

1                   BEFORE THE PUBLIC SERVICE COMMISSION

2                                 STATE OF MISSOURI

3                                 \_\_\_\_\_  
4                   TRANSCRIPT OF PROCEEDINGS

5  
6                                 Evidentiary Hearing

7                                 December 15, 2011

8                                 Jefferson City, Missouri

9                                 Volume 2  
10                                 \_\_\_\_\_  
11

12           In the Matter of the Union Electric )  
13           Company's 2011 Utility Resource        )  
14           Filing Pursuant To 4 CSR 240-         ) File No. EO-2011-0271  
15           Chapter 22                                )

16                                 \_\_\_\_\_  
17                   MORRIS WOODRUFF, Presiding

18                                 SENIOR REGULATORY LAW JUDGE

19                                 KEVIN D. GUNN, Chairman,

20                                 JEFF DAVIS,

21                                 TERRY M. JARRETT,

22                                 ROBERT S. KENNEY,

23                                 COMMISSIONERS.  
24                                 \_\_\_\_\_  
25

26           REPORTED BY:

27                   LISA M. BANKS, CCR

28                   TIGER COURT REPORTING

## A P P E A R A N C E S

TOM BYRNE, counsel

WENDY TATRO, counsel

Brydon, Swearengen & England, P.C.

1901 Chouteau Avenue

St. Louis, Missouri 63109

FOR: Union Electric Company d/b/a Ameren Missouri

JENNIFER FRAZIER, counsel

Office of Attorney General

P.O. Box 899

Jefferson City, Missouri 65010

FOR: Missouri Department of Natural Resources

DIANA VUYLSTEKE, counsel

Bryan Cave, LLP

211 N. Broadway, Suite 3600

St. Louis, Missouri 63102

FOR: MIEC

HENRY ROBERTSON, counsel

Great Rivers Environmental Law Center

705 Olive Street, Suite 614

St. Louis, Missouri 63101

FOR: NRDC, Sierra Club, MO Coalition for the Environment,

Renew Missouri, Missourians for Safe Energy

SHANNON FISK, counsel

Natural Resource Defense Council

2 N. Riverside Plaza, Suite 2250

Chicago, Illinois 60606

FOR: NRDC

LEWIS MILLS, Public Counsel

P.O. Box 2200

Jefferson City, Missouri 65102

FOR: Office of Public Counsel

NATHAN WILLIAMS, Deputy Counsel

P.O. Box 360

Jefferson City, Missouri 65102

573.751.3234

FOR: Staff of the Missouri Public Service Commission

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

(Wherein; Company Exhibit Nos. 1HC, 1NP, 2HC, 2NP, 3, 4, 5, 6 and 7 were marked for identification.)

(Wherein; Staff Exhibit Nos. 8 through 17 were marked for identification.)

(Wherein; MDNR Exhibit Nos. 18 through 27 were marked for identification.)

(Wherein; NRDC Exhibit Nos. 28, 29HC, 30, 31HC, 32HC, 33 and 34 were marked for identification.)

JUDGE WOODRUFF: We're here this morning for a hearing in -- concerning Ameren Missouri's IRP filing in File No. EO-2011-0271. We'll begin this morning by taking entries of appearance beginning with Ameren.

MS. TATRO: Wendy Tatro and Tom Byrne, 1901 Chouteau Avenue, St. Louis, Missouri, 63103.

JUDGE WOODRUFF: Okay. And for Staff?

MR. WILLIAMS: Nathan Williams, P.O. Box 360, Jefferson City, Missouri, 65102.

JUDGE WOODRUFF: And for Public Counsel?

MR. MILLS: On behalf of the Office of Public Counsel and the public, my name is Lewis Mills. My address is P.O. Box 2230, Jefferson City, Missouri, 65102.

JUDGE WOODRUFF: And for the NRDC?

MR. ROBERTSON: Henry Robertson, Great Rivers Environmental Law Center, 705 Olive Street, Suite 614,

1 St. Louis, Missouri, 63101.

2 JUDGE WOODRUFF: And for --

3 MR. FISK: Shannon Fisk, Natural Resource  
4 Defense Council. My address is 400 West Madison Avenue in  
5 Chicago, Illinois, Suite 2250. And the zip code is 60606.

6 JUDGE WOODRUFF: Okay. And for Department of  
7 Natural Resources?

8 MS. FRAZIER: Jennifer Frazier with Missouri  
9 Attorney General's Office for the Department of Natural  
10 Resources, P.O. Box 899, Jefferson City, Missouri, 65010.

11 JUDGE WOODRUFF: Thank you. And I see MIEC in  
12 the room.

13 MS. VUYLSTEKE: Diana Vuylsteke, Bryan Cave Law  
14 Firm, 211 North Broadway, Suite 3600, St. Louis, Missouri,  
15 63102.

16 JUDGE WOODRUFF: Okay. Is there anyone -- any  
17 other attorneys in the room that I've -- I've missed? I don't  
18 remember seeing anyone. There were a number of other parties in  
19 this case. Several have requested leave to be excused, which  
20 was granted in an order issued yesterday, so I believe that  
21 takes care of entries of appearance for today.

22 Preliminary matters, there was a pending motion  
23 out there that Ameren filed on the 12th to file a revised  
24 surrebuttal testimony of Warren Wood. I haven't seen any  
25 responses to that. Does anyone object to that motion?

1                   Hearing no objections, it will be granted.

2                   Any other preliminary matters that anyone wants  
3 to bring up before we go to the opening statements?

4                   MS. TATRO: Would it be appropriate to move into  
5 the record the testimony of individuals that have -- their  
6 appearance have been waived, also the original filing that  
7 Ameren Missouri made in February and the reply to the comments?  
8 I think that would be Ameren Missouri 1HC and NP.

9                   JUDGE WOODRUFF: All right.

10                  MS. TATRO: Ameren Missouri 2HC and NP. 1 is  
11 the February report, 2 is the reply to the other parties'  
12 comments. And then Ameren Missouri 6 -- Ameren Missouri 6,  
13 which is the testimony of Steve Wills, who everyone has waived  
14 cross on.

15                  JUDGE WOODRUFF: Okay.

16                  MS. TATRO: So I would move those be put in the  
17 record.

18                  JUDGE WOODRUFF: 1HC and NP was the February  
19 report?

20                  MS. TATRO: Yes.

21                  JUDGE WOODRUFF: And 2 was also HC and NP?

22                  MS. TATRO: Yes.

23                  JUDGE WOODRUFF: And that was the reply report?

24                  MS. TATRO: Yes.

25                  JUDGE WOODRUFF: And you said 6 was Steven

1 Mills?

2 MS. TATRO: Yes.

3 JUDGE WOODRUFF: And was that the surrebuttal?

4 MS. TATRO: Yes.

5 JUDGE WOODRUFF: All right. Exhibits 1HC and  
6 NP, and 2HC and NP and Exhibit 6 have been offered. Any  
7 objection to their receipt?

8 Hearing none, they will be received.

9 (Wherein; Company Exhibit Nos. 1HC, 1NP, 2HC,  
10 2NP and 6 were received into evidence.)

11 JUDGE WOODRUFF: That also brings up the  
12 question of -- there was at least one party -- Green Belt --  
13 Green Line, who had some testimony they wanted to have received  
14 into evidence, but they're not here today and they were excused.  
15 Is anyone prepared to mark that exhibit for them? Have they  
16 asked for that?

17 I don't see anybody stepping up.

18 MS. TATRO: I did receive an e-mail from their  
19 attorney asking if that would be -- could be placed into the  
20 record. And we sent around an e-mail and the other parties said  
21 that -- I think all the parties said -- indicated they did not  
22 object to that being placed into the record.

23 JUDGE WOODRUFF: Okay. Does anyone have a copy  
24 of it?

25 MS. TATRO: You know, I didn't bring a copy of

1       it. I certainly -- we could get it over lunch.

2                   JUDGE WOODRUFF: I'd appreciate that if you  
3       could.

4                   MS. TATRO: I can print it out.

5                   JUDGE WOODRUFF: Because I want to make sure  
6       everything is clearly denominated in the record.

7                   MS. TATRO: Okay. We'll do that.

8                   JUDGE WOODRUFF: All right. Anything else  
9       anyone wants to bring up?

10                  All right. Then we'll move on to opening  
11       statements. And we'll begin with Ameren Missouri.

12                  MS. TATRO: Good morning, Judge. As we start  
13       this two-day hearing on Ameren Missouri's integrated resource  
14       filing, I want to start by taking a step back from the testimony  
15       and discuss what the filing is and what it's not supposed to  
16       accomplish.

17                  The IRP rule was adopted to ensure that electric  
18       utilities in Missouri undergo a robust planning process for the  
19       long-term provision of safe and reliable service at just and  
20       reasonable rates. Further, as this commission itself has  
21       acknowledged, the rules are not designed to dictate what  
22       decisions are to be made by the utility.

23                  In other words, Judge, the IRP rules require the  
24       company to do resource planning and to undertake certain  
25       analysis as to part of that planning. The rules do not require

1     that the intervenors or even the Commission agree with every  
2     input used in the planning process nor does it require that the  
3     utility reach the end result desired by every party in the case  
4     and with the variety of interests represented in this case, that  
5     probably wouldn't be possible.

6                     So the question that's left is to ask whether  
7     Ameren Missouri complied with the requirements of the rule. For  
8     example, did the company calculate total resource cost values  
9     using the methodology set forth in 4 CSR 240-22.050 (7) (D). If  
10    the company completed that calculation, even if other parties  
11    would have used a different value for some portion of that  
12    calculation, then the company has complied with that portion of  
13    the rule.

14                    Now, I would tell you that the company takes the  
15    IRP planning process very seriously. It took the company 18  
16    months to complete the analysis required. This was not a small  
17    amount of work. During that time period the company held  
18    multiple meetings with stakeholders to provide insight in how  
19    the company was undertaking the planning process and to seek  
20    input upon that plan. Most party in the -- most of the parties  
21    in this case participated in those meetings.

22                    So did Ameren Missouri comply with the  
23    requirements of the Commission's IRP rule? The company believes  
24    that it has. When you read through the testimony filed by  
25    others in this case, you will not see allegations that the



1 company skipped a step in the required analysis. You will see  
2 that a party would have used a different input. You will see  
3 that they would have weighed the scorecard differently. You  
4 will see that they would have assigned a higher weight to PVRR,  
5 Present Value Revenue Requirement. But you will not see the  
6 company skipped a required step in their analysis.

7 Now, in addition to that you will also see at  
8 least one specific allegation from other parties that asks this  
9 commission to go beyond how the Commission has interpreted its  
10 IRP rules in the past. Specifically, the argument that the  
11 company has no choice but to adopt the plan with the lowest  
12 PVRR. This distorts the language of the rules. It is Company's  
13 management who must decide what preferred plan to adopt.

14 And we know that this commission isn't  
15 interested in managing the utility decision-making process, a  
16 fact which was confirmed in their recent order of rulemaking for  
17 the revised IRP rules. Yet, the recommendations of Staff, OPC  
18 and others would turn the IRP process into one where inputs are  
19 fed in and a result is spit out and management decision-making  
20 is ignored. And the sole criteria that Staff and OPC want that  
21 result to be determined by relies solely upon the PVRR result.  
22 So what is PVRR?

23 Well, it's exactly what it says it is. It's the  
24 revenue requirement on a present value basis during the 20-year  
25 resource plan. In fact, when Ameren Missouri calculated it, we

1       went out almost 30 years to capture the after effects.

2                       So according to OPC and others the plan that  
3       results in the lowest PVRR has to be adopted regardless of  
4       whether the company could afford to finance that plan,  
5       regardless of whether there exists a regulatory construct that  
6       makes energy efficiency an investment that makes business sense,  
7       regardless of the length of time it takes the ratemaking process  
8       to incorporate the results of energy efficiency kilowatt hours  
9       savings into the billing unit portion of the calculation of the  
10      company's revenue requirement in a rate case.

11                      You see, the PVRR calculation assumes no delay.  
12      It assumes expenditures are recovered at the same time as they  
13      are made. Sometimes this is referred to as Perfect Ratemaking.  
14      But in reality it should be called Impossible Ratemaking because  
15      rates cannot be set on an instant basis so that they align  
16      exactly with the expenditures as they are made.

17                      So given these limitations what is the role of  
18      PVRR? PVRR is very important and Ameren Missouri agrees it  
19      should be the primary selection criterion, but it has  
20      limitations and those limitations means it cannot dictate the  
21      final decision without applying other considerations, which by  
22      the way is exactly what the IRP rules say and how they say the  
23      PVRR is to be used.

24                      If you look at the company's filing and you look  
25      at the planning process, you will see that the resource plans

1     that came through integration and were considered for plan  
2     selection included the plan with lowest PVRR. That's the one  
3     that included energy efficiency at the RAP level, Realistic  
4     Achievable Potential. But RAP wasn't ultimately selected as the  
5     preferred plan. And why is that?

6                 Well, because as the IRP rules themselves  
7     acknowledge, there are other factors, other considerations is  
8     the language of the regulation, that must be considered when  
9     selecting a preferred plan. If one looks at the policy  
10    objective that is set forth in 4 CSR 240-22.010 (2) it says the  
11    objective is to provide the public with energy services that are  
12    safe, reliable and efficient at just and reasonable rates that  
13    service the public interest.

14                In order to achieve that objection [sic], the  
15    rule sets forth multiple steps that the utility must undertake  
16    as a part of its analysis. I want to focus on (2)(B) and  
17    (2)(C). Now, (2)(B) requires the company to use the  
18    minimization of present worth of long-run utility cost, which  
19    we're all referring to as PVRR, as the primary selection  
20    criterion.

21                The company identified five selection criteria;  
22    PVRR, economic development, customer satisfaction or rates,  
23    financial and regulatory and diversity of resources. PVRR was  
24    given a weight of 30 percent. Economic development was given a  
25    weight of 10 percent. And the remaining three criteria were

1 given a weight of 20 percent each. Clearly PVRR was the primary  
2 criterion.

3 And the plans that were left after applying  
4 these selection criteria included that plan with the realistic  
5 achievable potential energy efficiency that the other parties  
6 have testified about in their written testimony.

7 So the next step is to move to (2) (C), which  
8 requires the utility to explicitly identify other considerations  
9 which are critical to meeting the fundamental objective of the  
10 resource planning process, but which may constrain or limit the  
11 minimization of the PVRR. And this is the step that other  
12 parties ignore.

13 They want PVRR to be the controlling factor, but  
14 the Commission's rules explicitly allow for other considerations  
15 and the company identified three other considerations. The  
16 company labeled them decision factors in the filing. These were  
17 large plant financing, plant retirement and environmental, and  
18 DSM cost recovery.

19 The reality is that the company's current cost  
20 recovery mechanism for its energy efficiency investment is  
21 insufficient because it doesn't address the throughput  
22 disincentive. As a consequence, the other considerations  
23 constrain the company's ability to choose RAP as part of its  
24 preferred plan at this time. That is not to say that RAP can  
25 never be a part of the company's preferred plan.

1                   In the future the company believes it can be a  
2 part. And the company's recent history confirms that the  
3 company is and has been committed to energy efficiency, spending  
4 over \$70 million since 2009. And these programs were  
5 successful. And in fact, they far exceeded our own goals for  
6 kilowatts hours saved.

7                   What's important to remember is that there's a  
8 timeline that things happen and they don't happen  
9 instantaneously. If I can work this -- we've put together a  
10 timeline that shows when the MEEIA statute was passed, when the  
11 rules were passed and when Ameren Missouri's filing was made.

12                   You can see that the statute was passed back in  
13 '09, became effective August 1st of '09. The proposed rules  
14 were filed -- were filed in '10 and became effective on May 30th  
15 of '11. And the IRP was filed on February 23rd of '11.

16                   So until the company has had an opportunity to  
17 make a MEEIA filing -- which the company has filed its 60-day  
18 notice indicating that it may do so no sooner than 60-days from  
19 when that notice was filed -- it cannot chose a resource plan  
20 which doesn't allow it to recover the costs that will be  
21 incurred.

22                   So now, in our last rate case this commission  
23 suggested the company file under MEEIA in order to resolve the  
24 regulatory framework issues which hinder the investment in  
25 energy efficiency today. And as I said, Judge, we do intend to

1 do so and we look forward to working with the Commission and the  
2 stakeholders in this room so that we can once again move forward  
3 in a positive direction with energy efficiency.

4 We're working on that filing and once it's  
5 approved by the Commission, the interest of the customers and  
6 the utility will be aligned. And that will allow the utility to  
7 pursue all cost-effective energy efficiency. But remember the  
8 timeline shows those rules hadn't been adopted before the filing  
9 was made in February and obviously the company hasn't yet  
10 received approval of its MEEIA filing.

11 Accordingly today, the preferred plan doesn't  
12 yet reflect those developments. And this really just  
13 demonstrates what the company has said multiple times: Resource  
14 planning is a process, a continuing process and things change  
15 and that change is the selection of preferred plan.

16 The filing itself that was made in February is  
17 nothing more than a snapshot of that process at the time it was  
18 filed. When changes occur they're reviewed by company  
19 management and a determination of whether the preferred resource  
20 plan is still appropriate is made. If it is not, the company  
21 will change its preferred plan.

22 A Commission order on our MEEIA filing will  
23 likely cause a change in how energy efficiency is valued as  
24 compared to the value it was given at the time of the IRP  
25 filing. But that's for the future and not for this initial IRP

1 filing.

2 So remember the case here, the commissioners are  
3 to decide whether or not the company undertook the steps set  
4 forth in its IRP rules. We believe we have done so and we have  
5 brought to hearing today three witnesses who are happy to  
6 discuss what inputs were used and why; how integration and plan  
7 selection occurred and why; what PVRR results were reached and  
8 how those results were constrained.

9 Ameren Missouri believes it has undertaken a  
10 very robust planning process that more than complies with the  
11 Commission's integrated resource planning rules and we believe  
12 the Commission should issue an order that finds no deficiencies  
13 in the company's filing. Thank you.

14 JUDGE WOODRUFF: Thank you.

15 Commissioner Kenney, did you have any questions?

16 COMMISSIONER KENNEY: No thank you.

17 JUDGE WOODRUFF: Okay. We'll move on to Staff  
18 now.

19 MR. WILLIAMS: Thank you, Judge, Commission.  
20 May it please the Commission. I am Nathan Williams and I am  
21 representing the Staff before you here today.

22 As Ameren Missouri has stated the Commission  
23 Rule 4 CSR 240-22.010 (2)(B) required Ameren Missouri to use  
24 minimization of the present worth of long-run utility costs as a  
25 primary selection criterion in choosing its preferred resource

1 plan that is the subject of this case. It's Staff's position  
2 that Ameren Missouri did not do so.

3 In its order of rulemaking where it first  
4 adopted this rule in 1993, the Commission said -- and this is  
5 found in what's been marked for identification as Exhibit 1  
6 at -- I believe it's Page 8, but it's in the section --

7 JUDGE WOODRUFF: It can't be Exhibit 1 because  
8 we've already had Exhibit 1.

9 MR. WILLIAMS: I'm sorry. Let me get the  
10 exhibit list. It would have been Staff Exhibit 1. On the  
11 exhibit list it's Exhibit No. 8.

12 JUDGE WOODRUFF: Thank you.

13 MR. WILLIAMS: It's in the section that the  
14 Commission has identified as 4 CSR 240-22.010. And there the  
15 Commission said -- the Commission adopts the two modifications  
16 in the proposed rules in response to various comments. It still  
17 holds to the proposition that cost minimization should be a  
18 primary importance in resource plan selection.

19 Among the comments to which the Commission  
20 directed this and other statements were those of Ameren  
21 Missouri. Staff has provided -- or is asking the Commission to  
22 take official -- or notice of Ameren Missouri's, then known as  
23 Union Electric Company's, initial and reply comments in that  
24 rulemaking, which is Case No. EX-- or it's EX-92-299.

25 And those have been marked as Exhibits 9 and 10.



1 And it's also asking the Commission to take notice of the order  
2 of rulemaking in that case, which is what's been marked as  
3 Exhibit 8.

4 In those initial comments, Ameren Missouri  
5 argued that the term "primary" as used in the rule was ambiguous  
6 and should be replaced with the word initial. While the  
7 Commission clarified in its order of rulemaking that primary  
8 selection criterion meant of primary importance, it did not  
9 elaborate further. That is why we are here before you today  
10 from Staff's perspective.

11 Staff agrees that much of what Ameren Missouri  
12 did is exactly what it should have done under the rules and that  
13 it has done a robust resource planning process. However, Staff  
14 disagrees that in selecting its preferred plan that Ameren  
15 Missouri has properly used PVRR as the primary selection  
16 criteria. Basically Staff is saying it should have more weight  
17 than what Ameren Missouri gave to it.

18 And if you look at the rule, it talks about  
19 there may be constraints or limits on the minimization of  
20 present worth of expected utility costs, that is should not  
21 necessarily be -- remain the primary selection criteria.

22 Those criteria should be -- other criteria or  
23 considerations should be related to the fundamental purpose --  
24 fundamental objective of the resource planning process, which is  
25 safety, reliability, efficiency, just and reasonable rates.

1 From Staff's perspective that's the main issue in this case and  
2 we're really looking for guidance from the Commission as to what  
3 primary selection criteria -- criterion is as used in the rule.

4 JUDGE WOODRUFF: Thank you. Now, the exhibits  
5 that you marked as 8, 9 and 10, did you wish to offer them into  
6 evidence or --

7 MR. WILLIAMS: Yes. I'll offer those at this --  
8 well, what I'm asking is if you can take notice of them. I  
9 mean, that's its own files. And the exhibits are copies of what  
10 are in those files.

11 JUDGE WOODRUFF: Since we have the documents  
12 here, I'll take that as an offer and see if anybody has an  
13 objection to it.

14 MS. TATRO: Could you say which one is which  
15 number?

16 JUDGE WOODRUFF: 8 was the order of rulemaking  
17 from 1992, 9 was UE's initial comments and 10 was Union  
18 Electric's reply comments.

19 MS. TATRO: No objection.

20 JUDGE WOODRUFF: Hearing no objection, then they  
21 will be received.

22 (Wherein; Staff Exhibit Nos. 8, 9 and 10 were  
23 received into evidence.)

24 JUDGE WOODRUFF: Commissioner Kenney, did you  
25 have any questions for Mr. Williams?

1 COMMISSIONER KENNEY: Just one.

2 Good morning, Mr. Williams.

3 MR. WILLIAMS: Good morning.

4 COMMISSIONER KENNEY: So if I'm hearing you  
5 correctly, the fundamental disagreement that Staff has was how  
6 much weight to give to the PVRR?

