reliability after meeting NERC's standards. So that is a
21 key element of this. And the information that Larry talked
22 about is mission critical for us so we can have a stable
23 operating grid at the end of the day.

24 But I just wanted to mention that I appreciate
25 the opportunity today. We really need to encourage others

1 to join EIM, and as others have joined, it's enabled the
2 liquidity that everyone is thirsty for in the West.

3 Thank you.

4 MS. SHIPLEY: Would you like to start?

5 MR. MAC DOUGALL: Mike MacDougall with Powerex.
6 So just to start off, you know, Powerex is highly
7 supportive of the CAISO undertaking a stakeholder process
8 to talk about the rules and the requirements and any
9 procedures that would be required for external resource
10 participation.

11 I think as has been mentioned earlier, this is
12 going to be a complex set of issues that need to be
13 addressed. We're going to touch on them here today. We're
14 not going to solve things, but hopefully, we will set a
15 framework for that. It's already been noted by Chairman
16 Bay of the substantial benefits that have accrued to date.
17 I think those benefits are going to be ongoing and
18 certainly seem to be a reasonable payback for the
19 investments that have been made to date and will continue
20 to be ongoing for the EIM entities.

21 We generally support the CAISO's initial stated
22 principles for external resource participation as were
23 articulated at the regional issues forum, and in
24 particular, the need for accurate modeling of power flows.
25 We understand conventional intertie bidding could pose

1 challenges, technical or otherwise, for the CAISO and the
2 EIM entities, and we believe that resource-specific
3 external participation is the next logical step in the
4 evolution of the EIM and the support exploring this
5 approach with the CAISO and stakeholders.

6 We also want to acknowledge the lift that's been
7 made by the EIM entities getting this market off the
8 ground. We agree that any framework for external resource
9 participation should not result in free riding for the work
10 that's been done. We're not looking for a framework that
11 provides a better deal than what the EIM entities have to
12 date. We recognize that the EIM itself offers these BAs
13 substantial additional valuable services that they are
14 benefiting from, including managing imbalances, helping to
15 resolve congestion.

16 Importantly, while we expect that other BAs are
17 going to join, as have been indicated today and we have
18 seen the announcements and the stuff like that, the
19 studies, there are some BAs that don't see a ready path to
20 participation, and whether that be due to legal,
21 regulatory, political, or operational challenges.

22 In particular, I would note there would
23 certainly be challenges in direct EIM participation by BC
24 Hydro, and there may be other significant entities in the
25 region that have their own unique challenges that they need

1 to overcome.

2 However, these BAs also have substantial
3 flexible resources, often clean resources. That can help
4 integrate renewables, help manage EIM imbalances, and help
5 lower costs for consumers across the region through the
6 enhanced liquidity and production cost savings by their
7 participation in the EIM market.

8 I think some of the challenges that have been
9 identified are manageable. I think we will talk more about
10 transmission in the afternoon. But from our perspective,
11 that's going to be -- need to be resolved regardless. I
12 think even within the EIM footprint, it's a matter of
13 geography. I think NV Energy experiences a fair bit of
14 wheeling from other EIM participants. Puget being at the
15 end of the footprint isn't going to experience much in the
16 way of wheeling, if anything. So it's a bit of an
17 independent issue of external resource participation and
18 more a matter of geography, topology, and the broader
19 participation.

20 So just to conclude, we support the development
21 of a CAISO framework for participation for external
22 resources in the EIM and the commencement of a stakeholder
23 process to address those issues.

24 Thank you.

25 MR. KINNEY: Good morning. Scott Kinney with

1 Avista Corp. I appreciate this opportunity to participate
2 and FERC for putting on this technical conference.

3 I am in a unique situation today. I think this
4 is the first time in my career that I've sat at the
5 opposite side of the table of my IOU colleagues. Maybe
6 some day we can join you guys over there.

7 You know, we are very interested in market
8 expansion in the Northwest. We did participate in the
9 Northwest initiative that, unfortunately, didn't see
10 fruition. But we were a founding member of that and very
11 engaged in that, and we continue to be engaged in all of
12 the stakeholder -- CAISO stakeholder processes today.

13 Unfortunately for us, though, we just don't
14 quite have the drivers. Tess mentioned where they sit with
15 regards to costs and benefits, and we're in a very similar
16 situation. And without those drivers, it's been difficult
17 for us to make the leap. But we have seen some impact, and
18 we are concerned with the potential market liquidity issues
19 going into the future in the Northwest, and that's why we
20 are engaged.

21 But we see this external bidding as an
22 opportunity maybe to hedge some of that risk for us and
23 also giving us an opportunity to get familiar with how the
24 market operates.

25 One thing that we do recognize, as a BA and a

1 TSP, in the future, we could be an actual EIM entity. And
2 so if a stakeholder process gets up and running, we would
3 be interested not only from a participant bidding
4 potentially as an external resource but also in the future
5 as an actual EIM entity. So we're very interested in the
6 stakeholder process that would be up and running, and we
7 do -- we would like to see CAISO start that process sooner
8 rather than later.

9 MS. SHIPLEY: Anybody else?

10 Okay. Then I think what we would like to do is
11 start with some Staff questions. I believe Steve Rodgers
12 has something to start off.

13 MR. RODGERS: I would like to, first of all,
14 thank all of you for excellent comments that we've already
15 heard today. I know just in the hour and a half that we've
16 been here I've already learned a lot about this issue, and
17 I'm sure I speak for many others on the Staff in that
18 regard. Thank you for the time and thought you've put into
19 the presentations this morning.

20 I do have two questions. The first is for Cal
21 ISO and Sarah in her capacity as an officer of PacifiCorp.
22 The provision in CAISO's tariff providing for bidding at
23 the interties is not something that the Commission imposed
24 but the Commission, rather, accepted as just and reasonable
25 after CAISO originally proposed it back in 2014.

1 So Mark, in light of your comments earlier that
2 bidding at the intertie is not a good solution to the
3 expansion of the EIM, then I'm wondering, why did CAISO
4 originally propose it, and Sarah, why did PacifiCorp not
5 oppose it?

6 MR. ROTHLEDER: You're talking about in
7 reference to the energy imbalance market? So it's a very
8 good question, and I think at the time we were designing
9 the energy imbalance market, you've got to remember that we
10 had not had experience with our actual 15-minute bidding on
11 the ties.

12 And so we were under the presumption that okay,
13 maybe there was a relatively easy fit to doing that
14 expansion. And we didn't really think through all the
15 details.

16 And frankly speaking, that's why we left it --
17 we thought it was -- because the EIM entity was ultimately
18 the transmission provider, we thought okay, it was really a
19 transmission question whether they can facilitate and make
20 that transmission available for the intertie bidding use.

21 I think what we identified in having stakeholder
22 discussions about -- and frankly, those stakeholder
23 discussions about whether we were going to mandate intertie
24 bidding on the EIM entity. What we discovered from those
25 discussions were there's more fundamental issues that are

1 in play related to intertie bidding at the EIM border.

2 It is not the same thing as the ISO's intertie
3 bids at the border. The balancing area still has the
4 responsibility of managing the constraints within their
5 system, managing the transmission within their system, and
6 they -- unlike the ISO, if we have an issue in our system,
7 an intertie bid, we can manage that through the bids, they
8 have other protocols, other priorities about transmission
9 allocation that have to overlay with this.

10 So it's one of many, several issues that were
11 identified. I think I identified some others, resource
12 sufficiency. The market power mitigation, whether those
13 bids at the interties will undermine what we put in place
14 in the energy imbalance market with regards to market power
15 mitigation.

16 We introduced available balancing capability to
17 specifically address some of the visibility into some of
18 the resource capacity that the EIM entity has that we
19 weren't fully aware just as an in initial implementation of
20 the EIM. Intertie bidding, without some additional
21 measures, could undermine that.

22 And then lastly, this whole -- when we started
23 up the original design of the EIM, we didn't know what we
24 were going to have to do with regards to managing flows
25 across the BPA system. We discovered that through the

1 implementation, and then we've got a very robust process of
2 not just managing, monitoring, but managing those flows
3 across the BPA system and being respectful to neighboring
4 balancing areas. That could be undermined with a generic
5 intertie bid that doesn't have some resource-specific
6 expectations about performance and where is it coming from.

7 So the bottom line is, we learned from what we
8 originally thought was an easy lift to bring intertie bids
9 under the original EIM design. We learned from the actual
10 implementation that there's much more fundamental issues in
11 play, and through the stakeholder process and our learning,
12 we realized it's not just as easy as plug and play
13 expanding the interties to the EIM border.

14 There's many other factors that have to be
15 considered, and that's why we are where we are today. And
16 that's why we introduced -- because of that, we introduced
17 the proposed tariff language to say, it's not just now an
18 EIM entity decision.

19 We're concerned about fundamental market design
20 issues that need to be addressed before you introduce an
21 intertie bid at the border. So that's why we changed it.

22 MS. EDMONDS: I don't have a lot to add. This
23 is Sarah Edmonds with PacifiCorp.

24 I would agree with absolutely every
25 characterization that Mark made of how that all developed.

1 This was all prior to any tariffs being filed at the
2 Commission, because this was the market design phase of the
3 energy imbalance market.

4 Just from our perspective, I would say that in
5 the conversations we were having with ISO about what
6 implementation would look like, we did oppose it. We were
7 not willing to take it on, and we did say to ISO, we
8 understand you're implementing your own Order 764 market,
9 we have plenty on our plate with energy imbalance market,
10 we don't understand all the details with that, we're not
11 interested in it, please don't make it mandatory. And
12 that's why they ended up with the language we had that they
13 had in their tariff, and it's also why PacifiCorp did not
14 implement that functionality in our own tariff.

15 MR. RODGERS: My next question is for the folks
16 on the other side of this issue that are on the outside of
17 EIM looking in. So this question, I appreciate hearing
18 from WPTF, NIPPC, or PGP. But I'm wondering, why would
19 allowing bids at the EIM interties not provide a
20 disincentive for BAAs to join as EIM entities? We've
21 already heard this morning from several existing or would
22 be EIM entities that allowing bidding at the interties
23 could fundamentally change their calculation about
24 participating in the EIM, either for economic or
25 operational reliability reasons. So I'm wondering why

1 allowing bids at the ties would not provide a disincentive
2 for future BAAs to join the EIM.

3 MS. WOLFE: This is Ellen Wolfe for WPTF. I
4 feel like I can't answer a lot of that question because I
5 don't know really what it's like to be a BAA and to make
6 that choice. But I will speak to it a little bit.

7 It seems to me like a balancing authority or
8 utility system should be able to make the value proposition
9 sort of standalone. If the numbers don't line up to be an
10 EIM entity, they don't line up to be an EIM entity. So it
11 sort of seems like there's a fundamental value proposition
12 that needs to be there for somebody to jump in.

13 But again, I don't have particular expertise on
14 what it's like to be one of those entities. So I will pass
15 the mike down in a minute.

16 I think the folks that we are looking at serving
17 are kind of the ones that are stuck between. You still
18 have parties that do bilateral transactions that don't even
19 necessarily own resources. They just need to move their
20 energy from one place to another or you have independent
21 power producers that are someplace on the system and want
22 to serve the needs of the West, and they're getting
23 really -- they're getting hammered with the slicing of the
24 west up into EIM markets and non-EIM markets. So
25 transactions that they've done for years now, they're

1 starting to be impossible to do because of the explicit
2 imposition of the congestion costs and the inability to
3 change schedules closer to the operating hour.

4 So our constituents are more the little guys out
5 there that aren't a whole BAA, and they don't even have the
6 ability to make that choice to join because they're just an
7 isolated resource or an entity that has access, a market
8 maker that buys and sells based on the market needs and
9 tries to move energy around.

10 So I think there still needs to be some
11 consideration for those transactions. Until everybody is
12 in, you're going to have those guys. And the more folks
13 that get into EIM, the worse the situation is going to be
14 for those that just need to move energy across the West in
15 a traditional fashion.

16 I will pass the mike down to those that are
17 probably more able to answer the question about the BAA
18 choice.

19 MR. JAMIESON: This is JJ Jamieson, representing
20 NIPPC. In some situations, we are not able, as Ellen
21 pointed out, to join the EIM.

22 Our balancing authority areas either do not want
23 to join or they have no load. So there's really no real
24 benefit to them.

25 But the independent power producers do want to

1 participate to benefit EIM overall. We have resources that
2 could be made available to the market that could help
3 reduce the cost to the load.

4 I think what we need to really get down to is
5 what are we trying to accomplish through the EIM. We're
6 trying to figure out what is the lowest possible cost and
7 the most reliable manner to provide service to load, and we
8 feel that having a restriction that says, thou shalt be a
9 BA before you're able to participate in this, not only does
10 a disservice to us because we cannot participate and
11 provide the benefit that we are capable of, but it also
12 provides a -- it's troubling to hear that one of the
13 reasons that we want to restrict intertie bidding is so
14 that we can force you into the market.

15 That's a big concern for me, particularly when
16 you are looking at what is the best benefit for the
17 ratepayers. And we feel that we're able to provide that in
18 a more consistent manner as intertie bid participants
19 rather than joining in some instances.

20 And I'm in no way discouraging the continued
21 growth of the EIM. I think it's been very successful.

22 I think it does provide benefit. But we need to
23 look broader at how we can provide even better benefit,
24 even if it falls outside of the container that we are
25 focused on right now, which is EIM.

1 MS. HAMPTON: Therese Hampton, Public Generating
2 Pool. I appreciate JJ's last comment, because I think -- I
3 appreciate the question, too, Steve, but maybe it's not
4 quite the right question in that should the question be,
5 are actions we're going to take going to incent people to
6 join a market that they've already decided they don't want
7 to join, or is the question should they be able to exclude
8 resources from participating in that market, if that makes
9 sense.

10 I think we, too, struggle with that comment that
11 we're not going to allow this because it will not incent
12 you to make a decision that is really wholly your own.
13 Right? You have to do your own cost/benefit and decide
14 whether this makes sense for you.

15 I think there are a couple other pieces to it,
16 though. There's the presumption underlying that that this
17 will have significant impact to EIM entities, that it will
18 have costs, that it will change their cost benefit.

19 And we don't see it that way, and for a couple
20 of reasons. Number one, we haven't defined the market
21 rules. And so we can define the market rules in a way that
22 doesn't have significant impact to them.

23 Larry kind of shared the story of getting great
24 minds together and creating new solutions we haven't had
25 before. We have a lot of great minds in this room, and we

1 can create solutions so that it doesn't have a negative
2 impact on EIM entities, both from an administrative
3 standpoint or from a reliability standpoint.

4 Second, we really don't see how external
5 resource participation undermines their benefits. We only
6 see it as enhancing their benefits. And so what we would
7 like to do is allow for external resources to take the step
8 that they're willing to take, that they're willing to take
9 to participate in the market and then provide them the time
10 to make decisions about whether they want to fully move the
11 BA, have their BA become an EIM entity.

12 MR. BAK: This is Brian Bak, FERC Staff. Trying
13 to expand on a comment Ms. Wolfe made from WPTF made in her
14 opening statement about being unable to really know in
15 advance what the imbalance charge is going to be.

16 So a hypothetical two examples. If you have a
17 resource external to the EIM who just decides we're always
18 going to take whatever the imbalance charge is but we will
19 change our schedule 20 minutes in advance, and so they're
20 exposed to this, the LMP, versus a similar resource saying,
21 here's what I'm willing to pay to change 20 minutes in
22 advance, and if the price is more than that, I will stick
23 with my current schedule, if it's less I will move.

24 So my question is, does an external resource
25 that's blind to the price, making its decisions, create

1 more or less difficulty in balancing the systems of the EIM
2 participating BA versus one that is being instructed or
3 dispatched by California -- or CAISO, if it's able to
4 express a price preference for the BA?

5 MS. SHIPLEY: Who would like to speak to that?

6 MR. ROTHLEDER: I want to maybe -- this is Mark
7 Rothleder, California ISO. I think the discussion starts
8 to -- you have to kind of bifurcate this discussion a
9 little bit.

10 One is this bilateral concern. And I think you
11 have to bifurcate that from the idea of a supply wanting to
12 simply make itself available at the intertie.

13 The bilateral, to me, is they've already got a
14 buyer and a seller. They've matched up that buyer and
15 seller, and they're effectively documenting that through
16 the tag, and they are -- they've got their financial
17 basically construct administered through that bilateral
18 arrangement.

19 I think the issue that's trying to be expressed
20 is that somehow -- one is a timing issue, the fact that
21 they have to declare that schedule 57 minutes in advance so
22 that the balance schedule in the EIM is informed of it,
23 does that create some kind of new impediment or harm.

24 And then two, does that timing and the
25 resultant -- if there is congestion and after the T minus

1 57 minutes, does that create some kind of risk or undue
2 risk.

3 I think the answer, first off is, nothing is
4 preventing them from making those arrangements. Okay? Is
5 there potentially now a new cost implication to that? I
6 think I understand that that may be the case. But there's
7 nothing preventing them from making those arrangements.

8 From the perspective of solutions, I think there
9 are solutions that are unrelated to intertie bidding to
10 maybe get after what those issues are. One thing that we
11 thought about is this 57-minute, can that be moved on
12 without impacting the underlying issues with the energy
13 imbalance market and the performance of the imbalance
14 market.

15 We think there is. We think that T-57 could
16 probably be moved up to as close as maybe 30, 37.5 minutes.
17 That helps reduce that gap.

18 But I think there's another component that can
19 potentially address the issue, and that is leveraging some
20 of the design components that we have in our market with
21 regards to balanced wheel. A balanced wheel is effectively
22 an import and an export, and they remain balanced.

23 And you can put prices on those import and
24 export, not as so much a supply that's being offered or a
25 purchase that's being offered to buy, but the price

1 represents the differential price that they're willing to
2 continue to flow. And I think that's kind of the
3 description that Ellen was describing as is there a
4 mechanism that they can express their willingness to
5 continue to still act on that bilateral using a mechanism.

6 That's much different than a generic intertie
7 bid where the supply or the offer to buy is really not
8 resource specific, you don't know where it's coming from,
9 and frankly, when you offer it, you don't know where it's
10 going. And that creates some complexities about
11 transmission utilization, managing parallel flows.

12 So what I'm trying to express here is that I
13 think we should bifurcate the discussion a little bit about
14 is there a bilateral issue, understanding the bilateral
15 issue, and then trying to go after solutions there, and
16 then separate that from this notion of how do you expand
17 participation, how do you expand the capability of the
18 model to support external resources. And then in that, we
19 are disagreeing that generic intertie bidding is a
20 solution.

21 MR. RISTANOVIC: Just a little bit more comment.
22 Petar Ristanovic from California ISO. We believe that this
23 tool enhancements, important timeline, and maybe expanding
24 use of imbalanced wheeling, for balance of -- going to EIM,
25 can mitigate the problem.

1 We really cannot understand how intertie bidding
2 can address that problem. We would like to go back and
3 engage in that discussion, because we don't see, if you
4 have intertie bid, that you are bidding at T minus 75, can
5 help you with the problem that you have to decide at T
6 minus 57. So we really couldn't understand why intertie
7 bidding is linked with this part of the issue.

8 MS. WOLFE: Thank you. Ellen Wolfe for WPTF.

9 I thought at first the question was directed to
10 me, but then I realized you were just doing a good job of
11 restating something that I said. And I felt like the
12 question was being directed to the EIM entities. So I
13 didn't jump in.

14 I thought you did a good job of recharacterizing
15 it. And I think there are a few things going on here. And
16 I appreciate Mark's distinction, because it's nice to start
17 parsing them apart.