7 MR. WILLIAMS: Yes.

8 COMMISSIONER KENNEY: And that's it.

9 MR. WILLIAMS: It's not the only, but that is  
10 the primary issue in the case from Staff's prospective.

11 COMMISSIONER KENNEY: Is it Staff's opinion that  
12 that issue will either be resolved or change under the new  
13 Chapter 22 rules?

14 MR. WILLIAMS: I believe it's Staff's position  
15 that it will still be an issue under the new version of the  
16 rules.

17 COMMISSIONER KENNEY: Okay. Thank you.

18 JUDGE WOODRUFF: Thank you.

19 Then opening for NRDC?

20 MR. ROBERTSON: Thank you, Judge. May it please  
21 the Commission. There's no dispute in this case that Ameren did  
22 not take the case with the lowest PVRR. Ameren says that they  
23 can analyze other considerations and that's true. They can  
24 quantitatively analyze them until their hearts content. They  
25 can propose trade offs and balances and perhaps propose that

1     they cannot minimize PVRR to the extent it might first appear,  
2     but they cannot simply dispense with the primary criterion under  
3     the rule.

4                 We also find that Ameren has not adequately  
5     analyzed the supply-side resources, in particular the cost of  
6     continuing to operate their coal fleet. They've not adequately  
7     considered the capital costs of doing so, the operating costs  
8     and the high capacity factors they assigned to an ancient coal  
9     plant like Meramec.

10                Ameren admits it expects environmental costs to  
11     rise and yet they then set them inside and pretend that they  
12     won't change at all. Ameren has not accounted for trends in  
13     coal prices and natural gas prices and the high natural gas  
14     prices that they use bias their plan against the cost -- in  
15     favor of the cost effectiveness of coal.

16                Ameren has not fulfilled the policy objective of  
17     equally treating supply-side and demand-side resources because  
18     they only considered demand-side when they see a capacity gap.  
19     They don't let demand-side and supply-side resources compete on  
20     cost.

21                In short, Ameren has manipulated the rule and  
22     its analysis under the rule in order to reach a preconceived  
23     result. They should take the plan -- the right plant and then  
24     make their MEEIA filing. They should not assume, as they have  
25     done, that they are not going to get fair treatment under MEEIA.

1                   The Commission's primary mission is to protect  
2     the public interest, the interest of the consuming public.  
3     Resource planning serves that interest and the Commission does  
4     not take over the management of a company when it tells a  
5     utility that the public interest is paramount. Thank you.

6                   Now, I have exhibits, too, that we're  
7     stipulating into evidence. And I can enter them now or wait  
8     until after opening statements. I don't know how you want to do  
9     that.

10                  JUDGE WOODRUFF: Does -- you don't have any  
11     witnesses that are actually going to appear?

12                  MR. ROBERTSON: I have no witnesses that are  
13     going to appear.

14                  JUDGE WOODRUFF: All right. Go ahead and offer  
15     your exhibits.

16                  MR. WOODRUFF: Okay.

17                  JUDGE WOODRUFF: And tell me what they are.

18                  MR. ROBERTSON: We have Exhibit 28, which is the  
19     rebuttal testimony of Phillip Mosenthal. Exhibit 29 is the  
20     rebuttal testimony of David Schlissel and that document is HC.  
21     Exhibit 30 is the resume of David Schlissel accompanying his  
22     rebuttal testimony. Exhibit 31 is the comments of NRDC, Sierra  
23     Club, Renew Missouri, Mid-Missouri Peaceworks and Great Rivers  
24     Environmental Law Center. That document is HC.

25                  I have a document that did not get marked. I

1 have to get that marked.

2 Exhibit 32, also HC, is our reply to Ameren's  
3 response to comments. That is HC. Exhibit 33 is an attachment  
4 to our reply. It's a presentation by the Brattle Group entitled  
5 Potential Coal Plant Retirements Under Emerging Environmental  
6 Regulations. And Exhibit 34 is a list of coal plant  
7 retirements, which is attached to our reply.

8 And if I may, I'll get this other document  
9 marked.

10 JUDGE WOODRUFF: Go ahead.

11 (Wherein; NRDC Exhibit No. 35 was marked for  
12 identification.)

13 MR. ROBERTSON: Exhibit 35 is NRDC Attachment 1,  
14 which was filed with our original comments. And that's all I  
15 have.

16 JUDGE WOODRUFF: Okay. Then what we've got here  
17 is 28, which is Mosenthal's rebuttal, 29HC is Schlissel  
18 rebuttal, 30 was resume of Schlissel, 31HC is the comments of  
19 NRDC, 32HC is reply to Ameren's response to comments, 33 was an  
20 attachments to that reply, 34 was the coal plant retirement  
21 list, and 35 was Attachment 1 to the original comments.

22 MR. ROBERTSON: Correct.

23 JUDGE WOODRUFF: All right. Those documents  
24 have been offered into evidence. Are there any objections to  
25 their receipt?

1                   Hearing none, they will be received.

2                   (Wherein; NRDC Exhibit Nos. 28, 29HC, 30, 31HC,  
3                   32HC, 33, 34 and 35 were received into evidence.)

4                   JUDGE WOODRUFF: And Commissioner Kenney, do you  
5                   have any questions?

6                   COMMISSIONER KENNEY: Same question,  
7                   Mr. Robertson, do you take exception with any other -- well, you  
8                   already talked about the fact that they didn't take into account  
9                   coal plant operating expenses, but how about the use of the PVRR  
10                  as the primary criterion. Is it more a debate about weight  
11                  given to it?

12                  MR. ROBERTSON: I'm not really sure that the  
13                  best way to approach is in percentage terms, that it have a 50,  
14                  plus 1 percent. That is one way to look at it, though. I don't  
15                  know how else you can give it the primacy that the rule assigns  
16                  it.

17                  COMMISSIONER KENNEY: Well, I think Ms. Tatro  
18                  said they gave it a 30 percent and then 10 percent to economic  
19                  development and then 20 percent each to the three additional  
20                  criteria.

21                  MR. ROBERTSON: Well, as we analyze it, they  
22                  gave PVRR 25 percent and non-cost factors the other -- other 75  
23                  percent. And so we do not consider that as giving it the  
24                  primacy that's required.

25                  COMMISSIONER KENNEY: Okay. Thank you.

1 MR. ROBERTSON: Thank you.

2 JUDGE WOODRUFF: Then for Missouri Department of  
3 Natural Resources?

4 MS. FRAZIER: Thank you. Good morning. May it  
5 please the Commission. The Department of Natural Resources'  
6 involvement in the utility resource planning process at the  
7 Commission is driven by its interest in making the IRP process a  
8 more meaningful planning process for utilities to use as the  
9 core of their ongoing business planning process and not just as  
10 an exercise every three years.

11 The IRP process can be meaningful and result in  
12 an appropriate analysis and selection of an optimal preferred  
13 resource plan. Unfortunately the process Ameren Missouri  
14 conducted in developing its integrated resource plan in this  
15 case has fallen far short of compliance with the Commission's  
16 regulations and resulted in selection of a plan that fails to  
17 adequately consider energy efficiency and renewable energy  
18 resources.

19 It is the Department's position that with its  
20 2011 IRP filing, Ameren Missouri has jeopardized the integrity  
21 of the planning process. The Department has filed extensive  
22 testimony documenting deficiencies with Ameren's planning  
23 process as well as numerous concerns as have other parties in  
24 this docket.

25 Most notably, the Department contends that



1 Ameren created a new concept, decision factors, outside the  
2 context of any rule or waiver provision and used those factors  
3 to drive a selection of a preferred plan that did not include  
4 lower cost in PVRR, net Present Value Resource Revenue plan and  
5 to exclude any meaningful level of DSM.

6 Ameren chose not to remedy or mitigate these and  
7 other deficiencies identified by the parties. In his testimony  
8 one Ameren witness says that in a planning process the Company  
9 assumptions must meet a threshold of creditability. However,  
10 Ameren's plan does not meet this threshold in many respects.

11 Ameren's selection of its preferred resource  
12 plan is driven by the assumption that it will not receive any  
13 cost recovery treatment under MEEIA. It used DSM cost recovery  
14 in an all or nothing approach and assumed it would recover  
15 nothing unless proven otherwise or until proven otherwise next  
16 year, and thereby avoided any meaningful contingency planning  
17 analysis.

18 Based upon our testimony, the Department's  
19 position is that the Commission has no choice but to find  
20 Ameren's planning process is not in compliance with the  
21 Commission's resource planning rules and the Department requests  
22 that the Commission make this finding.

23 We look forward to Ameren's MEEIA filing next  
24 year so that we can all move forward and start realizing the  
25 economic and environmental benefits of energy efficiency savings

1 for Ameren's customers in the state of Missouri. Thank you.

2 JUDGE WOODRUFF: Commissioner Kenney, any  
3 questions?

4 COMMISSIONER KENNEY: No questions. Thank you.

5 JUDGE WOODRUFF: All right. Opening for Public  
6 Counsel?

7 MR. MILLS: Good morning. May it please the  
8 Commission. First I need to just -- sort of as a perception, I  
9 think that the Commission should not be fooled by the waiver of  
10 cross-examination of the out of town witnesses into thinking  
11 that the parties are taking this case lightly. Certainly,  
12 public Counsel is not. I think the fact that you see all these  
13 people here indicates that none of the other parties are either.  
14 This is an important case. This is a critical case that will  
15 have long-lasting repercussions.

16 Every day that goes by when Ameren fails to  
17 offer cost effective DSM programs, means more lower efficiency  
18 furnaces are installed, more lower efficiency refrigerators are  
19 purchased, et cetera. These choices, which this commission  
20 should be influencing, will have impacts for decades.

21 Similarly, every day that goes by when Ameren  
22 fails to realistically evaluate wind energy and fails to invest  
23 in cost effective wind energy, means more pollutants are emitted  
24 and higher energy costs. Again, these choices will have impacts  
25 for decades.

1                   And also, the Commission should not let the fact  
2     that this is probably the last IRP to be processed under the old  
3     rule, keep the Commission from doing what needs to be done in  
4     this case. The new Chapter 2 rules certainly makes some  
5     improvements over the old rules, but with respect to the central  
6     issues in this case, there is not that much difference.

7                   And as Mr. Williams pointed out, and as  
8     Commissioner Kenney has asked about, the central issue in this  
9     case is whether Ameren can comply with the IRP rules by  
10    selecting a plan that allows shareholder profits to be a more  
11    important criteria than minimizing the present value of revenue  
12    requirement.

13                  Certainly there is not a requirement that a  
14    utility pick mathematically the lowest PVRP plan, but the  
15    requirement in the rule and the whole point of the rule is to  
16    drive the utility towards the -- the lowest cost PVRP that's  
17    consistent with other uncertain factors. UE did not do so in  
18    this case.

19                  I think there's some reasons to be optimistic  
20    that -- that perhaps this case will go better for those of us  
21    who are arguing for compliance with the IRP rules than some of  
22    the cases have in the past. First of all, we have reason to  
23    believe that unlike the last case, the Commission is proceeding  
24    down a path that makes it more likely that the Commission will  
25    find that Ameren did not comply with the IRP rules, order the

1 company to rerun the IRP and chose a plan that's consistent with  
2 the policy objectives in 22.010 (2) and especially  
3 22.010 (2) (B) .

4 And that reason can be found in the fact that we  
5 are here in an evidentiary hearing. This is -- for those of us  
6 who have a long history with the Commission's IRP rules, this is  
7 notable because this is the first evidentiary hearing that the  
8 Commission's ever held in the context of an IRP planning  
9 process.

10 In the -- in the order regarding Ameren's last  
11 IRP process in Case No. EO-2007-0409, the Commission essentially  
12 found that UE did not comply with the planning rules in many  
13 respects, but did not order the filing of a new plan. And I  
14 think what is most notable about the decision in EO-2007-0409 is  
15 in fact the dissenting opinion. And the dissent was issued in  
16 that case by -- by then Chairman Clayton and then Commissioner  
17 Gunn.

18 And they recognized the implications of the  
19 integrated resource planning process and they stated in that  
20 dissent that the purpose of the IRP rule was to ensure that the  
21 company carefully considers decisions well in advance. It goes  
22 on to say that the parties spent countless hours reviewing  
23 Ameren's IRP filing and found it to be deficient.

24 But they go on and they conclude by saying that  
25 the dissenting commissioners would require Ameren UE to correct

1 the deficiencies in its IRP now -- at that point in time --  
2 rather than allow the company until its next IRP filing to get  
3 it right. And they also en-- they also dissented from the fact  
4 that the Commission declined to hold an evidentiary hearing to  
5 make findings on which to base such an order.

6 So we certainly have moved a step forward in  
7 this case. We are having an evidentiary hearing. The  
8 Commission will have evidence on which it can make a finding  
9 that Ameren failed to comply with the IRP planning rules and  
10 order Ameren to comply.

11 Now, as I said the -- the central issue in this  
12 case, and it's certainly not the only issue -- but the central  
13 issue in this case is whether Ameren can comply with the rules  
14 by disregarding the present value of revenue requirement in  
15 favor of other factors. And to more explicitly answer  
16 Commissioner Kenney's question that he posed to a couple of  
17 other attorneys this morning, there certainly are a lot of other  
18 issues.

19 We've got serious issues with the way that wind  
20 was modeled. We have serious issues with the way that the  
21 critical uncertain factors were treated under the rules. But at  
22 the end of the day, if Ameren is free to essentially disregard  
23 all the results and all of the analysis that occurs in the plan  
24 and chose a plan based on factors that were not analyzed in the  
25 way that the rule requires them to be analyzed, then whether or

1 not they complied with these intermediate steps is really not  
2 nearly as important as whether they're required to comply with  
3 the final step, which is the question of picking a plan.

4 And so we -- and I won't go through all of them  
5 here, but you know, in addition to the central issue Public  
6 Counsel has provided testimony and reports identifying eight  
7 deficiencies in the IRP planning process and the other parties,  
8 of course, have identified many more.

9 With respect to the opening statement of Ameren  
10 this morning, I do have to correct one particular point, which  
11 is the point that none of the parties have stated that UE  
12 skipped a step. In fact one of our deficiencies we pointed out  
13 is the UE did in fact skip a step and that it failed to analyze  
14 probable environmental costs as a critical uncertain factor,  
15 which is a step required by 22.070 (2) (C). And that step was  
16 not done at all.

17 And finally, and this goes to the central issue  
18 in the case. I think Ms. Tatro said that the other parties take  
19 the position that the Company would have no choice but to adopt  
20 the plan that comes up with the lowest possible PVRR, and that's  
21 simply not the case. The rules allow a utility some discretion  
22 to vary from PVRR as they should because there are other factors  
23 that should be considered. But they don't allow the utility as  
24 much discretion as they've attempt to exercise in this case in  
25 which they've essentially ignored PVRR in favor of other

1 factors. Thank you.

2 JUDGE WOODRUFF: Commissioner Kenney, any  
3 questions?

4 COMMISSIONER KENNEY: No. Mr. Mills anticipated  
5 by questions and he answered those. I thank you.

6 MR. MILLS: Thank you.

7 JUDGE WOODRUFF: Thank you. I believe that will  
8 be all of the opening statements.

9 And we're ready to move on to our first witness,  
10 which I believe is Mr. Wood.

11 (Witness sworn.)

12 WARREN WOOD testifies as follows:

13 DIRECT EXAMINATION BY MR. BYRNE:

14 Q. Good afternoon, Mr. Wood.

15 A. Good morning.

16 Q. Would you please state your name for the record.

17 A. Warren Wood.

18 Q. And by whom are you employed, Mr. Wood?

19 A. Ameren Missouri.

20 Q. And in what capacity?

21 A. Vice President of legislative and regulatory  
22 affairs.

23 Q. And what is your business address?

24 A. 1901 Chouteau Avenue, St. Louis, Missouri.

25 Q. And are you the same Warren Wood that has caused

1 to be filed in this proceeding surrebuttal testimony that has  
2 been marked as Company Exhibit 3?

3 A. Revised surrebuttal testimony?

4 Q. Yes.

5 A. Yes.

6 Q. And do you have any corrections to that revised  
7 surrebuttal testimony?

8 A. I do not.

9 Q. Okay. And is the information contained in that  
10 revised surrebuttal testimony true and correct to the best of  
11 your knowledge and belief?

12 A. It is.

13 Q. And if I were to ask you the questions contained  
14 in that prefiled testimony here today when you're under oath,  
15 would your answers be the same?

16 A. They would.

17 MR. BYRNE: Okay. Your Honor, I would offer  
18 into evidence Exhibit 3 and tender Mr. Wood for  
19 cross-examination.

20 JUDGE WOODRUFF: Exhibit 3 has been offered.  
21 Any objections to its receipt?

22 Hearing none, it will be received.

23 (Wherein; Company Exhibit No. 3 was received  
24 into evidence.)

25 JUDGE WOODRUFF: Cross, we begin with Staff.



1                   MR. WILLIAMS: Judge, do you want us to use the  
2 podium or --

3                   JUDGE WOODRUFF: As you prefer.

4 CROSS-EXAMINATION BY MR. WILLIAMS:

5                   Q.       Good morning, Mr. Wood.

6                   A.       Good morning.

7                   Q.       I believe you were my witness probably the last  
8 time when you were on the stand.

9                   A.       I think you may be -- I think you may be right.

10                  Q.       In your testimony you state you were employed at  
11 the Missouri Public Service Commission as the Natural Gas  
12 Department manager, then the Energy Department manager, and then  
13 the Utility Operations Division director before you left the  
14 Commission. When were you promoted to be the Natural Gas  
15 Department manager?

16                  A.       That was a new hire. I have been -- I  
17 previously had been at the Commission in the Natural Gas  
18 Department, ended up leaving the Commission, moving and coming  
19 back later.

20                  Q.       When was it that you left the Commission and  
21 then when did you return? You don't have to be precise, but I  
22 want to get kind of an idea. Were you gone a year? Two years?

23                  A.       I believe it was two to three years, but that's  
24 a guess. I'm not that good at remembering those timelines  
25 without getting it out and looking at the calendar.

1 Q. And that would have been around what year?

2 A. In the mid-'90s.

3 Q. And then when were you promoted to Energy  
4 Department manager?

5 A. I don't remember. I've been in Natural Gas  
6 Department for a short number of years. I don't remember the  
7 exact number. And then I was Energy Department manager for a  
8 couple of years and then the Utility Operations Division  
9 director after that for a period of time.

10 Q. You anticipated by next question. Do you know  
11 when in 2010 you began working for Ameren Missouri?

12 A. October of last year.

13 Q. And you describe that you oversee state  
14 legislative regulatory -- and regulatory policy development and  
15 compliance for the company. What is it that you do in  
16 particular?

17 A. On the legislative side we monitor filing of  
18 bills, the different impacts of those bills on the company,  
19 provide comments and testimony in House and Senate hearings on  
20 that legislation. Sometimes we're in the drafting of  
21 legislation for consideration by the General Assembly.

22 And on the regulatory side I'm working with  
23 Ameren Missouri and Ameren corporate people in the development  
24 and compliance filings to meet regulatory requirements at the  
25 state level, not necessarily -- I'm not involved much at the

1 federal level.

2 Q. Would that include rate cases or more items like  
3 this case?

4 A. I have some involvement in the rate cases as  
5 well.

6 Q. And what would be the nature of that  
7 involvement?

8 A. Well, I would be looking at the -- at the  
9 different issues being considered in the case, potential  
10 witnesses, positions taken, you know, different -- as  
11 negotiations go on in different aspects of the filing, you know,  
12 what changes would be acceptable to see if we can settle issues.  
13 And then development of different issues to be heard, you know,  
14 in the hearings with -- obviously with advice of counsel working  
15 with attorneys.

16 Q. Would that role include testifying or is it more  
17 of a managerial --

18 A. It could in-- it could include testifying in the  
19 future, although I didn't testify in the last rate case.

20 Q. Are you a member of Ameren Missouri's leadership  
21 team?

22 A. I am.

23 Q. Who are the members of that leadership team?

24 A. You mean the senior leadership team?

25 Q. Yes.

1           A.       It would -- well, we have -- I mean, it's a list  
2 of people. It's -- you know we have our operations vice  
3 president. We have communications. We have, you know, the  
4 regulatory people, myself. I mean, do you want me to try to go  
5 through those names? I won't hit everybody.

6           Q.       Well, how many people are we talking about?

7           A.       Just about -- without going through the names, I  
8 mean, 10 to 12.

9           Q.       Why don't you just list what you can think  
10 about.

11          A.       Okay. If I could take a minute to --

12          Q.       Sure.

13          A.       -- think through that. Okay.

14                   Some of the immediate, you know Warner Baxter,  
15 obviously, president. Adam Heflin, our chief nuclear officer.  
16 Marty Lyons, Richard Mark, you know, Chuck Naslund, Dave  
17 Wakeman. Those are some of the people that jumped into mind  
18 right away. There's probably some others I haven't hit.  
19 Just -- you know, I haven't looked at the chart today, sorry.

20          Q.       Sounds a bit short of 10 to 12, but if that's  
21 what you recall, that's what you recall,

22          A.       Yeah. I don't recall right away.

23          Q.       Were you responsible for -- as a -- let's see --  
24 in overseeing regulatory policy development and compliance, were  
25 you involved in this -- the development of Ameren Missouri's

1 integrated resource planning under Chapter 22 that's the subject  
2 of this case?

3 A. Well, as that filing started about 18 months  
4 ago, I haven't been with the company during that time period  
5 when that initiated. I did participate in the three Ameren  
6 Missouri management meetings where in -- you know, one meeting  
7 in late October, two in November last year where we went through  
8 the -- the candidate resource plans, the decision criteria, the  
9 decision factors, policy objectives, weighting, scorecard, and  
10 the development of selection of the preferred resource plan and  
11 five contingencies.

12 Q. Well, who determined the weighting of the  
13 factors?

14 A. That was -- as I recall the scorecards that --  
15 initially, there was like minimization of PVRR had a 25 percent.  
16 That was changed to 30 percent. There was some discussion on  
17 the different scoring in those meetings a little over a year ago  
18 and I don't recall if there were changes at that time.

19 Q. Well, aren't there -- wasn't the scorecard used  
20 at two different points; one to screen initial programs and then  
21 later for making the decision of the preferred plan?

22 A. Well, yes. They were looked at by the  
23 management team in assessing the different -- you have 14  
24 candidate resource plans and you looked at the different  
25 weighting of the different decision criteria and then after you

1 had looked through those different scorings, you would then  
2 looked at the decision factors or maybe -- you know, it's the  
3 same thing as the other considerations under the rule.

4 Q. And when was the -- before selecting the  
5 preferred plan, when was the -- when were the criteria selected  
6 and when was the weighting for each criteria determined?

7 A. I do not recall. I suppose Mr. Michaels would  
8 know that exactly.

9 Q. Well, rather than tying it to a specific date,  
10 when did it occur relative to whenever the preferred plan was  
11 selected? Are we talking days? Months?

12 A. I don't know the answer to your question.

13 Q. Were you involved in the development of the  
14 Commission's Chapter 22 rules that are at play in this case or  
15 the ones that Ameren Missouri filed under? They have been  
16 fairly recently been revised, but I'm talking about the ones  
17 that were in effect in --

18 A. This is '92?

19 Q. '92, '93.

20 A. I -- I don't recall being involved in that  
21 rulemaking.

22 Q. Did you have any involvement in the development  
23 or passage of the Missouri Energy Efficiency Investment Act?

24 A. Yes. I was at the Capitol when the Missouri  
25 Energy Efficiency Act was being debated and eventually passed by

1 the General Assembly.

2 Q. Well, you said you were there. I was asking if  
3 you had involvement. Was your involvement just to be present or  
4 were you lobbying or --

5 A. I was --

6 Q. -- what were you doing?

7 A. As the president of the Missouri Energy  
8 Development Association at the time, I certainly had an interest  
9 in and was working on that legislation.

10 Q. So you were lobbying?

11 A. Yes.

12 Q. Under Missouri Energy Efficiency Investment Act  
13 does Ameren Missouri have any obligations?

14 A. I'm not exactly sure how to answer your  
15 question. When you look at the obligations under 393.1075.3 it  
16 lays out objectives of demand-side and supply-side resources  
17 equivalent basis and then it has a number of -- you know, it  
18 says the Commission shall and then there's a list of three  
19 things.

20 You know, if -- if the Commission has done those  
21 things, I think there is an expectation that, you know, if a  
22 MEEIA filing is approved that the utility would seek  
23 implementation of all cost effective demand-side energy savings.  
24 That's the goal in 393.1075.4 as I recall.

25 Q. I think you testified that in your view that it

1       could have some obligations depending on what occurs. Are you  
2       aware of any other obligations Ameren Missouri might have under  
3       Missouri Energy Efficiency Investment Act?

4               A.       Well, there are some obligations. If an  
5       industrial says that they wish to opt out, there's some other  
6       requirements in there on tracking that and I believe if  
7       somebody -- and there was a provision I'd put in regarding if  
8       somebody had previously received some sort of another -- and I  
9       forget the exact detail. I can pull the piece up if you want to  
10      see that, but there is a commitment there as well for us to  
11      track.

12             Q.       Anything else you can think of offhand?

13             A.       Not without reading through the statute right  
14      now, no.

15             Q.       Has Ameren Missouri taken any actions that are  
16      inconsistent with if it had chosen realistically achievable  
17      potential demand-side management as its preferred plan other  
18      than not choosing -- I'll use the shorthand -- RAP DSM as its  
19      preferred plan?

20             A.       Repeat the question. I missed the first part.

21             Q.       Other than not selecting realistically  
22      achievable potential demand-side management as its preferred  
23      plan, what actions, if any, has Ameren Missouri taken that are  
24      inconsistent with if it had made that -- had chosen that as its  
25      preferred plan?



1                   MR. BYRNE: I'm going to have to object to the  
2 question. It assumes facts not in evidence. It assumes that  
3 our selection was inconsistent with the statute, which it's not.

4                   JUDGE WOODRUFF: Your response?

5                   MR. WILLIAMS: No. It's purely a hypothetical,  
6 asking had Ameren Missouri selected realistically achievable  
7 potential demand-side management as its pr-- has it taken any  
8 steps that are inconsistent with if it had chosen realistically  
9 achievable potential demand-side management as its preferred  
10 plan?

11                  JUDGE WOODRUFF: I don't think that question  
12 assumes anything. It's not that the company has necessarily  
13 done anything wrong. As I understand it, it's asking did you do  
14 anything different than if you had chosen RAP; is that --

15                  MR. WILLIAMS: That's essentially what the  
16 question is driving at, yes.

17                  MR. BYRNE: Okay. As clarified, that's -- I  
18 withdraw my objection.

19                  JUDGE WOODRUFF: Okay. You can answer the  
20 question.

21                  THE WITNESS: I'm trying to understand the  
22 question first and then I understand I need to answer it.

23                  Explain to me what you're asking. I'm having a  
24 hard time following what you want me to answer.

25 BY MR. WILLIAMS:

1           Q.       Okay. Ameren Missouri has not chosen  
2       realistically achievable potential demand-side management that  
3       it screened as its preferred plan.

4           A.       It --

5           Q.       What I'm asking is --

6           A.       It was two contingencies, but not the preferred  
7       resource plan. Right.

8           Q.       Right. As its preferred resource plan.

9           A.       Right.

10          Q.       My question is: Has it -- has Ameren Missouri  
11       done -- taken any actions that would be inconsistent with it  
12       having had chosen RAP DSM as its preferred plan?

13          A.       As I understand the question, I don't believe  
14       so.

15          Q.       Well, do you want to -- go ahead and state your  
16       understanding of the question. I'm not trying to confuse  
17       anybody.

18          A.       Okay. Well, as I understand your question is  
19       other than not choosing RAP DSM, are we inconsistent with the  
20       MEEIA statute in some other regard.

21          Q.       No. That's not my question.

22          A.       Okay.

23          Q.       It's not about the MEEIA statute.

24          A.       Okay.

25          Q.       What I'm asking is Ameren Missouri has not

1 selected realistically achievable potential demand-side  
2 management as its preferred plan.

3 A. Correct.

4 Q. Has it taken any actions inconsistent with  
5 having chosen realistically achievable potential demand-side  
6 management as its preferred plan?

7 A. Only to the degree that you would view pursuing  
8 the energy efficiency levels in 2009, '10 and '11 as -- as  
9 pursuing significant energy efficiency savings. You know, in  
10 2009 we spent about \$13.6 million, in 2010 about 23.3 and in  
11 2011 an estimate of about \$33 million. So those were  
12 significant investments in pursuit of cost effective demand-side  
13 energy savings and then reducing those expenditures in light of  
14 some of the issues in discussion today.

15 I don't consider that inconsistent with that,  
16 but you know, to the degree that it's relevant to your question,  
17 I would point that out.

18 Q. Is that the only thing you're aware of that you  
19 would point out as somebody might assert was an inconsistency?

20 A. That's the only thing that strikes me.

21 Q. And Ameren Missouri has publicly stated now that  
22 it will be making a Missouri Energy Efficiency Investment Act  
23 filing -- rule filing in, I think, the first quarter of this  
24 year -- this coming year. Correct?

25 A. We are -- we consider the timely development of

1 a thorough and accurate MEEIA filing a high priority right now  
2 and we're doing what we can to accelerate that filing as much as  
3 possible.

4 Q. Does that mean you don't have a timeline in mind  
5 for when that filing might be made?

6 A. Our internal target is the first full week of  
7 January. We're doing a number of things to try to develop that  
8 filing as quickly as possible. It is not a complete filing.  
9 There's still a fair amount of work to be done, internal reviews  
10 and approvals, et cetera.

11 But we are trying to complete that filing in the  
12 first full week of January but with the caveat, I wouldn't see  
13 that as a commitment. We're trying to get it to that date.  
14 We'll see if we can make that happen.

15 Q. And I'm not asking you to make a commitment, but  
16 when you say completed filing are you talking about internally  
17 or are you talking about actually filing?

18 A. Actually filing.

19 MR. WILLIAMS: No further questions at this  
20 time.

21 JUDGE WOODRUFF: All right. Questions from  
22 NRDC?

23 MR. FISK: Yes. Thank you. Thank you, Your  
24 Honor.

25 CROSS-EXAMINATION BY MR. FISK:

1 Q. Good morning, Mr. Wood.

2 A. Good morning.

3 Q. How are you doing today?

4 A. Fine.

5 Q. Good. I had a few questions for you today. And

6 I guess first, do you have a copy of your testimony in front of

7 you?

8 A. I do.

9 Q. Okay. Great.

10 A. The revised surrebuttal?

11 Q. Yes.

12 A. Yes. I have it.

13 Q. Great. If you could turn to Page 8.

14 A. I'm there.

15 Q. All right. And Lines 13 to 14 you reference --

16 you reference Ameren having incurred tens of millions of dollars

17 in lost fixed cost recoveries?

18 A. Yes.

19 Q. Okay. And that is with regards to DSM projects

20 that have already been carried out by Ameren?

21 A. Specifically associated with the Energy

22 Efficiency programs 2009 through 2011 with a total investment

23 level of about \$70 million.

24 Q. And do you have a specific figure as to how much

25 has been incurred in lost revenues?

1           A.           Yes. And estimate of 2009 to 2011, \$24.8  
2 million; 2012, \$20.3 million; 2013, \$7 million; 2014, \$600,000.  
3 And that's calculated assuming rate cases on a 15-month cycle  
4 starting in September of 2010. To the degree of frequency of  
5 rate cases is less frequent than that, the loss revenues would  
6 be higher.

7           Q.           Okay. And has Ameren calculated the amount of  
8 lost revenues assuming there are no RAP scenario pursued?

9           A.           If -- if there -- to answer your question maybe  
10 one of the other witnesses have. I have not. I think -- is  
11 this under the assumption that a MEEIA filing is approved by the  
12 Commission?

13          Q.           Under the assumption that RAP had been included  
14 in this IR-- selected in this IRP --

15          A.           I --

16          Q.           -- without the MEEIA filing.

17          A.           I don't have information to answer that  
18 question.

19          Q.           Okay. And if you turn to -- do have the IRP in  
20 front of you?

21          A.           The integrated resource plan?

22          Q.           Yes.

23          A.           No. I do not. Could somebody provide that for  
24 me? I didn't -- I was afraid I'd strain my back bringing it up  
25 here. Okay. Thanks.

1 Q. Okay. If you turn to Chapter 10, Appendix B.

2 A. Okay. What page? Appendix -- what's the page  
3 number on that?

4 Q. It's Page 1 of Appendix B to Chapter 10. It's  
5 towards the back.

6 A. Towards the back. Okay. Appendix D?

7 Q. B, like boy.

8 A. B. Okay. Appendix B. I am looking at Appendix  
9 B. What page of Appendix B?

10 Q. The first page.

11 A. This has the Chapter 10, Appendix B candidate  
12 resource plan dashboard?

13 Q. Yes.

14 A. Okay. I'm on that.

15 Q. And this on Page 1 here, this is one of the  
16 scenarios that assumes the low risk DSM approach; is that  
17 correct?

18 A. Yes. This is the -- under one of the low risk  
19 DSM portfolio. Yes.

20 Q. And if you turn to Page 5 of Appendix B.

21 A. Page 5?

22 Q. Yes.

23 A. Okay. Let me get there. Just a minute. I need  
24 to -- I need to get glasses. These bifocals -- I can't see it.  
25 Okay. Yes. I'm there.

1 Q. Okay. And is that -- the plan reflected on Page  
2 5, is that the same resource plan except for that it assumes RAP  
3 rather than low risk DSM?

4 A. Yes.

5 Q. Okay. And if you compare the PVRs for the plan  
6 on Page 1 and the plan on Page 5, what -- what is approximately  
7 the difference?

8 A. The PVR 2011 through 2039 for the RAP is at  
9 59.66 billion and the PVR under DSM portfolio low risk is 61  
10 million 259.

11 Q. Okay. And would that be a difference of  
12 approximately \$1.6 billion?

13 A. 1 -- it looks like about the math, about 1.6 out  
14 of \$60 billion. Yeah.

15 Q. Okay. And would that be -- that \$1.6 billion  
16 difference would be attributable to pursuing RAP rather than low  
17 risk DSM?

18 A. Well, there's also a difference on a combined  
19 cycle unit in that calculation as well.

20 Q. In which -- which scenario?

21 A. Page 1 -- Pages 1 versus Page 5.

22 Q. Okay.

23 A. The Page 1 has the combined cycle in 2029 as  
24 well.

25 Q. And that combined cycle would be needed



1 because -- or would not be needed in the scenario on Page 5

2 because of higher levels of DSM?

3 A. I would turn that question over to Mr. Michaels.  
4 I expect he'd give you an immediate answer on that. I'm -- I --  
5 I could guess, but let's leave that for Mr. Michaels.

6 Q. Okay. Do you know how Ameren weighed the trade  
7 off between reducing PVRR from the -- from RAP versus low risk  
8 against the cost to the Ameren shareholders with regards to lost  
9 revenue?

10 A. Well, the minimization of PVRR had a 30 percent  
11 weighting and the financial regulatory piece that includes  
12 return on equity earnings per share, you know, business  
13 condition constraints was 20 percent.

14 Q. Do you know over the -- over the life of the --  
15 over this 2011 to 2039 period what the lost revenues for Ameren  
16 would have been from the RAP versus low risk DSM?

17 A. I do not know that.

18 Q. Do you know if that was calculated?

19 A. I do not.

20 Q. Okay. Okay. Do you know who would know that at  
21 Ameren?

22 A. It -- it -- you know, we could att-- we could  
23 find out if Mr. Voytas or Mr. Michaels knows that later, but I  
24 don't know the answer to that right now.

25 Q. And I guess I'm -- you testified, I believe,

1       that the PVRR minimization was weighted 30 percent, the return  
2       on equity was 20 percent.

3               A.       Well, return on equity and other financial  
4       regulatory con-- you know, decision criteria, they were lumped  
5       together in one 20 percent block.

6               Q.       So if the PVRR reduction from doing RAP rather  
7       than low risk DSM were larger than the lost revenues to the  
8       company, would that mean that the company should have pursued  
9       RAP?

10              A.       Well, if you look at the weighting of the  
11      minimization of PVRR versus the financial regulatory, it's a  
12      30/20 spit and you know, the way of the -- the way the weighting  
13      worked out RAP DSM came through -- through that scorecard review  
14      and arrived at two of the contingencies out of 5. So the  
15      minimization PVRR weighting did result in -- in two RAP DSM  
16      programs coming through the screening, but arriving as  
17      contingencies.

18              Q.       And then why was it not included as the -- in  
19      the preferred plan?

20              A.       Because of the other consideration or decision  
21      factor related to DSM cost recovery.

22              Q.       And what was that?

23              A.       It -- there were three other considerations also  
24      in the filing referred to as decision factors. And they relate  
25      to DSM cost recovery, plant financing and retirement,

1 environmental compliance concerns. And what that comes down to  
2 is when you look at minimization of PVRR it has to be viewed in  
3 light of legal and practical constraints. For instance, if --  
4 if a utility arrived at a candidate resource plan that it could  
5 not reasonably finance, say a nuclear power plant, then they  
6 couldn't choose that as a preferred resource plan.

7           Also, on advice of counsel, if a utility was --  
8 was -- was -- did not believe there was a likelihood or in deed  
9 a significant likelihood that it would receive cost recovery for  
10 a resource plan, it couldn't be compelled to choose that  
11 resource plan. And in this case it was the DSM cost recovery  
12 constraint.

13           Q.       So did the level of the lost -- lost revenue  
14 recovery factor into the decision whether to have it as part of  
15 the preferred plan, RAP, as part of the preferred plan or would  
16 any level of lost revenue to the company have led Ameren to  
17 eliminate RAP from the preferred plan.

18           A.       The level of lost revenues was certainly a  
19 factor in looking at that other consideration.

20           Q.       But you don't know what that level of lost  
21 revenue was?

22           A.       No. We just look off of the last 2009 to 2011  
23 and the current calculated losses that are -- that already been  
24 impacted and those that we see going forward and then we  
25 could -- it's not hard to determine it's a significant number.

1           Q.       So if the -- hypothetically, if the minimization  
2 of PVRR was 10 times as large as the lost revenue to the  
3 company, would RAP still not be included in the preferred  
4 resource plan?

5           A.       Well, it still would have come through the  
6 scorecard as a contingency plan as it did, so the minimization  
7 of PVRR you could have gone to a higher weighting. It still  
8 would have come through as a contingency plan just as it did,  
9 but then when you get to the cost recovery constraints, it  
10 wouldn't be chosen -- chosen as the preferred resource plan.

11          Q.       Even if the savings to customers was -- through  
12 PVRR was 10 times as the loss to shareholders?

13          A.       Well, the public interest is -- it's a balancing  
14 principle between customers expecting safe and adequate service  
15 and the utility having access to just and reasonable rates  
16 including opportunity to earn a reasonable return on its  
17 investments.

18          Q.       So is there any level of exceedance of the  
19 minimization of PVRR over the lost revenues to shareholders that  
20 would have caused Ameren to include the RAP in the final  
21 preferred referred plan?

22          A.       I don't know the answer to that question. I  
23 mean, how big of a -- I don't know the answer to that.

24          Q.       All right. If you turn to Page 11 of your  
25 testimony --

1           A.       Okay.  Are we done with the IRP?

2           Q.       Yes.

3           A.       At least for now?

4           Q.       At least for now.

5           A.       And then let me go over to my testimony.

6           THE WITNESS:  Can I set this here?

7           THE COURT REPORTER:  Sure.

8           THE WITNESS:  Thank you.

9           Okay.  Page 3, I'm there.

10       BY MR. FISK:

11           Q.       Okay.  You discuss here the weight given to the  
12       minimization of PVRR in comparison to other factors used in --  
13       other decision factors; is that correct?

14           A.       Yes.

15           Q.       Okay.  And is it your position -- am I  
16       understanding correctly that so long as the PVRR is given the  
17       most weight of any single factor then it qualifies as being the  
18       primary factor?

19           A.       If I understand your question, if you have a  
20       number of different factors as long as minimization of PVRR  
21       receives the greatest weighting, it is being viewed as the  
22       primary selection criterion.

23           Q.       Yes.  That's my question.

24           A.       Yes.

25           Q.       Okay.  And does it matter -- is there a limit to

1 the number of factors under -- under that approach?

2 A. Well, I think -- the simple answer to your  
3 question is in theory no, but in reality there's only going to  
4 be a limited number of decision criteria that makes sense  
5 associated with resource planning.

6 Q. So under -- under -- under Ameren's approach to  
7 what it considers the primary factor, if there had been 10  
8 selection criteria and PVRR was given 11 percent weighting,  
9 would that be -- still PVRR would be the primary decision  
10 factor?

11 A. Well, mathematically it would be the primary  
12 selection criterion then, but clearly that was doesn't done  
13 here. There were five and you know --

14 Q. But in terms of extending the logic of the  
15 argument, you could have a situation where there are 20  
16 selection criteria and PVRR would be 6 percent weighted.  
17 Correct?

18 A. Under an extreme example, yes.

19 Q. And would that -- would you still consider that  
20 to be the primary factor?

21 A. Well, mathematically it would be the primary  
22 selection criterion. Although clearly that wasn't the case in  
23 this -- this example.

24 Q. And if you turn to Page 7 of your testimony.

25 A. Okay.

1           Q.       Lines 3 to 15. There you have a discussion  
2 there about the testimony of Mr. Rogers; is that correct?

3           A.       Yes.

4           Q.       And there's a reference to I guess proposal that  
5 the company commits to do four things, one of which is agreeing  
6 that if there were a -- if the Commission were to approve RAP  
7 with a fair DSM investment mechanism, Ameren would agree to deem  
8 that to be part of its preferred resource plan. Do you see  
9 that?

10          A.       Yes, I do.

11          Q.       And is that a correct interpretation of your  
12 testimony there?

13          A.       Yeah. There -- there was -- this is condition 2  
14 of the Commission's four and actually Mr. Rogers includes it in  
15 his surrebussel -- rebuttal testimony as well. Yes. I think  
16 it's a fair recollection of it.

17          Q.       Okay. And is that something that Ameren would  
18 agree to?

19          A.       I think likely. If your question is if the  
20 Commission approving a MEEIA filing aligning our interests with  
21 the interest of our customers in pursuit of all cost effective  
22 demand-side energy savings as 393.1075.3 and 4 of the MEEIA  
23 statute envisions, I think it is likely we would be able to  
24 chose that as a preferred resource plan.

25                   As I sit here today I can't say absolutely. I

1 mean, it's not my decision alone to make that decision, but I  
2 think it's likely. And you know, if it's a yes or no to  
3 Mr. Rogers' question the idea for the commitment here the net  
4 effect over the three-year period, after that MEEIA filing was  
5 approved would be sent the net -- the same as saying yes or no  
6 because the only resource plan in that time period is the RAP  
7 DSM expenditure investment effort. And so yes or no, it's the  
8 same net effect over that three-year period.

9 Q. And there is a reference to fair demand-side  
10 program investment mechanisms. Do you see that in Lines 13 and  
11 14 of your testimony on Page 7?

12 A. Yes. From Mr. Rogers' --

13 Q. yes.

14 A. -- testimony where I've quote it there, yes. I  
15 see that.

16 Q. And do you know -- or what would Ameren consider  
17 to be fair DSM investment mechanisms?

18 A. Well, the details of filings are not completed  
19 yet, but what we would envision in that filing is a three-year  
20 commitment seeking approval of a three-year commitment or a  
21 three-year plan to seek RAP DSM energy savings, seek cost  
22 recovery of the energy efficiency programs, share net benefits  
23 mechanism to mitigate the throughput disincentive, and approval  
24 of a technician resource manual that would lay out the details  
25 of the effects of a range of energy efficiency programs.



1           Q.       Okay. Just two other quick questions. Do you  
2 know what percent of Ameren's shares are held by Missouri  
3 residents?

4           A.       No. I don't.

5           Q.       Do you know what percent of Ameren shares are  
6 held by Ameren customers?

7           A.       I do not.

8           MR. FISK: No further questions.

9           THE WITNESS: Thank you.

10          JUDGE WOODRUFF: Ms. Vuylsteke, did MIEC wish to  
11 cross?

12          MS. VUYLSTEKE: Yes. I do have a few questions.

13          CROSS-EXAMINATION BY MS. VUYLSTEKE:

14          Q.       Good morning, Mr. Wood.

15          A.       Good morning.

16          Q.       Mr. Wood, do I understand from your surrebuttal  
17 testimony that it's your position and also Ameren's position  
18 that present value of revenue requirements is not the only  
19 factor to be considered in selecting the preferred resource  
20 plan?