18 When I really started thinking about this
19 problem, it occurred to me how similar this is to the
20 market solution that the Commission wanted in Order 764,
21 which was to allow entities to -- allow entities to adjust
22 schedules on a 15-minute basis. And given that that
23 functionality is already in place and the Commission
24 encourages the West to use it for balancing purposes, it
25 seems to me that adding economic signals to that just has

1 to make it better.

2 So I think the question is a great one. Now,
3 maybe people aren't changing their schedules that much, and
4 maybe they would be if they could hedge the risk.

5 But adding the ability for the EIM entity to see
6 how much it's worth to somebody seems like it should make
7 that way easier because then it's not a clunky move. I'm
8 just not saying I think it's going to be okay and shoving
9 my energy in, I'm adding a price to that.

10 So I like to hear more, and I think it's great.
11 But I also appreciate what Mark said, tearing apart these
12 things going on.

13 I think he's right, there are some participants
14 that are just trying to move from point A to point B, and
15 now they have to cross an EIM boundary. And it's become
16 more difficult because of the requirement to schedule so
17 early.

18 So if they're trying to balance their own system
19 or take advantage of their own hydro condition or whatnot,
20 they don't have any ability to do that between that almost
21 hour before and 20 minute before time frame that they used
22 to have. So I think some of the ideas he has are great.

23 I think that's not the situation entirely,
24 though. I do think there are people that are moving energy
25 bilaterally but then have flexibility. And they would be

1 happy to say, I have a 100-megawatt deal that I can
2 actually move up or down a little bit if you need it.

3 And we've seen how voluminous that's been in
4 ISO's FMM. It's not huge; right? The West cannot do that
5 a lot right now.

6 But if you could have a little bit at the right
7 time, it can make a big difference to an entity that's got
8 a resource that has extra energy. It can also make a lot
9 of difference to an EIM entity that's starting to get short
10 on power or has excess power.

11 So I see it as sort of bulk of the energy
12 scheduled bilateral but some ability for bilateral
13 transactions maybe to move around and so those guys are
14 saying why not, why can't we offer that into the EIM.

15 So maybe there are a couple different business
16 models here that we should think about to see if we can
17 extract the most value out of them in some of these
18 mechanisms that aren't harmful because I agree with
19 Therese, the idea is not to make matters worse.

20 The idea is to make matters better. We need to
21 start thinking about operationally is it better or worse or
22 administratively is there a cost to it that participants
23 can absorb to offset.

24 MR. OVODENKO: Alex Ovodenko, FERC Staff. I
25 have a question for the EIM entities, an issue raised a

1 number of times in the discussion so far. From an
2 operational standpoint, what would be different about the
3 EIM entities accepting bids at the interties as opposed to
4 when CAISO accepts bids at the interties?

5 MR. THOMPSON: Justin Thompson, Arizona Public
6 Service. One of the things we have to do, like I mentioned
7 earlier, we have to balance our system and so a couple of
8 concerns we have with accepting intertie bids.

9 Number one, what is the quality of the
10 transmission that's bringing that power in. So in other
11 words, someone using nonfirm transmission.

12 If they're using nonfirm transmission, anything
13 that comes into our system, we have to hold reserves back
14 so that in case that's cut we can immediately respond to
15 that. So that's going to add costs and cause us to have to
16 keep resources not loaded to be able to respond to that.

17 The other thing I'm concerned about, during the
18 nonsummer months, especially during the middle of the day
19 when we're getting a lot of solar generation in the West,
20 I'm very concerned about entities dumping power into our
21 system and us -- and our BA not being able to back down our
22 generation resources to make room for it. In that case we
23 would be violating NERC reliability standards with no
24 mechanism or vehicle to be able to stop that flow from
25 coming in. So we're concerned about that.

1 We're also concerned that during the summer,
2 under very high-load conditions, that if someone bids into
3 our BA and if a price becomes better somewhere else, they
4 could pull that resource or that schedule and just take it
5 somewhere else. The only penalty or the only prohibition
6 is that they pay the LMP price at that point for the supply
7 that left.

8 And so there's no other penalty or no
9 prohibition for that. So that's a concern.

10 I don't have enough extra resources to be able
11 to carry additional reserves to deal with those various
12 situations. It's very, very expensive.

13 Did that help?

14 MR. OVODENKO: Absolutely. Thank you very much.

15 MR. LATEEF: Shahzad Lateef with NV Energy. I
16 will add a little bit to Justin's comments.

17 NV Energy has been participating for -- since
18 December 1st. First of all, I want to caveat this by
19 saying that we have looked at it very briefly to see what
20 operational challenges, and in that brief period, we have
21 identified a significant amount of challenges, operational
22 challenges, which is a part of the second session and we
23 will discuss more.

24 But in addition to the regulating reserves, the
25 bilateral markets that exist today, the 15-minutes, they're

1 all appropriately tagged. We are very familiar with where
2 the source and where the sink is.

3 The energy imbalance market is different in the
4 aspect that the flow changes every five minutes. It has
5 the potential of changing every five minutes.

6 It could sink in one area at one point and the
7 other at another point. The challenges are that the
8 resource that is coming in, if for any physical reason that
9 resource is cut, we as the EIM entity who is fully
10 responsible for balancing and meeting our reliability and
11 compliance requirements, now have to chase down the sink
12 and actually curtail that sink so we can actually keep our
13 area whole.

14 The additional requirements of adding network
15 models well beyond our traditional balancing authorities is
16 burdensome, and we are still -- I wanted to emphasize this,
17 and there has been pretty good conversation. We are
18 talking about three different types of markets. There's a
19 Cal ISO market, and it's got a Cal ISO boundary.

20 We keep talking about the energy imbalance
21 boundary. There is no such thing.

22 In my opinion, there is a balancing authority
23 outside the California ISO. So NV Energy has its own
24 boundary. We are responsible for managing our boundary.
25 Any resource coming in or going out of that boundary at the

1 request of the market operator, it has to still meet all of
2 our reliability criteria and keep us whole in the sense of
3 not put additional risk, operational, technical, that we
4 will have to mitigate just to maintain our balancing
5 authority as a whole.

6 And then intertie bidding is a third product.
7 So Cal ISO market is one product. Energy imbalance market
8 is a second product. And I see intertie bidding as a third
9 different product.

10 And it will still put all of those -- and I
11 don't want to restate what Sarah has already stated and
12 what Justin has just stated. The regulating reserve
13 requirements and maintaining our own reliability in check,
14 the biggest element of going into energy imbalance market
15 is every balancing authority has to prove -- that's what
16 the tests are for -- that we are not going to lean on the
17 market going in.

18 But now you are adding an additional burden of
19 an external resource which will impact our participation or
20 inability to participate in the market.

21 MS. SHIPLEY: This is Jennifer Shipley. We're
22 actually going to wrap up -- I'm sorry.

23 MR. JACOBS: Josh Jacobs with Puget Sound
24 Energy.

25 I was just wanted to add to what Lateef was

1 walking you through. In my mind, the difference between
2 what is happening in the CAISO market and what would happen
3 in the EIM entity is that we have multiple e-Tags
4 representing the flow of electricity.

5 So in the EIM entity scenario, we would have
6 interchange with the bidder directly with our balancing
7 authority. So that impacts our net scheduled interchange.

8 And then simultaneously, we have a net scheduled
9 interchange with the California ISO to represent flows
10 within the market itself. And that's where you get that
11 disconnect and the gap that would require an EIM entity to
12 carry additional regulation because if there's some issue
13 that happens with the intertie bidder and they don't
14 perform, I'm still managing that net scheduled interchange
15 with that bidder, and that is a part of the cost increase
16 that we would incur as an EIM entity.

17 Secondly, this is a simple one, but CAISO
18 updates the tags today for intertie bidders. They are not
19 a part of the first leg of that transaction, the first leg
20 of interchange.

21 They're not on the tag, so they don't update the
22 tag. So that's a design issue that needs to be worked out.

23 And then for Puget, one of our biggest issues is
24 the convergence between the 15-minute market and the
25 five-minute market. We have a 300-megawatt path going

1 through the Bonneville Balancing Authority to PacifiCorp to
2 effectuate EIM transfers in both directions. The 15-minute
3 market doesn't have any bounds on it from restriction
4 perspective on the Bonneville system.

5 But again, it's only 300 megawatts, and that's
6 sized for imbalances within our BA. We have seven posted
7 paths, thousands of megawatts of capability for intertie
8 bidders.

9 Therese showed the map where we're bordered by a
10 lot of entities that are interested in intertie bidding.
11 So one of our concerns is that we're going to see this
12 massive influx of intertie bids going across the 300
13 megawatts that's been established for imbalances and
14 completely soaking up that capacity for 15-minute
15 transfers.

16 That doesn't give us any wiggle room to the
17 five-minute market to help correct the imbalances that
18 occur between the two different intervals. That adds
19 incremental cost in terms of a less efficient dispatch and
20 potentially infeasibilities if we can't solve in the
21 five-minute market. From an EIM perspective, that's the
22 difference.

23 MS. SHIPLEY: We're actually hitting the lunch
24 hour, but Ellen, if you would like to make one more comment
25 before we break.

1 MS. WOLFE: Ellen Wolfe for WPTF. And I will
2 keep it short.

3 I think there's a point of clarification also on
4 your question, because the way I understand the mechanics,
5 the EIM entities wouldn't accept the bids mechanically.
6 The bids would go into the EIM, and the ISO would manage
7 the bids.

8 But I also just note -- well, I think also a
9 point that was made about the transmission, that seems like
10 something again to talk about, whether it's limited to a
11 firm transmission product, that would seem like a
12 reasonable request, so you don't have that challenge. But
13 a lot of the other challenges that were raised exist with
14 fixed schedules.

15 If somebody schedules a fixed schedule into
16 Arizona Public Service in the wrong time of the year, it's
17 going to be a problem and if a fixed schedule doesn't
18 perform, it's going to be a problem, too.

19 So the problems that were stated have a lot of
20 similarities with fixed schedules. Adding an ability to
21 move, I don't think, makes those problems worse. In fact,
22 with respect to balancing renewables or allocating scarce
23 transmission, it should make the problem much better,
24 because then the model wouldn't send energy where it
25 doesn't need to go, and it wouldn't allocate the scarce

1 transmission to somebody that's not willing to pay enough.

2 Thanks.

3 MS. SHIPLEY: Thank you.

4 So I hate to cut us off, but I think our
5 stomachs are going to cut us off. So let's break and come
6 back here at 1:00.

7 (Whereupon, at 12:04 p.m., the technical
8 conference was recessed, to be reconvened at 1:00 p.m. this
9 same day.)

10

11

12

13

14

15

16

17

18

19

20

21

22

23

24

25

1 the need to arbitrarily split those up.

2 And I think we're also going to be trying to
3 keep a list up here, and feel free to do the same, of what
4 challenges are identified as we go through these
5 conversations. Possibly at the end, we can see if we have
6 at least spoken to each of those. If we can leave here
7 with some idea of where we're going, to us, the value we
8 are trying to get out of this conference is to learn more
9 and have conversation started.

10 So with that in mind, let's open it back up and
11 start with some questions.

12 Does Staff want to kick off?

13 MS. COATS: Hi. Ginny Coats, FERC Staff. I
14 have a question related to default energy bids. I know
15 CAISO has suggested that default energy bids may need to be
16 developed if this was to become a -- if there were -- if
17 EIM intertie bidding were to be implemented. I wonder if
18 CAISO could speak to why that would be necessary or some of
19 the challenges associated with that. Thanks.

20 MR. ROTHLEDER: This is Mark Rothleder,
21 California ISO. So as it relates to default energy bids,
22 first off, even in the ISO market, the interties are not
23 subject to market power mitigation.

24 There is no default energy bid calculation for
25 the interties coming into the ISO. Part of the rationale

1 for that is those intertie bids are coming into the ISO.
2 The ISO as a system-wide is effectively considered to be a
3 competitive market. There is potentially multiple parties
4 that can get to most of the interties.

5 Now, that's not to say that some of those
6 interties have low liquidity and availability. But the
7 point is that the ISO currently does not calculate default
8 energy bids for the ISO interties.

9 With regards to the question about if you open
10 up some kind of intertie bidding, expand the participation
11 in the EIM, I don't think we can make the same assumption
12 that the area is competitive necessarily. We've seen
13 already where some of the areas got conditional
14 market-based rate authority under the energy imbalance
15 market where all resources have to bid default energy bids.
16 It all depends -- if you open up that to the interties, it
17 all depends how many interties you're really talking about,
18 how many players are going to be participating, the
19 interplay between that and the available balancing
20 capability.

21 But nonetheless, we believe that opening up the
22 interties, there is at least a potential that you're going
23 to have to be ready to mitigate those intertie bids to
24 avoid market power being exercised. And in that regard, we
25 would have to come up with some kind of default energy bid

1 for those interties.

2 How that could be done, there are some
3 methodologies not related to heat rate that could be used.
4 There are historical prices methodologies. We would have
5 to leverage those. We would have to probably leave it open
6 to the fact that there would need to be some kind of
7 negotiation of potentially opportunity costs, especially
8 with the hydro resources. So we would have to go through
9 the process of what is an appropriate default energy bid
10 methodology for such resources.

11 And it does bring me back to the point that a
12 generic intertie bid having a default energy bid associated
13 with some kind of generic resource is much more difficult
14 than having a specific resource that you can then calculate
15 an accurate default energy bid associated with it.

16 So I think that also plays into that question.

17 MS. SHIPLEY: So not seeing anybody with their
18 tent up, this is Jennifer Shipley. I wanted to start maybe
19 parsing out some of the things we were talking about
20 parsing out earlier. So we've got the issue of -- it's
21 hard to craft all these. Maybe I can just offer some
22 thoughts I had from the first session.

23 One of the things that we've seen is when we
24 first started talking to folks in the West about
25 potentially creating an EIM with the possibility for people

1 to participate in the last sliver, five minutes of the
2 market, we were very -- we had a lot of questions about is
3 this going to be dragging us into an RTO. And the
4 Commission and those of us on Staff who went out to the
5 West regularly tried to reassure folks that this really was
6 a voluntary market, would stay a voluntary market. I think
7 it's important the way that you all have set it up and the
8 way the Commission has approved does have easy entry/easy
9 exit voluntarily.

10 So there's some of the things we were talking
11 about this morning, and the way people were talking, it
12 sounds like once we've all joined, almost like there's sort
13 of a manifest destiny this was going to happen and become a
14 west-wide market. We would be thrilled to see that, but
15 that is not a given. So just to caution that there are
16 going to be seams created by bringing this EIM into
17 existence and having it continue to expand. We're happy to
18 see it expand. Hopefully you guys are happy.

19 Obviously, there's people joining, and there's
20 obviously benefits to people joining. But we have to keep
21 in mind that it does create sort of these seams issues, and
22 there are the seams of the California ISO border, which is
23 the ISO's RTO border.

24 Then there's sort of this border which I think
25 someone earlier was telling me -- Mr. Lateef who was saying

1 don't think of it as the EIM border. That was interesting
2 to me because I have been thinking about the CAISO border
3 and the broader EIM border.

4 So that's an interesting thing I want to talk
5 with you further about, but for me in my head, we had the
6 CAISO border, the EIM border, which is not an RTO, and the
7 interaction with the rest of the West. So there are
8 growing pains as we go into this new paradigm. I hear that
9 we have people who are wanting access to that. I also hear
10 that getting into this has given benefits that came at some
11 great cost.

12 So we -- this is sort of where we're at.
13 There's great benefits. There's growing pains. It's an
14 evolution that doesn't have a necessary complete final
15 manifest destiny. So that's sort of the context that I'm
16 seeing this in. And I guess what I'm trying to suggest is
17 we aren't going to find the answer to this today or easily,
18 and it's my hope personally, as Jennifer Shipley, that we
19 will end up with some kind of stakeholder process that
20 continues. We did have people doing outreach as we came
21 into this saying, are you going to have action items to
22 leave this meeting with. And the Commission's not in a
23 position to run a stakeholder process like that, but we are
24 hoping that we can create, you know, the point of departure
25 for these conversations to continue.

1 So I see Anna has her tag up, and I'll pass the
2 microphone.

3 MS. MC KENNA: Thank you, Jennifer.

4 MS. SHIPLEY: So you want it to have a green
5 light versus the amber light.

6 MS. MC KENNA: Thank you, Jennifer.

7 This is Anna McKenna with California ISO. I
8 appreciate your comment actually.

9 I want to take the opportunity at this time to
10 address an issue that was brought up by Ellen, which is
11 near and dear to my heart but also near and dear to the
12 heart of many of the ISO representatives in this room. And
13 that is the concern that was expressed in the pleadings and
14 Ellen's statements earlier today that, perhaps, in this
15 case and in other cases there are times when the Commission
16 has to step in and override if you wish or not allow us to
17 go through our stakeholder process but actually issue a
18 directive, an order, because there's something so egregious
19 going on that that needs to happen.

20 And we've been thinking about that quite a bit,
21 both when the statements were made previously and today and
22 probably will continue to do that, because we at the ISO do
23 feel that we have a very good stakeholder process, a very
24 robust, a very rigorous stakeholder process. In fact, what
25 you are getting here today is only a very small sliver of

1 what we do, the hours we spend trying to figure out how to
2 resolve the issues, what the issues are, prioritize the
3 efforts, because we don't have an unlimited amount of
4 resources. I wish we did sometimes, but we don't. So what
5 we do try and strive for through our stakeholder process is
6 to have an open communication with our stakeholders,
7 address all the issues.

8 And there are certainly times when we're not
9 going to be able to provide everybody everything they want.
10 But we have a pretty good track record on raising issues
11 that not everybody wants but we know are important for the
12 market, for design.

13 I'll take one example, for example, most
14 recently, our commitment costs. We have spent now about
15 four years -- not everybody wants us to spend time on that,
16 but we think it's important. And the reason we think those
17 are important is because we have to reflect both the costs
18 of the resources in the market accurately and then we have
19 to compensate resources accurately, and we have to dispatch
20 our system resources -- our system accurately. So we do
21 sometimes take issues that perhaps not everybody wants but
22 we know are important for market value and pull them out
23 and spend time good on those.

24 On this issue, we're at a very important
25 juncture, both intertie expansion of EIM. As you said,

1 we're sort of -- not really quite an adolescent yet of EIM,
2 we're not really children anymore, but we're trying to
3 define our next steps.

4 And it's really important that we do so in a way
5 -- as we said earlier, and I'm not going to repeat all this
6 again, in a way that doesn't undermine the EIM. Because if
7 we did and if we actually imposed requirements that took
8 away the market efficiencies, the transmission
9 enhancements, the market enhancements, there wouldn't be
10 any EIM to bid at.

11 That's the issue here. And so one of the things
12 we want to do is go back, and we had talked about this in
13 the stakeholder process, and I have actually asked people
14 to participate quite actively right now in the stakeholder
15 process, where we're prioritizing our issues.

16 And you make a good point that we can't solve
17 everything here today, but we certainly are trying to
18 listen and understand what the problems are. As we carve
19 out through some of the problems that we talked through
20 today, there's definitely going to be an opportunity to go
21 back to the stakeholder process and do that.

22 The other thing I wanted to mention is that the
23 point was made about open access being an important element
24 to this. And I think that open access is an important
25 element. We have actually a good track record at the ISO

1 as well with coming up with solutions and ensuring that
2 there's -- access to the grid is provided in an open
3 manner, nondiscriminatory, fair pricing both in terms of
4 the market as well as transmission.

5 But that's not quite the issue here. There
6 isn't an open access issue here, because there is access to
7 the grid. The question is, what price do you pay for it?
8 And the ISO grid is differently situated than the EIM grid,
9 and the participants at the border of the EIM are
10 differently situated than the consumers of the ISO grid.
11 So these are questions we have to ask, whether a price for
12 participating in that market should be the same or not.

13 Currently, and as the Commission previously
14 actually addressed the question of the congestion issue
15 that parties are faced with, parties are differently
16 situated internally and externally. There may be a reason
17 why the EIM participants don't have that.

18 I'm not saying those aren't issues that
19 shouldn't be addressed and looked at as we expand and, as
20 you said, we grow and think about what our next steps are
21 in the West. But it's important to keep that in mind that
22 it's not an open access issue.

23 And we know that open access does not mean
24 unlimited access to the grid. It means -- it does mean
25 open access, but it also means there may be times where you

1 have to duly discriminate. And we need to look at these
2 question very carefully. And I have to say that I think
3 the best place to figure out the best way to do those
4 things are in the stakeholder process.

5 And that's one of the things I wanted to make
6 sure we didn't lose through this discussion today.

7 MR. LATEEF: Shahzad Lateef, NV Energy.

8 Anna brought up a very key point that I wanted
9 to also make with regards to the stakeholder process. It
10 was also brought up earlier. Each one of us EIM entities
11 that have joined have a unique set of geographical and
12 portfolio advantages or disadvantages.

13 The example was brought up that Puget right now
14 exists on the end of the EIM and we are in the middle of
15 it. During the stakeholder process, we have brought up
16 issues that are reflective of NV Energy's concerns. But
17 the stakeholder process is very robust in the sense that
18 the prioritization method allows for the overall EIM
19 priorities, not necessarily related to someone who has
20 hydro only or someone who has gas only or a different type
21 of footprint.

22 We have put a lot of faith into the stakeholder
23 process and the prioritization mechanism. When we signed
24 up for the energy imbalance market, we put our faith in
25 that process and there are priorities that are already

1 established. One of the risks that we see is if there's
2 kind of overlaying priorities placed on our existing
3 priorities, it will derail what we already have identified
4 as the process improvements for the existing process.

5 So I wanted to just bring that up. The second
6 part what we talked about before, Ms. Shipley you brought
7 this up on my comment about the energy market footprint
8 versus BA footprint. I wanted to reemphasize, we all have
9 our own set of challenges, but when we joined the energy
10 imbalance market, the EIM entity is ultimately responsible,
11 aside from the few market elements, all the reliability
12 compliance elements are retained within the balancing
13 authority as it stands.

14 That's the biggest element why I didn't want to
15 confuse the Cal ISO market boundary is essentially the --
16 EIM is not really an extension of Cal ISO boundary.

17 MS. SHIPLEY: So I have a quick question. This
18 is Jennifer Shipley. We had heard that one of the concerns
19 of the EIM entities was performance of someone coming from
20 the outside. We also heard, I thought, in some of our
21 outreach that the BAA from where the power is coming is the
22 one ultimately responsible for that performance.

23 So can you help me understand the difference
24 there?

25 MS. ANDERSON: Kathy Anderson, Idaho Power. So

1 from my perspective, it's maybe not so much the
2 performance, because you're correct because there's a BA
3 that's backing up that energy. If they don't generate to
4 their schedule or their target, that BA is going to make it
5 up.

6 My concern is more on the other side on an
7 unknown transmission issue, unknown transmission on
8 somebody else's system. So if, for some reason,
9 nonperformance is because of a hindrance on a transmission
10 system that is outside of the view of the EIM and it gets
11 curtailed or cut, my balancing authority is instantaneously
12 going to be responsible for making up that deficit.

13 And the reason is because these come in and bid
14 in at my border. That means they sink at my border.
15 There's not something going out on the other side that
16 there's a potential 100 megawatts that maybe gets granted.
17 That 100 megawatts goes away from a tag perspective, which
18 means my NSI instantly changes, my generation instantly
19 ramps -- at that scheduled interchange, excuse me. So it's
20 a part of my control.

21 If that goes away, my load hasn't changed. My
22 BA is now out of balance. My generation is going to
23 internally start to automatically respond to that, because
24 the market can't solve for that instantaneously. The
25 market doesn't know that happened. The market doesn't know

1 that happened until I tell them that happened, because the
2 market doesn't see that external tie into my balancing
3 authority.

4 And so that's where you could end up with a
5 situation where I don't have direct visibility of the
6 generator, I don't have direct visibility of somebody
7 else's external transmission system necessarily. That goes
8 away. I need to instantaneously respond to something that
9 was a part of an optimization of a larger BA to BA
10 footprint, and I want to call it a footprint. I kind of
11 hesitate to that. But the EIM is a BA to BA optimization.
12 Right? I don't have any direct contact with CAISO
13 directly. My interactions are going to be between the BAs
14 that are participating in EIM next to me.

15 And so when that external comes in, I think,
16 that's from Idaho's perspective what we mean by
17 nonperformance. If the generator is in Bonneville's
18 Balancing Authority and they get granted 100 megawatts, if
19 they don't generate 100 megawatts, Bonneville is going to
20 generate 100 megawatts, and that's the risk that the
21 external BAs are going to have to be willing to continue to
22 take.

23 And they take that today. But it's more on the
24 fact that the market is not automatically going to respond
25 to any change in those external schedules that are coming

1 in and sinking in my balancing authority that intertie
2 bidding would create.

3 MS. SHIPLEY: This is Jennifer Shipley again.
4 So when you have stuff coming in, you're saying yes, it's
5 definitely going to be produced because Bonneville or
6 whoever the BA is coming from is on the hook for that.

7 Is the transmission potential of curtailment
8 there that is causing a problem for you and --

9 MS. ANDERSON: It's that, and also if the
10 balancing authority -- I don't know what deal everybody in
11 every other balancing authority has for their imbalance
12 service with their host BA. I don't know what that would
13 be. And so if, for instance, somebody was subject to some
14 kind of limitation on the imbalance service that their BA
15 is willing to provide, there also could be a
16 nonperformance. They could get capped from a perspective
17 of generation. There's various aspects of what BAs do out
18 there.

19 So you know, in a normal everything's great kind
20 of world, when we all do transactions and bilateral
21 transactions, all of those transactions go in each
22 balancing authority's net scheduled interchange. We all
23 have control over those. If you want 50 megawatts sent
24 between Idaho and PacifiCorp, I'm going to generate it,
25 they're going to undergenerate it, we're going to pull 50

1 megawatts.

2 But the system is so complex that, you know, if
3 I don't have enough to back it up, I may tell that
4 generator you have to self-supply. They fail to
5 self-supply and it --

6 MS. SHIPLEY: So one of the things -- Jennifer
7 Shipley. So one of the things that we heard in some of our
8 outreach was that the EIM entities were very clear that,
9 you know, we signed on to be market participants but not so
10 much market operators, and this was pushing us towards the
11 market operator side.

12 Is there some way -- I'm a little confused,
13 because my understanding is that ISO -- CAISO is the one
14 doing the dispatching. So how does -- yeah, will you help
15 me understand that?

16 MR. LATEEF: Okay. Shahzad Lateef for NV
17 Energy. So first of all, I wanted to back up that the
18 example that Idaho Power just provided is one example. NV
19 Energy is middle of the pack. We have about 35 tie points
20 where potentially this can happen. Even if you think that
21 only 20 entities can bid at those 35 points, our magnitude
22 is 700 potential scheduling points that have to be managed,
23 20 entities times 35 points.

24 Cal ISO is the energy imbalance market provider.
25 They will dispatch based on that bid, the intertie bid at

1 my border, which I'm fully responsible for managing all
2 congestion, and they will move those resources up and down.

3 It's -- NV Energy is not moving those resources.
4 We are our own control area, but now we're having to
5 monitor a purchase or a bid at our border that is being
6 managed up or down by somebody other than us.

7 So we're having to respond sort of reactively to
8 our potential reliability concerns, because every time a
9 resource that Cal ISO dispatches higher, we have to look at
10 all of our congestion elements. We have to look at our
11 losses, our internal -- and if we don't see that it meets
12 our requirements of reliability, we're going to have to
13 still override the Cal ISO's bid or award to mitigate our
14 contingencies or to mitigate -- for example, the example
15 that was provided, Cal ISO awards a bid at an intertie,
16 moves the generation resource up 100 megawatts. It is not
17 going to NV Energy's sink. It is actually going -- for the
18 next five minutes, it's going into Arizona Public Service's
19 sink. I need to know that it is coming from at this tie
20 point and it is going into Arizona Public Service.

21 In a true market, that 100 megawatts can be
22 split multiple ways, 15 of it is going into Arizona Public
23 Service, 50 of it is going into PacifiCorp. Another 20 is
24 going into NV Energy's own sink. And I will have to manage
25 and mitigate all those based on if that resource fails to

1 perform.

2 And it's my responsibility. It's not Cal ISO's
3 responsibility, and that's why I continue to delineate that
4 that responsibility of managing my reliability, NV Energy's
5 reliability remains with NV Energy itself.

6 I'm hoping I answered that part of the question.
7 And the complexity continues to increase when you think
8 that there's the potential of 35 tie points, but so many
9 potential bidders that will all be moved up or down based
10 on their bid values by somebody other than NV Energy.

11 So what we mean by we never signed up for market
12 operator, we never signed up to monitor that if this entity
13 fails to perform, is it because of a transmission
14 limitation? Can they go to another tie point and still
15 continue to perform? The network model will continue to
16 have to be expanded. And instead of just looking at our
17 own balancing authority, we're actually now having to look
18 at so many other resources outside our balancing authority.
19 And from the reliability and compliance management,
20 managing our own balancing authority is a fairly good
21 challenge in itself, that we are just at this point not
22 very eager to sign up to be a small market operator within
23 the Cal ISO border.

24 MR. SOTO: Polo Soto, FERC Staff. What we hear
25 is that external participation through bidding at the

1 interties, generally there are challenges and costs to the
2 host BAA. Is there anything that the external resource can
3 do to mitigate those challenges and costs or that CAISO
4 could do, for example imposing certain technical
5 constraints with a participant's resources, certain
6 constraints that need to be satisfied within the bid, and
7 maybe certain charges that cover some of the costs that the
8 entities would assume if nobody else does.

9 MR. LATEEF: Shahzad Lateef with NV Energy. I
10 start with the premise you're absolutely correct. All
11 these challenges, you put in the right resources, right
12 construct, and right charging mechanism can be solved. So
13 I start with that.

14 The premise that I want to emphasize is, first,
15 we have to identify what problem we're trying to solve,
16 because based on my little understanding of how everything
17 works, and I will start with that, some of these congestion
18 charges really are not solved by the intertie bidding. So
19 we need to identify each problem, bifurcate those problems,
20 and then identify solutions and then identify how the EIM
21 entities can actually enable that.

22 And then going back to we still have to
23 rejustify our business case, that we're not taking
24 additional risks, operationally, reliability, compliance,
25 financial, any of those on behalf of our control area. And

1 if we are made whole in all those cases, then we can
2 actually look at those issues one at a time, as long as it
3 solves what we intended to solve.

4 MS. AMOS: Mr. Lateef or someone else, this is
5 Angela Amos, FERC Staff. It's not clear that the problems
6 you're describing are going to -- are uniquely tied to
7 intertie bidding. It seems as though when one creates an
8 e-Tag that's moving power from one BA to the other, the
9 same sorts of risks of curtailments or modifications
10 intra-hour are still there.

11 So could you, please, delineate how a -- is it a
12 timing problem that you're describing, or is it something
13 else?

14 MR. LATEEF: Shahzad Lateef with NV Energy.
15 Very good question, Ms. Amos. It is a little bit of both.
16 First, the e-Tag actually defines the source and the sink.
17 I know where the power is coming from, and I know where
18 it's being sinked. And during the course of that tag being
19 valid, that path remains.

20 In the intertie bidding, the optimization engine
21 is run every five minutes. For the same clearing price
22 as -- for a few minutes or the first five-minute or
23 15-minute period, the sink may be in Arizona Public
24 Service, and the next sink may be in California ISO. And
25 it's not the whole element. It is energy that is being bid

1 is being used by wherever it's needed within the EIM
2 footprint, which includes multiple balancing authorities,
3 and it's continually moving.

4 The second, the timing part is also very valid.
5 That problem exists today. As soon as the tag is -- a
6 force event happens. A transaction is cut. A tag is cut.
7 Both from the source, and if it's a wheel-through, so is
8 the outgoing schedule cut at the same time. If the sink
9 was actually NV Energy balancing authority, then we have
10 actually evaluated that up front that if that resource gets
11 cut, we will provide the imbalance energy to make us whole.

12 Am I making myself clear? So in this -- the
13 timing of this is when the first element gets cut --

14 MS. AMOS: Sorry. The part where I actually got
15 stuck was where you clearly can identify the source and the
16 sink for every tag, because we already know that some tags
17 have "system" as the source or the sink. So if you could
18 say a little bit more about or tease out the different
19 components of the concern.

20 MR. LATEEF: So if NV Energy is the sink, when
21 we approve that tag, we acknowledge that if that gets cut
22 we will actually take that responsibility of providing that
23 imbalance energy. For a wheel-through, the tag has a
24 component that it came from, the source, and this is the
25 sink it's going through. I have a full path identified

1 that if this tag gets cut, which elements of the actual
2 flow gets cut, and I'm staying whole if it's a
3 wheel-through.

4 Energy imbalance market is very different
5 because we have dynamic tags that exist between energy --
6 between EIM entities. But which tag is being used at what
7 time for each resource, it's a continually moving target.
8 And it's reoptimized -- that's the whole value of why it's
9 imbalance market. Incoming resource may stay. They have
10 whole transmission to NV Energy's border, 100 megawatts.
11 How it's then dispatched within the energy imbalance
12 market, it continually moves.

13 So it's difficult for me, without being a pseudo
14 market operator, to see how Cal ISO is redispatching that
15 resource across the EIM entities and where it's going and
16 what do I need to cut, 10 megawatts of EIM tag into APS,
17 another 80 megawatts of EIM tag into PacifiCorp? So that's
18 the element that is challenging from -- that makes it
19 different from the bilateral transactions and the EIM
20 related transactions.

21 Somebody else?

22 MS. SHIPLEY: We have some other hands up.

23 MR. MANTIFEL: Russ Mantifel, Bonneville Power.

24 I think it's true that many of these issues exist in the
25 status quo and are not necessarily unique to EIM intertie

1 bidding, so for example, like the sanctity or the security
2 of the upstream transmission, currently in the Northwest a
3 large number of resources are actually delivered on
4 Bonneville transmission. So even though they are EIM
5 participating resources, they wheel across Bonneville's
6 transmission in order to get to load. And those tags are
7 between Bonneville and the relevant EIM balancing authority
8 area.

9 So there's a curtailment risk of those tags
10 getting curtailed without there being -- without there
11 being foreknowledge of the CAISO. You would have a lagging
12 indication after the tag were curtailed, but it wouldn't
13 automatically get integrated into the market because those
14 tags aren't integrated into the market.

15 Those exist today, and typically, those are on
16 firm transmission, and there's a low likelihood of them
17 being curtailed. But my understanding is it's the
18 discretion of the EIM entity what sort of transmission they
19 use.

20 And I agree that the market models need to be
21 updated so that the shift factors can properly be
22 calculated and that the engine can effectively dispatch
23 within the security constraints and that it knows all the
24 security constraints. But that can be done. Bonneville's
25 network is already effectively modeled by the CAISO. We've

1 gone through a lot of work to make sure that they
2 understand what sort of realtime operational concerns that
3 we have. And we've been effective at integrating our
4 network model into theirs so that they can effectively come
5 up with an optimization that is correctly
6 security-constrained.

7 And so I think that it's doing these things --
8 these things in many ways are done currently, and I think
9 that they're soluble in terms of being able to expand it to
10 third parties. If you have consistent technical
11 requirements that meet the ISO's market -- and also,
12 Bonneville is interested in the efficiencies that are
13 provided for the market. Most of the Northwest -- many of
14 the Northwest megawatts impact our system first. So we are
15 equally incented to have an effective security management
16 system that the CAISO runs.

17 MS. SHIPLEY: I think Mark Rothleder was waiting
18 next.

19 MR. ROTHLEDER: Thank you.

20 So I think you're hearing flavors of what I'm
21 going to say here, and let me try to bring this all
22 together. It's hard to compare status quo traditional
23 contract path tagging and what it can do in terms of
24 managing flows across a system. And I will be blunt. It
25 can't. Contract path cannot manage flows across the

1 system.

2 And therein lies why you move to something like
3 a full network model with locational pricing, so you can
4 get the granularity and the accuracy of flows so that you
5 can produce prices, produce dispatches consistent with
6 those prices that send the right signal at the right
7 location to manage the system and the flows on the system.

8 And you do that through the security-constrained
9 economic dispatch. If you try to mix those two and say
10 okay, we're going to do security constrained economic
11 dispatch and we're going to price but we're going to
12 dispatch on a system resource basis, you lose the pricing
13 connection with the dispatch that you just established and
14 the consistency with the flows.

15 And this is not new ground. We know that to the
16 extent those don't align, things happen. Reliability is
17 jeopardized because now you're creating inaccurate flows,
18 and you have to do things to compensate for that. There
19 are financial implications, because then if you have to do
20 redispatch because the original dispatch wasn't accurate,
21 there are what's called offset costs that accrue that then
22 become the responsibility -- that then be allocated to EIM
23 entities and ultimately potentially load.

24 And this is where trying to overlay a system
25 resource, nonspecific resource, contract-based approach

1 where, I agree, that if you give a schedule to a
2 neighboring balancing area and that schedule interchange
3 will reflect it, the balancing area will support that.

4 But from what resource? It may not be from the
5 resource that you expected performance on, and that can
6 create both congestion issues in the sending balancing
7 area. It can create congestion issues that you thought you
8 resolved for the EIM entity balancing area. And it can
9 create issues on neighboring areas that are supporting EIM
10 flows through the system, such as BPA.

11 So what you're hearing there is that EIM is not
12 trying to just match what contract path does. It's trying
13 to be superior. And in doing so, we are using
14 resource-specific dispatches. Yes, we're following it up
15 with transfers and quantifying the transfers and
16 registering that with the tags. But first and foremost,
17 the resource-specific information allows us to do that
18 accurate dispatch, consistent with the prices that helps
19 manage reliability and reduce the inefficiencies of
20 dispatch that can occur because of the lack of that
21 granularity.

22 And I think that's the piece that we feel as
23 though, or at least I feel as though, introducing intertie
24 bidding just with the support that the balancing area is
25 going to support that through the net schedule interchange

1 deviates from the intent of the EIM and undermines the
2 efficiency and the pricing connection with the dispatch
3 that you're trying to do.

4 MS. SHIPLEY: I see three hands up on this side
5 of the room, JJ, Ellen, and Therese.

6 Who wants to start?

7 JJ?

8 MR. JAMIESON: Hi, it's JJ Jamieson from
9 Perennial Power Holding. I have been hearing a lot of
10 discussion surrounding the idea that we simply don't know
11 what's happening outside the EIM, we don't have enough
12 information to make an intelligent decision about how it's
13 going to impact our system, how it's going to impact
14 dispatch.

15 So what I'd like to do for just a moment is take
16 it and split it into two. So rather than looking at trying
17 to solve it all at once, look at one specific example to
18 see if we can get a better understanding of how something
19 could progress and potentially be successful. But I want
20 to be very careful not to take away from the discussion
21 about a system resource at the intertie.

22 So as I alluded to earlier this morning, we have
23 a unit that is available for dispatch, and prior to 2016,
24 July 1st, it was wholly contained within the PacifiCorp
25 balancing authority and was able to participate in the EIM.

1 What happened post-July 1st is we split it into
2 two separate units in two separate balancing authority
3 areas. It's important to note at this point that the
4 physical characteristics of the plant, of the wire that the
5 energy is transmitted on, everything is identical. There
6 was no change beyond communication devices were put in, and
7 we did put in some additional RTUs and metering so every --

8 MS. SHIPLEY: RTU?

9 MR. JAMIESON: Remote Terminal Unit. So it's
10 basically a communication device so that you can see what's
11 going on.