21          A.       No. It isn't the only decision criteria.

22          Q.       Okay. And I believe that you mentioned earlier  
23 that in Ameren's selection in preferred resource plans the  
24 weight given to the PVRR was 30 percent; is that correct?

25          A.       Minimization of PVRR had a 30 percent weighting,

1       yes.

2               Q.       Okay.  So is there a minimum weight to PVRR that  
3       Ameren believes should be used?

4               A.       It should receive the greatest weighting of any  
5       of the different decision criteria, but I don't know if I -- I  
6       haven't gone through what's a -- what's a reasonable minimum  
7       assessment there.

8               Q.       Is there a maximum weight to PVRR that Ameren  
9       believes should be used in selecting the preferred resource  
10      plan?

11              A.       I haven't assessed that range of the -- of it  
12      either.

13              Q.       Okay.  In addition to PVRR what do you regard as  
14      the most important -- quote/unquote -- other factors to consider  
15      in selecting a preferred resource plan?

16              A.       Well, in this case -- and I think it fairly  
17      captures the view of the Ameren Missouri management team.  You  
18      have to also consider environmental compliance and portfolio  
19      diversity given our concentration toward one general -- one  
20      generation resource right now.  That's one of them.

21                      Another one would be rate impacts, customer  
22      satisfaction.  You know, while PVRR is important, you know, for  
23      energy efficiency in particular, people who haven't participated  
24      in the energy efficiency program, you have to be concerned about  
25      the rate impacts on them.  So that's the average system rate,

1 customer impact piece is 20 percent.

2 And then financial regulatory concerns, return  
3 on equity or earnings per share, stranded capital, things like  
4 that, 20 percent. And then economic development in terms of  
5 jobs, tax base, things of that nature at 10 percent.

6 Q. Okay. Now, assume that we have two resource  
7 plans that have essentially the same present value of revenue  
8 requirements over whatever time horizon the utility is going to  
9 use for evaluation purposes.

10 A. Okay.

11 Q. And assume that there are two candidate resource  
12 plans. Plan A has a very high capital investment at the  
13 beginning as compared to Plan B, but Plan A has lower variable  
14 prices in all years than does Plan B. Okay?

15 A. I think I'm with you.

16 Q. Okay.

17 A. Okay.

18 Q. And let's also assume that our evaluation period  
19 is 20 years.

20 A. Okay.

21 Q. And that Plan A has a PVRR of \$10 billion --

22 A. Okay.

23 Q. -- for the first 10 years. And a PVRR of 7  
24 billion for the second 10 years.

25 A. Okay. I didn't bring my calculator up here, but

1       okay -- so Plan A has 10 million over the first 10 years, 7  
2       million over the second 10 years?

3               Q.       Right.

4               A.       Am I following you right?

5               Q.       Yeah. To-- so there would be a total of 17  
6       billion of PVRR.

7               A.       So the 7 billion has that been present valued as  
8       well, so you can add that to the 10, for up front of 17?

9               Q.       Correct.

10              A.       Okay. I'm there.

11              Q.       Okay. Now, keep -- stay with me and assume that  
12       Plan B, which is not as capital intensive but has a higher  
13       variable cost has a PVRR for the first 10 years of 7 billion and  
14       for the second half 10 billion.

15              A.       And the 10 is present valued, so they're both 17  
16       million PVRRs, but one has more up front and the other one is  
17       more up front and more at the end?

18              Q.       They're both 17 billion.

19                      JUDGE WOODRUFF: If I can interrupt. The  
20       attorney is talking about billions. The witness is talking  
21       about millions. I want to be clear on which we're talking  
22       about.

23                      THE WITNESS: There is a difference there.

24                      MS. VUYLSTEKE: Billion.

25                      THE WITNESS: Billions. I have it. Okay. Very

1 good. Okay.

2 BY MS. VUYLSTEKE:

3 Q. Okay. So they both have a PVRR -- both examples  
4 I gave you, both hypotheticals have a PVRR of 17 billion.

5 A. I'm with you.

6 Q. And even though these plans have the same PVRR,  
7 do you agree that they pose different risks to ratepayers?

8 A. How are you -- I mean, are you quantifying if --  
9 are you including environmental compliance, customer rate  
10 impacts?

11 Q. All of that. Sure.

12 A. All of those. Yeah. Without -- I mean, if I  
13 had some idea of the type of resources and then I would still  
14 have to give the caveat that I -- you know, I think there's a  
15 lot of details that go into assessing what -- what -- what --  
16 how you measure risk over time to customers under different  
17 resource plans.

18 So I -- I don't know that I can answer that as  
19 one has a different risk than the other because it depends on  
20 other variables associated with it.

21 Q. Would --

22 A. PVRR isn't the only -- my point is PVRR isn't  
23 the only way to assess that risk.

24 Q. Would you agree that once a capital investment  
25 has been made the revenue requirement associated with that

1 capital investment is defined?

2 A. As a -- if I understand your question, does one  
3 of them have a better defined up-front capital of expenditure  
4 than the other one?

5 Q. Yes.

6 A. Yeah. I think that would be true.

7 Q. Now, if I can refer to your testimony on your  
8 surrebuttal testimony, Page 8.

9 A. Okay.

10 Q. And beginning on about Line 5.

11 A. Line 5. I'm there.

12 Q. Okay. You state that the rules implementing  
13 MEEIA are currently under challenge.

14 A. Yes.

15 Q. Is that challenge occurring in the courts?

16 A. Yes.

17 Q. Who are the parties that have filed challenges  
18 to those rules in court?

19 A. Well, I -- I know we have challenged them. I  
20 know -- I believe the Office of Public Counsel's challenged them  
21 as well. There are probably some other parties I'm not  
22 recalling right now.

23 Q. Okay. Do you -- do you know the status of where  
24 that appeal process stands for these challenges?

25 A. There's been a couple of court proceedings. I'm

1       trying to remember if there's already been the one there's  
2       already been a decision by the Circuit Court and it's going to  
3       the Appeals. I believe that's the case with this one.

4               Q.       And then can I refer you to Page 9 of your  
5       surrebuttal testimony.

6               A.       I'm there.

7               Q.       Okay. And starting around Line 8, you indicate  
8       in the answer to the question there that Ameren Missouri has  
9       initiated discussions with stakeholders to develop an MEEIA  
10      filing. Is that a true statement at the time that you prepared  
11      the testimony?

12              A.       Yes.

13              Q.       Okay. Which parties -- if you can tell me,  
14      which parties have you initiated discussions with?

15              A.       I -- I was present for an up front meeting with,  
16      you know -- this is just getting some ideas around what parties  
17      would want to see with Staff and DNR, although I know there's  
18      been some additional outreach since then that I wasn't a part  
19      of.

20              Q.       So you've been a part of discussions with the  
21      Staff and with DNR?

22              A.       Yeah. Just getting some general feedback on  
23      thoughts about the structure of filing.

24              Q.       And you said that there were others that  
25      Ameren -- are there others at Ameren that have had discussions

1       that you were not involved in?

2               A.       Yes.

3               Q.       Do you know who those people were?

4               A.       I would anticipate Dan Laurent (ph.) was in some  
5       of those discussions.

6               Q.       Do you know which stakeholders would have been  
7       non-Ameren stakeholders would have been there?

8               A.       No.

9               Q.       Okay. Do you know roughly when the discussions  
10      began? Your discussions? Starting with your discussions?

11              A.       Well, I mean, there have been discussions around  
12      cost recovery associated with energy efficiency as early as, you  
13      know, a year and a half ago. You know, some of the more recent  
14      ideas for MEEIA filings -- I mean, those discussions have taken  
15      place in the last, you know, probably two or three months.

16              Q.       Have you met with or attempted to meet with the  
17      OPC regarding the MEEIA filings?

18              A.       No. I do anticipate that sort of an outreach,  
19      but I don't know that that has happened yet.

20              Q.       Have you met with or tried to meet with the AARP  
21      about the MEEIA filings?

22              A.       I don't know.

23              Q.       You know whether you have or not.

24              A.       I have not.

25              Q.       You have not. And you don't know of anyone at



1 Ameren who has?

2 A. I do not know if that outreach has been made  
3 yet.

4 Q. Have you met with or tried to meet with the  
5 Consumer Council of Missouri regarding the MEEIA filings?

6 A. I don't know the answer.

7 Q. Have you met with or tried to meet with  
8 representatives of Barnes-Jewish Hospital?

9 A. I don't know the answer to that.

10 Q. Do you plan to meet with them?

11 A. I would need to check with -- with our people  
12 working on that filing to see what additional stakeholder  
13 outreach they have planned and the timing on that. I don't know  
14 the answer to that.

15 Q. Okay. I should have asked you the same question  
16 with regard to the AARP. Do you plan to meet with them?

17 A. Well, prior to the filing, I don't know.  
18 Obviously, once the filing's been made they're be plenty of  
19 opportunity for everybody to look at that filing and provide  
20 their feedback.

21 Q. Do you plan to meet with the OPC?

22 A. I do not know that.

23 Q. Okay. And finally, have you met with or  
24 attempted to meet with representatives of the MIEC regarding the  
25 MEEIA filing?

1           A.       I do not know the answer to that.

2           MS. VUYLSTEKE: No other questions. Thank you.

3           THE WITNESS: Thank you.

4           JUDGE WOODRUFF: Public Counsel?

5           MR. MILLS: Isn't DNR next?

6           THE WITNESS: DNR.

7           JUDGE WOODRUFF: I'm sorry. I skipped DNR.

8       CROSS-EXAMINATION BY MS. FRAZIER:

9           Q.       I just have one follow-up question.

10          A.       Okay.

11          Q.       Good morning.

12          A.       Good morning.

13          Q.       I believe in some earlier testimony you were  
14 describing how you determined decision factors.

15          A.       Uh-huh.

16          Q.       And with regard to DSM cost recovery I believe  
17 you said if the company believes it won't receive cost recovery  
18 if you view that as a constraint and that was the basis of your  
19 treating DSM cost recovery as a constraint in this case; is that  
20 correct?

21          A.       Yeah. On advice of counsel, if a utility does  
22 not believe it would be likely to receive cost recovery under a  
23 plan, it couldn't be compelled to chose that plan.

24          Q.       And so what leads Ameren to believe that it will  
25 won't receive adequate cost recovery?

1           A.       If we look at the current regulatory structure  
2       and where our energy efficiency expenditures have been and the  
3       lost revenues associated with that, without a change in that  
4       construct likely triggered by the approval of a MEEIA filing,  
5       you know, we don't currently have an expectation we wouldn't  
6       continue to incur significant cost revenues.

7           Q.       But in terms of the treatment of Ameren by the  
8       Commission under its MEEIA filing that it intends to file, what  
9       leads you to believe you won't receive adequate treatment or a  
10      range of treatment that would allow you to recover lost revenue?

11          A.       I believe the cost recovery provisions of the  
12      MEEIA rule anticipates you have a MEEIA filing approved and at  
13      that point in time you have the ability to recover lost revenues  
14      associated with that plan that's been approved by the  
15      Commission. You know, I don't -- I'm not confident that a  
16      retroactive or the ability to recover lost revenues were  
17      incurred already as a result of that.

18                 In fact, under a MEEIA filing if one was  
19      approved by the Commission in mid next year, the lost revenues  
20      amounts I quoted earlier -- those are -- those are likely  
21      already going to occur and there wouldn't be an opportunity, at  
22      least, you know -- at least I'm -- on advice of counsel -- we  
23      need to check with counsel if there's some opportunity there,  
24      but you know I think there's a real lot -- possibility those  
25      lost revenues are -- will occur either way.

1 Q. I think you misunderstand my question.

2 A. Okay.

3 Q. So coming at it a different way, when you  
4 evaluate environmental regulations that may or may not come into  
5 existence in the future, do you make certain assumptions about  
6 how you will have to deal with future treatment under  
7 environmental regulations? Treatment meaning compliance with  
8 those regulations? Do you make assumptions about that?

9 A. Well, you have to -- you look at different  
10 uncertain factors and apply different risk ranges associated  
11 with them, yes.

12 Q. And so my question is with respect to whatever  
13 you're intending to ask for under your MEEIA filing that you  
14 intend to file --

15 A. Yeah.

16 Q. -- what leads you to believe that you won't  
17 receive -- or be able to receive some level of recovery for lost  
18 revenue under that filing?

19 A. I -- if that MEEIA filing is approved, I think  
20 we'd have a high confidence level of alignment and recovery of  
21 those costs.

22 Q. But for purposes of your IRP you assumed that  
23 you would not receive any; is that right?

24 A. Prior to the approval of the MEEIA, yes.

25 MS. FRAZIER: Thank you.

1 JUDGE WOODRUFF: Public Counsel?

2 CROSS-EXAMINATION BY MR. MILLS:

3 Q. Good morning, Mr. Wood.

4 A. Good morning.

5 Q. Do you have a copy of Mr. Rogers' surrebuttal  
6 testimony there with you?

7 A. No. I'm sorry. I don't.

8 Q. I'm just going to ask you a question about a  
9 couple of pages. Let me just hand you the pages.

10 A. Okay.

11 MR. BYRNE: We'll get him a copy.

12 THE WITNESS: You have a --

13 MR. BYRNE: I got a copy.

14 THE WITNESS: Tom's going to give me a copy.

15 Thank you.

16 MR. BYRNE: Sure.

17 THE WITNESS: I'm working my way there. Is it  
18 the surrebuttal or rebuttal?

19 BY MR. MILLS:

20 Q. Surrebuttal.

21 A. Okay.

22 Q. Specifically, starting on Page 12.

23 A. Just a minute.

24 MS. TATRO: If it helps, it's behind the orange  
25 divider.

1 THE WITNESS: Thank you. That is helping me.

2 Okay. Yes. I'm on Page 12 of Mr. Rogers's surrebuttal  
3 testimony.

4 BY MR. MILLS:

5 Q. And before I get into this, let me ask you sort  
6 of a preliminary question. You are the most senior member of  
7 Ameren management to testify in this case; is that correct?

8 A. That's true.

9 Q. Okay. You have read Mr. Rogers' surrebuttal  
10 testimony, I take it, before you get here today?

11 A. Yes, I have.

12 Q. And are you familiar that, on Page 12 and 13 he  
13 lists four conditions that Staff recommends that Ameren accept?

14 A. Yes. I have read those.

15 Q. And I'm just going to go through those sort of  
16 one by one.

17 A. Okay.

18 Q. Number 1 is on Line 16 through 18 of Page 12.  
19 Would Ameren agree to that condition in this case?

20 A. There's really two requirements under this  
21 sentence. The first one's acceptable; the second one is not.  
22 If you'd like me to explain.

23 Q. No. I'm just trying to get a yes or no on each  
24 of the conditions --

25 A. Okay. Well --

1 Q. -- and I think that if that's partly a no,  
2 that's a no. Correct?

3 A. Well, it's -- it's half yes, half no --

4 Q. Okay.

5 A. -- because there's two --

6 Q. Fine. I --

7 A. -- requirements in there.

8 Q. And I --

9 A. Okay.

10 Q. That's partly no. Let's move on to Condition  
11 No. 2, which is at Lines 1 through -- 1 through 5 on Page 13.

12 A. I'm there. Okay.

13 Q. Would Ameren agree to that condition in this  
14 case?

15 A. Let me read the condition again. If our --  
16 it's -- I'm probably in reverse order of what he's -- what he's  
17 asking here. And you can interpret that a -- if you believe  
18 that's a yes or no. I think if a MEEIA filing was approved by  
19 the Commission, we would -- there's a likelihood we would chose  
20 that as a preferred resource plan, but I can't make that  
21 commitment sitting here today.

22 Q. Okay.

23 A. But it's a little different than what he was  
24 asking, is would we commit to that if the Commission approves  
25 the MEEIA. I'm answering a little different. I don't know that

1 I can commit to the specific requirement he's making here.

2 Q. His condition as I read it -- and tell me if you  
3 read it differently -- is that Ameren would essentially notify  
4 the Commission now that it has changed its preferred resource  
5 plan subject only to a condition that it may change later if you  
6 don't get fair treatment in your MEEIA filing. Is that not how  
7 you read his proposed condition?

8 A. I think that is largely how I read it. And I  
9 couldn't agree to that commitment as I sit here today.

10 Q. Okay. Condition No. 3 is at Line 6 and 7 of  
11 Page 13.

12 A. Yes.

13 Q. Would Ameren agree to that?

14 A. Well, it is our intent to make a MEEIA filing,  
15 you know, as I indicated, in early January. That's are target  
16 date.

17 Q. So you would agree to that one. In fact, your  
18 current plan, I believe as you've layed it out today, is to file  
19 relatively quickly as to compared to what previous public  
20 statements have been made?

21 A. Yeah. We indicated first quarter and there's  
22 been a number of, you know -- in a number of different  
23 proceedings, people have made it clear they want us to see that  
24 filing as soon as possible and we've been accelerating our  
25 efforts internally to try to move that date up.



1           Q.           Condition No. 4, which is at Lines 8 through 12  
2 is on Page 13 of Mr. Rogers surrebuttal testimony.

3           A.           Yes. A note of clarification, then I'll answer  
4 it. If it's referring to deficiencies identified by the  
5 Commission in an order, I believe -- you know, Sentence 4 is  
6 consistent with our reading of the rule and that would be  
7 acceptable. If it's a requirement to address alleged  
8 deficiencies of parties absent a Commission order, then we  
9 couldn't agree to that commitment.

10          Q.           Moving on to some different topics. And you  
11 went through a little bit of sort of your background and your  
12 involvement in the IRP filing with Mr. Williams, so I'm not  
13 going to try to repeat that.

14                       Were you involved -- and he may have asked you  
15 this. And if he has, I apologize for repeating it. Were you  
16 involved in the development of the policy objectives that were  
17 used in the initial screening of alternative resource plans?

18          A.           These would be the policy objectives or the  
19 decision criteria? The five? I was not in the initial meetings  
20 where those were developed, no.

21          Q.           Okay. And a similar -- and really, I wasn't  
22 asking about the five. I was talking about the initial  
23 screening. But a similar question about those five, the policy  
24 objectives that were used in the final screening, I take it from  
25 your answer that you were not involved in developing those

1 objectives either?

2 A. In developing of them, no. In the assessing of  
3 the market scenarios and independent uncertain factors there  
4 were three meetings, one in October and two in November of last  
5 year. I was in those meetings.

6 Q. And the purpose of those meetings was to --

7 A. Was to go through the candidate resource plans  
8 and arrive at the preferred resource plan with five  
9 contingencies.

10 Q. Okay. Using the policy objectives that had  
11 already been developed?

12 A. Yes.

13 Q. Okay. Do you -- even though you weren't  
14 involved in the development of those objections -- objectives,  
15 do you know why energy efficiency was removed from the list of  
16 policy objectives used for the final screening?

17 A. I had -- I had asked about this in some of the  
18 management discussions early on and there was -- initially  
19 energy efficiency was in there and actually it was an effort  
20 to -- to make sure that there was an additional weighting for  
21 energy efficiency to make sure that it would make it through the  
22 screening process for further evaluation.

23 In the end it wasn't necessary, the PVRR numbers  
24 were favorable enough that it came through without the need to  
25 have a specific weighting in favor of energy efficiency.

1           Q.       Now, Ameren Missouri has filed a notice of  
2       change in preferred resource planning -- preferred resource plan  
3       in late October of this year; is that correct?

4           A.       Yes.

5           Q.       Can you, in brief, describe how it differs from  
6       the one that was part of the preferred resource plan that was  
7       filed -- the IRP that was filed in February of 2011?

8           A.       I believe it reduced the energy efficiency  
9       level. It moved a -- a generation resource option sooner in the  
10      process and there was probably a bridge period where you -- I'm  
11      trying to remember the details of the filing. I don't really  
12      remember all the details of it.

13          Q.       But at a high level it reduced energy efficiency  
14      spending and accordingly moved up a supply-side resource further  
15      in the -- in the -- closer to the beginning of the planning  
16      horizon period?

17          A.       Yes, as I recall.

18          Q.       Okay. Were you involved in the decision to make  
19      that change of the preferred resource plan?

20          A.       Yes.

21          Q.       Who else was involved in that decision and when  
22      was the decision made? Let me ask that as two questions. Who  
23      else was involved?

24          A.       Okay. The Ameren Missouri management team.

25          Q.       Okay. And that's the same management team that

1       you discussed with Mr. Williams earlier?

2             A.       Yes.

3             Q.       Okay. When was that decision made?

4             A.       I mean, if you're looking for a specific date, I  
5       won't remember that, but I recall that it was subsequent to the  
6       rate case decision and obviously prior to our filing in October.

7             Q.       And that's as close as you can pin it down?

8             A.       Yes. Possibly.

9             Q.       Was that made at a -- was the decision made at a  
10       specific meeting of the management team?

11            A.       Several different discussions on what the  
12       appropriate path forwards would be.

13            Q.       Was there a specific point at which a vote or  
14       a -- a -- some other means of measuring consensus among the  
15       management team members occurred?

16            A.       Yeah. There was a meeting where the Ameren  
17       Missouri management team looked at the -- you know, we had  
18       several discussions at that point and there was a decision -- a  
19       decision of the group that it was appropriate.

20            Q.       Was that a unanimous decision?

21            A.       I do not recall any consent among the members.  
22       It was the right thing to do. So I think I would view it as  
23       consent.

24                    COMMISSIONER KENNEY: I didn't hear you. What  
25       did you -- can you repeat that?

1                   THE WITNESS: I would -- yes. I don't recall  
2 any of the management team expressing -- I mean, they had asked  
3 their questions, we had stepped through them. I don't recall  
4 what they were, but there were no objections to making that  
5 decision.

6 BY MR. MILLS:

7                   Q.       I think -- I think in your earlier response you  
8 said there was no consent.

9                   A.       I'm sorry. Then I'm glad we asked for  
10 clarification.

11                  Q.       Sort of at a high level would you agree with me  
12 that this case is about planning to see how Ameren Missouri  
13 could best provide service to its native load customers over the  
14 next 20 years?

15                  A.       Could you restate that again because I -- I  
16 think I might state it a little differently. Or I can restate  
17 it differently, you could see if you --

18                  Q.       Well, my question was is this case about  
19 planning to see how Ameren Missouri could best provide service  
20 to its native load customers over the next 20 years.

21                  A.       I would go with no. I wouldn't necessarily  
22 agree with the way you stated it. I would go to this case is  
23 about the fundamental objective of the integrated resource  
24 planning process. And I would go to the definition in 01 --  
25 22.010 (2). It is about the fundamental objective of the

1 resource planning process.

2 Q. Do you have a copy of Chapter 22 there with you?

3 A. The old rules? Not the current -- or previous  
4 rules, I should say.

5 Q. Let me ask a clarifying question then. From  
6 your perspective is there a difference in the last answer you  
7 gave me depending on whether you're talking about the old rules  
8 or the new rules?

9 A. I need to look at the fundamental objectives  
10 statement in the new rules and then I can answer that question.

11 Q. And do you have copies of either or both?

12 A. I have the -- I have a copy of the rules in  
13 effect when this IRP was filed. No.

14 THE WITNESS: I have the old ones, Tom. He's  
15 asking about the new ones.

16 BY MR. MILLS:

17 Q. And I didn't -- I didn't bring a copy of the new  
18 ones.

19 MS. TATRO: I have them.

20 THE WITNESS: Okay. Okay. Thank you. Well,  
21 the fundamental objective reads a little differently, but in  
22 many regards is -- it's very similar.

23 BY MR. MILLS:

24 Q. So with respect to what this case is about, it's  
25 about the fundamental objectives and they're fairly similar, are

1       they not, between the old rule and the new rule?

2               A.       It's focused on providing the public with energy  
3       service that are safe, reliable and efficient at just and  
4       reasonable rates in a manner that services the public interest.

5               Q.       And the both require the use of PVRP as the  
6       primary selection criteria, do they not?

7               A.       Yes. They do.

8               Q.       Okay. Now, would you agree with me that Ameren  
9       Missouri could reduce the environmental impact of serving its  
10      native load customers over the next 20 years if the company  
11      pursued aggressive energy efficiency programs?

12              A.       It depends on the net effect of which units  
13      continue to operate in off-system sales. You know, like would  
14      you close down coal units or not. It's hard to say. It depends  
15      on their cost effectiveness and other EPA regs. If it results  
16      in a reduction of lack of generation from coal-fired units, then  
17      the answer to your question is yes.

18              Q.       And I phrase the question specifically about the  
19      impacts of serving its native load.

20              A.       Okay. If that was the distinction you were  
21      making? Likely.

22              Q.       Can you envision a circumstance in which it  
23      would not?

24              A.       Nothing comes to mind right now, no.

25              Q.       Okay. And looking at it another way, would

1 implementing aggressive energy efficiency programs allow Ameren  
2 Missouri to reduce harmful emissions such as CO2, SO2, NOx and  
3 Mercury associated with providing electric service to native  
4 load customers?

5 A. It has that potential, yes.

6 Q. Okay. And again, I'm not trying to pin you down  
7 to everything, but --

8 A. Okay.

9 Q. -- can you envision a circumstance in which it  
10 would not?

11 A. Well, you're specifying native load --

12 Q. Yes.

13 A. -- so you're explicitly taking out off-system  
14 sales operations of units, so I -- no. I don't have an example  
15 that comes to mind where what you're suggesting isn't true.

16 Q. And when you -- when you're referring to  
17 off-system sales, you're envisioning the scenario in which the  
18 generation used to serve native load is reduced by aggressive  
19 pursuit of energy efficiency, but nonetheless all the current  
20 units run the same way they're running now in order to make  
21 off-system sales?

22 A. Where there are economic opportunities for  
23 off-system sales and, you know, as you know a vast majority of  
24 those go back to offset rates and to the benefit of customers.

25 Q. Okay.



1           A.       Right.

2           Q.       Now, do you believe that climate change is due,  
3 at least in part, to human activity such as the operation of  
4 coal-fired power plants?

5           A.       I don't know the answer to that question.

6           Q.       You don't have a -- you don't have any knowledge  
7 about that?

8           A.       If coal-fired units are causing global warning?

9           Q.       At least in part. Does the operation of  
10 coal-fired power plants contribute in part?

11          A.       I -- I do not have -- I do not have a view on  
12 that if it's one way or the other. I mean --

13          Q.       Setting that particular aspect aside, do you  
14 believe that reductions in the amount of energy generated by  
15 coal-fired power plants would have public health benefits?

16          A.       You know, this is -- I don't -- I don't know  
17 that that's a forgone conclusion. There are some other things  
18 that relate to human health that have little to do with  
19 emissions from coal-fired units. But versus the cost of  
20 electricity from those units.

21          Q.       And I'm not asking you to speculate whether car  
22 crashes are more hazardous than coal plant emissions. I'm  
23 asking you would a reduction in the amount of energy generated  
24 through coal-fired power plants, all else being equal, have  
25 public health benefits?

1           A.       Okay. All other things being equal, I think I  
2 would say yes. You would see a reduction in emissions from  
3 those units.

4           Q.       And the question wasn't will you see a reduction  
5 in emissions from those units. The question was would a  
6 reduction in emissions from those units have public health  
7 benefits.

8           A.       I -- I would think the answer's probably yes.

9           Q.       Now --

10           MR. MILLS: Judge, may I approach?

11           JUDGE WOODRUFF: You may.

12           THE WITNESS: Thank you.

13 BY MR. MILLS:

14           Q.       Mr. Wood, I've handed you a document that is a  
15 two-sided, one-page document. On the front it's simply a  
16 printout from Ameren's website that -- that's a link that lists  
17 vision, mission and values. Are you familiar with Ameren's  
18 mission?

19           A.       Yes, I am.

20           Q.       Okay. And here at least, it's reflected as the  
21 mission is to meet our customers' energy needs in a safe,  
22 reliable, efficient and environmentally responsible manner.

23           A.       Yes.

24           Q.       And then if you look at the back side, there's a  
25 press release. And it's really -- this particular press release

1 has to do with the Callaway outage, but --

2 A. Uh-huh.

3 Q. -- at the bottom of the press release -- and I  
4 think this is similar on many of the Ameren Missouri press  
5 releases -- it talks about sort of -- the very last paragraph it  
6 talks about serving the customers and it states that our mission  
7 is to meet their energy needs in a safe, reliable, efficient and  
8 environmentally responsible manner.

9 A. Yes.

10 Q. And are you familiar with that as a mission of  
11 Ameren Missouri --

12 A. Uh-huh.

13 Q. -- as well as Ameren Corporation?

14 A. Yes.

15 Q. And do those statements accurately reflect the  
16 mission of Ameren Missouri and Ameren?

17 A. Yes, to provide, you know, safe, reliable,  
18 efficient, environmentally responsible manner. Yes.

19 Q. Do you believe that the -- the new preferred  
20 resource plan that you all just filed at the end of October is  
21 consistent with that mission?

22 A. I do.

23 Q. So eliminating almost all expenditures for  
24 energy efficiency, at least in the short term, is consistent  
25 with that mission statement?

1           A.       Well, it -- in -- in the immediate short term,  
2     you know, the unfortunate reality is we've had to reduce our  
3     expenditures in energy efficiency. That wasn't something we  
4     wanted to do. We'd like to be able to get past this lull and  
5     increase efficiency investments as soon as possible, you know.  
6     But in the long run we need to be able to have just and  
7     reasonable rates and access to capital to make continued  
8     investments.

9                   And if we're facing a significant ongoing loss  
10    of revenues under current regulatory structure, we're going to  
11    have to seek some sort of alignment, which is the reason we're  
12    trying to accelerate the MEEIA filing.

13          Q.       Now, one thing that struck me about this mission  
14    statement is there's no mention at all about shareholder  
15    returns, earnings or profitability. Do any of those things  
16    figure into the mission of you, in particular, as an Ameren  
17    employee?

18          A.       Well, certainly in meeting customers' energy  
19    needs in a safe, reliable manner we need to be -- have access to  
20    capital and the ability to invest in infrastructure to provide  
21    customers with that service over time.

22          Q.       And with respect to access to capital, is it not  
23    true that of all the major entities within the Ameren family of  
24    companies that Ameren Missouri has got the best credit rating?

25          A.       I don't know the answer to that question.

1           Q.       Do you know of any other entities within the  
2       Missouri family of companies that have a higher credit rating  
3       that Ameren Missouri?

4           A.       I haven't reviewed the relevant credit ratings  
5       of the different entities here recently, so I don't have the  
6       answer to that question.

7           Q.       Let me -- let me have you, if you would, turn to  
8       your surrebuttal testimony, if you look at the revised  
9       surrebuttal.

10          A.       Okay. I am -- what page?

11          Q.       Page 5.

12          A.       Okay. I'm on Page 5.

13          Q.       And here -- and it's really part of the whole  
14       page. I don't have a specific line, although perhaps, you know,  
15       the sentence on Lines 14 through 16. Actually, 16 through -- 14  
16       through 19. Here's where you're talking about where  
17       shareholders come into the picture. Correct?

18          A.       Yes. This is the need to have access to the  
19       opportunity to earn a reasonable return on your investment.

20          Q.       From your perspective does Ameren Missouri have  
21       an obligation to consider customer interests?

22          A.       Yes, we certainly have an interest in customer  
23       satisfaction as part of our business.

24          Q.       Do you have an obligation to consider customer  
25       interest?

1           A.       I feel -- I feel a personal obligation to  
2       consider personal interest. And I believe the corporation does  
3       as well.

4                   MR. BYRNE: Excuse me, Your Honor. I think he  
5       misspoke. He said personal interest, I think he meant customer  
6       interest. Can I get him to correct that?

7                   THE WITNESS: Okay. Yeah.

8       BY MR. MILLS:

9           Q.       You did. I though it was relatively clear from  
10      the context that you misspoke.

11          A.       Okay.

12          Q.       That's fine. Freudian perhaps, but it was  
13      understandable.

14                   So, and I take it that it's your belief that the  
15      company had struck the proper balance between customer interests  
16      and shareholder interests in its preferred resource plan as  
17      modified?

18          A.       In the short term, consider given the  
19      constraints, yes. In the long term, I would like to see us at a  
20      higher energy efficiency investment level. Hence again why  
21      we're seeking that MEEIA filing as soon as we can.

22          Q.       If in this case the Commission disagrees that  
23      you struck the proper balance between shareholder and  
24      ratepayers, what can it do?

25          A.       Well, the integrated resource planning process

1 is largely about the process, the inputs. It's not necessarily  
2 a means to direct or approve of a particular resource or plan.  
3 So I -- you know, if -- if there's a concern on what comes out  
4 of this it's -- it really in -- in terms of the IRP rule, it's  
5 largely is focused on the process not the output.

6 Q. Okay. So if those of us who argue that the  
7 process was so flawed that the preferred resource plan was -- is  
8 incorrect, if we are successful in convincing the Commission to  
9 agree with us, it's your opinion that the Commission other than  
10 simply stating it agrees, can do nothing about it?

11 A. Well, not necessarily in the integrated resource  
12 planning process. There are other regulatory proceedings where  
13 there is cost differences between one resource versus another,  
14 where cost recovery of those resources come up and that's where  
15 those -- those arguments would be made.

16 Q. Okay. So for example in an FAC case the  
17 Commission can say you should have spent less on fuel because  
18 you could have spent more on energy efficiency. Is that one of  
19 the cases you're talking about?

20 A. It is. They would have an obligation to show  
21 the utility was not -- was not somehow reasonably constrained  
22 from choosing that resource either legally or practically.

23 Q. So it's your testimony that even if the  
24 Commission were in this case to find that Ameren has chosen an  
25 inappropriate preferred resource plan, it would be up to some

1 party in some other case to prove harm from that decision?

2 A. The imprudence issue would generally come up in  
3 a different proceeding than this one. This is largely focused  
4 on process. If there was a determination in the future that  
5 this resource was not right and parties could argue that they  
6 were -- the utility was not legally or practically constrained  
7 from making that decision, they would have to show that and show  
8 harm.

9 Q. Switching gears.

10 A. Okay.

11 Q. Are you familiar with the Amerenwide generation  
12 planning initiative?

13 A. Ask the question again.

14 Q. The process that's Amerenwide, that's called the  
15 generation planning initiative.

16 A. I may be thinking it, of a different term, but  
17 that doesn't come to mind right away.

18 Q. Well, we may come back to that. Let me move on  
19 then.

20 A. Okay.

21 Q. With respect to the processing of this case has  
22 Ameren Missouri or Ameren Services retained consultants that  
23 worked on this filing or worked on this case that has not filed  
24 testimony in the case?

25 A. I mean, I'm aware of Black and Veatch early on.



1       There may have been some others. I would refer that question  
2       probably to Mr. Michaels. I think he could probably give you a  
3       run down of who was brought in in the case.

4               Q.       Okay. So as you sit there today, you know of  
5       some but you think you don't know all of them?

6               A.       I think that's probably the case.

7               Q.       Okay. I'll -- I will then defer that to  
8       Mr. Michaels.

9               A.       Okay.

10              Q.       Now, in your revised surrebuttal testimony you  
11       attached some data request responses.

12              A.       Yes.

13              Q.       And so for example you've attached DR No. 3 to  
14       the Staff and the response to that question; is that correct?

15              A.       Yes.

16              Q.       And that's at Schedule WW-E1?

17              A.       Yes. I'm there.

18              Q.       And at WW-E2 you've attached Ameren DR No. 14 to  
19       the Staff and the response thereto; is that correct?

20              A.       That's true.

21              Q.       And Ameren submitted similar questions to a  
22       number of the other parties in this case; is that correct?

23              A.       I believe so.

24              Q.       How did you decide on which of the responses to  
25       the similar questions to attach to your surrebuttal testimony?

1           A.       Well, these -- these DR responses were, you  
2 know, in -- in viewing the opinions and positions that  
3 Mr. Rogers and Staff -- these DR responses were helpful in -- in  
4 providing clarity as to the position of Staff and our view in  
5 agreement on some of the issues they were expressing.

6           Q.       Okay. And if we were to go through the similar  
7 responses that Public Counsel gave for these similar questions  
8 they would -- they would -- first of all, did you review those?

9           A.       I reviewed a lot of DR responses. I don't  
10 recall specifically these responses from OPC.

11          Q.       Okay.

12                   MR. MILLS: Judge, I'd like to get two exhibits  
13 marked.

14                   JUDGE WOODRUFF: Okay. We're up to numbers 36  
15 and 37.

16                   (Wherein; OPC Exhibit Nos. 36 and 37 were marked  
17 for identification.)

18                   MR. MILLS: Okay. So then 36 will be Ameren  
19 Data Request No. 4 to OPC and the response thereto, and 37 will  
20 be Ameren Data Request No. 13 to OPC and the response thereto.

21                   This is 36. And this is 37.

22                   THE WITNESS: Thank you.

23                   MR. MILLS: Judge, how many do you need? I have  
24 lots.

25                   JUDGE WOODRUFF: Just a couple is fine. And

1       this first one was 36?

2                       MR. MILLS:   Yes.

3       BY MR. MILLS:

4               Q.       Mr. Wood, do these questions and responses look  
5       familiar to you now?

6               A.       They do.

7               Q.       And the question that's posed in DR No. 4 to OPC  
8       is the same question with the exception that it says OPC instead  
9       of Staff as DR No. 3 to the Staff, which is attached to your  
10       surrebuttal testimony as WW-E1; is that correct?

11              A.       I do believe so.

12              Q.       Okay.  And could you read the response of --  
13       well, I don't need to have it read into the record.  The  
14       response of Public Counsel is very different from the response  
15       of Mr. Rogers, is it not?

16              A.       Let me double check.  This is comparing PSC 03  
17       to OPC 04?

18              Q.       Right.

19              A.       Okay.  I don't know that they are terribly  
20       different.

21              Q.       Does Mr. Rogers in his -- anywhere in his  
22       response state that Ameren Missouri has an obligation to do  
23       anything for -- for ratepayers?

24              A.       Well, they have a fiduciary obligation to make  
25       decisions that are in the best interest of Ameren Missouri's

1 investors and shareholders.

2 Q. Correct.

3 A. Yes. And there are some shareholders and  
4 investors who are Ameren Missouri customers as well.

5 Q. Okay. Do you know what percentage of your  
6 shareholders are actually customers?

7 A. No, I don't.

8 Q. Do you know if it's a significant percent?

9 A. I -- I don't know the answer to that question.

10 Q. Let's look at your Schedule WW-E2, which is your  
11 DR 14 and the response --

12 A. Yes.

13 Q. -- from the Staff.

14 A. I am there.

15 Q. And that is essentially the same question that  
16 you posed to Public Counsel as DR 13; is that correct, in  
17 Exhibit 37?

18 A. OPC 13 compared to PSC 14?

19 Q. Correct.

20 A. Yes. I'm looking at both of them.

21 Q. It's essentially the same question?

22 A. Yes, it is.

23 Q. Okay. And Mr. Rogers simply answered that  
24 question yes?

25 A. Yes.

1 Q. Okay. And Public Counsel has a very different  
2 take on that; is that not correct?

3 A. I would concur.

4 Q. Okay. So the data requests that you attached to  
5 your surrebuttal testimony were intended to give the Commission  
6 an idea that there was a general consensus among the parties  
7 about these questions, was it?

8 A. No. It was expressing that our view and the  
9 view of PSC Staff witness Rogers.

10 Q. Do you still have a copy -- and I'm switching  
11 gears on you again, Mr. Wood.

12 A. Okay.

13 Q. Do you still have a copy of the -- the resource  
14 plan filing?

15 A. Yeah, I do. I do.

16 Q. If you could turn to -- it's in the executive  
17 summary.

18 A. Okay. I'm there.

19 Q. And I'm talking about the road map. It's in the  
20 executive summary. I'm not sure exactly what page, but it's  
21 also --

22 A. Page 21?

23 Q. -- in Chapter -- Chapter 10 on Page 15.

24 A. And Page 21 of the executive summary.

25 Q. Okay.

1           A.       Yeah. Okay. It's the one that lays out  
2 preferred resource plan and --

3           Q.       Yes.

4           A.       -- five contingencies?

5           Q.       Correct. Yes.

6           A.       Yes. I'm there.

7           Q.       And just looking essentially at the top layer of  
8 the preferred resource plan, assume with me that on the same day  
9 some time in the late spring of 2012 Ameren Missouri gets what  
10 it considers to be adequate legislation addressing plant  
11 financing solutions on the very same day that it gets a decision  
12 from the Commission that -- that implements what Ameren Missouri  
13 considers to be adequate DSM cost recovery solutions. Where do  
14 you go on this road map?

15          A.       So basically if you had -- if I understand your  
16 question, it's if you had legislation or some other change in  
17 support of financing of nuclear power plant versus -- so is  
18 it --

19          Q.       In addition to, not versus, but in addition to.

20          A.       In addition to. So you have an approved MEEIA  
21 filing on the same day. You know, and let's say this happens in  
22 mid next year, if I understand.

23          Q.       Correct.

24          A.       Then we would need to, under the preferred  
25 resource planning either -- actually either one of the two

1 events you described would likely trigger a need to review our  
2 integrated resource plan decision -- you know, decision tree and  
3 then go back through the management discussion on where we  
4 should go.

5                   You know, you would -- would you likely move to  
6 one of the two or some combination of the two; yes. Today I  
7 can't tell you which one you'd go to if they both happened.  
8 Now, if one happened and the other didn't, then --

9           Q.       And if -- if one of those two contingency plans  
10 had a markedly lower PVRR would you choose that plan?

11          A.       Are we saying all other factors equal in terms  
12 of economic development, environmental regulations, expectations  
13 going forward, load growth, natural gas prices, coal prices?  
14 All other things equal?

15          Q.       Most of those would be taken into account in  
16 PVRR, not economic development, but the projected gas prices and  
17 all that stuff would be taken into account.

18          A.       Well, do you -- yeah. The economic development,  
19 let's say they're -- they're the -- well, they're probably not  
20 the same, so I don't know if you can make that analogy, but if  
21 economic development, you have environmental portfolio  
22 diversity, you have rate impact, customer -- you know,  
23 shortened -- you know the short term rate impact type of one  
24 resource versus the other.

25                   And then you have, you know, the financial

1 regulatory piece. If I understand your question is if so -- why  
2 don't you ask your question again, so I understand it.

3 Q. Let me ask a different question because I think  
4 I see where you're going here. Your approach at that point  
5 would be to evaluate the same five decision criteria in  
6 approximately the same way as you did in this plan and then  
7 decide which contingency to move to; is that correct?

8 A. That -- if right now looking at data that is  
9 what I would anticipate, yes.

10 Q. Okay. So in that circumstance, you would give  
11 PVRR roughly the same weight that you did in the resource -- in  
12 the initial -- in the final screening, but not the final  
13 decision of a preferred resource plan; is that correct?

14 A. You mean 30 percent weighting?

15 Q. Yes.

16 A. Well, as I sit here today, that's likely.

17 MR. MILLS: Okay. Judge, that's all the  
18 questions I have.

19 JUDGE WOODRUFF: Did you wish to offer 36 and  
20 37?

21 MR. MILLS: Yes, I do. Thank you. I'd like to  
22 offer --

23 JUDGE WOODRUFF: 36 and 37 have been offered.  
24 Any objections to their receipt?

25 Hearing none, they will be received.



1                   (Wherein; OPC Exhibit Nos. 36 and 37 were  
2     received into evidence.)

3                   JUDGE WOODRUFF: We've been going now for two  
4     and a half hours and we're ready for a break. I will go to  
5     break before we go to commissioner questions. We'll come back  
6     at -- let's call it 20 minutes at 11:10.

7                   (Off the record.)

8                   JUDGE WOODRUFF: Let's come back to order,  
9     please. And we're back from our break and the witness is still  
10    on the stand. And I'll turn to Commissioner Kenney to see if  
11    you have any questions.

12   EXAMINATION BY COMMISSIONER KENNEY:

13                 Q.       Just a few, Mr. Wood. Can you hear me okay?

14                 A.       I can hear you fine.

15                 Q.       I want to ask about the energy efficiency  
16    component of the IRP planning process and ask you some questions  
17    about that.

18                 A.       I'm not hearing some -- there's a little bit of  
19    noise on this end. Sorry.

20                 JUDGE WOODRUFF: We're having a hard time  
21    hearing you, Commissioner Kenney.

22   BY COMMISSIONER KENNEY:

23                 Q.       Is that better?

24                 A.       Yes. That's better.

25                 Q.       Okay. Maybe I wasn't speaking clearly into the

1 microphone. Is it Ameren's opinion that measuring demand-side  
2 efficiency on equivalent basis supply-side resources requires  
3 Ameren to recover loss revenue?