12 The data that is provided to those RTUs,
13 although it's going two separate places, is identical. So
14 each RTU has the entire output of both units at all times
15 available for the entities that are looking at it to
16 understand exactly what's happening.

17 For this data, we not only take it and share it
18 between the unit that is in the PacifiCorp balancing
19 authority area, but we also take the one that's the
20 Hermiston Generating Company's balancing authority area,
21 Perennial Power, and we transmit that information at the
22 same time, at the same rate, through the same equipment to
23 ensure that everybody sees what's going on. The people
24 that are seeing what's going on is the CAISO, EPA,
25 PacifiCorp, Grid Force which is a parent for our sub-BA,

1 and Peak RC. So I'm struggling with the idea that we would
2 not know what's going on, given this particular
3 circumstance.

4 To add to the irony around this is, if unit 1 is
5 in the PacifiCorp balancing authority area for a period of,
6 say, three months, that unit is allowed to go into the EIM
7 and participate. We change back and forth for maintenance
8 concerns and so on. So we literally move the units between
9 balancing authority areas every three to four months.

10 So if I have possession of unit 1 that's
11 identical to the one that bid in yesterday, but because
12 it's under my possession today, it's not allowed to bid
13 into the EIM. Although it's physical characteristics are
14 identical, the data that's supplied is identical, there's
15 absolutely no difference except who has the ownership of
16 the unit at that time.

17 And I just want to add one more further piece of
18 irony to this. The data that is used to calculate what
19 portion of the energy from the unit is going into the EIM
20 is calculated by my balancing authority area. So even
21 though I do the calculation that tells PacifiCorp exactly
22 what's coming into the balancing authority area for the
23 EIM, I don't have the capability of doing that for myself,
24 even though I'm the one responsible for providing you with
25 the information you operate to.

1 MS. SHIPLEY: So this is a very specific issue
2 that I'd like to spend a little bit of time on, if that's
3 okay. I think PacifiCorp, did you have something specific
4 to this? And we've got Petar from CAISO. If we can stick
5 on this one for a little bit and then come back around to
6 some of the other issues.

7 MR. RISTANOVIC: Yeah, we would like to focus --

8 MS. SHIPLEY: Can you identify yourself.

9 MR. RISTANOVIC: Petar Ristanovic from
10 California ISO. We would like to focus the discussion on
11 generic intertie bidding. For example, physical resources.
12 We agree physical resources with telemetry should be able
13 to participate. Now, generic intertie bidding, the way we
14 have in California ISO, does not have that requirement.
15 You can bid on our intertie using specific system resource,
16 and that energy can come from anywhere and not going to
17 show up on the bid. This is a different issue.

18 So we have agreement and we have principles,
19 resource, physical-based bidding is okay. We have to find
20 a way to do that. But we really want to address issue of
21 generic intertie bidding which is not
22 physical-resource-based --

23 MS. SHIPLEY: We are going to address that
24 today. But if there's a moment that we can talk about
25 this, though, I think it's potentially helpful. This is a

1 unique situation, but there are also lots of other unique
2 one-off situations. We do want to get to the general
3 discussion, but I think it's helpful to talk about some of
4 the unique situations. So if you want to speak to those
5 now, I think that would be helpful.

6 Go ahead. Down here, PacifiCorp. Thank you.

7 MR. SCHAFFROTH: Hello, John Schaffroth from
8 PacifiCorp. So for Perennial's units, it is actually a
9 very unique situation for sure. It was as a unit that
10 fully in PacifiCorp's BA, and the reason that it got split
11 out was because an agreement couldn't be reached on the
12 purchased power agreement, if I understand right.

13 So one of the requirements, though, in order to
14 have a unit like that that's a shared unit and shared
15 ownership is that the owners have to agree on how to market
16 and how to participate with that unit in the market.

17 So it has all the communications. JJ is
18 correct. It has all the communications and everything
19 that's already set up because it was in our BAA and being
20 used for regulation bidding and all-day automatic or remote
21 control that we would use the unit for. And so I just want
22 to point out that it is definitely a unique case that is
23 physically located in/very close to PacifiCorp's BA. So
24 the transmission issues are different with it, and then I
25 think to me the hurdle for it, from my understanding, is

1 coming to an agreement on how to bid and how to participate
2 with it.

3 MR. JAMIESON: I agree with John that part of
4 the reason that there was that communication in place was
5 because it was wholly within the PacifiCorp balancing
6 authority for a period of time. But when we did the split,
7 we actually completely re-created it again. So it's
8 completely individual. So I guess my point here is that
9 it's achievable for someone else that isn't in that unique
10 a situation. You can create the exact communication
11 infrastructure requirements relatively easily.

12 MR. LATEEF: Shahzad Lateef, NV Energy. I'm not
13 familiar with the unique situation that both John and John
14 talked about. But looking from my perspective, yes, we can
15 put the construct in place, proper remote terminal units in
16 place, proper telemetry in place, having it brought into
17 our SCADA, having it brought into our state estimation,
18 having done studies on each one as to what will happen to
19 our system if that outside participant is not whole, is
20 unable to perform.

21 Multiply that with 35 tie points with multiple
22 resources. I'm having to monitor all my contingencies. If
23 one unit fails at one place, and that is, it still solves
24 only one part of my equation, because I still have to solve
25 where the sink is. So I have fully understood the

1 generation. I have put all the resources in place. I know
2 which transmission it's taking it, which paths. I have put
3 all those contingencies in my model to study.

4 I still have to go back to the Cal ISO model on
5 where that energy is being sunked at, because if you are
6 unable to perform or whoever is the resource, I am still
7 responsible for the outgoing energy if it is not sunk in my
8 BA.

9 So the responsibilities for the BAA becomes that
10 pseudo-market operator, because now I have a very clear
11 understanding of the tags and everything that is coming in,
12 but there is no corresponding tag going out because it's a
13 continuously moving target. Sometimes it is sunk in my
14 area.

15 And I go back to that these are all technical
16 challenges that we're talking about. Are they solvable?
17 Yes. I go back to my original question. I still am
18 confused on what we are trying to solve here.

19 MS. SHIPLEY: So the gentleman from Chelan
20 County has been very patient. Would you like to speak now?

21 MR. DAVIS: Thank you.

22 Rob Davis with Chelan County PUD. I just wanted
23 to highlight a similar situation that we have related to
24 joint ownership resources in EIM, just for some additional
25 background. We have two hydroelectric projects,

1 Mid-Columbia. We're neighbored by a couple other public
2 utilities districts that also have large resources on the
3 Columbia. The three utilities currently hydraulically
4 coordinate those resources. And we sell large slice of
5 systems to utilities and marketers in the Northwest.

6 One of those is Puget Sound Energy, who has a
7 large share of our Rocky Reach and Rock Island projects,
8 and they also have shares with the other utilities. They
9 pseudo-tie those into their balancing authority area and
10 participate in the EIM with them. They have been
11 cooperative with us. We see a lot of data. The ISO's been
12 very good about talking with us. I'm glad to hear that
13 they're still behind their principles on external resource
14 participation.

15 And it's really a situation that, when we look
16 at it, you know, if we as a balancing authority area decide
17 that the costs aren't in our favor or that the economics
18 won't pencil out to join, we still sell a lot of system
19 slices to other marketers and utilities who may have a
20 desire to use that flexibility in the EIM.

21 They will be situated in a place where the ISO's
22 already modeled, where they're already receiving data,
23 where there's already a good deal of telemetry in place for
24 the hydraulic coordination that takes place, and it
25 shouldn't be, you know, an impediment to their

1 participation, that we as a balancing authority area and as
2 a local utility have decided that we don't want to incur
3 those costs for our customers in our county.

4 MS. SHIPLEY: So we are definitely identifying
5 some of the challenges.

6 Therese, do you want to speak to this?

7 MS. HAMPTON: I want to give Russ a chance, I
8 think, if we're going to stay on the same topic. Oh,
9 sorry. This is Therese Hampton with Public Generating
10 Pool. I actually have a number of comments from what's
11 been said. So I'm going to try to make it succinct and
12 pick up on some comments.

13 So Mark Rothleder identified what some of the
14 issues were associated with generic intertie bidding,
15 specifically related to managing flows and congestion.
16 That -- what he shared with you today, he shared also in
17 the region, and that was the compelling argument for us, to
18 understand the need for visibility. So I just want to
19 underscore again, that so the PGP utilities, as all other
20 resources, we understand the need to have resource-specific
21 information, certainly aggregated where it's appropriate,
22 not blanket fraud aggregation, but aggregation where you
23 have similar system flow impacts. So I just -- I want to
24 underscore that, because I think we are comfortable with
25 market rules around that and think that's a good place to

1 have conversation.

2 MS. SHIPLEY: So if I can interject. So this is
3 one of those parsing moments where we can parse out. We've
4 got discussion of participation from the outside, from
5 people who are willing to provide a lot of
6 resource-specific information that the EIM entities and the
7 CAISO might be more comfortable with, parsing that
8 separately from the folks who -- the IPPs and whatnot who
9 have energy they'd like to bring into the EIM in some way
10 without having to identify exactly where it's coming from.
11 Is that accurate? All right. That's one of the parsings.

12 Go ahead.

13 MS. HAMPTON: Some of the other issues that were
14 raised relative to reliability concerns, we do think that's
15 a BA to BA issue and that there are kind of technical ways
16 to solve that. There are ways to address it. And I think
17 you've kind of asked I don't know what problem we're trying
18 to solve. We're trying to solve the opportunity of getting
19 more resource into the energy imbalance market.

20 There's another piece, though, that's important
21 in the way that we talk about this. We've been talking
22 about the geographic footprint and maybe trying to define
23 it as a BA to BA, kind of each BA is its own footprint.
24 But this market, the way the EIM market is defined, its
25 boundary is all of the participating BAs, and you can only

1 participate if you're in that boundary. You can't
2 participate if you're outside that boundary.

3 And I think we just can't lose sight of that.
4 We have members in our -- in PGP that are in balancing
5 authority areas that have chosen not to participate. They
6 are not balancing authority areas themselves, but they
7 happen to be in one that has chosen not to participate but
8 have resources that could participate. So that's really
9 what we're trying to solve, is to find the opportunities
10 there.

11 MS. SHIPLEY: So trying to decide who is best to
12 speak next. JJ has his up. Ellen has hers up. Russ has
13 had his up for a while.

14 MR. MANTIFEL: Russ Mantifel, Bonneville Power.
15 Going back to the two examples, I think to clarify the
16 roles in terms of the reliability and in general but in
17 Northwest specifically. So JJ's plant, we are the
18 transmission operator. It connects to the Bonneville
19 transmission system. Rob's plant, parties can -- there's
20 multiple ways to wheel that, that resource to different
21 loads, but a large percentage of the parties bring those
22 megawatts home on Bonneville's transmission.

23 So the beneficiary of the data for the purpose
24 of congestion management is Bonneville, a non-EIM entity.
25 And so a lot of the concerns about not having visibility,

1 creating reliability problems for the balancing authority
2 area, congestion management is not a balancing authority
3 function. It's a TOTP function. You can have a balancing
4 authority without transmission; you can have transmission
5 without a balancing authority.

6 We are a transmission operator for many of the
7 megawatts that are participating in the EIM, and we are
8 very interested in furthering the benefits that the EIM
9 provides in terms of generation-specific data, more
10 effective shift factors, visibility in terms of what is
11 unscheduled flow and what flow is expected.

12 And I think that we have solved a large number
13 of those problems already in order for PacifiCorp to join
14 using Bonneville transmission, Puget more recently, working
15 with PGE now, and we benefit from the data that we receive
16 from the CAISO, and we would expect -- we would hope that
17 further participation from generators that are not a part
18 of any balancing authority area would meet those same
19 standards that we have on the resources that are in EIM
20 balancing authority areas. And so we are equally incented
21 to not undermine the reliability benefits of the market.
22 So -- and we are a willing partner in terms of solving some
23 of these problems.

24 I think also in terms of the number of
25 connections that she was talking about, we also don't want

1 to see a proliferation of e-Tags. Right? And so I think
2 that you could do something similar to the way generators
3 bid currently inside EIM participating balancing authority
4 areas, roll it up into a single tag. There's a lot of ways
5 to handle interchange in a manner that greatly simplifies
6 these things if parties on both sides are really incented
7 to try to work something out, I think. And so our hope is
8 that we get an opportunity to do that.

9 MS. SHIPLEY: Both JJ and Ellen --

10 MR. JACOBS: Josh Jacobs with Puget Sound
11 Energy. Just on the heels of what Rob was talking about
12 with our Chelan shares that we have made available as a
13 participating resource into the market. I also wanted to
14 acknowledge that a lot of what we are talking about here
15 sounds a lot like pseudo ties, and it is much different
16 than intertie bidding.

17 And to the extent that we get visibility based
18 on, you know -- just looking at our OATT, there are a
19 number of different components of how we would enable
20 pseudo ties in our balancing authority. Transmission, do
21 we have a firm transmission path from source to sink.
22 Metering, is it compatible with our MB 90 system and meet
23 our technical specs. Communications, is it redundant and
24 do we have the RTUs set up in the right places. Remedial
25 action schemes, units remote from our balancing authority

1 that could be curtailed because of transmission constraints
2 or flow gate constraints in the area, that impacts the EIM
3 entities. Costs, you know, who is bearing the costs for
4 all the work that's required to enable a pseudo tie.
5 That's dictated by the OATT, but in large part it's picked
6 up by the pseudo tie resource. And then ultimately,
7 reliability, are there any other reliability concerns that
8 we need to factor into this arrangement.

9 But just to talk a little bit about the Mid-C
10 work that we put into making those resources available to
11 the market, it actually took a lot of effort and analysis
12 with both Bonneville, CAISO, and Puget to make sure that we
13 had the accurate representation of congestion on our
14 system. And I think Russ kind of made the case in terms of
15 we need all of this information in order to assess impacts
16 to the system and congestion accurately.

17 And yes, Bonneville does sit on top of much of
18 the Northwest, and they're interested in all of this data,
19 and they're getting a lot of the data, and I think it's
20 improving their situational awareness. Puget is quite a
21 bit smaller, but we're equally interested in having that
22 information. And it was a part of, you know, what has gone
23 into our full network model work, specifically with the
24 Mid-C resource that's pseudo tied into our system.

25 So it's a much different conversation than

1 intertie bidding. And I think it's more in alignment with
2 the CAISO principles that were established at the RIF.

3 MR. JAMIESON: JJ Jamieson, Perennial Power
4 Holdings. For Mr. Lateef, I need help understanding how if
5 you've got a resource that you have -- full transparency,
6 just for argument's sake, you know exactly what's going on
7 with that. But you say if it has some kind of disconnect,
8 it's not able to perform, it causes you additional problems
9 because you don't know where you're sinking to in that.
10 Can you help me understand how that's different from having
11 a unit within your BA that does the same thing?

12 MR. LATEEF: Shahzad Lateef, NV Energy. True,
13 in our BA, as an EIM entity, we control what we bid into
14 the market. So we're taking ownership on that behalf. And
15 I think you made precisely my point. When I -- at T minus
16 57 or T minus 40, when I decide what units go into the
17 market, I am choosing to allow what has been bid into the
18 market from the reliability. I'm doing a reliability
19 assessment, and I'm saying that these units are okay to
20 participate because if they fail to perform I have
21 resources to cover. Ultimately, I'm in charge from the
22 reliability perspective, and I pay very much attention to
23 what's been bid into the market versus what I can sustain
24 from a reliability perspective.

25 When you increase that, I will have to take the

1 same responsibility for units outside, and that's the point
2 that we were trying to make, that it makes me not a
3 balancing authority or transmission operator. It makes me
4 a market operator because I'm now also responsible for
5 resources which are outside my balancing area footprint.
6 And I should still be able to -- if all the resources are
7 put in in the right place and the construct is such that
8 there's 20 intertie bids that I have to evaluate in
9 addition to my own bids, my bids from within my own
10 balancing area, I have to be able to decide based on which
11 ones I'm going to allow to proceed and which ones I'm not
12 based on congestion within my system, based on my ability
13 to sustain the imbalance energy if those resources fail to
14 produce.

15 So it just increases the challenge that I have
16 by a significant fold, and my fold was 35 times whatever
17 number of participants can bid on it. So that was my
18 construct. Yes, I can actually offer the same service, but
19 my responsibility would increase significantly. I will
20 incur additional costs of analyzing that data, reliability
21 assessment on my system. All of those costs will be
22 incurred by me primarily for an opportunity -- and I go
23 back to Ms. Hampton's comment. It's not a problem, it's
24 not a challenge in the EIM that I see that is solved. It's
25 an opportunity for others to participate in the market.

1 So in order to create that opportunity, I am, as
2 NV Energy balancing authority operator, taking the
3 increased responsibility for enabling that.

4 MR. SOTO: This is Polo Soto, FERC Staff. So we
5 hear from CAISO that resource-specific intertie bidding is
6 okay. We hear from you that it might not be because of all
7 the other responsibilities that BAA has.

8 Any way to reconcile that? Are the differences
9 between the five-minute market, 15-minute market or both?

10 MR. LATEEF: I'll comment -- Shahzad Lateef, NV
11 Energy again. I'll comment on your first part and pass it
12 to John after that.

13 The first part is Cal ISO is a market operator.
14 NV Energy does not plan on being a market operator. That's
15 why we very carefully chose to become the energy imbalance
16 market participant, a voluntary market. Cal ISO has a
17 different set of resources. They enable that for different
18 transmission operators within their footprint.

19 And I go -- keep going back to this, that the
20 construct of California Independent System Operator versus
21 NV Energy as a balancing in the control area is very, very
22 different. Can we enable that? Yes. But we will have to
23 see where the benefit lies for NV Energy's customers. And
24 that's the whole crux of it. If we sign up for being more
25 than just control area operator or balancing area operator,

1 we are enabling things well beyond our means or what we are
2 capable of at this point. Can we get there? Yes,
3 absolutely. What will it take? We'll have to identify.

4 MR. SOTO: Could either of you speak to the
5 second part of the question, whether it makes a difference
6 to focus on the 15-minute market, five-minute market, or a
7 combination of both? So would it be easier for the BAA to
8 allow resource-specific intertie bidding at the 15-minute
9 market than at the five-minute market or both?

10 MR. SCHAFFROTH: Can I start?

11 MS. SHIPLEY: Identify yourself.

12 MR. SCHAFFROTH: I'm sorry. John Schaffroth,
13 PacifiCorp. So I want to kind of tie that -- start with a
14 response to that question and tie it back to a couple of
15 points that Jennifer and Kathy and Shahzad made, how it
16 will be -- but a 15-minute and a five-minute market are
17 kind of a blend in how it would be beneficial for the -- or
18 how the BAs could use that to make that type of thing work.

19 Something to understand, the comment was made
20 that the ISO's not dispatching our units, and I want to be
21 clear on that, that each BA is still in control of all of
22 its units. It's still dispatching its units in order to
23 balance itself in realtime.

24 And what that means is really in that
25 sub-five-minute area, the market is really more of a

1 security-constrained economic dispatched system, which is
2 coming up with a plan for you to meet your load. It's not
3 coming up with those 30-second to one-minute type of --
4 that time horizon where you need to balance, you need to
5 make sure -- there was a change or some sort of imbalance
6 or some sort of -- some sort of change with variable energy
7 resources or a unit had some sort of an issue and it's
8 backing down, something like that.

9 The BA still has to respond to all of that. So
10 bringing in more resources or more variables on the 15- and
11 the five-minute market doesn't help the BA balance their
12 own BA. And that's -- I think that's key to kind of how
13 the EIM is different from California ISO operation and
14 perhaps why intertie bidding for the California ISO would
15 work, because in the same room they are also balancing
16 their own BA.