4 A. There needs to be some mechanism to mitigate the  
5 throughput disincentive. I think that's answering your question  
6 with yes.

7 Q. And essentially in this particular -- this  
8 particular docket, with Ameren's revised preferred plan, Ameren  
9 doesn't choose as its preferred plan a plan including energy  
10 efficiency and demand-side management because it doesn't have in  
11 place yet an adequate revenue recovery mechanism?

12 A. Yeah. We have -- at this point in time, we're  
13 at a lull -- a lull between when the MEEIA rules were  
14 implemented, approval of a MEEIA filing and implementation of  
15 pursuing RAP DSM energy savings. So at this point in time, yes.

16 Q. Are you able to give a preview of what the lost  
17 revenue recovery mechanism will look like?

18 A. From a high level, I mean, we have the approval  
19 of a three-year plan to pursue RAP DSM energy savings. You  
20 know, so once that approval's in place, we would be pursuing  
21 what we view of as all cost effective DSM energy savings. The  
22 goal specifically outlined in MEEIA, the expenditure levels are,  
23 I believe -- you know, what we would look at in those three-year  
24 timeframes, as I recall. But once again, the filing's under  
25 development right now, so these are tentative.

1                   You know, 33 million the first year, 43 the next  
2   year and 62 the third year. Something on the order of \$140  
3   million. You know, roughly double what we had put in the last  
4   three years.

5                   Q.       And have you estimated how much lost revenue  
6   that will amount to?

7                   A.       I -- no. I don't have that number with me right  
8   now. Some of the other subsequent witnesses might.

9                   Q.       I'm sorry?

10                  A.       Some of the subsequent witnesses might. I do  
11   not have that number.

12                  Q.       Would you agree with me that a robust energy  
13   efficiency spend can albeit the need to build a new plant in th  
14   first place?

15                  A.       It can -- it can certainly delay or reduce the  
16   size of a plant that might be needed in the future.

17                  Q.       And are there cost savings to be realized as a  
18   result of that not having to build a plant?

19                  A.       There certainly can be and -- as compared to --  
20   depending on the cost, of course, of the energy efficiency  
21   program itself.

22                  Q.       Okay. And who do you think might know how much  
23   lost revenue would be associated with that \$100 million figure  
24   in energy efficiency?

25                  A.       Well, as part of the development of our MEEIA

1 filing, we would be pur-- and -- the answer is I don't know who,  
2 but I know as part of our MEEIA filing development we would need  
3 to propose a shared net benefit mechanism to deal with the  
4 throughput disincentive and in those calculations we would have  
5 some expectation of what that -- what that lost revenue  
6 component looks like.

7 So it -- I anticipate we would have something  
8 like that in our MEEIA filing, but I don't -- I don't know that  
9 the witnesses here today necessarily have that.

10 COMMISSIONER KENNEY: Okay. Thank you.

11 JUDGE WOODRUFF: Anything else, Commissioner?

12 COMMISSIONER KENNEY: No, thank you. I'm  
13 finished.

14 JUDGE WOODRUFF: Okay. Recross based on  
15 questions from the bench, then? Beginning with Staff.

16 MR. WILLIAMS: No questions.

17 JUDGE WOODRUFF: NRDC?

18 MR. FISK: No questions.

19 JUDGE WOODRUFF: MIEC? She's not there.

20 MDNR?

21 MS. FRAZIER: No questions.

22 JUDGE WOODRUFF: Public Counsel?

23 MR. MILLS: Just very briefly.

24 RECROSS-EXAMINATION BY MR. MILLS:

25 Q. Mr. Wood, with respect to the MEEIA filing that

1     you're developing, have you -- have you consulted or worked with  
2     at all KCPL or KCPL GMO to see what aspects of your filing are  
3     similar to theirs or different from theirs? Has there been any  
4     kind of coordination at all?

5             A.         We have -- we have contacted them to see if  
6     we -- you know, we're trying to interpret what the MEEIA rules  
7     require and understand the general structure of maybe -- you  
8     know, if it wasn't cert and see what their understanding of that  
9     meant for -- in terms of that sort of coordination, yes.

10            MR. MILLS: Okay. That's all I have. Thanks.

11            JUDGE WOODRUFF: Chairman Gunn is also watching  
12     the hearing over the Internet.

13            THE WITNESS: Okay.

14            JUDGE WOODRUFF: He has sent me a question, so  
15     I'll go back and ask that for him.

16            THE WITNESS: Okay.

17            JUDGE WOODRUFF: Would Mr. Wood agree that in  
18     order to recover lost revenue there has to be a nexus between  
19     the implementation of the energy efficiency programs and the  
20     lost revenue?

21            THE WITNESS: Yes.

22            JUDGE WOODRUFF: Okay. Anyone else wish to  
23     recross based on that question?

24            All right. We'll move to redirect.

25            MR. BYRNE: Just a few, Your Honor.

1 REDIRECT EXAMINATION BY MR. BYRNE:

2 Q. Earlier today Mr. Fisk was asking you some  
3 questions about how having different -- increasing the number --  
4 I guess we have five decision factors. Is that what they are?  
5 Five --

6 A. Decision criteria.

7 Q. Decision criteria. Sorry. It escaped my mind.  
8 And Mr. Fisk was asking if you increase the number of decision  
9 factors -- I think the point he was making is it would diminish  
10 the impact of PVRR analysis. Do you recall those questions?

11 A. I do.

12 Q. I mean, as a practical matter is it -- is it  
13 likely that you're going to come up with a huge number of  
14 decision criteria?

15 A. No. If you -- if you tried to make that a very  
16 large number, I think at some point in time it would be  
17 relatively transparent to other parties what you were doing.  
18 And there was an effort to minimize but make sure they were all  
19 relevant factors, criteria in this case.

20 Q. Okay. And earlier in the day you were asked  
21 about -- you were asked about if the MEEIA filing -- if our  
22 MEEIA filing is approved --

23 A. Yes.

24 Q. -- and would we change our preferred plan. And  
25 I think you said as you're sitting here today -- I think you

1       said it would be likely, but as you're sitting here today that  
2       you can't -- you can't commit to that. Do you recall that?

3               A.       I do recall that.

4               Q.       Can you explain what we would commit to if the  
5       MEEIA filing is approved?

6               A.       Well, if the MEEIA filing was approved the net  
7       effect of answering the question is preferred resource plan yes  
8       or no is the same in terms of our investment commitment. We  
9       would be looking at pursuing three-year RAP DSM energy savings.  
10      Once it was approved, we'd be obviously committed to pursue that  
11      effort and you know, that would include investment levels of the  
12      33, 43 and \$62 million and all the other aspects that go along  
13      with that MEEIA commitment.

14              So yeah. I would want to clarify if we made  
15      that commitment, it's a three-year commitment to pursue RAP DSM  
16      energy savings.

17              Q.       Okay. I think earlier today Mr. Mills was  
18      walking through the -- walking you through the four  
19      recommendations in Mr. Rogers' testimony.

20              A.       Yes.

21              Q.       Do you recall that?

22              A.       I do.

23              Q.       And on Recommendation No. 1 -- and I don't know.  
24      Do you have Mr. Rogers' testimony with you?

25              A.       I have it -- I have those recommendations

1 memorized. Go ahead.

2 Q. Okay. Well, on Recommendation No. 1 I think you  
3 said the answer was part yes and part no.

4 A. Yes.

5 Q. And you know, Mr. Mills properly said okay. Cut  
6 you off there. I guess I'd like you to explain, if you would,  
7 why it's part yes and part no.

8 A. Okay. The first half of Mr. Roger's -- the  
9 first recommendation was do you agree to minimize PVRR as your  
10 primary selection criterion. Yes. We believe we did that. The  
11 second half is make it the -- the objective of the resource  
12 planning process. And I believe the commitment there is  
13 inconsistent with the stated primary objective in 4 CSR  
14 240-22.010 Sub 2. And so I wouldn't agree to that second half  
15 of the first recommendation.

16 Q. I -- also earlier today Mr. Mills was asking you  
17 some questions about the health impact of -- I think it was of  
18 coal -- operating a coal plant.

19 A. Yes.

20 Q. And he asked you if even -- you know, if  
21 reducing coal -- you know, running of coal plants would improve  
22 human health and I think you hesitated in your answer. Why did  
23 you hesitate in your answer on that?

24 A. I'm glad you asked the question. I -- you know,  
25 it wasn't clear what the hesitancy is about and it's just as



1     simple as this: You know, I -- you know, fortunately in some  
2     past work I've done some overseas, USA emission work in Africa.  
3     I've seen some information on -- on if -- on where people have  
4     access to reliable and affordable electricity and where they  
5     don't.

6                     And there's a dramatic difference in the quality  
7     of life where people have access to affordable electricity. And  
8     to take one single issue like coal emissions and say that would  
9     result in a different quality of life for people without  
10    considering the impact on cost of electricity and quality of  
11    life associated with access to affordable power, doesn't tell  
12    the whole story. And so that was my -- that was why I hesitated  
13    in answering the question as I did.

14                    Q.        Okay. Ms. Frazier asked you a question and I  
15    think -- I'm summarizing it, but I think the upshot of it was:  
16    Why are you -- why are you assuming that you're not going to get  
17    full cost recovery? Do you recall that question?

18                    A.        I do.

19                    Q.        And I guess my question is: Under the current  
20    regulatory framework that we have today, are we getting full  
21    cost recovery for energy efficiency?

22                    A.        No. In particular, the throughput disincentive  
23    and the way the billing unit adjustments work themselves through  
24    future rate cases, once those lost revenues -- you know, those  
25    ongoing lost revenues right now, that throughput disincentive,

1       there really isn't a mechanism in place right now to recover  
2       those. They are an ongoing loss that there will likely not be  
3       an opportunity to recover.

4               Q.       And is that had a practical impact on Ameren  
5       Missouri?

6               A.       The expectation is a little over \$50 million.

7               MR. BYRNE: Thank you. I have no further  
8       questions.

9               JUDGE WOODRUFF: Mr. Wood, you may step down.

10              THE WITNESS: Thank you.

11              (Witness excused.)

12              JUDGE WOODRUFF: Ameren can call its next  
13       witness.

14              MS. TATRO: Rick Voytas.

15              JUDGE WOODRUFF: Good morning, Mr. Voytas.  
16       Please raise your right hand.

17              (Witness sworn.)

18              JUDGE WOODRUFF: You may inquire.

19              MS. TATRO: Thank you.

20       RICHARD VOYTAS testifies as follows:

21       DIRECT EXAMINATION BY MS. TATRO:

22              Q.       Please state your name and business address for  
23       this commission.

24              A.       Yes. My name is Richard A. Voytas. My business  
25       address is 1901 Chouteau Avenue, St. Louis, Missouri.

1           Q.       Mr. Voytas, by whom are you employed and what do  
2     you do?

3           A.       I'm employed by Ameren Services. My title is  
4     manager of energy efficiency and demand response.

5           Q.       And are you the same Richard Voytas who caused  
6     to be filed surrebuttal consisting of 43 pages and six schedules  
7     in November of this year?

8           A.       Yes, I am.

9           Q.       Do you have any corrections or additions to make  
10    to your testimony?

11          A.       Not at this time.

12          Q.       And if I were to ask you the same questions that  
13    are contained within your prefiled testimony, would your answers  
14    be substantially the same?

15          A.       Yes.

16                 MS. TATRO: I would move -- I believe it's  
17    Exhibit 4 into the record and tender Mr. Voytas for  
18    cross-examination.

19                 JUDGE WOODRUFF: Exhibit 4 has been offered.  
20    Any objections to it's receipt?

21                 Hearing none, it will be received.

22                 (Wherein; Company Exhibit No. 4 was received  
23    into evidence.)

24                 JUDGE WOODRUFF: For cross-examination we begin  
25    with Staff.

1 MR. WILLIAMS: No questions.

2 JUDGE WOODRUFF: All right. NRDC?

3 MR. FISK: Yes. Thank you, Your Honor.

4 CROSS-EXAMINATION BY MR. FISK:

5 Q. Hello, Mr. Voytas.

6 A. Good morning.

7 Q. How are you doing?

8 A. Fine. Thank you.

9 Q. Good. I just had a few questions for you. Do  
10 you have your surrebuttal testimony in front of you?

11 A. Yes, I do.

12 Q. If you could start on Page 5, towards the bottom  
13 of the page around Line 22. You refer to the national action  
14 plan for energy efficiency. Do you see that reference?

15 A. Yes.

16 Q. Okay. And in your discussion that then goes  
17 over on to Page 6, you refer to the fact that NRDC's witness  
18 Phil Mosenthal was a project manager and co-author of that  
19 guide. Do you see that?

20 A. Yes, I do.

21 Q. And in your mind, what is the -- what is the  
22 relevance of that fact?

23 A. We were talking about the aspects of maximum  
24 achievable potential and one of the aspects is the infinite  
25 budget assumption. And that's the document that I used to

1 reference that.

2 Q. Okay.

3 A. That's it.

4 Q. Okay. And the document is attached to your  
5 testimony; is that correct, as RAVE, R-A-V-E 2?

6 A. Yes.

7 Q. Okay. And do you have a copy of that?

8 A. No, I do not.

9 MR. FISK: May I approach, Your Honor?

10 JUDGE WOODRUFF: You may.

11 THE WITNESS: Thank you.

12 BY MR. FISK:

13 Q. I handed you a copy of the RAVE2. Which is the  
14 national -- national action plan for energy efficiency; is that  
15 correct?

16 A. Yes.

17 Q. Okay. And if you could turn to Page Roman  
18 Numeral IV. It's the acknowledgements page.

19 A. Yes.

20 Q. Do you see that. Okay.

21 A. Yes.

22 Q. And there -- that first paragraph refers to the  
23 national action plan being part of a work plan that was  
24 developed by the action plan leadership group. Do you see that?

25 A. Yes, I do.

1           Q.       Okay. And then on the second paragraph after  
2 the reference to Phil Mosenthal being a co-author, it refers to  
3 direction and comments by the action plan leadership group into  
4 the report; is that correct?

5           A.       Yes.

6           Q.       Okay. And it says a full list -- in Paragraph 2  
7 it says a full list of the leadership -- leadership group  
8 members is in Appendix A?

9           A.       Yes.

10          Q.       And if you turn to Appendix A there's the  
11 listing of the members of the leadership group.

12          A.       Yes.

13          Q.       Okay. And could you read the name, title and  
14 utility that the -- on the bottom, right corner of -- which is a  
15 member of the leadership group?

16          A.       The bottom --

17          Q.       On Page A-1.

18          A.       On Page A-1? Michael Moehn, vice president of  
19 corporate planning, Ameren Services.

20          Q.       So Ameren also had a role in this -- this  
21 national action plan for energy efficiency?

22          A.       In the review of the plan, yes.

23          Q.       All right. And you referred to the unlimited  
24 budget, I believe?

25          A.       Infinite budget assumption.

1           Q.       Infinite budget. Okay. And what -- what, in  
2 your mind, is meant by that?

3           A.       By that is meant there's not budget assumption.  
4 I mean, it is what it is. If there's energy efficiency that can  
5 be achieved for -- let's just say an out there number -- a  
6 billion dollars then it's a billion dollars.

7           Q.       Okay. So your understanding is that the  
8 infinite budget is not limited in any way by whether or not that  
9 spending is cost effective?

10          A.       Well, yeah. It's limited by what's cost  
11 effective, but I think, you know, in reality what a limited  
12 budgeted -- what a budget assumption is under maximum achievable  
13 potential considerations is perhaps defined as what the maximum  
14 that's been out there by leading states might be. I think that  
15 is the reality.

16          Q.       And so your understanding of maximum achievable,  
17 which is MAP, is what the leading states are doing as opposed to  
18 an infinite budget or unlimited budget?

19          A.       Well, I think my testimony pretty clearly states  
20 what our understanding of MAP is and it's representative of the  
21 best practices of the best states in the country.

22          Q.       Should -- is the MAP that was used by Ameren in  
23 this proceeding -- did it assume an unlimited budget or an  
24 infinite budget?

25          A.       It did not.

1           Q.       Okay. It did not. And would an increase in the  
2 budget assumptions for the MAP lead to a larger amount of energy  
3 saved on the MAP?

4           A.       Not according to our research.

5           Q.       And why not?

6           A.       Because our research got into customer  
7 psychographics and how they make their decisions about energy  
8 purchases and it basically spoke to a number less than 100  
9 percent of the incremental cost of what was necessary to get  
10 customers to go to that next level.

11                    So there'd be absolutely no reason to pay 100  
12 percent of incremental cost if that same amount of energy  
13 efficiency could be obtained for less than that.

14          Q.       All right. And do you know, is that consistent  
15 with the findings of the national action plan for energy  
16 efficiency?

17          A.       The best states, I don't know if they're paying  
18 100 percent of incremental costs for their efficiency. I'd be  
19 surprised if they are.

20          Q.       How about the national action plan?

21          A.       What's your question on the national action  
22 plan?

23          Q.       Is the assumption that an unlimited or infinite  
24 budget would not lead to an increase in the amount of energy  
25 savings from MAP consistent with the assumptions about infinite



1 budgets in the national action plan?

2 A. Well, it's not just about budget; it's about the  
3 data that you have on hand, how you determine that budget, so I  
4 don't think I can answer that question. If the data that you  
5 have on hand says that you can achieve a maximum amount of  
6 energy efficiency with a certain budget, there's no reason to  
7 pay more than that budget to achieve the same amount of energy  
8 efficiency.

9 Q. All right. And also on Page 5 of your testimony  
10 you refer to -- starting on Line 4 -- the conditions that would  
11 need to exist in order to achieve MAP; is that correct?

12 A. That's correct.

13 Q. Okay. And what role did -- you refer to  
14 regulatory framework.

15 A. Yes.

16 Q. And what role did the regulatory framework  
17 considerations play in distinguishing in the IRP between MAP and  
18 RAP?

19 A. You know, in the IRP and our MAP selection  
20 process that particular framework did not have a role. But that  
21 is the framework that the states -- for instance the top 10  
22 states in the ACAAA scorecard -- that's the framework that they  
23 have in place that enables them to achieve the levels of energy  
24 efficiency that they are achieving.

25 Q. So the regulatory framework did not play a role

1 in MAP versus RAP in the IRP?

2 A. That's correct.

3 Q. Okay. Did it play a role in the distinction  
4 between RAP and the low risk puzzle?

5 A. No.

6 Q. Okay.

7 A. From -- from my team's perspective in developing  
8 these plans, it did not. Now, my team passes these plans onto  
9 the integration team who takes it another step. But from my  
10 perspective, it did not.

11 Q. All right. So in your team's perspective, what  
12 would be -- what would be needed to go from the low risk plan to  
13 the RAP plan in terms of energy effi-- or DSM?

14 A. I'd like to answer this the best way I can, but  
15 that really is not in my purview. We developed the plans,  
16 realistic, maximum achievable. On low risk, that was a budget  
17 limited plan for which we're giving the budget assumptions to  
18 develop. We don't have a say so in the selection of those  
19 plans.

20 Q. So you weren't involved in that?

21 A. That's correct.

22 Q. And in -- in your opinion what would be needed  
23 to go from the RAP to the MAP level of DSM savings?

24 A. In my opinion the items that I've listed on Page  
25 5 of my testimony, Line 6 through Line 21 would be needed.

1 Q. Okay. I guess I'm confused because I thought  
2 earlier you testified that the regulatory framework did not play  
3 a role in RAP versus MAP?

4 A. It doesn't in the design of that number, what  
5 that level is. I thought your question applied to  
6 implementation what would make Ameren Missouri implement MAP.  
7 And so that's why I referred to this section. But the -- this  
8 regulatory framework consideration did not enter into our  
9 estimation of a level of MAP.

10 Q. Will you turn to Page 11 of your testimony. The  
11 very top of the page, Figure 4. Do you see that?

12 A. Yes, I do.

13 Q. Okay. And it has a series of states and the  
14 level of savings that they -- that those states achieved in 2008  
15 and 2009; is that correct?

16 A. That's correct.

17 Q. Okay. And do you know if the programs in the  
18 states listed here are designed to capture all reasonably  
19 achievable efficiency?

20 A. Can you define what reasonably achievable  
21 efficiency means?

22 Q. In terms of how it's defined in the IRP.

23 A. The IRP doesn't define it.

24 Q. Okay. The RAP, realistically achievable.

25 A. Do I know if these --

1 Q. Yes.

2 A. -- bars represent RAP?

3 Q. Right.

4 A. I don't know.

5 Q. Okay. Do you know if they represent MAP?

6 A. No.

7 Q. Okay. Do you know if -- strike that.

8 And do you know whether the states listed in

9 Figure 4 are -- have assumed unlimited budgets for the DSM

10 programs?

11 A. No.

12 Q. Okay. Do you know whether they -- whether the

13 states listed in Figure 4 mandate all cost effective achievable

14 energy efficiency?

15 A. What do you mean by mandate?

16 Q. Are the -- are the utilities in the states

17 listed here required to pursue all cost effective achievable

18 energy efficiency?

19 A. So you're talking about -- you're talking about

20 there's financial consequences if they do not?

21 Q. Sure.

22 A. I'm not aware that they have financial

23 consequences if they do not achieve those levels.

24 Q. Okay. Do you know of any requirements in those

25 states to -- for the utilities to achieve all cost effective

1 energy efficiency?

2 A. Well, I know that there's a portion of those  
3 states that have energy efficiency resource requirements that  
4 are set as guidelines, but I don't know that they're mandates.

5 Q. Okay. And you -- you state at Line 3 to 4 --  
6 referring to Figure 4 on Page 11 -- that it shows that the  
7 leading states have seen precipitous declines in electric energy  
8 efficiency load reductions in 2009 relative to 2008. Do you see  
9 that?

10 A. Yes.

11 Q. Okay. And out of the top five states listed on  
12 Figure 4, how many of them had greater savings in 2009 than  
13 2008?

14 A. Let me -- let me just go through the first five.  
15 It looks like the first state, Vermont's decline was about a 1  
16 percent. It looks like Nevada was up about a quarter of a  
17 percent. It looks like Hawaii was down about 1 percent. It  
18 looks like Rhode Island was up about a quarter of a percent.  
19 And it looks like Massachusetts was up about a quarter of a  
20 percent.