17 So they are doing not just those 15-minute and
18 five-minute market dispatches or awards are coming in.
19 They're dealing with those. They're also then balancing
20 their BA after that. And we're not. We're taking that
21 15-minute and five-minute instructions above our current
22 processes and then further controlling it then from there.

23 So we get an instruction really, we get advice
24 on where our unit should go, and then we either agree or
25 disagree with that in terms of how to balance our BA. I

1 don't know if that directly answers your question, but I
2 wanted to hit on that dispatch piece before passing this
3 down to Josh.

4 MS. SHIPLEY: I actually want to give us the
5 five-minute mark for our break. I will turn to Therese and
6 then Ellen, and I think we will close out before the break
7 and pick back up when we come back.

8 MS. HAMPTON: I just have a quick question.
9 Therese Hampton, Public Generating Pool. When I think
10 about external resource participation in a -- from a
11 nonparticipating BA, you would receive a dispatch request,
12 dispatch operating target, something like that from the
13 ISO, accept that, and then it becomes a part of that
14 scheduled interchange between that host BA and the EIM
15 entity BA that it would be being delivered to. So it
16 becomes a part of that net schedule interchange.

17 At that point, the question I have is, I don't
18 know how a failure of that resource to perform becomes your
19 issue, number one, that's my first question, because it's
20 in the net schedule interchange, the host BA is responsible
21 for that, and two, how it's any different than if a
22 resource didn't perform and one of your other EIM entity
23 BAs that also had a net scheduled energy with you. So I
24 just really like some help in understanding that.

25 MS. SHIPLEY: So I'm going to ask that we pause

1 on that. We're going to hear from Ellen, and then we're
2 going to take our break, and we're going to come back and
3 tee up that question that Therese just set up.

4 MS. WOLFE: Hi, Ellen Wolfe for WPTF. I've been
5 just listening this afternoon, and it's been really
6 fascinating. I wanted to follow up on a couple threads.

7 One is to a comment Anna made initially about
8 open access, and I think it was in response to my initial
9 comments and we certainly didn't mean open access in the
10 sense of being denied the ability to get transmission
11 service. But I think JJ's plant example illustrates the
12 kind of open access we're talking about, which is
13 relatively similar situated entities and one has access to
14 market products and services and the other doesn't.

15 So it's not open access in the very
16 old-fashioned sense of the word. It's are there barriers
17 in place that don't really need to be in place that are
18 preventing sort of similar treatment. So I just want to
19 make that clarification.

20 I think with respect to the discussion about
21 inside EIMs versus outside EIMs, it's been really
22 interesting to sit back and listen to it, because I think
23 there's no doubt that we think a full network model EIM
24 representation, CAISO representation, is superior to a
25 contract path one. I don't -- I think if you're parsing,

1 there would be no doubt on anybody's mind that that's true.

2 I think the -- and the ISO made an example of
3 that with its own market. Now the EIM entities are going
4 to do a lot of work to build that out. And that's great.
5 We're all benefiting from that. But the situation is that
6 we're left still with some parts that aren't yet modeled
7 like that, or the BAAs, for one reason or another, haven't,
8 you know, bought into running their system like that. But
9 we still have the bilateral contract world going on. So
10 what do we do about it?

11 And I think Ms. Amos asked the question, does
12 this have to do with bidding or does this just have to do
13 with sort of normal life? And I think it's kind of a
14 normal life problem that we're in with these EIMs being put
15 in place, but now the old contract path world that used to
16 be fine looks really bad.

17 And it's interesting to hear about all of these
18 challenges, because these interchanges have been going on
19 for decades, and somehow entities have been managing them,
20 and now they actually have more visibility, better ability
21 to control in their own area, and all of a sudden it's
22 really bad news that these interchanges are going on. And
23 if you follow the logical argument to its implication it
24 would be that nobody should trade anything with anybody at
25 their boundary because it's too hard to manage.

1 And we don't want that conclusion. So what I
2 hear more is sort of a theme that too much volume is too
3 hard. It's not really a matter of whether they're offered
4 economically or not. It's almost the sense that if we let
5 them offer economically, they'll want to do it, and then
6 we'll have all this volume, and what will we do with it.

7 But I think you've got to think through well,
8 what is the root cause of the problem. We have still this
9 old world, and until we get the models built out somehow --
10 and maybe that's, you know, some hint of where we need to
11 go with this or something. As long as we have that
12 contract path world still existing in the West, we can't
13 just decide we're not going to do business with them
14 anymore.

15 And so I think it's really interesting -- I
16 don't hear it being about the bid so much. It's just
17 about, you know, how can we handle all these trades when
18 now the information is -- quality is sort of poor on one
19 side and is good on another side. But it's no worse than
20 it was 10 years ago on the other side. It's just now
21 you've got something that's better on your side, and I
22 think how we marry those two is really an interesting place
23 for us to dwell, because we have to figure out how to do
24 it. We can't just tell the old world to go away, as easy
25 as it sounds.

1 MS. SHIPLEY: Okay. So growing pains is what
2 I'm hearing. You know, we had a system in the West that
3 was operated a lot on e-Tags and phone calls and lots of
4 things that are now being improved. We've heard from folks
5 who've been visiting and participating in our outreach,
6 that even just going into an EIM approach has really given
7 a lot of new visibility on their own systems. There's a
8 lot -- an evolution happening in the West that is, perhaps,
9 EIM has been the catalyst with renewable energy coming on
10 and being the catalyst before that, but there's a lot of
11 change going on.

12 And it sounds like the EIM is not going to be
13 the full answer to all of this, but it is a part of the
14 growing pain transition we're going through. So let's keep
15 talking when we come back about where some of these other
16 challenges are and what potential solutions might be or
17 maybe where those solutions need to be looked for, because
18 obviously it won't happen here, where these conversations
19 might continue, et cetera.

20 So let's take a break and come back at 2:30.

21 (Recess taken from 2:17 p.m. to 2:34 p.m.)

22 MS. SHIPLEY: This is Jennifer Shipley. We
23 ended last session before the break with some really good
24 questions. Brian Bak of FERC Staff is going to see if he
25 can summarize what we heard to kick us off again.

1 MR. BAK: This is Brian Bak, FERC Staff. So I
2 want to try to build off of what Ms. Hampton said with kind
3 of a hypothetical idea of what intertie bidding might look
4 like. And this may or may not fit to exactly what you're
5 getting at.

6 So hypothetically, if an external resource could
7 bid a -- kind of an offer curve, saying we want to schedule
8 for 100 megawatt-hours but we're willing to move for a
9 certain price. That bid is submitted for 15 minutes, but
10 57 minutes ahead with the option to move based on CAISO's
11 kind of discretion.

12 But I want to hear how that differs from the
13 existing ability of those resources to schedule into the
14 EIM footprint, as it is, not at CAISO's discretion but
15 under their own business practice, and whether or not
16 having CAISO seeing what their offer curve looks like and
17 being able to say this is a cheaper resource to move as
18 opposed to independently that resource saying we think the
19 price is going to be here, so we're going to move, because
20 we don't think the imbalance will be that much.

21 So basically, does adding this visibility into a
22 price preference for these external resources, can it
23 provide a benefit if, for instance, it's limited to
24 scheduling an hour ahead or about an hour ahead and maybe
25 limited to 15-minute schedules instead of five-minute

1 dynamic scheduling?

2 MS. HAMPTON: That was not my question, but it's
3 a great question. So my question was specifically about
4 the reliability concerns that were mentioned and the need
5 to, as a BA, to take on additional risk associated with the
6 nonperformance of an external resource in a non-EIM entity
7 BA and how that might differ from any resource risk you
8 might have in another non-EIM entity BA.

9 MS. SHIPLEY: So can we start with the first
10 question that Brian posed, whoever wants to respond to
11 that, and then we will deal with Therese's question.

12 MR. BAK: And if you could focus on both -- kind
13 of the reliability concerns, how that impacts your
14 reliability concerns, and also from just an economic use of
15 the transmission system and generation available, so kind
16 of both the economics but also, is it increasing balancing
17 authority obligations and reliability risks to have CAISO
18 see a dispatch or a price preference and dispatch it within
19 its time frame, at T minus 57 versus a transaction done
20 purely outside of that, the EIM infrastructure.

21 MS. SHIPLEY: Who'd like to speak to that?

22 MR. ROTHLEDER: All right. So I guess the first
23 thing I think we want to make sure, we're now talking
24 beyond just resource-specific and the flow accuracy.
25 You're asking more from a balancing area perspective,

1 what's the impact of having to manage bids into the market
2 on the balancing authority.

3 And I think you make an important
4 differentiation, that is, versus a schedule that comes in,
5 let's say an hour in advance or even on a 15-minute
6 advance. And I think Mr. Lateef was -- tried to address
7 this in that if you make a transaction with a neighboring
8 balancing area or a load-serving entity through a
9 bilateral, you know the terms and conditions. You know the
10 sink at which -- where it's going from the perspective at
11 least of who's making the deal. And there's implications
12 for that in terms of reserve responsibility, reserve
13 obligations.

14 I think when you start doing this through now
15 the economics of the market, now you're effectively
16 creating realtime imports that are being managed by the
17 economics of the market. The clarity around those terms
18 and conditions now becomes not as clear. Is that a firm
19 delivery for the 15 minutes, therefore reserve obligations
20 are on the sending balancing area? Is it a nonfirm,
21 therefore if it doesn't perform for the net scheduled
22 interchange, doesn't deliver from the balancing area, does
23 the receiving balancing area have responsibility?

24 And I'm just talking about one instance of that.
25 You multiply that times potentially the number of

1 transactions that are being facilitated by the market and
2 you throw in the fact that that information, that market
3 information has to go back to the balancing area so that
4 they can agree to the tag change and what that tag change
5 means to their balancing area operation, and all this has
6 to happen in a very short period of time, that's where, I
7 think, the operational and reliability complexity comes
8 into play.

9 Because if you get those wrong and the rules of
10 the road and the expectations about the terms and
11 conditions are misaligned, someone could be harmed in terms
12 of NERC performance standards. Someone could be harmed in
13 terms of the amount of reserves that they are now holding
14 that maybe they didn't have to hold because they didn't
15 clarify the terms and conditions.

16 And the point here is that those types of
17 issues, those issues about terms and conditions, what does
18 it mean to get an award and who is going to take the
19 responsibility of that award and what happens if the
20 resource is not performing and what happens if the
21 balancing area that is not an EIM entity decides they don't
22 want to deliver that NSI anymore, what happens.

23 All those things, I'm not saying are not
24 resolvable. Those are the types of issues that come up in
25 a stakeholder process and get resolved and clarified. And

1 that's the importance of the clarification in terms of the
2 stakeholder process.

3 I'm not trying to cloud the issue. I'm just
4 trying to express, I think, the -- without that clarity,
5 that's where the balancing area uncertainty is. They don't
6 know what their risk is, because they don't know what
7 really this intertie bid even means in their business
8 process as a balancing area. We need some definition.

9 Clearly, you might have that definition for
10 bilaterals today, and let's keep on differentiating
11 bilaterals, because we talked earlier about those have -- I
12 think there's a different issue being expressed to talk
13 about that solution. But when you start piling up even
14 generic intertie bids or even -- and I felt like we jumped
15 to a conclusion that oh, problem solved if you just go
16 resource-specific intertie bids.

17 Well, that's one element of the solution.
18 You've got to get all these other issues resolved. And
19 that's why I go back to my list of design issues, resource
20 sufficiency, transmission utilization, flexibility, who's
21 responsible for the flexibility, market power mitigation,
22 the accounting, feasibility of flows, performance,
23 metering, settlements. When there's nonperformance, who's
24 responsible, whose costs are going to be allocated where.
25 Those are all meaty issues. We're not going to solve them

1 today, but I think we're doing a good job teeing them up,
2 but I think a stakeholder process is where those are better
3 addressed.

4 MS. SHIPLEY: So -- this is Jennifer Shipley.
5 It sounded like, I'm hearing that there's an agreement that
6 a stakeholder process is to be called for on these topics,
7 not necessarily just intertie bidding, but sort of external
8 resource participation in general.

9 So is there -- also what I'm hearing is there is
10 a ranking process that still needs to happen. So where do
11 we stand on that?

12 MR. ROTHLEDER: So I think that's where we feel
13 the next place should be, is getting it properly
14 prioritized relative to other initiatives. And I know that
15 scares people when I say that because there's a lot of
16 initiatives, and there's competing interests on those
17 initiatives. But I do feel that process is open to all
18 stakeholders, and it really does drive from the input of
19 stakeholders about what is important and what is timely and
20 what needs to be addressed.

21 MS. SHIPLEY: So I think the interest in the
22 technical conference that we've gotten in terms of doing
23 the outreach which we've done over the past two months,
24 et cetera, this is a hefty issue in the West right now.
25 And as you saw from our two -- Chairman and the

1 Commissioner attended this morning, and they've been
2 talking it out, this does seem like a really big issue. We
3 want to get a feel --

4 MR. ROTHLEDER: I respect and I do understand
5 that. But I also want to caution, there's a lot of other
6 issues that come before the Commission that people want us
7 to start up and take up and address. It's probably not
8 worthy of going through the list right now, but that's
9 exactly what we're doing right now, is going through the
10 list and making sure that we understand the level of
11 interest, the level of importance because there's other
12 ones similarly situated like that.

13 MS. SHIPLEY: Understood. So we have -- Ellen
14 has her hand up, and Josh just raised his. Do we want to
15 go Ellen and then Josh?

16 MR. JACOBS: I was just going to parlay off of
17 what Mark said.

18 MS. SHIPLEY: Okay. Well, go on next.

19 MR. JACOBS: I'll be quick. And I know Mark
20 said we don't need to go through the list.

21 MR. SHIPLEY: This is Josh Jacobs from --

22 MR. JACOBS: Josh Jacobs with Puget Sound
23 Energy. So as an EIM entity and somebody who has invested
24 in the last couple of years of going through the process of
25 the journey to the EIM, there's a lot of blood, sweat, and

1 tears along the way and a little bit of money invested.

2 But we're also very focused on our customers,
3 our transmission customers within our balancing authority
4 and would absolutely agree that this needs to be
5 stakeholder. It came up in our own stakeholder process for
6 our OATT, and how we answered those questions was this
7 needs to be stakeholdered through the CAISO.

8 And so we still believe that, but we also feel
9 like there are other issues that are a higher priority for
10 us in our transmission customers and the imbalances that
11 we're suballocating to them, issues like stepped constraint
12 parameter. We think that that needs to be addressed,
13 issues like the EIM scheduling timeline. We think that
14 improvements there can address some of the issues
15 identified today, probably better than intertie bidding.

16 And then for Puget, because of our unique
17 transmission situation, the transmission donation and
18 compensation for those that are willing to do that, we
19 think that's a really big issue. So just to give you a
20 little snippet of perspective from an EIM entity, that's
21 the priority that we would place.

22 MS. SHIPLEY: I think we can let you know, at
23 least for FERC Staff, it's very clear to us that there's a
24 lot going on in EIM. This is just one issue, how to bring
25 in external participation. There's still the question of

1 if you were to price transmission, how would you price it.
2 That was something that was looked at in the first year,
3 and it's clear that's going to take a lot longer.

4 There are a lot of other priorities, we totally
5 understand, need to be addressed first. Whether -- I take
6 back the "first." A lot of priorities to be addressed, and
7 we need to be aware of these issues as well. So we're
8 struggling with how -- and the Commission is in an unusual
9 situation here, because we don't have a proposal before us
10 on this. We have an understanding that this is an issue in
11 the West, and so we are trying to do what we can to create
12 a forum for you all to talk about it, to learn what we can
13 learn about it, and to somehow figure out what next steps
14 might be.

15 And it sounds like more conversation is needed.
16 Whether that be in a stakeholder process or in some other
17 forum, we don't know, but that's sort of what we're looking
18 for here today, to get this started without any
19 preconceived conclusions. So please also don't take any
20 questions that we are proposing as a preconceived we expect
21 this to happen or we expect this will never happen. Those
22 are all still open.

23 And we had a woman over here. I'm going to turn
24 to Ellen, if Ellen wants to cede to the person behind her
25 and then she can go next. Please identify yourself.

1 MS. BLAIR: Sure. My name is Bonnie Blair, and
2 I represent a group of cities in Southern California,
3 Anaheim, Azusa, Banning, Colton, Pasadena, and Riverside.
4 We call ourselves "The Six Cities" for purposes of
5 comments.

6 To the issue of priorities, I appreciate the
7 opportunity to be here today. I understand the issues a
8 lot better than I did before. So it has been very
9 constructive in that sense.

10 But in addition to the EIM issues that are also
11 important, there are other issues of great importance to
12 LSEs within the ISO. The ISO's Department of Market
13 Monitoring has identified an issue with congestion revenue
14 rights under funding that it estimates is costing
15 California LSEs \$130 million a year on average over the
16 last five years. That's more than twice the average annual
17 EIM benefit since the EIM started in 2014. So I do want to
18 flag that in addition to important EIM issues, there are
19 other critical market design issues, and I would simply ask
20 the Commission, you know, sort of not to elevate one
21 particular issue without being aware of the full array.

22 MS. SHIPLEY: Thank you for joining us all the
23 way from Southern California.

24 MS. BLAIR: Actually, I'm local. It wasn't that
25 hard.

1 MS. SHIPLEY: Okay, well, well said.

2 Ellen, would you like to speak?

3 MS. WOLFE: Yes, please. Ellen Wolfe for WPTF.

4 I wanted to comment on the question that Mr. Bak asked
5 originally and Mark responded to, but I'll just jump in on
6 the process question here. Resources are thin all the way
7 around. The ISO is trying to, I think, aid in
8 incorporating new EIMs without doubling or tripling its
9 budget to make it attractive and to keep GMC at a
10 reasonable level, and that spreads everybody thin.

11 And it strikes me, though, you know, we
12 implemented EIM, and we all celebrate, but we don't have
13 any process around it to talk about what's residual impact
14 on the parties around the EIM. So these challenges are
15 being created, in part, because of the successes of EIM.

16 So it's almost like we need to deal with the
17 whole picture as we move forward. We can't just leave part
18 of it out, celebrate the progress with the EIMs, and never
19 get to these other cleanup issues.

20 MS. SHIPLEY: If I could interrupt for a second.
21 So what I am hearing is, we need time to digest what's gone
22 so far and make sure we understand how it's impacting the
23 rest, which is also what I hear from the EIM entities, we
24 need time to digest as we take on this big picture. So we
25 hear that on all sides, that this is a fast-moving, young

1 setup that has had a lot of success and also needs to be
2 mindful of the impacts it's having outside and inside.

3 MS. WOLFE: I don't think I suggested we take
4 time to do that. It's just somehow we have to figure out
5 how to do that. So we can't wait three or five years or
6 something until all the other issues to get dealt with. In
7 fact, all the other issues never get dealt with.

8 But somehow, we just have to do it, even if it's
9 a mini stakeholder process or maybe it's something that can
10 sort of just talk about this for a while without
11 necessarily taking on two years of activities, I don't
12 know.

13 I did want to comment on the substance of
14 Mr. Bak's question, because I think maybe this is my
15 wishful thinking. I think I've heard this question twice
16 now, and yet still Mark's answers about all the challenges
17 still would apply on 15-minute fixed schedules. It would
18 still apply, and there's still challenges. How do the EIM
19 entities deal with it, what do we do about GHG. All those
20 things still apply. It doesn't have more severity with the
21 economic bids.

22 So -- and I think there also are some ways to
23 simplify the question. What if you assumed for the sake of
24 argument that the transmission that was coming with these
25 offers was firm. You know, maybe we can set that as a rule

1 and just assume that, because that doesn't seem like an
2 unreasonable rule. Maybe we can assume that when the ISO
3 runs something hour ahead or by the time the 15-minute --
4 first 15-minute interval runs, that there are tags with
5 these schedules, and then they're tagged and you
6 automatically know at that point where they're coming from.

7 MS. SHIPLEY: Would that change anything for
8 CAISO?

9 MS. WOLFE: If I could just wrap up and then
10 pass the baton. In the ISO's FMM, the ISO automatically
11 adjusts the tags when somebody's offered to be moved within
12 the hour. Maybe we could assume that that same capability
13 would be in place and there wouldn't be this big scramble
14 for how adjacent the BAAs would adjust their tags. Maybe
15 there's some ways to simplify this problem where you can
16 just assume that's the way we would do it and sort of take
17 that as a given.

18 MR. RISTANOVIC: Petar Ristanovic from
19 California ISO. I'm afraid that we are referring to design
20 solution piece-by-piece. There are multiple elements that
21 we lie down in our principles. And yet, we don't
22 understand what is the formula that we're trying to solve
23 because if you know what is the problem, we can assess what
24 is the magnitude of the problem and prioritize based on
25 that.

1 What we have heard so far are three items, that
2 because of EIM, it is more difficult than in the past,
3 liquidity can be better, and openness for others. We are
4 not convinced that EIM caused any problem for bilaterals,
5 but we may be wrong, but we are sure that intertie bidding
6 cannot solve that problem. So we would like that to be
7 very clear before we start to design a solution.

8 We are also getting into elements of principle.
9 There is no notion of resource-based intertie bidding as we
10 want today. So we are mixing something that if we take
11 parts of these principles and bolt it on top of intertie
12 bidding we have solution. This is all complex issue from
13 the fundamental design principles of EIM have a large
14 potential cost. But before we engage in solving the
15 problem, we need to understand what the problem is and what
16 is the severity of the problem.

17 MR. BAK: So I'll try to get my interpretation
18 of what I'm hearing as maybe the problem that those
19 entities that are outside of EIM are facing. And I think a
20 large part of that has to do with the schedule guidelines.
21 Previously, it was 20 minutes before. And with the EIM, it
22 provides benefits to those that are internal to the EIM,
23 despite the fact that they have to schedule 57 minutes in
24 advance.

25 But those outside of the EIM are kind of faced

1 with this near hour-ahead scheduling obligation without, at
2 least the way I'm hearing it being phrased, any benefits
3 being reaped from that extra timeline as compared to those
4 internal.

5 So is that a fair interpretation --

6 MR. RISTANOVIC: That's a good point.

7 MR. BAK: -- of kind of the problem that those
8 external to the EIM are trying to have addressed?

9 MR. RISTANOVIC: That is an excellent point. In
10 EIM, you have to balance your schedule by T minus 57. If
11 you don't schedule by T minus 57 and T minus 57 is the
12 first round of 15-minute market, you may be exposed to
13 congestion charges because when you're wheeling through EIM
14 and BA, you're entering one point, exiting another point.
15 Price differential or congestion charge you may be exposed
16 to. That was there always, but was not measured. Now that
17 becomes reasonable and that is reasonable in our market
18 today.

19 In Cal ISO market, when you wheel through
20 bilateral, if you want protection against congestion, you
21 have a wheel-through feed to identify up to which amount
22 you're willing to be scheduled. It is very similar to
23 up-to congestion. And we have that mechanism, and we
24 believe that that mechanism can address that additional
25 risk that we are now with EIM seeing that congestion, and

1 we believe that the solution which is proposed by one of
2 the protestors and we also believe with our initiative and
3 market timeline, we can then use that window for bilaterals
4 need to use that mechanism.

5 MR. BAK: Brian Bak again, FERC Staff. Is the
6 up-to bid, is that available in the EIM?

7 MR. RISTANOVIC: That is not available in the
8 EIM. That is available in the CAISO. But for us, we can
9 extend that to the EIM without touching basic principle and
10 current design and implement with very low risk. But
11 instead of that, we are hearing parties that say well, the
12 best way to address this is by intertie bidding, which
13 cannot address the problem.

14 MS. SHIPLEY: So I think there's a few different
15 things that are being discussed today. Generic intertie
16 bidding, which is what I'm understanding you to be
17 referring to sort of the economic bidding without resource
18 specificity. Is that what you mean by generic intertie
19 bidding?

20 MR. RISTANOVIC: Yeah.

21 MS. SHIPLEY: So there's that. There's people
22 who are willing to give some resource-specific information,
23 either at the level of sort of the pseudo tie or dynamic
24 schedule, and continuous or even further out into the
25 five-minute time frame. Then we're also hearing desires

1 for a lot of other things to be addressed as well.

2 So we agree, there are multiple issues that are
3 being discussed today. I don't think we have any of them
4 off the table. This is sort of a flushing out of what are
5 the issues that are at play in the EIM now.

6 So I do see Ellen's tag, Mike's tag, Therese
7 Hampton's tag.

8 Therese, I don't know that we ever came back to
9 your question. Do we want to do that?

10 MS. HAMPTON: No. My tag is for something else.

11 MS. SHIPLEY: Okay. Let's turn to you.

12 MS. HAMPTON: I just wanted to address the issue
13 of really like where it sounds like there is some common
14 ground today and the areas where we might see things
15 differently. Therese Hampton, Public Generating Pool. A
16 little slow on that.

17 The first is, I understand Mark kind of outlined
18 that just by saying we'll give you resource-specific
19 information doesn't solve the problem. Right. There are
20 still other lots of market rules that need to be put in
21 place, and we understand that. We appreciate that. So I
22 think there's agreement there.

23 It does sound like there's agreement that a
24 stakeholder process is the right place to have these
25 detailed conversations. So there's agreement there. I

1 think for us, though, the challenge is really relying on
2 the prioritization process to get there, because it feels
3 like we've heard even here today there's some desire or
4 there's some concern that if you allow external resource
5 participation, then people won't join the EIM, and people
6 have expressed their interest in expanding EIM.

7 So there might not be an incentive to put this
8 as a top priority because you might hope for a different
9 outcome. And that's a part of our concern in that process.

10 So what we would really like to see is some way
11 to recognize that this is an issue about market liquidity.
12 That's what we're trying to get at is to help improve the
13 liquidity in the market and to really open this market to
14 other participants.

15 We recognize that if we start now, it would
16 probably be 18 months at best until you were ever able to
17 get external resources into the market. And so delaying
18 this potentially another year for another prioritization
19 process would just delay that further. And that's why we
20 see it as a priority now, to ensure that you are allowing
21 actual resource participation at the same time you're kind
22 of further enhancing the EIM market.

23 MR. MAC DOUGALL: Mike MacDougall, Powerex. So
24 a couple of comments, because I don't know that the
25 microphone will come back around by the time we get to the

1 end.

2 I want to recognize the points that both Mark
3 and Petar raised earlier about the bilateral markets, and
4 also Ellen and really make a distinction there that there
5 are two different issues here that, I think, need to be
6 dealt with. There are impacts on the bilateral market, but
7 I think we've heard ideas today that the solution of
8 generic intertie bidding isn't a way to kind of tackle
9 that, and maybe some of the existing provisions of the ISO
10 and how they deal with balanced wheel schedules and
11 various -- maybe up-to congestion for other circumstances
12 should be looked at as a potential solution. But that's
13 separate from the EIM in terms of external resource
14 participation.

15 We've heard from both the Cal ISO and from the
16 EIM entities that there are challenges with generic
17 intertie bidding. We've also heard from EPA, PGP, and
18 Powerex that we'd be willing to work with the parties on a
19 different model for external resource-specific framework to
20 tackle those issues that have been identified and come up
21 with a solution that deals with issues like free rider,
22 transmission, all those things.

23 And at the end of the day, that's premised on
24 the fact that there are benefits that arise from that
25 broader participation and liquidity and the production cost

1 savings and everything else that have been identified in
2 the benefit study to the EIM for the loads in the area. So
3 I think it is a worthwhile exercise to pursue.

4 And you know, we're willing to sit down and work
5 through those challenges. We don't understand why we
6 wouldn't be able to come up with a solution and why people
7 would not be willing to participate in it.

8 MS. WOLFE: Ellen Wolfe for WPTF. I just have a
9 couple short points, I think.

10 I wanted to confirm Mr. Bak's characterization
11 of the problem, at least with the bilateral wheel-through
12 transactions. You have it exactly right. A month before
13 the first EIM goes in, if I have a bilateral transaction, I
14 schedule it through, something goes wrong on my system, I
15 can change it up to 20 minutes before, and I'm not at risk
16 for some cost. EIM goes in. Something goes wrong with my
17 system, and I could be subject to a \$1,000 cost. So that's
18 exactly the problem with the wheel-throughs. I still think
19 there's some economy energy that has some flexibility that
20 could offer in. Maybe we need to separate those out and
21 not avoid making some progress to try to get everything at
22 once.

23 To Petar's point about we protest, we don't even
24 consider this mechanism of wheel-through. Well, that's
25 because today is the first time we've heard about it. It

1 sounds very promising to me, that, in conjunction with a
2 timeline, I think requires similar consideration. I would
3 hope that we could do that on short order.

4 So I think that, just as Mike said, there's some
5 promise here, and it feels like a little bit of momentum,
6 and I don't think we were to say that we want everything or
7 we'll take nothing. You know, maybe there's some
8 low-hanging fruit we can do that would solve 50 or 75 or 80
9 percent of this problem while we start to work on the
10 resource-specific and then see where that goes. So
11 definitely, we're happy to entertain ideas and appreciate
12 you coming with those offers.

13 MS. SHIPLEY: I'm seeing heads nodding around
14 the table.

15 MR. RISTANOVIC: Well, we have seen that in one
16 of your comments as one of the options. We would never
17 oppose to anything like that. We just didn't want to
18 undermine the whole EIM economic bidding, because that
19 would destroy the whole principle EIM is designed on.

20 But for us, we really need to understand the
21 size of the problem to be able to react on that. And as I
22 said, I saw three issues. I hope on balance we can find
23 some low-hanging fruit without affecting current EIM. But
24 we also need to understand other issues raised like
25 liquidity. Liquidity is very sympathetic with FERC. When

1 you start talking liquidity, they like that discussion.

2 And so it's their job. Okay? I understand
3 that. But what I'm saying, the same characters were
4 talking in this place more than a year and a half ago about
5 liquidity and, in fact, going live. The discussion was
6 going like these price spikes is because there is not
7 enough resources, not enough liquidity. And we disagreed
8 and said no, there is not enough transfers, there are not
9 enough EIM transfers. We got enough transfers; no price
10 spikes.

11 So we are running a system with about 80,000
12 megawatt loads. 2, 3 percent, about 2-, 3,000 megawatts,
13 so to address that right now, we have more than enough
14 resources. More is better, but we have more than enough
15 resources. What we don't have, and we can never have
16 enough, is transfers.

17 So if you really want to increase the liquidity,
18 that is another enhancement that people are talking about,
19 third-party transmission donation to the market. There is
20 transmission capacity left on the table unused from
21 bilateral market that we can benefit EIM, that there is no
22 mechanism currently to put in the system. We can easily
23 enable that usage. Again, we don't have to touch any piece
24 of fruit and achieve huge benefits for everybody. Is it
25 better to address that liquidity, which is a low risk, or

1 we increasing it with bids of the resources, we don't have
2 big deficiency, whole redesign of the market with some
3 units challenging their business cases. That's what we
4 need to address in stakeholder process. You need to come
5 there and listen to us and listen to others.

6 I appreciate Six Cities' comment. EIM is
7 designed as a very inexpensive market for us, and you guys
8 are not paying a big part of our -- there's already
9 complaints from them that we are paying too much attention
10 to EIM. So we have to justify the priority and what they
11 are doing. The best place for that is stakeholder process.

12 MS. SHIPLEY: This is Jennifer Shipley. Is
13 there a way to have a stakeholder process that continues
14 this discussion that doesn't have the title on it of
15 intertie bidding? Could this discussion be --

16 MR. MANTIFEL: So I think it's encouraging --

17 MS. SHIPLEY: Russ from BPA.

18 MR. MANTIFEL: We're really bad at that on the
19 West Coast. So I think it's encouraging hearing that a
20 stakeholder process would be supported. I think that some
21 of the concern is it's sometimes difficult in these
22 conversations to understand is there a broad-based support
23 for a stakeholder process or is there not sufficient
24 support for it to get through the stakeholder process and I
25 think that's some of the concern that is still present and

1 making sure that there is a recognition of that. I think
2 it is difficult to demonstrate the size of the problem.

3 I worry about that being used as a justification
4 to avoid the stakeholder process because there's not a good
5 analog. There's not a lot of liquidity in the 50-minute
6 mark, on the COI, but we've heard there are a lot of
7 reasons for that. Right? The way that scheduling happens
8 is alternate causality for why you might not have liquidity
9 there.

10 So that itself might be thought of as a reason
11 to say that there's not going to be -- that you might build
12 it and nobody would come. But I think that we've already
13 shown that there's a lot of other reasons why that's not
14 necessarily taking place.

15 I think also, the concern that we're dealing
16 with, I think, is as Therese said, there are parties that
17 are not good candidates for joining the EIM, whether it's
18 because of statutory limitations or just because their
19 business model, they don't stand to reap significant
20 benefits from the core functionality of the EIM. But those
21 parties traditionally interact with the realtime markets
22 and can provide benefits to other parties.

23 And if the -- there might be an irony here where
24 you would suspend this process to encourage the success of
25 the EIM, which would then that in itself would create the

1 problem, right, in that you have a significant number of
2 load and resources that are in a closed market essentially.
3 So at that point in time, you've created the problem that
4 you said didn't exist in the first place. And I think we
5 want to do the work at the front end to make sure that that
6 doesn't happen, because there's mutual benefit, I think,
7 from having third-party resources.

8 And in terms of Petar's point about increase
9 transfer, if you just increase transfer, you're increasing
10 access for the same pool of resources. That is the same
11 sort of additional liquidity that you would get from
12 third-party transfer, and they're not mutually exclusive.
13 You can do both of those at the same time.

14 And so we would like to have an opportunity to
15 make sure we get the chance to talk about this in a
16 stakeholder process and I think there's still some concern
17 that it might not -- that it might be created on a curve
18 that doesn't really favor this issue. And the other
19 concerns are sympathetic, but I think these ones are as
20 well. And so figuring out the right way to balance that is
21 important.

22 MS. MC KENNA: Anna McKenna with California ISO.
23 I'm going to try to address a couple of the issues related
24 with the stakeholder process. I am going start with the
25 comment that we have actually spent a lot of time already

1 on this issue just getting ready for this discussion,
2 obviously.

3 And as a result of that, you know, this is a
4 part of the problem, is that we are just thrown with some
5 of this stuff. People say just solve this issue, this is
6 what we want you to solve the most. A lot of time and
7 effort goes into that. I have some of the best guys from
8 the California ISO here with me today, really very invested
9 in trying to do the right thing. So there's no doubt that
10 the California ISO is vested on this.

11 I want to give you guys a flavor of how this can
12 be resolved through a stakeholder process because there's
13 two issues, one is prioritization of this issue and --

14 MS. SHIPLEY: "This issue" being external
15 participation?

16 MR. RISTANOVIC: External participation.

17 MS. MC KENNA: Yeah. I think as we wind down to
18 it, because right now in our catalog, we have two items on
19 our catalog already, one is listed as generic intertie
20 bidding and the other is resource participation. We're in
21 the process right now defining what the issues are and
22 prioritizing those through the catalog. We've collected
23 information from the participants. We make all that
24 public, so there's no mystery as to what people feel about
25 these issues.

1 And in that process, what's really important is
2 that it's clear that you don't throw a label at something
3 that just says I want this, intertie bidding. You've got
4 to be specific sometimes about what exactly you want.

5 I think this is what Petar is going to. If you
6 talk about some of the specific problems that you might be
7 faced with, it might be easier for us to resolve those,
8 because the solutions might be more readily available as
9 opposed to a large scale, you know, big market redesign,
10 which is what we're thinking of with intertie bidding.

11 So I wanted to give some dates as to where we're
12 at with the stakeholder process. Would that be helpful?

13 MS. SHIPLEY: Yes.

14 MS. MC KENNA: Okay. So right now, there is no
15 stakeholder process underway or any initiative begun with
16 any of these issues, because we're defining our road map
17 for next year. But in our road map process, we're
18 prioritizing. We have these in the catalog. We're about
19 to post the next version of the initiatives catalog that --
20 for the 2017. We couldn't, because we're here. We're all
21 here.

22 So we're going to post it next week hopefully.
23 This is what we're dealing with; right? So when we post
24 this next week, we're going to have a stakeholder call.
25 Participants have already given us an idea of what they

1 want to hear and what they don't want to hear. I'm not
2 going to give you any results because that's going to come
3 out next week. And then we're going to have written
4 comments due the 17th of November. Sorry, the stakeholder
5 call is on the 3rd of November. On the 17th we have
6 stakeholder comments due. So people can put whatever they
7 want in there. There's no limit as to how much paper you
8 submit at the ISO except for the fact that the IT
9 department keeps cutting me off with my e-mail.

10 I wanted to throw that in there. But you can
11 say whatever you want in there. I thought if I got that on
12 the record, I might get more space in my e-mail. Can the
13 Commission order -- no.

14 But seriously, I think it's really important
15 that you parse out the issues, much like Jennifer was
16 trying to earlier, and make sure that it's clear exactly
17 what you're thinking of when you're talking about spending
18 time and resources, because we do have a lot of things on
19 our agenda.

20 On the 15th of December, we're currently
21 scheduled to actually post the 2017 road map. So it's not
22 far away as to where this process is going to land. It's
23 not like we're talking we won't know for a year what we're
24 going to do here. We're in -- we're right in the midst of
25 it. And it's entirely possible that, you know, we're going

1 to modify this based on comments that we have, where we
2 currently are. There's no doubt.

3 But I do -- because Therese said earlier that,
4 and in the comments as well, that it would be good to have
5 something in place by, say, 2018. You know, to be honest,
6 if we dropped everything, everything and spent our time
7 just doing this, I am sure we can get there.

8 So it's really a resource issue. Once you get
9 into the initiatives, stakeholder process, once you
10 establish what the issue is and you're trying to address
11 it, it all depends what the solution is. We can't
12 predetermine a timeline.

13 And even if the Commission tells us go do this
14 in a year, I know you guys know, we often come back and say
15 well, we tried. So that's kind of the resource -- you
16 know, the differentiation in terms of where you put your
17 resources burden and prioritization. Once you go into the
18 stakeholder process, we have implementation issues,
19 competing interests that come into play. It's going to
20 take some time.

21 But in terms of knowing what our next road map
22 is for the next year, we're looking at about a month and a
23 half here, and we'll have a pretty good idea. And so it's
24 really important that people put as much comments as they
25 can, as much input as they can, be very explicit what it is

1 you're thinking of as we go through the prioritization.

2 And I think that's pretty much it. I think it's
3 important to throw that back in there. I won't go back to
4 reiterate the points on our -- how robust it is, but I do
5 want to point out that if we spent some initial time today,
6 for example, going through some of these issues, you know,
7 we might actually come up with a couple of thoughts for a
8 road map process. But I think the better time is placed
9 actually in the comments of the road map process, because
10 that's a better use of our time.

11 MS. SHIPLEY: Thank you. This is Jennifer
12 Shipley.

13 I have a quick question. I'm hearing -- help me
14 understand the difference. I'm hearing we need -- I'm
15 hearing intertie bidding being the focus is a misplaced
16 focus because there are other issues that might make this
17 better. I'm also hearing be really specific when you make
18 your comments as to what you're asking for. And I'm
19 hearing there might be a benefit to some broader titled or
20 open best practices discussion to find out what are the
21 issues and what might be the best ways to address them
22 rather than you have an issue and you picked what you think
23 is a solution and you're going to ask us to do it.