21 Q. So that's three out of five of them actually saw  
22 an increase in efficiency savings from 2009 over 2008?

23 A. Yeah. Those states finally started to achieve  
24 close to 1 percent.

25 Q. Okay. And out of the top 10 states listed on

1 Figure 4, how many of them saw an increase in the amount of  
2 savings in energy efficiency in 2009 over 2008?

3 A. All right. Well, we'll go -- one, two, three,  
4 four, five, six. It looks like Iowa had a slight increase. It  
5 looks like the next one was California, had a decrease. It  
6 looks like Wisconsin had a slight increase. It looks like  
7 whoever the next one had a slight increase. It looks like  
8 Connecticut had a decrease.

9 Q. So out of that, the majority of the top 10  
10 states actually saw an increase in their -- in their energy  
11 efficiency savings in 2009 over 2008; is that correct?

12 A. I think the states that experienced a  
13 decrease -- the amount of the decrease was far greater than the  
14 states that experienced an increase. But other than that, yeah.  
15 There was -- in the top five again, three out of five had slight  
16 increases.

17 Q. So once again, my question was the majority of  
18 the top ten states saw an increase in their energy savings I  
19 2009 over 2008; is that correct?

20 A. Based on the data in Figure 4, yes.

21 Q. Okay. On Pages 11 to 12, towards the bottom of  
22 the -- starting at -- towards the bottom of Page 11, you refer  
23 to dozens of higher energy efficiency standards imposed by  
24 federal legislation. Do you see that?

25 A. Yes, I do.

1           Q.       Okay. And I believe your point here is that it  
2 is more difficult for the utility to achieve energy efficiency  
3 savings because of the federal standards? Energy efficiency  
4 savings that are attributable to their programs.

5           A.       Not necessarily. I think what it means is that  
6 those opportunities go away. When a -- when the federal  
7 government codifies a baseline efficiency for which utilities  
8 can no longer offer programs, those opportunities go away and  
9 the utility has to look elsewhere. That's what I mean.

10          Q.       And have you quantified the impact of that -- of  
11 those federal standards on the ability of a utility to achieve  
12 savings through energy efficiency programs?

13          A.       The -- part of the -- our DSM potential study  
14 included a scenario analysis with more aggressive building codes  
15 and standards. So yes, we've quantified that. We've also  
16 looked at the impact on our programs for those that -- these  
17 main ones that I've just mentioned. And I guess the most  
18 glowing aspect is the new information that's coming out, the new  
19 potential studies that are coming out today as we speak, are  
20 showing severe impacts with 20 to 30 percent reductions in  
21 achievable potential, so yes.

22          Q.       Do the federal efficiency energy standards?

23          A.       In part.

24          Q.       And do you know if Ameren is then factoring the  
25 impact of those federal efficiency energy standards into its

1 load forecasts?

2 A. Yes.

3 Q. Yes, you do know or yes they are.

4 A. Yes, they are.

5 Q. Were you involved in that?

6 A. I'm not involved in the forecasting process.

7 Q. And I asked Mr. Wood earlier today about the  
8 amount of lost revenue for Ameren if they pursued the RAP plan,  
9 DSM plan versus low risk plan. And he was not aware of the  
10 figure but thought that either yourself or Mr. Michaels might  
11 know. Do you know that figure?

12 A. You're speaking in reference to the RAP plan and  
13 the IRP filing?

14 Q. Yes.

15 A. I don't know that figure.

16 Q. Do you know if anybody calculated that figure?

17 A. I don't know.

18 MR. FISK: Nothing further.

19 JUDGE WOODRUFF: For MIEC?

20 MS. VUYLSTEKE: No questions.

21 JUDGE WOODRUFF: For DNR?

22 MS. FRAZIER: Thank you. I just have one  
23 question.

24 CROSS-EXAMINATION BY MS. FRAZIER:

25 Q. Can you identify which potential studies are



1 showing 10 to 20 percent reductions in achievable potential?

2 A. California has recently put out its first draft  
3 of a 2011 DSM potential study. The prior study was done in 2008  
4 and that'll show that the technical and economical potential is  
5 20 to 30 percent less and that's the most recent one that I've  
6 reviewed.

7 Q. Can you identify any others?

8 A. Not at this time.

9 MS. FRAZIER: Thank you.

10 JUDGE WOODRUFF: And for Public Counsel?

11 MR. MILLS: Just a few. Thank you.

12 CROSS-EXAMINATION BY MR. MILLS:

13 Q. Good morning, Mr. Voytas.

14 A. Good morning.

15 Q. Do you believe that the experience in California  
16 is applicable to Missouri and specifically Ameren Missouri  
17 service territory?

18 A. What experience are you talking about?

19 Q. The one you just referred to.

20 A. The DSM potential study?

21 Q. Yeah.

22 A. I believe that the basics of the potential  
23 study, the codes and standards reducing the available potential  
24 and another thing the California study clearly shows is the law  
25 of diminishing returns. There's a graph in the study showing

1 the annual incremental benefits attributable to energy  
2 efficiency are going down over time. Yes. I believe those are  
3 directly compatible with Ameren Missouri.

4 Q. Doesn't California have some significantly more  
5 stringent state level energy efficiency requirements and  
6 standards than Missouri does?

7 A. Can you give me an example?

8 Q. Building codes.

9 A. I don't know what California's building codes  
10 are.

11 Q. Okay. Do you know what Missouri's building  
12 codes are?

13 A. I don't believe Missouri has building codes.

14 Q. Hasn't California just in general terms been  
15 pursuing energy efficiency and demand-side management much more  
16 aggressively than Missouri has for about a decade?

17 A. I think that's an accurate statement.

18 Q. Are you familiar with the requirement or the  
19 goal in MEEIA to achieve all effective -- all cost effective  
20 demand-side management?

21 A. Yes, I am.

22 Q. Does that include all cost effective demand  
23 response?

24 A. What do you mean by all cost effective?

25 Q. Demand response that reduces PVRR.

1           A.       So the question is do I think that the  
2 requirements of MEEIA allow -- require that we pursue all cost  
3 effective demand response?

4           Q.       Yes.

5           A.       I thought the requirements of MEEIA stated -- or  
6 at least the Commission's rules implementing MEEIA stated  
7 specific goals to achieve. But in terms of meeting all cost  
8 effective, I think that's part of the integration process where  
9 we determine what passes the benefit/cost -- I'm sorry -- my  
10 team, which does the analytics determines what passes the  
11 benefit/cost test and that gets passed on to integration who  
12 decides how those will be integrated into the plan.

13          Q.       So you don't know. Is that the answer?

14          A.       I think that -- the answer to that is outside of  
15 my purview. So yes, I don't know. I'm sorry.

16          Q.       Are you aware that at least for the -- the  
17 purposes of this case that the company included demand response  
18 only in years in which there was a capacity shortfall?

19          A.       Yes, I am.

20          Q.       Do you believe that that treatment is the proper  
21 way to minimize PVRR?

22          A.       I don't have an opinion on that. I think  
23 there's -- there's different ways that can be looked at. The  
24 integration team had a perspective and they use that. The  
25 beautiful thing about demand response is that it's modular. It

1 can be put in in almost any size at any time relatively quickly.  
2 So to the extent that there's a pressing need at some point in  
3 the future, it could be done relatively quickly. But again,  
4 I -- you know, I'd have to look at all the decisions like our  
5 integration team does to come up with that.

6 Q. With respect to the response in your testimony  
7 to Public Counsel witness Tim Wolfe about the elimination of MAP  
8 too early in the process. Do you recall your response there?

9 A. Can you give me a reference in my testimony,  
10 please?

11 Q. Yeah. It starts at about Page 8.

12 A. I'm on Page 8 of my surrebuttal testimony, but I  
13 don't see it there.

14 Q. Okay. Well, let me just ask you in general, do  
15 you recall Mr. Wolfe's criticism of the company for eliminating  
16 MAP too early in the process?

17 A. No. I don't really recall that. What I recall  
18 is that Mr. Ma-- Mr. Wolfe said that MAP was too low and he used  
19 the information from the ACAA states' scorecard to make his  
20 point. That's what I recall from his testimony.

21 Q. When in the process did the company eliminate  
22 MAP consideration?

23 A. I don't know. That's beyond my purview.

24 Q. Do you believe that MAP and RAP performed  
25 similarly in terms of PVRR over the planning horizon?

1           A.       Well, you know, the numbers are out there and I  
2       don't recall them. I know the total resource cost test to  
3       benefit/cost test ratio for MAP is lower than it is for RAP, but  
4       I -- I don't recall those numbers but, you know, they're public  
5       information. I just don't recall them.

6           Q.       Okay. But the PVRR of MAP is greater than the  
7       PVRR of RAP. You just don't recall the delta; is that correct?

8           A.       I don't recall those specifics at this time, no.

9           Q.       You don't recall whether one is greater than the  
10      other?

11          A.       On the PVRR basis?

12          Q.       Yes.

13          A.       No. There's been a lot of water under the dam,  
14      but I don't recall that.

15          Q.       Okay. Do you recall whether there's a  
16      difference in terms of energy savings between MAP and RAP?

17          A.       There's greater energy savings with MAP.

18          Q.       And in fact that you got a figure here on Page  
19      13 of your testimony shows that difference; is that correct?

20          A.       That's correct.

21          Q.       And do you recall that MAP is expected to save  
22      capacity with respect to MAP over the -- over the long term of  
23      the planning horizon?

24          A.       Definitely. If the energy savings are greater,  
25      the demand savings are also greater.

1 MR. MILLS: That's all the questions I have.

2 Thank you.

3 JUDGE WOODRUFF: Questions from the bench,  
4 Commissioner Kenney.

5 EXAMINATION BY COMMISSIONER KENNEY:

6 Q. Mr. Voytas, how are you?

7 A. Good morning, Commissioner.

8 Q. Would you be responsible for planning the DSM  
9 programs that will be proposed in Ameren's MEEIA filing?

10 A. Yes. My team did the analytics around those  
11 programs, the benefit/cost ratio and those aspects of it. Not  
12 the implementation but the program designed the analytics, so  
13 yes to your question.

14 Q. Would you also be responsible for designing and  
15 planning the lost revenue recovery mechanism?

16 A. No. I am not.

17 Q. Who would be responsible for that?

18 A. Our corporate planning group, specifically Bill  
19 Davis is the person who is responsible for calculating the lost  
20 revenues.

21 COMMISSIONER KENNEY: Okay. I don't have any  
22 other questions. Thank you.

23 THE WITNESS: Thanks.

24 JUDGE WOODRUFF: Mr. Voytas, I'm a little  
25 confused about something that you've been testifying about and

1     it concerns the reduction in the achievable potential impact of  
2     federal standards for DSM potential standards. Can you explain  
3     that more fully for me?

4                 THE WITNESS: Definitely, Judge. I'll take the  
5     most ubiquitous standard that's out there and CFL, compact  
6     florescent light bulbs, have been the Number 1 energy efficiency  
7     measure for all utilities across this nation for the past 10  
8     years. Most portfolios -- utility portfolios attribute 70 to 80  
9     to 90 percent of their portfolio savings to compact florescent  
10    light bulbs.

11                The Energy Independence And Security Act of 2007  
12    mandated that these incandescent bulbs be phased out of  
13    production beginning in January of 2012 and that this phase out  
14    will be complete by 2014. At that point consumers will have no  
15    choice but to buy more efficient bulbs.

16                Therefore utilities will have to look to other  
17    measures, other things to get their savings. So the impact of  
18    codes and standards was basically to remove that measure -- or a  
19    large portion of that measure -- from our portfolio.

20                Did I --

21                JUDGE WOODRUFF: Okay. I think I understand.

22                THE WITNESS: Okay.

23                JUDGE WOODRUFF: The savings are still there,  
24    they just can't be counted as savings by the utility any more?

25                THE WITNESS: Perfect -- perfect. That's

1 correct.

2 JUDGE WOODRUFF: Okay. I thought that's what it  
3 meant, but I wanted to be sure.

4 THE WITNESS: Okay.

5 JUDGE WOODRUFF: Any questions based on  
6 questions from the bench?

7 I see Mr. Mills raised his hand. Go ahead.

8 MR. MILLS: Just briefly.

9 RECROSS-EXAMINATION BY MR. MILLS:

10 Q. You identified in response to a question from  
11 Commissioner Kenney that Bill Davis is responsible for  
12 calculating the lost revenue. Does Mr. Michaels, who's a  
13 witness in this case, also have a responsibility in that  
14 calculation?

15 A. Mr. Davis reports to Mr. Michaels.

16 Q. And in response to the question that Judge  
17 Woodruff asked you, you said that some utilities have up to 90  
18 percent of the savings attributable to CFLs. What is the  
19 percentage for Ameren Missouri?

20 A. In the last three-year implementation plan, the  
21 bulk of Ameren Missouri savings came from CFLs. I would have to  
22 say that that number will also be in that 80 to 90 percent  
23 range.

24 Q. Is that from total savings or is that just  
25 residential?



1           A.           Well, lighting in our business portfolio counts  
2     for about 75 percent of the business savings and the residential  
3     portfolio probably account for 80 to 90 percent. You weight  
4     those two 50 percent a piece approximately. It'll come out to  
5     be about 80 percent.

6                   MR. MILLS: Okay. That's all I have. Thanks.

7                   JUDGE WOODRUFF: Redirect?

8                   MS. TATRO: I have no questions. Thank you.

9                   JUDGE WOODRUFF: All right. Mr. Voytas, you may  
10    step down.

11                   (Witness excused.)

12                   JUDGE WOODRUFF: And it's almost noon, so we'll  
13    take a break for lunch and we'll come back at one o'clock.

14                   (Off the record.)

15                   (Wherein; Green Belt Exhibit No. 38 was marked  
16    for identification.)

17                   JUDGE WOODRUFF: We are back from lunch. I  
18    believe there's some matters we want to take up before we go to  
19    the next witness.

20                   MS. TATRO: Yes. At your request I printed a  
21    copy of the comments that were filed by Green Belt Express Clean  
22    Line this afternoon. I think that's their name. And attached  
23    the affidavit of Mr. Berry who was attesting to those comments.  
24    I gave it to the court reporter and she has marked that as  
25    Exhibit 38, I believe.

1 JUDGE WOODRUFF: All right. This is -- comments  
2 were filed by Green Belt, which is one of the parties to the  
3 case that have been excused from the hearing. I'll take that as  
4 an offering of the document by Green Belt, not by Ameren. Does  
5 anybody have any objection to that document being received into  
6 evidence?

7 Hearing no objection, it will be received.

8 (Wherein; Green Belt Exhibit No. 38 was received  
9 into evidence.)

10 JUDGE WOODRUFF: All right. I believe we can  
11 move on to our witness then.

12 MS. TATRO: Mr. Michaels.

13 JUDGE WOODRUFF: Good afternoon, Mr. Michaels.  
14 Please raise your right hand.

15 (Witness sworn.)

16 JUDGE WOODRUFF: Thank you. You may inquire.  
17 MATTHEW MICHAELS testifies as follows:

18 DIRECT EXAMINATION BY MS. TATRO:

19 Q. Good morning. Can you state your name and  
20 business address for the Commission?

21 A. Yes. My name is Matthew Michaels, Matt  
22 Michaels. My business address is 1901 Chouteau Avenue,  
23 St. Louis, Missouri, 63103.

24 Q. And can you state who your employer is and your  
25 job title.

1           A.           I'm employed by Ameren Services company and I am  
2 the managing supervisor for resource planning.

3           Q.           And are you the same Matt Michaels who was  
4 responsible for a portion of the IRP filing that was made in  
5 February as well as the surrebuttal testimony that consisted of,  
6 I think, approximately 98 pages and 12 schedules?

7           A.           Yes.

8           Q.           And do you have any additions or corrections to  
9 make to that testimony?

10          A.           I just have one correction to my surrebuttal  
11 testimony. On Page 59 at Line 4, strike --

12          Q.           Slow down so people can get there.

13          A.           Sorry. Page 59, Line 4 striking the first  
14 sentence, "of course". And then on Line 5 striking the word at  
15 the end of the sentence "speculate" and replacing that with  
16 "make informed estimates".

17          Q.           Do you have any other additional additions or  
18 corrections?

19          A.           No, I don't.

20          Q.           And if I asked you the same questions that are  
21 contained within your surrebuttal testimony, would your answers  
22 be the same?

23          A.           Yes.

24                       MS. TATRO: With that I offer Mr. Michaels'  
25 surrebuttal. I think the original report's already been

1       accepted into the record and tender him for cross-examination.

2                   JUDGE WOODRUFF:   What number was his  
3       surrebuttal?   Was that 5?

4                   MS. TATRO:   I'm sorry.   I believe it's 5.   And  
5       there's an HC, so there's 5HC and 5NP.

6                   JUDGE WOODRUFF:   All right.   5HC and NP have  
7       been offered by Ameren.   Any objections to its receipt?

8                   Hearing none, it will be received.

9                   (Wherein; Company Exhibit Nos. 5HC and 5NP were  
10      received into evidence.)

11                  JUDGE WOODRUFF:   And cross-examination will  
12      begin with Staff.

13                  MR. WILLIAMS:   Thank you, Judge.

14      CROSS-EXAMINATION BY MR. WILLIAMS:

15                  Q.       Mr. Michaels, as managing supervisor of resource  
16      planning, what are your job responsibilities?

17                  A.       My primary job responsibilities are to oversee  
18      the resource planning activities of the company of which the  
19      integrated resource plan filings and preparation and analysis  
20      are the main component.

21                  Q.       You said that's your primary responsibility.   Do  
22      you have some secondary responsibilities as well?

23                  A.       Other things related to resource planning;  
24      periodic analysis of particular resource options that might  
25      come -- come to light that maybe hadn't during the IRP process.

1 Q. And who's your direct supervisor?

2 A. My direct supervisor is Azar (ph.) Aurora. He's  
3 director of corporate planning.

4 Q. And who is it that he works for? Is it the same  
5 company or someone else?

6 A. He also works for Ameren Services.

7 Q. And who is it that Mr. Aurora reports directly  
8 to

9 A. Mr. Aurora most recently reported -- currently  
10 reports to Michael Moehn who is the senior vice president of  
11 corporate planning and strategic initiatives.

12 Q. How long has he reported to Mr. Moehn?

13 A. He's reported to Mr. Moehn on a couple of  
14 occasions, most recently just for the last couple of months.

15 Q. Are there special circumstances during which he  
16 reports to Mr. Moehn? If I understood your answer correctly,  
17 you've indicated he reported to Mr. Moehn -- direct reported on  
18 a couple of different occasions. But what I'm asking is that  
19 the normal course is that -- are there specials occasions when  
20 Mr. Aurora --

21 A. Yeah.

22 Q. -- reports to --

23 A. Well, let me clarify. Mr. Aurora reported  
24 directly to Mr. Moehn until October 1st of 2010. At that point  
25 Steve Kidwell came from Ameren Missouri back into corporate

1 planning and at that point Mr. Aurora began reporting to  
2 Mr. Kidwell who in turn reported to Mr. Moehn.

3 With some organizational changes recently, that  
4 has changed, so that now Mr. Aurora is again reporting directly  
5 to Mr. Moehn. All that time it was in his same capacity as  
6 director of corporate planning.

7 Q. And you said that Mr. Kidwell, I think, was his  
8 direct report starting in October of last year. When did  
9 Mr. Kidwell no longer be his direct report, if you know.

10 A. Well, Mr. Aurora was Mr. Kidwell's direct  
11 report. Mr. Aurora reported to Mr. Kidwell and that began  
12 October 1st, 2010 and then changed in the last couple of months.  
13 I don't remember the exact date.

14 Q. I'm sorry if I misspoke, but you did answer what  
15 I was trying to get at.

16 A. Okay.

17 Q. How many Chapter 22 compliance filings have  
18 Ameren Missouri made since you've joined Ameren Services  
19 Company?

20 A. Since I joined Ameren Services? I believe the  
21 company has filed two, including this one.

22 Q. And how many has Ameren Missouri -- how many  
23 Chapter 22 compliance filings has Ameren Missouri filed since  
24 you became managing supervisor of resource planning at Ameren  
25 Services Company?

1 A. One, the 2011 IRP.

2 Q. When were the two filings you referenced made?

3 A. One was in 2008. I don't remember the exact  
4 date, but early February 2008. And then the most recent one,  
5 February 23rd, 2011.

6 Q. Would you take a look at your testimony -- your  
7 surrebuttal testimony at Page 7, Lines 18 through 22.

8 A. Okay. I've got it.

9 Q. Have you had an opportunity to familiarize  
10 yourself with it?

11 A. Just a moment. Okay.

12 Q. In that part of your testimony you refer to  
13 Ameren Missouri senior management establishing six policy  
14 objectives, do you not?

15 A. Right.

16 Q. Who, by name and title, are each of those  
17 members of Ameren Missouri senior management?

18 A. At the time this was done it included Warner  
19 Baxter, president, CEO of Ameren Missouri. I might have a  
20 little trouble with the titles. I don't know all the exact  
21 titles. Adam Heflin, chief nuclear officer. Mark Birk, vice  
22 president in charge of basically the fossil plant operations.  
23 Richard Mark, who oversees the customer operations. Lynn  
24 Barnes, who takes care of financial and accounting aspects for  
25 Ameren Missouri. Steve Kidwell at that time was vice president

1 for legal and regulatory -- or legislative and regulatory.  
2 Those are all I can recall. Hopefully I'm not forgetting  
3 someone.

4 Q. And you indicated you were identifying who were  
5 the members of the senior management at that time. What time  
6 are you referring to?

7 A. At the time we were -- at the time we came up  
8 with policy objectives that are discussed in this section of my  
9 testimony.

10 Q. And when was that? I'm looking for a date or --

11 A. When were the policy objectives established?

12 Q. Right.

13 A. I don't remember exact date. I know we had a  
14 couple of meetings to discuss that with the senior leadership  
15 team that I believe occurred in the March/April timeframe of  
16 2010.

17 Q. And I'm just asking you to answer to the best of  
18 your ability.

19 A. That's the best I can recall.

20 Q. Do you have Ameren Missouri's 2011 integrated  
21 resource plan with you?

22 A. I do.

23 Q. In particular Chapter 9?

24 A. Chapter 9. Any particular page?

25 Q. Page 7.



1 A. Page 7.

2 Q. There should be a table there labeled -- or  
3 Table 9.2 labeled preliminary scorecard.

4 A. Okay. I've got it.

5 Q. Is it correct that the policy objectives and  
6 weights given to each policy objective for the purpose of  
7 screening the 216 alternative resource plans are contained in  
8 that Table 9.2?