24 So help me understand the difference or how that
25 would be best addressed.

1 Petar, I see you nodding your head.

2 MR. RISTANOVIC: Well, if you just go and say
3 generic intertie bidding, it's going to be massive redesign
4 of the market. I know exactly what we need to change, and
5 it's going to be very expensive. The question is, who is
6 going to pay for that. And we pretty much have to stop
7 everything else. That's one option. I don't like this.
8 And I think FERC can do that -- implement generic intertie
9 bidding for EIM.

10 Another approach, we sit down together and say
11 the problem is I cannot schedule other than T minus 57. We
12 want to sit down and talk about that. We had serious
13 problems with BPA, and we worked together and found
14 solution. We are under severe stress to ultimately utilize
15 our resources. Managing this and bringing on line is a lot
16 of work. So we will try to work on everything else we
17 can --

18 MS. SHIPLEY: Which is amazing, considering that
19 the EIM entities we've met with have told us how many
20 people they've added each time they've come in. It is very
21 impressive that you acknowledge --

22 MR. RISTANOVIC: They have their own problems.
23 Based on design, they have no choice. They don't have a
24 choice. When we talk about -- figure out why you have to
25 do that. So this other approach, we sit down together. We

1 identify problem, not perceived problem to get some
2 specific other. Sometimes we can come up with things
3 faster.

4 MS. SHIPLEY: So what would be most helpful to
5 you in creating that container for that conversation? I
6 mean, you guys are overwhelmed, stressed, understaffed. I
7 mean, it sounds like this is -- you're in a very
8 challenging time, and you have a lot of priorities, both
9 from EIM, from CAISO, from internal to you, Six Cities,
10 et cetera. So what is the best way for us to make, us
11 collectively here, not FERC us, but collectively here to
12 create a container for this kind of conversation to happen.

13 MS. MC KENNA: Well -- this is Anna McKenna from
14 California ISO. And quite frankly, you already have
15 created the container for discussion today. We've come
16 here, and I think we've had a really healthy discussion.
17 We had a lot of agreement on some of these issues. And you
18 know, I think while we come here sometimes and might look
19 like a disjointed western market, we actually work together
20 all the time, you know, on these issues. But coming
21 together on this issue has been really helpful.

22 I think the most helpful thing at this point is
23 for us at this point is for us to all go back and go
24 through our stakeholder processes as they currently are and
25 make sure that's done correctly.

1 I wanted to point out actually that there's a
2 lot of concern about stakeholder process at the ISO,
3 perhaps, right now. But we've actually -- we haven't
4 expanded a whole lot in terms of head count or resources,
5 but we have expanded our efforts across the board on
6 stakeholder process. We have the RIF, Regional
7 Integration -- Issues Forum. Sorry. And you know, we also
8 have our new EIM governing body. We have lots of processes
9 through which EIM --

10 MS. SHIPLEY: Who, we will note, are listening
11 in today. Thank you for joining us. I just wanted to put
12 a plug in for them.

13 MS. MC KENNA: But you know, we have a lot of
14 ways for these kinds of issues to get vetted and get more
15 attention as necessary. And I didn't -- I kind of honestly
16 was starting to feel that perhaps there was a feeling that
17 the EIM participants or EIM -- non-EIM participants outside
18 of the EIM are not getting a sufficient voice, perhaps,
19 because they're not inside of the market. But there
20 actually are forums for this kind of stuff. And that's why
21 we're participating in those quite actively and try to
22 support that.

23 But one of the things we can't do, as I said
24 earlier, is drop everything and do that one thing at a
25 time. So what would be really helpful, I think, would be

1 to continue this dialogue, focus in a little bit better
2 perhaps on resolving specific issues that Ellen actually
3 herself proposed, and I think there were some of those in
4 the comments as well, which is there's some elements of
5 these -- of the issues that were has raised that are much
6 more specific, and perhaps we can focus on that and think
7 about ways to do that as opposed to, you know, just generic
8 intertie bidding.

9 So that, going back to our stakeholder process,
10 prioritizing, getting the information, I do think that is
11 the best way we can all help each other.

12 MR. ROTHLEDER: Mark Rothleder. So just to add
13 to that, I think in that process it's important to right
14 size, as you define the issue you want to discuss, is right
15 size the issue so it can right size and determine what the
16 complexity and the impact will be so that we can correctly
17 prioritize it. Because when we do prioritization, the
18 criteria is what's the market benefits, what's the
19 efficiency developed, what's the implementation issue or
20 what's the implementation impact, what's the reliability
21 impact, and also what's the market participant impact. And
22 we have to assess all those things.

23 And so something -- if you say something like
24 it's a bilateral issue, that may be a narrow issue that
25 doesn't have a lot of impact, and we can right size the

1 solution, right size the effort so it's correctly
2 prioritized. I know it sounds easy --

3 MS. SHIPLEY: But what you're not saying is, not
4 a lot of people -- I just want to make sure what I'm
5 hearing. Are you saying -- what you're not saying is if
6 not a lot of people want it, it's low on the priority.

7 MR. ROTHLEDER: No, I think not a voting contest
8 of -- there's more criteria than that. That's what I was
9 describing the criteria, and that's why intertie bidding,
10 generic intertie bidding sounds like a simple thing, why
11 don't you just do it, you have it in your interties. But
12 now that we understand it more and understand the
13 implications, it's a big issue. And that's why trying to
14 identify so that we can understand what the issue is so we
15 can right size and correctly prioritize it is important.

16 MS. SHIPLEY: And it sounds like -- I appreciate
17 Anna's encouragement for please bring us as much
18 information as you can bring it. I think there's some
19 benefit to having conversations where you can go back and
20 forth, because when you're doing it through paper -- we
21 struggle with this. The ex parte keeps us from talking to
22 you guys once you filed, and oh, my goodness, how we have
23 enjoyed calling you in the last eight weeks and actually
24 have conversations about this.

25 So that really helps with the communication and

1 maybe we could have gotten to -- it sounds like Ellen is
2 not solely focused on intertie bidding, intertie bidding,
3 there's some options for other ways for this to be
4 improved.

5 Is that correct, Ellen?

6 MS. WOLFE: Yes.

7 MS. SHIPLEY: So there's some other options
8 available. But until people get somehow in the same room
9 or in the same phone call or something where you can have
10 these dialogues, it's hard to do it by paper. So I'm
11 looking for where that can continue.

12 MS. WOLFE: Ellen Wolfe for WPTF. What strikes
13 me about today is it was very beneficial, in my
14 perspective, from a couple of vantage points. One is the
15 exchange of information was great, you know. To actually
16 sit -- a lot of us, when we're writing comments about this
17 or thinking about this, said we don't know what they think
18 because we've never had a conversation about it. So to sit
19 and hear what other parties' concerns are were is very
20 beneficial.

21 And also, the brainstorming that came out of, it
22 I hear these ideas that maybe they have some functionality
23 that would solve half of our problem easily. So I wonder
24 if there may be a way of continuing that without taking on
25 these big I initiatives. And I think about the RIF that

1 they have in place and also which I participated in not
2 quite so much but there's sort of a parallel one in the ISO
3 world called the market performance and planning forum.

4 Sometimes the ISO will accept recommendations
5 for topics where we can just exchange ideas and talk about
6 things and brainstorm. And maybe those two forums are a
7 way that we can start both continuing the discussion about
8 what the challenges are, how we might do particular things,
9 and also explore some of these ways to start progressing.

10 And maybe there are little bite-sized pieces
11 that we can chip away at in those forums every quarter or
12 so and keep some of these more collaborative just dialogue
13 going while we're contemplating giant initiatives.

14 So I wonder if the ISO would be willing to just
15 imagine that some of these topics could be broken down into
16 something that you could spend an hour and a half on in one
17 or both of those processes and try to keep progressing
18 without necessarily waiting for the giant initiative that
19 solves all the problems. So just a thought.

20 But I do want to say how beneficial I think this
21 has been. So I hope we can continue something like this.

22 MS. SHIPLEY: We have a couple hands up front
23 that we hadn't paid attention to.

24 Kathy Anderson from Idaho Power.

25 MS. ANDERSON: So I want to point out, as an

1 entity who has not joined who deals with the bilateral
2 world who has resources that are hydro, I understand the
3 position that everybody else is in.

4 I think what I want to caution is that I also
5 did an analysis and a benefits study based off of certain
6 market establishment. If that starts to modify and now all
7 of a sudden external resource participation starts to be an
8 option, that looks a lot different for Idaho Power than the
9 \$4.5 million gross annual benefits that I was going to get
10 to my customers, which is not a lot, as opposed to the \$15
11 million I get to spend to join.

12 So if you start to take this market and you
13 start to evolve the market principles and the market
14 participations in such a way that it starts to shift the
15 economics for those people who are looking at it, who are
16 evaluating it, that could, quite frankly, start to put
17 people just on pause. I'm not saying we wouldn't do. I'm
18 just saying, we would pause.

19 I really like the concept of what are we trying
20 to solve. The issue in the bilateral market, great. We
21 have the same concern. I'll be honest, I try to avoid it,
22 because I don't like the congestion risk exposure. So I
23 try to avoid that. Let's solve that one. That helps
24 mitigate that.

25 Let's take a look at those issues that are

1 creating those seams issues with the bilateral world and
2 the EIM world and see if we can solve those. To me, those
3 are not fundamentally changing the EIM market in a way that
4 would cause me to put a pause on where we move, go to my
5 PUC and say timeout, and basically be ordered by them to
6 take another look at what that looks like and put on hold
7 for two more years a potential expansion of something that
8 we think is really great in the West, it's moving in the
9 right direction.

10 The transfer capabilities that open up when
11 entities join -- and I understand not every entity could
12 possibly join. But the transfer capabilities that occur in
13 that are beneficial to that market. And when you start
14 talking about major market design changes, I'm going to be
15 very honest. It gets very, very nervous for an entity who
16 is in a 2018 entry sitting in front of the PUC asking for
17 potential cost recovery and deferment. And how do I not go
18 to them and say gosh, there's this major instability going
19 on. So I think we have to be very careful in what we're
20 doing with this emerging and evolving situation, that we
21 don't unintentionally stop something.

22 MS. SHIPLEY: This is Jennifer Shipley. I just
23 want to spoke to that really quickly. It sounds like -- I
24 don't think you're asking for a pause on conversations
25 about what will improve the current status, and it sounds

1 like what you're talking about would be those major capital
2 I initiatives that would be something that would go through
3 a stakeholder process.

4 And what we're talking about here is potentially
5 having some fora outside of this, like the market
6 performance and planning forum and the regional issues
7 forum, where you could have some conversations,
8 brainstorming, et cetera, about potential solutions that
9 would then, I think if you came up with potential
10 solutions, need to go through the big I initiative.

11 MS. ANDERSON: Yes.

12 MS. SHIPLEY: So you would have time to digest
13 that and take it back and take it under consideration, and
14 maybe even back to your PUC.

15 MS. ANDERSON: Right. I am all for efficiencies
16 in the market and finding ways to make the seams issues go
17 better and modify the timing maybe so that things work just
18 smoother with those that don't have an opportunity or have
19 not made that decision of their BA to do this. I'm all for
20 that, and I think that yes, those initiatives, let's go for
21 that. I'm not afraid of the conversations either. I think
22 today has been a great conversation. I think people have
23 recognized the different issues we have.

24 But yeah, the big Is, when you start changing
25 the way somebody could participate without going all in,

1 you start to change the dynamics of what an entity looked
2 at when they did their cost/benefit studies, and that's a
3 big deal when you start talking to state regulators and
4 especially a big deal when you start talking to state
5 regulators when you did not have an \$18 million per year
6 growth-looking objective. So --

7 MS. ROSENBLATT: Lauren Rosenblatt from NV
8 Energy. I'd like to give NV Energy's perspective in
9 bringing together everything that we've discussed today and
10 providing a bit of a summary of what we're hearing.

11 I'm pleased to hear that everybody wants more
12 discussion, and I'd like to help with that discussion by
13 maybe lending some structure to how we think, or I think on
14 behalf of NV Energy, the issues settle out.

15 Anybody who has experience with computer
16 programming might be familiar with the aspirational goal of
17 elegance. And for those of us who are EIM entities, we see
18 a certain amount of elegance in the EIM solution that
19 PacifiCorp and the ISO initially designed for the BAAs that
20 wanted to join in.

21 So thank you, PacifiCorp, and thank you guys.

22 That elegance, I think, lends itself to two FERC
23 terms that are used quite a lot, which is "just and
24 reasonable" and also "fully functioning." What we have is
25 we have a product for balancing authority areas. It's not

1 an energy product. It's a product for balancing authority
2 areas that's an optimization product. And it works really
3 well. NV Energy is excited to be a part of that and has
4 brought its resources and its transmission and its load to
5 the table, as have the others that have joined the group.

6 Resources that want to participate in the energy
7 imbalance market as resources that contribute to that
8 optimization may do so under every EIM entity tariff,
9 usually by a pseudo tie. I think somebody mentioned
10 earlier there's also the dynamic scheduling option for one
11 of the EIM entities.

12 If a resource wants to participate in the ISO's
13 markets, the ISO's real-time market, which is an energy
14 market, then they may do so by buying transmission through
15 our system. They have that ability today to buy
16 transmission through our system and send it to the ISO.

17 So those options are out there, and if there are
18 other ways that resources want to send energy into the ISO,
19 then there are stakeholder processes that are available to
20 discuss that, and I encourage those discussions.

21 I do appreciate Ms. Hampton trying to tease out
22 and separate the issues of smaller BAs who want to come and
23 be a part of the optimization product. At least that's
24 what I heard earlier.

25 And if there are barriers to entry for smaller

1 BAs to join the EIM and be a part of that optimization,
2 then listening to my colleagues for the last nine months,
3 who are EIM entities, I think we all embrace addressing
4 that, because we're really excited about the two public
5 power entities that have just announced they want to join,
6 and we want to make sure the door is open to all who want
7 to bring in that trifecta, as Sarah described earlier, of
8 load, transmission, and resources.

9 So that's also a conversation that we should be
10 having and it, perhaps, should be separate from resources
11 participating alone in California's real-time market.

12 NV Energy embraces the stakeholder process.
13 It's something that's been effective. If there are other
14 ways to have these conversations, then we would certainly
15 participate and encourage that as well.

16 And I would end with Kathy's point, is that we
17 have a product that is functioning, and it can always be
18 enhanced. The markets are constantly evolving. We expect
19 to have lots of conversations about enhancement. We would
20 like to perfect and not undermine what we have before we
21 start redesigning it.

22 So when we talk about the conversations that we
23 want to have and the priorities that we want to set, a lot
24 of our priorities are to seeing that the EIM product
25 functions for the BAs. And some of the stakeholder

1 processes that have already been proposed are focused on
2 that. There may be room in those conversations to talk
3 about expansion, but expansion is not on our minds right
4 now.

5 And I can appreciate what Kathy had to say about
6 focusing on what we have and making it work, because that's
7 what people who are joining are expecting to get when they
8 join.

9 So all of this is to say -- and again, this is
10 NV Energy's perspective -- that we see a path toward
11 solving all of the issues. We hope everybody can join us
12 in taking a deep breath and doing it in an orderly fashion
13 and keeping some clarity around what it is that we want to
14 discuss and how to get there.

15 MR. RISTANOVIC: I think Lauren touched on a
16 very important point that we haven't talked about enough
17 today. We at Cal ISO recognize that some entities have
18 objective obstacles to join, either recovery or it is not
19 cost benefit to justify joining. There are significant
20 start-up costs. There are significant operational costs.
21 We are continuously working on reducing the operational and
22 start-up costs.

23 To give you an example, Puget didn't have to
24 build out of merit system. They are using our out of merit
25 system. If you don't want to use LMPs, if you want to use

1 index -- there are ways to do that. If you are too small
2 to get a return of investment in short time and sustain
3 operational costs, you can abrogate.

4 Smaller BAs cannot absorb the cost of their own.
5 We are willing to work on that. Our interest is to reduce
6 barriers for entry. But you have to walk very fine line
7 when you are doing that without destroying principles for
8 entities that are already in. So if we can improve design,
9 open more ways around the principle that we agree about --
10 because everybody in this room has the same goal. The
11 whole West should be in this one or another way.

12 MS. SHIPLEY: So I was going to suggest we -- I
13 was just conferring with my colleagues. This is Jennifer
14 Shipley, FERC Staff. We have 25 minutes left. We were
15 going to stop at quarter till for closing remarks from
16 Staff. I think it would be most helpful actually, what I'd
17 like to propose, we spend the last 25 minutes just sort of
18 going around with those at the table and maybe talking
19 about what takeaways you want to come from with -- bad
20 English, but what have you learned here today or what are
21 the questions you would like to continue to be posed or
22 just closing remarks, if you'd like to do that.

23 I can't do the math quickly enough. I think we
24 have 20 people at the table and 25 minutes. So that's not
25 going to work. We've sort of already begun that a little

1 bit. So if you guys want to --

2 MS. MC KENNA: I'm in the mode of offering
3 solutions right now, and I just want to say one thing. I
4 want to go back to something that was said a little bit
5 earlier in terms of where you define the issues, and we
6 were sort of thinking it's absolutely appropriate, I think,
7 in the regional issues forum for us to go back and really
8 define the issues there a little bit better.

9 Perhaps if we had spent more time doing that
10 this past year -- although the RIF hasn't been that
11 functional that long enough yet. So as we go forward, just
12 finding those issues, perhaps more closely there, that
13 might be the right forum. Ultimately, as you said earlier,
14 going back to the stakeholder process. And I'm sorry this
15 comment comes back late. But the question that Ellen was
16 asking, that might be the right place to really hone in on
17 what we're looking at. I want to go back to that.
18 Apologies.

19 MS. SHIPLEY: No apologies. That's great.

20 So why don't we -- yeah, we'll go around the
21 table. Angela is firing up the timer. I'm just going
22 to -- we'll get there. What we'll do is set the timer to
23 end at the 4:00 time frame so you know what's going on.

24 Mr. Davis from Chelan County has his up. I'd
25 like to give him a chance to start, if you would like.

1 Let me take the pressure off. This is not final
2 comments, you know, wrapping everything up. This is what
3 you'd like to say as we leave today, whatever is left on
4 your mind.

5 MR. DAVIS: Thank you. Rob Davis, Chelan PUD.
6 I don't -- what I heard there in the beginning of our
7 summarizations was a little inconsistent. What I heard
8 from the ISO lined up with their principles. What I heard
9 from some of the EIM entities was a little more
10 restrictive. And that's the thing that we want to make
11 sure you don't leave with the sense that there's a unified,
12 you know, position on that.

13 You know, we are a BAA. We can look at the
14 costs and the benefits of joining. But once we've made
15 that decision, if we do decide not to join, we've made it
16 for all our share participants, and they have no option.
17 And that's true for a lot of BAAs.

18 As Bonneville highlighted earlier they have a
19 significant number of IPPs on their system. And so it's
20 more than just, you know, this is something for BAAs to do.
21 There's this issue of additional resources being able to
22 compete with their neighbors, which is the point of open
23 access, is removing barriers to that competition by
24 resources, and recognizing that there is, you know, a cost
25 to join the EIM, but there are also benefits.

1 We hear all the time about significant benefits
2 from the EIM. And today, we get the impression that well,
3 maybe they're not so significant. I tend to think that
4 they are. And I think that, you know, the EIM entities
5 will continue to receive those benefits.

6 External participation, if it's designed
7 correctly, if it's designed in a way that we think it
8 should be and that it seems like the CAISO thinks it should
9 be, is not going to, you know, remove the congestion
10 benefit, the variable resource integration benefit, the
11 system visibility, or the production cost savings that
12 these entities are seeing. And so we don't think it's
13 going to be such a burden that it completely undermines the
14 case for the EIM continuing and continuing to expand.

15 And so we'd just like you to keep that in mind.
16 Thank you.

17 MS. SHIPLEY: So we were thinking maybe give you
18 a two-minute clock as an assistance up on the thing, not to
19 cut you off but just as a way for you to self-regulate.

20 Therese?

21 MS. HAMPTON: Therese Hampton, Public Generating
22 Pool. Really, again, I want to underscore a comment that a
23 lot of folks have made here. This has been a very, very
24 helpful conversation. These are the conversations we
25 really do want to have. Specifically, our interest is

1 clear. It's external resource participation in this
2 process.

3 I do appreciate Ellen suggested that maybe some
4 of these issues could be handled in the market performance
5 and planning forum. I think what we're looking for are
6 market rules for external resources to participate, which
7 would be a capital I initiative, and want that to be
8 considered.

9 I also appreciate that, I think, Anna suggested,
10 we couldn't get there in a few months, we would have to put
11 all hands on deck. That for us is all the more reason why
12 it needs to start now, because if it's going to take more
13 than that, that will be four years at that point in time
14 that the EIM has been operating without any external
15 resources in that market.

16 I appreciate that it's got BA benefits, but it
17 is an energy market. It is a market. And there are folks
18 that are in balancing authority areas who have made a
19 decision not to be part of it that have resources that they
20 would like to contribute.

21 Again, thanks for the conversation. We hope
22 this is just the beginning of a conversation about how to
23 create those market rules.

24 MS. BAKER: Nancy Baker, Public Power Council.
25 I will abbreviate my remarks by agreeing with Rob and

1 Therese, but simply adding on thank you, again, for having
2 the conference, and I think it's been very constructive,
3 and I hope FERC Staff will continue to remain engaged in
4 these issues as we continue to take it back to the West and
5 have discussions about it.

6 MR. MAC DOUGALL: Mike MacDougall with Powerex.
7 And I also would like to thank the Commission for
8 organizing the conference.

9 I already made a number of points earlier. I
10 think just to add on to that, we'll absolutely provide
11 commentary to the CAISO stakeholder prioritization. We
12 think that is the right way to get all the information in
13 to rank these projects. And you know, at the end of the
14 day, we think that we're -- the proposal of external
15 resource participation follows the principles that relate
16 out to the Regional Issues Forum.

17 We're not looking at redesigning the market.
18 What we are trying to do is find a solution such that
19 resources that are located outside an EIM entity can
20 participate in these markets the same way as resources
21 located within the EIM entities.

22 And on top of that if, you know, if Bonneville's
23 position is going to be sort of in between, we're happy to
24 also talk about bringing our transmission rights to the
25 table to facilitate the transfers that have benefits to the

1 markets.

2 MS. SHIPLEY: And so can I start over here now.

3 MS. PARK: Tess Park with Idaho Power, and I'd
4 like to thank you for having the conference as well. And I
5 think there's been a lot of comments. Idaho has been
6 fairly vocal with the fact that we're a little uniquely
7 situated, still in this process of implementation, and the
8 benefits studies that we did don't show the benefits that
9 some people have received, which means we have a lot of
10 upside risk in joining the EIM. And if that risk continues
11 to change, I think people need to be mindful that if you're
12 an entity that has made the decision not to join, you did
13 so based off of the cost/benefit analysis and some
14 potential risk.

15 And when you look at it from an entity on the
16 flip side who is joining on something that was a market
17 designed as an optimization tool for BAs that's now forming
18 into something a little different with some fairly
19 large-size upside risks and the benefits fairly small, one
20 might say that if you want to have those benefits that you
21 think are so large, maybe you should take the risks as
22 well.

23 And I don't mean that as derogatory towards
24 anybody, but it's a business decision to be made. And if
25 you want to participate, you know, it's Idaho's position

1 that you participate and take the risks that everyone else
2 takes.

3 MS. EDMONDS: Sarah Edmonds, PacifiCorp. I also
4 want to thank the Commission and also thank everyone in the
5 room today for the exchange of ideas.

6 For me, it was helpful to parse the issues,
7 because again, potentially the agenda might have been a
8 little upside down in the sense that it was isolated on one
9 solution without an articulation and a discernment and a
10 parsing of what the problems were.

11 And so I see at least two clear camps. There's
12 issues around constraints in the bilateral market. There's
13 different ways to expand access to this market. And I
14 think that's an important clarification, because it will
15 really aid us in the future conversations around the
16 catalog process, the setting of those priorities. There
17 may be a bigger priority on looking at some of the
18 bilateral constraint issues over looking at different ways
19 of changing the market that may impact those fundamentals
20 that were the basis for the utilities that have joined.

21 And I think that Idaho did a great job of really
22 contouring what that issue is, but it also applies to a
23 company like NV Energy or PacifiCorp or any number down the
24 road that are already in the market, this voluntary market,
25 where not only is the ease of entry quite straightforward,

1 but we also can exit.

2 And we have a very close relationship with our
3 one or multiple state public utility commissions that are
4 very much closely watching to see is there a benefit in
5 this for our customers, is this the right balance of the
6 risks to the benefits that we take on when we're
7 facilitating these markets in our balancing authority area.

8 And I guess the last thing I would say is that
9 because of those challenges, because of those constraints
10 that we face in our business model, the EIM entities will
11 certainly be very cautious about any proposals that would
12 suggest that we need to latch on new capabilities on a
13 mandatory basis versus what kind of goes to the heart of
14 what EIM is, this voluntary market.

15 MS. ROSENBLATT: Lauren Rosenblatt, NV Energy.
16 What she said.

17 MS. SPORBORG: Pam Sporborg with Portland
18 General Electric.

19 And I want to go back to some of what we talked
20 about at the beginning of the day and remind us that EIM
21 has been the market construct that solved almost a
22 two-decade-long effort to bring an organized market
23 framework to the West.

24 And that framework is built on bringing three
25 elements to the table of generation, load, and

1 transmission. And the benefits we receive from that are
2 economic optimization, reliability, and renewables
3 integration. And today, we've really been talking about
4 one of the assets, generation, and one of the benefits,
5 which is the economic optimization.

6 For PGE's study, our economic benefits were
7 similar to Idaho's. But we see a lot more benefit in the
8 renewable integrations opportunities than the reliability
9 enhancements that we get from EIM.

10 I want to make sure that as we think through
11 this and have these discussions, we continue to weigh the
12 one component that we've been discussing today with the
13 other two aspects from both the asset side and the benefits
14 side, that we need to ensure are preserved through these
15 dialogues.

16 We're very supportive of resolving seams issues
17 with the bilateral market. We want to lower barriers to
18 entry for small utilities or for other utilities that might
19 be on the margin. But we also think that continuing this
20 dialogue through the regional issues forum and other
21 opportunities is a great opportunity. We've gotten a good
22 start today.

23 But I want to be cognizant that we have those
24 discussions while we're thinking about maintaining and
25 supporting this fundamental value proposition of the EIM

1 and doing these discussions in a measured and focused way
2 that ensures that we continue to think about the three
3 values that EIM brings and not put the emphasis on just the
4 economic optimization value ahead of renewables integration
5 or reliability that we also see.

6 Thank you.

7 MS. SHIPLEY: If we can do the last EIM entity,
8 and I would like to switch sides again and then come back
9 --

10 MR. JACOBS: Okay, I'll go quickly here. Josh
11 Jacobs, Puget Sound Energy. Again, I just want to echo,
12 thank you for everybody's comments today. I've learned a
13 lot.

14 Puget is 28 days into live functioning market,
15 and we're learning more every day. One of the big
16 challenges that we've encountered in this shift to the EIM
17 is how we manage interchange, interchange of not only our
18 merchant function but third-party interchange on our
19 system, and some of that tried to come out today in terms
20 of how are we managing hourly interchange versus 15-minute
21 interchange.

22 And I can say that for the next six months at
23 least, given the transitional period, we will be spending a
24 lot of time trying to get our arms around how to do that
25 sufficiently, to make sure we're passing all of the tests

1 we need to pass in order to engage in the market.

2 You know, for us, we are very supportive of
3 additional resources in the market. But it's clear to us
4 that intertie bidding as it's constructed today is not a
5 plug and play from the existing CAISO market into the EIM.
6 And a lot of the issues that have been talked about today
7 have to be run to ground to make sure that it's constructed
8 in a way that doesn't harm the reliability of the EIM
9 entities, that the EIM entities don't incur additional
10 costs that wasn't part of the equation in making the
11 decision to join the market.

12 And then above all else, that we preserve the
13 integrity of the market itself. It's a very stable market.
14 We're seeing benefits. It's very exciting. We're seeing
15 more people come on. But it's an emerging market, and we
16 need to recognize that and make sure that we don't make
17 large tweaks that could somehow jeopardize that.

18 MS. SHIPLEY: Go ahead, Suzanne.

19 MS. COOPER: Thank you. I appreciate it.

20 So from Bonneville's perspective --

21 MS. SHIPLEY: This is Suzanne --

22 MS. COOPER: Oh, this is Suzanne Cooper from the
23 Bonneville Power Administration. First, I do just want to
24 say that this dialogue today, I think, was very helpful and
25 enlightening, and the parsing out of various issues and

1 getting a little more clarity around them has been very
2 much worthwhile.

3 When we were preparing for this, one of the
4 things we asked ourselves -- because Bonneville, as folks
5 know, right now we are not planning to join the energy
6 imbalance market. We are watching as it evolves. We're
7 particularly interested in seeing how, with the new public
8 utilities who have indicated they're going to be joining
9 the market, what sorts of tangible benefits they receive.
10 The governance issues can be large for us as a federal
11 entity. So that's an area that we're watching as well, and
12 we're actively participating in. So I think the tie-in
13 with the regional issues forum and the EIM governing body
14 with some of these issues could be a great demonstration of
15 continued collaboration and a good governance process.

16 But one of the things that we did ask ourselves
17 as we thought about what is important, given that we're not
18 joining the EIM at this juncture, but we may in the future,
19 would be so whatever requirements or principles we apply
20 for external resources to participate in the market, they
21 should be the same whether we're in the market or we're not
22 in the market. So that was kind of the perspective that we
23 came into this with.

24 Again, I really appreciate the dialogue today
25 and the continuation of it in the forum.

1 MS. SHIPLEY: Thank you.

2 I believe we are at Avista.

3 MR. KINNEY: Scott Kinney with Avista Corp. So
4 again, I want to reiterate, I appreciate the opportunity to
5 come here today and participate, and I think all of us have
6 learned a little bit more. We understand some of the
7 issues. I think we've been able to dig a little deeper
8 into some of the issues, too. Maybe I will parse some of
9 them off and have some solutions fairly quickly.

10 But as one of those entities that the risks
11 right now does outweigh our benefits, and I appreciate
12 that's where you guys are at, because we're similar, but
13 we're on kind of the other side of it. I don't want to
14 lose the opportunity to just -- to not be able to
15 participate with our resources and look for those
16 opportunities. We're not looking for free riders at all.
17 And being a BA and a TSP, we understand the complexities as
18 well. So we're walking that fine line.

19 But we do think there is benefit to continuing
20 this conversation and to at least develop -- get the
21 conversation far enough along to where we at least
22 understand the requirements and the design changes that may
23 need to be made in order to allow external participation,
24 but not to just say no now, let's have those conversations,
25 let's continue them, let's figure out a way forward.

1 Four years ago, the Northwest didn't even have a
2 market outside of California, and look where we are at
3 today. So I think there is opportunity.

4 MS. SHIPLEY: Thank you.

5 MR. JAMIESON: JJ Jamieson, Perennial Power
6 Holdings. I would reiterate, thank you very much to FERC
7 for putting this on. I think there was worthwhile
8 discussion today. I certainly gained clarity in things I
9 was wondering about, I will say both good and bad.

10 Just a couple of things I would like to bring it
11 back to, a recurring thing and we actually circled back to
12 it at the end was you need to be a BA to participate. Rob
13 spoke to that. Therese spoke to that.

14 Technically, that's really not defensible.
15 There is no requirement for it to be a BA as long as you
16 have the information needed so that you can participate in
17 the model and the dispatch. If we continue to, say, put in
18 that restriction, then we're starting to look more at a
19 commercial impediment, a commercially-driven impediment as
20 opposed to a reliability-based impediment.

21 And the end result is you will restrict
22 lower-priced resources from being able to serve the load,
23 which is what the whole process is supposed to be about.

24 The benefit to load needs to be a focus. We
25 need to look at what we're trying to do as a generator. We

1 are designed to serve that load, and as the EIM
2 participants and anyone who is responsible for serving that
3 load, the lower price that you can achieve with the
4 reliability associated with it, the better off you are at
5 serving the people that you are responsible for.

6 So I think we need to keep that front and center
7 as opposed to some of the commercial risks that may be
8 involved and some of the -- where you based your studies on
9 and how it could be impacted as opposed to what is the base
10 premise of what we are trying to accomplish here.

11 And the last point I would like to make is I
12 encourage the stakeholder, I encourage the open discussion.
13 I think we're going to get a long ways by having these
14 discussions. We will learn things. And I commit to
15 participating in it with my company as well.

16 I would like to offer that there is in pretty
17 much all situations the ability to evolve into a solution
18 as opposed to just having a full stop where you do not
19 implement anything until you've got every single piece
20 involved. And I think in this area, we do have that
21 ability to look at it. Flashing light. So look the
22 evolution. See where the low-hanging fruit is. But we're
23 having a discussion, see what we can implement outside of a
24 four-year term.

25 MS. WOLFE: Ellen Wolfe, WPTF. I already got to

1 speak a lot of piece today. So I won't take much time.

2 Again, thank you to you all.

3 I had one process request, I guess. If you send
4 us off and leave us to our own devices, if you, FERC, could
5 think creatively about how you might create a little
6 check-in process with us without ruining the dialogue that
7 you have not having us under a docket. I think those
8 check-ins are always helpful. They hold us to task and
9 provide a timeline structure. I don't know how you do that
10 without ruining the ex parte luxury you have.

11 MS. SHIPLEY: It's a challenge. We will take
12 that back to the Commission.

13 MS. MILLER: Susan Miller with Earthjustice.
14 I'll just say how grateful I am to have been allowed to be
15 included in this discussion and try to get up to speed on
16 these issues and, hopefully, by extension, get my clients
17 up to speed. I particularly appreciated Jennifer's
18 question with regard to how CAISO sets its priorities,
19 because at that point I was just about to raise an
20 objection, which would have been totally wrong. And while
21 that's not unusual, I try to avoid it. So I'm glad I was
22 here, and I hope to keep participating in the
23 conversations.

24 MR. CROMWELL: Robert Cromwell, Seattle City
25 Light. I very much appreciate the dialogue, as both a

1 prospective EIM entity and as an entity in the region
2 concerned about and interested in the potential for a
3 market expansion.

4 One concrete suggestion for consideration is
5 perhaps having the ISO articulate specifically the
6 technical requirements for an external EIM resource
7 participant consistent with current market design might
8 help inform those prospective participants who may have
9 to make that investment, if any, and be a foundation for
10 that further dialogue and discussion.

11 Thank you.

12 MS. SHIPLEY: Thanks.

13 MS. MC KENNA: This is Anna McKenna. I'm not
14 going to make the conclusory comments for ISO. Mark is.

15 But I just want to offer a process, solution, if
16 you wish. So this docket technically, there really isn't
17 an open issue, and I think we can continue to discuss
18 things openly with the Commission. But the ISO is not -- I
19 can't believe I'm going to say this, but we would be
20 willing to file a report, to update, an informational
21 report to the Commission. I know my colleagues are going
22 to kill me.

23 MS. SHIPLEY: We give you so many required
24 already, I can't believe you're offering this.

25 MR. CROMWELL: You're walking home.

1 MS. MC KENNA: So --

2 MR. ROTHLEDER: Time's up.

3 MS. MC KENNA: So we'd be willing to file a
4 report. I don't know what the right time frame for that
5 is. So I won't suggest a time frame, but because it does
6 feel like it would be artificially imposing constraints on
7 our process to sort of speed up to report. But if perhaps,
8 a year from now we offer where offer where we are at
9 throughout this process, where things are going and what's
10 going on, if that's something the Commission would be
11 amenable to, we would be willing to do that. I think
12 that's a reasonable request or proposal.

13 MS. WOLFE: Six months?

14 MS. MC KENNA: Nine months?

15 MS. SHIPLEY: We have a bidding starting. We
16 cannot request that you make comments in this closed
17 docket. I think if you were to file them, and it sounds
18 like there would be some interest amongst the people to see
19 them, we would be happy to be the repository for them. So
20 we leave that to you.

21 MR. ROTHLEDER: Mark Rothleder, California ISO.
22 I want to repeat what everybody else has said, that this
23 has been enormously helpful in furthering the discussion,
24 and I will say I'm always happy to come here, but I will
25 also tell you that the last direct flight back to

1 Sacramento is about 5:00 out of Dulles. So anyway --

2 MS. SHIPLEY: So if I can speak to that real
3 quickly. So we are still new at this, and we apologize for
4 bringing you out here, A, on a Friday, and B, at a --
5 during time frames that makes it impossible for you to get
6 here easily or get home easily. We were not aware of that.
7 So mea culpa on our part. In the future, we will try to
8 make it easier. We will also try at some point to come to
9 you. We have difficulty with that, obviously, with
10 resolution it's sort of a constant struggle for us, the
11 same struggles that you face as well, we understand.

12 So in the future, we will do some outreach with
13 you to find out -- we actually had a suggestion from
14 someone that it would have been better had we started at
15 7:00 a.m. and gone to 3:00 p.m., which surprised the heck
16 out of us because 7:00 a.m. would be 4:00 a.m. for you. So
17 we thought we were doing you a favor by starting at 10:00
18 a.m. So apologies for not understanding the specifics.
19 And we will do better next time.

20 But Mark, please continue.

21 MR. ROTHLEDER: No, I'm somewhat teasing. I
22 appreciate the logistics.

23 It was helpful to really parse the discussion,
24 and I think in parsing the discussion, we have some areas
25 of agreement, and we have some areas that may be some

1 low-hanging fruit. I think as we dig into the more
2 difficult one, and that is going to be the how do you
3 address the expanded participation and what kind of models
4 do you use.

5 I think what we're going to discover, and I hope
6 everybody comes to the table with an open mind, that the
7 ultimate picture and how that looks may very well be very
8 similar to EIM participation, but with some barriers
9 removed. And those barriers are going to be the important
10 barriers that are necessary as described by folks who have
11 impediments participating in the existing model. But I
12 also ask the EIM entities to be open to the idea that this
13 is a new market, and we need to find ways to reduce the
14 barriers to entry for participation.

15 And I know some of the participation barriers
16 are regulatory and what is in the name, including what does
17 participation even mean. So I get all that. But I hope
18 that we can all come to the table with an open mind,
19 because I think that will lead to, ultimately, a solution
20 that is best overall for the entire interconnection at the
21 end of the day.

22 We look forward to trying to move this forward.
23 We also look forward to trying to remove those barriers.
24 We've identified some today. We will work on some of the
25 things that have been described as seams issues that we

1 think with somewhat more understanding, are very well
2 doable.

3 So at the end, it was a productive discussion.
4 I think we moved the ball forward for today. And we will
5 continue to see where this takes us.

6 Thank you.

7 MS. SHIPLEY: Thank you.

8 Is there anybody else not at the table who would
9 like to make a comment?

10 Seeing none, I'm going to look at Staff.

11 Okay. Thank you very much. We really
12 appreciate you coming all the way out here and helping us
13 better understand and participating in this dialogue. To
14 be continued.

15 (Whereupon, at 4:05 p.m., the technical
16 conference was concluded.)

17

18

19

20

21

22

23

24

25