9 A. That's correct.

10 MS. TATRO: I'm sorry to interrupt, Nathan. I'm  
11 having a really hard time hearing you.

12 JUDGE WOODRUFF: Mr. Williams or the witness?

13 MS. TATRO: Mr. Williams.

14 JUDGE WOODRUFF: Okay. Please speak up.

15 MR. WILLIAMS: Well, I'm not trying to be hard  
16 to hear.

17 MS. TATRO: I'm sure.

18 BY MR. WILLIAMS:

19 Q. Which rule or rules in Chapter 22 of 4 CSR 240  
20 was why this table was created?

21 A. I believe in -- well, let me get the exact rule  
22 reference. I think it's 22.060.1. Let me just get that.  
23 22.060.1 states in the last part: The utility may identify  
24 additional planning objectives that alternative resource plans  
25 will be designed to serve. It's on Page 13 at the top, middle.

1 Q. Mr. Michaels, will you take another look at Page  
2 7 and the Table 9.2.

3 A. Okay.

4 Q. You see right above that table a footnote --  
5 well, first there's a paragraph that's followed by a footnote?

6 A. Uh-huh. Yes.

7 Q. Did you take a look at that footnote as well?

8 A. Okay. Yeah. It refers to 22.060.2 as well,  
9 which provides for the establishment of performance measures,  
10 but relate to the performance objectives referred to in Section  
11 1.

12 Q. So does that change your answer that you  
13 provided before at all or is it still your answer that Table 9.2  
14 is referring based off of 22.060 Sub 1?

15 A. Well, the policy objectives are Sub 1. The  
16 measures listed in the second column of that table relate to Sub  
17 2. The weightings themselves relate to a different section,  
18 22.070 (11) (F), which discusses the inclusion of relative  
19 weights assigned to the performance measures listed here.

20 Q. Thank you for clarifying.

21 A. Sure.

22 Q. Doesn't Rule 4 CSR 240-22.060 Sub 2 state: The  
23 utility shall specify a set of quantitative measures for  
24 assessing performance of alternative resource plans with respect  
25 to identified planning objectives?

1 A. Yes.

2 Q. Are the six policy objectives you referred to on  
3 Page 7 of your surrebuttal testimony identify planning  
4 objectives as that term is used in Rule 4 CSR 240-22.060 Sub 2?

5 A. Yes.

6 Q. And what are each of the six policy objectives?

7 A. There listed right here. Environmental  
8 renewable resource diversity is the first one. Energy  
9 efficiency was the second one. Mr. Wood explained earlier that  
10 that was used in the screening stage to ensure passage of the  
11 energy efficiency heavy plans into the candidate resource plans  
12 for risk analysis. Customer satisfaction, economic development  
13 and cost.

14 Q. What weight did Ameren Missouri assign to each  
15 of these policy objectives when screening the 216 alternative  
16 resource plans?

17 A. The weights are listed here. 20 percent for  
18 environmental, 10 percent for energy efficiency, 20 percent for  
19 financial regulatory, 15 percent for customer satisfaction, 10  
20 percent for economic development and 25 percent for cost.

21 Q. Does 4 CSR 240-22.060 Sub 2 require that the  
22 present worth of utility revenue requirements be given in  
23 particular weight when screening alternative resource plans?

24 A. No, it doesn't.

25 Q. Does Rule 4 CSR 240-22.010 Sub 2 Sub B?

1           A.       No.

2           Q.       Does Rule 4 CSR 240-22.060 Sub 2 require that  
3 the present worth of utility revenue requirement be given the  
4 greatest weight when screening alternative resource plans?

5           A.       It does not.

6           Q.       Does Rule 4 CSR 240-22.010 Sub 2 Sub B?

7           A.       Yes, it does. It says that PVRR will be used as  
8 the primary selection criterion, which we take to mean of first  
9 importance.

10          Q.       Does 4 CSR 240-22.060 Sub 2 require that the  
11 present worth of utility revenue requirements be the primary  
12 criterion when screening alternative resource plans?

13          A.       It doesn't. It does not. It's specifically  
14 related to selection of the preferred resource plan.

15          Q.       Does Rule 4 CSR 240-22.010 Sub 2 Sub B?

16          A.       No. Again, related directly to the selection of  
17 the preferred resource plan.

18          Q.       In your expert opinion is it a good idea to not  
19 assign a majority of the weight to present worth of utility  
20 revenue requirements when screening alternate resource plans  
21 under 4 CSR 240-22.060 Sub 2?

22          A.       In our case it doesn't make sense because we  
23 have other policy objectives that are selected that support the  
24 primary objective of the resource planning process to provide  
25 safe, reliable and efficient service at just and reasonable

1 rates.

2 Q. Does Rule 4 CSR 240-22.060 Sub 2 provide  
3 guidance for weighting policy objectives when screening  
4 alternative resource plans?

5 A. It does not.

6 Q. Is that a good thing?

7 A. I think it is. It provides the utility decision  
8 makers the flexibility to assess what factors are most important  
9 in selecting resource plans and how those best serve the public  
10 interest.

11 Q. Do you also have Chapter 10 of Ameren Missouri's  
12 2011 integrated resource plan?

13 A. I do.

14 Q. Would you turn to Page 13.

15 A. I'm there.

16 Q. Do you see something that's labeled Figure 10.5?

17 A. Yes, I do.

18 Q. What is shown on Figure 10.5?

19 A. Figure 10.5 shows the selection scorecard that  
20 was used to assess the performance of the candidate resource  
21 plans during Ameren Missouri senior management's consideration  
22 of selection of the preferred resource plan.

23 Q. And how many policy objective are shown on  
24 Figure 10.5?

25 A. There are five. The one that is excluded is

1 energy efficiency. As Mr. Wood pointed out earlier, that  
2 particular policy objective was included in the screening phase  
3 to ensure that high energy efficiency resource plans would pass  
4 to the candidate resource plan and risk analysis phase.

5 Q. Are you saying that the policy objectives on  
6 Figure 10.5 are the same as the policy objectives on Table of  
7 9.2 with the exception of energy efficiency?

8 A. That's correct.

9 Q. Are the policy objectives on Figure 10.5  
10 weighted?

11 A. Yes, they are. It doesn't appear on the page,  
12 but in the work papers it shows that PVRR was weighted 30  
13 percent, economic development was weighted 10 percent, and each  
14 of the three others were weighted 20 percent.

15 Q. Is there some reason the weighting you say was  
16 in the work papers isn't reflected in the resource plan filing?

17 A. No reason that I know of.

18 Q. Do you think it should have been?

19 A. I think it would have been helpful to include.

20 Q. Do you think Ameren Missouri might do so in the  
21 future resource plan planning?

22 A. Yes. I would expect so.

23 Q. Would you turn to Page 18 of your prefiled  
24 surrebuttal testimony that's been marked for identification as  
25 Exhibit 5?

1 A. Which page?

2 Q. 18. In particular Lines 8 through 12.

3 A. Okay.

4 Q. And there don't you indicate, let's see, the  
5 company relied on the plain and ordinary meaning of the word  
6 "primary"?

7 A. That's correct.

8 Q. Is there only one plain and ordinary meaning of  
9 the word "primary"?

10 A. No. I think there are a lot of them, some  
11 relating to biology, chemistry, business.

12 MR. WILLIAMS: Judge, may I approach?

13 JUDGE WOODRUFF: You may.

14 MR. WILLIAMS: What I have is a copy of Exhibit  
15 9 Ameren -- Union Electric Company's initial comments in the  
16 EX-92-299 rulemaking case.

17 BY MR. WILLIAMS:

18 Q. Mr. Michaels, I'm handing you a copy of what's  
19 been marked for identification as Exhibit No. 9.

20 A. Okay.

21 Q. And turning your attention to Page 28 of that  
22 exhibit, or what's marked as Page 28. And I'll represent to you  
23 that that's a copy of a filing that was made by Union Electric  
24 Company in a rulemaking case for Chapter 22.

25 A. Okay.

1 Q. And in that filing did Ameren Missouri provide  
2 four different definitions of primary?

3 A. Yes.

4 Q. And do you agree that each of those are plain  
5 and ordinary meanings of the word "primary"?

6 A. I would agree with that.

7 Q. And if Ameren Missouri had argued at that time  
8 that "primary" as used in the rules had a particular meaning,  
9 would you agree that that would have been a reasonable argument  
10 at the time it was made at least?

11 A. I would expect so.

12 Q. Do you know if the Commission has provided any  
13 guidance as to what it meant when it used the word "primary" in  
14 promulgating Rule 4 CSR 240-22.010 (2) (B)?

15 A. I'm not aware of any.

16 MR. WILLIAMS: Judge, may I approach again?

17 JUDGE WOODRUFF: You may.

18 BY MR. WILLIAMS:

19 Q. Mr. Michaels, I'm handing you what's been marked  
20 for identification as Exhibit No. 8, which is Commission's order  
21 rulemaking for Chapter 22 back in 1993 and I'm directing your  
22 attention to -- I believe it starts on Page 9 under the heading,  
23 4 CSR 240-22.010 Policy Objectives. I'm asking you to read that  
24 page over to the following page stopping right about the middle  
25 of that page above the line that starts 4 CSR 240-22.010 Sub 2.



1           A.       All right. Summary of comment. The purpose of  
2 the modifications to the proposed rules is in response to  
3 concerns expressed by various commenters.

4           Q.       Mr. Michaels, I'm not asking that you read it  
5 into the record.

6           A.       Okay.

7           Q.       But if you want to, I won't object to it.

8           A.       I'll just read it.

9           Q.       The exhibit's already in the record. I just  
10 want you to --

11          A.       Okay.

12          Q.       -- take a look.

13          A.       Okay.

14          Q.       Would you go ahead and read that last paragraph  
15 out loud that starts out the Commission adopts two  
16 modifications.

17          A.       Sure. The Commission adopts the two  
18 modifications in the proposed rules in response to various  
19 comments but still holds to the proposition that cost  
20 minimization should be of primary importance in resource plan  
21 selection. Based on the foregoing the Commission finds that  
22 this section will be adopted as modified.

23          Q.       So in that rulemaking, didn't the Commission  
24 provide some guidance on the meaning of "primary" as used in  
25 4 CSR 240-22.010 Sub 2 Sub B?

1           A.       The way I read this it used the term "primary"  
2     to define itself by saying that it should be of primary  
3     importance.

4           Q.       So you don't view that the Commission provided  
5     any guidance as to what primary means?

6           A.       Not with respect to any particular weighting.

7           Q.       And I don't think I limited it to going to  
8     weighting.

9           A.       Well, the way I read this paragraph it doesn't  
10    provide any clarification as to what primary means.

11          Q.       Is it important to Ameren Missouri that the  
12    Commission provide guidance as to the meaning of primary as used  
13    in 4 CSR 240-22.010 Sub 2 Sub B?

14          A.       I don't know that explicit guidance is  
15    necessary, but certainly in its decision in this case we will  
16    have guidance as to whether or not our definition is the  
17    preferred one. I think the definition as stated provides  
18    flexibility to determine what's primary in light of other  
19    planning objectives that might be important.

20          Q.       Is your answer then that Ameren Missouri doesn't  
21    consider it to be important that the Commission provide any  
22    further guidance, that the rule is just fine as it is and the  
23    way it's being followed?

24          A.       I don't believe it's necessary.

25          Q.       With regard to the preferred plan selection

1 scorecard, which I believe was Figure 10.5 --

2 A. Okay.

3 Q. -- did you attend all of the meetings for Ameren  
4 Missouri senior leadership team where that team reviewed and  
5 revised the preferred plan selection scorecard?

6 A. Yes, I did.

7 Q. When were those meetings?

8 A. They were on October 25th, 2010; November 8th,  
9 2010; and November 15th, 2010.

10 Q. And how were those -- was energy efficiency ever  
11 a policy objective on that scorecard as it was being reviewed  
12 and revised?

13 A. I don't recall whether it was or not at this  
14 stage. It may have been initially, but I don't recall.

15 Q. And how were the policy objectives that are on  
16 that scorecard determined to be on it? How -- was it one person  
17 said this is the way it should be and the team agreed, or how  
18 was that arrived at?

19 A. No. As I mentioned to -- in a response to  
20 another question that you asked earlier, we met with the Ameren  
21 Missouri senior leadership team in the March/April 2010  
22 timeframe to establish what policy objectives were. And so it  
23 was at that time that those determine -- determinations were  
24 made essentially through -- it was over the course of at least  
25 two meetings, perhaps more -- where the entire Ameren Missouri

1 leadership team weighed in on what should be included, how  
2 things should be weighed and eventually led to the -- to the  
3 initial policy objectives and weightings that we were discussing  
4 earlier in Chapter 9. And then ultimately to the preferred plan  
5 selection scorecard here.

6 Q. Well, there's a difference between the criteria  
7 that were used on -- what's the initial selection and what was  
8 used to determine the preferred plan, at least energy efficiency  
9 is not on the second.

10 A. That's correct.

11 Q. So who deter-- who determined then when that  
12 energy efficiency wasn't included on the scorecard used to  
13 determine the preferred plan?

14 A. I don't remember exactly when. I do remember  
15 having -- being involved -- or being present for discussions of  
16 the Ameren Missouri senior leadership team where -- where it was  
17 raised that, you know, we have a -- have a bias built in here  
18 that we used in the screening phase toward energy efficiency.  
19 We really don't need that at this stage.

20 That might have been during the October 25th  
21 discussion. I don't remember. It might have been before that.

22 Q. It wouldn't have been in the March to April  
23 discussion, would it?

24 A. No.

25 Q. And when those discussions were going on for the

1 preferred plan selection scorecard, were policy objective  
2 weightings ever shown or discussed?

3 A. Yes, they were. Again, I don't remember  
4 precisely at what point in time, but I think most of this was in  
5 the October/November timeframe when consideration of the  
6 candidate resource plans was being undertaken.

7 Q. And did the scorecard ever reflect policy  
8 objective weightings? And I'm referring to the preferred plan  
9 scorecard.

10 A. I don't remember during the discussions whether  
11 they explicitly showed the weightings or not. I know that they  
12 were in the spreadsheet that served as the basis for this  
13 figure. And I know that they were discussed.

14 Q. Well, did the senior leadership team review the  
15 scorecard or the spreadsheets that underlie it?

16 A. They reviewed the scorecard, but during the  
17 discussions we had discussions about what the weightings were  
18 and should be.

19 Q. And how were those weightings determined? Was  
20 it consensus or was it a case of someone said this is what it  
21 ought to be and everyone else said okay?

22 A. It -- it was a general consensus.

23 Q. Do you know why the policy objective weightings  
24 are not shown on the scorecard that's in Ameren Missouri's 2011  
25 IRP filing? And I'm referring to the preferred plan scorecard.

1           A.       No, I don't. But as we discussed earlier, I  
2 think we would expect to include that in future filings.

3           Q.       Can you tell me why the scoring guide as shown  
4 in -- it looks like quarter increments of a pie as opposed to  
5 numerical or some other format?

6           A.       Sure. During the screening phase we used  
7 specific numerical measures because we had 216 plans to  
8 evaluate, so we needed some sort of measure that we could  
9 quickly get at. So we limited it to certain specific measures  
10 that were on the table in Chapter 9 that we discussed earlier.

11                   When we got to the preferred plan selection, it  
12 was necessary to consider not only qualitative measures but also  
13 quantitative measures. For instance, if you look at the  
14 financial regulatory policy objective, stranded cost risk is one  
15 of those. We didn't have a means by which we could measure what  
16 the stranded cost risk was explicitly for a particular plan, so  
17 it was basically a subjective assessment of what stranded cost  
18 risks might mean.

19                   As an example if you look at the plans R1 and C1  
20 where controls are installed on Meramec to comply with the  
21 aggressive environmental regulations scenario, those were  
22 represented as having a lower score specifically because adding  
23 expensive control technologies would present the possibility  
24 that there might be stranded investment if it turns out that,  
25 for instance, further environmental regulation would result in

1 retiring the plant.

2 Q. On Page 9 of your surrebuttal testimony at Lines  
3 18 through 19 you talk about balancing the needs of both  
4 customers and investors in the context of potential future  
5 environmental regulations.

6 A. Okay.

7 Q. In particular, what do you mean when you refer  
8 to balance the needs of both customers and investors?

9 A. Well, with respect to customers cost in terms of  
10 PVRR was weighted 30 percent as the primary selection criterion,  
11 the highest of any of the five selection criteria that were  
12 used. We also looked at financial and regulatory as a policy  
13 objective that we were just discussing, so we had to make  
14 assessments there with respect to what potential risks a plan  
15 might pose from the standpoint of investors.

16 And finally, we used other considerations -- we  
17 called them decision factors in the filing -- to evaluate  
18 additional -- additional considerations that needed to be taken  
19 into account that would constrain or limit the minimization of  
20 PVRR in choosing the preferred plan.

21 Q. And where are these decision -- you said these  
22 decision factors set out within Chapter 22?

23 A. It's 22.010 (2) (C). Decision factors is the  
24 term that we used to describe our consideration of those other  
25 potential constraints. But that -- that section of the rule

1 says that the primary objective resource planning requires that,  
2 you know, first consider and analyze demand-side efficiency and  
3 energy management measures on an equivalent basis with  
4 supply-side alternatives.

5 We did that in a number of ways including hourly  
6 modeling of both cost and benefits of both demand-side and  
7 supply-side resources; use of cost as a primary criterion in  
8 screening potential demand-side measures based on total resource  
9 cost tests and also levelized cost from the standpoint of  
10 screening supply-side options.

11 And (2) (B) it says: Use minimization of present  
12 worth of long-run utility cost as a primary selection criterion.  
13 We did that by applying clearly the highest weight to PVRR of  
14 any other selection criterion used. And then (C) says:  
15 Explicitly identify and where possible quantitatively analyze  
16 any other considerations which are critical to meeting the  
17 fundamental objective of the resource planning process, but  
18 which may constraint or limit the minimization of present worth  
19 of expected utility costs.

20 There's no limitation on what these other  
21 considerations might be. There are a few that are explicitly  
22 listed including risk associated with critical uncertain factors  
23 identified in the -- in the utility's analysis, risk associated  
24 with more stringent environmental laws or regulations, which  
25 goes directly to the decision factor that we used for



1 environmental and retirement analysis. And then the third one  
2 is rate increases associated with alternative resource plan.

3 So that -- that section, (2)(C) lays out a  
4 framework by which utilities can make other considerations about  
5 whether there are constraints from a legal or practical  
6 standpoint on implementing the preferred resource plan that it  
7 ultimately selects.

8 Q. Going back to the measures on the scorecard that  
9 was used for selecting the preferred plan, I think you  
10 referenced that there are financial measures there?

11 A. Right.

12 Q. Were those effected by lost revenues?

13 A. Yes, they were. According to the section of the  
14 rule that I just read we did a quantitative analysis of the  
15 impact of regulatory lag, specifically with respect to  
16 incorporating billing units effected by energy efficiency into  
17 the rate calculation. And we made an estimation.

18 There's a chart, I believe, in Chapter 10 that  
19 shows the lost revenue impact on earnings associated with both  
20 the RAP DSM portfolio and the low risk DSM portfolio under three  
21 different assumptions for frequency of rate cases. And that  
22 showed that there was anywhere from -- I think it was maybe 20  
23 or 30 on the low end and then 70 million on the high end, each  
24 and every year for the first five to ten years of implementation  
25 of the portfolio.

1           Q.       Does including lost revenues as part of the  
2       financial measure have the effect of changing the weighting of  
3       that method?

4           A.       That does, as does consideration of the program  
5       cost recovery piece, which is currently set up through a  
6       regulatory asset that's amortized over six years. That also  
7       weighed into the scoring on the financial regulatory because of  
8       the concerns about eventual recovery of that regulatory asset if  
9       it grew to a size that's very large.

10                   I believe for the RAP portfolio that -- that  
11       regulatory asset could have been in the neighborhood of \$600  
12       million. So that -- that also presented a potential cost  
13       recovery risk for the company that had to be considered in that  
14       financial regulatory measure.

15           Q.       Are the weightings that are used for the policy  
16       objectives in the scorecard used for selecting the preferred  
17       plan subjective?

18           A.       Are the weightings subjective?

19           Q.       Yes.

20           A.       Sure.

21                   MR. WILLIAMS: No further questions of this  
22       witness at this time.

23                   JUDGE WOODRUFF: All right. We'll move on to  
24       NRDC.

25                   MR. FISK: Okay. Thank you, Your Honor.

1 CROSS-EXAMINATION BY MR. FISK:

2 Q. Good afternoon, Mr. Michaels.

3 A. Good afternoon.

4 Q. How you doing this afternoon?

5 A. Pretty good.

6 Q. Good. In the -- in the IRP Ameren modeled two  
7 different environmental scenarios; is that correct?

8 A. That's correct; moderate and aggressive.

9 Q. Okay. And you have the IRP in front of you; is  
10 that --

11 A. I do.

12 Q. Okay. If you could turn to Chapter 8, Page 20.

13 A. Okay.

14 Q. And do you see Table 8.3 --

15 A. I do.

16 Q. -- towards the bottom?

17 A. Uh-huh.

18 Q. And that -- does that reflect the moderate and  
19 aggressive scenarios that were modeled?

20 A. That's correct.

21 Q. Okay. And just looking through there, you  
22 have -- first you have Labadie 1 and 2 and Labadie 3 and 4. And  
23 under the moderate scenario the assumption is there will be  
24 scrubbers, ACI and fine mesh screens required?

25 A. Uh-huh.

1 Q. Okay. And then under the aggressive scenario it  
2 will also require scrubbers and ACI plus cooling tower, ash,  
3 landfill and waste water plant?

4 A. Right.

5 Q. Okay. And if you flip over to Page 23 of  
6 Chapter 8.

7 A. Okay.

8 Q. That Table 8.5. Do you see that?

9 A. I see it.

10 Q. Okay. And that identifies the cost related to  
11 those controls; is that correct?

12 A. Yes.

13 Q. Okay. So that first -- well, the second column  
14 labeled nominal 2010 in millions of dollars?

15 A. Right.

16 Q. Okay. So for Labadie under the moderate  
17 scenario, that plant is facing about \$1.3 billion in  
18 environmental control costs; is that correct, capital costs?

19 A. For --

20 Q. For Labadie.

21 A. I got to see which pieces I need to add up.

22 Q. Sure.

23 A. It looks a little over 1.1. You're talking  
24 about the environment -- the moderate environmental re--

25 Q. Yes. So the scrubber --

1 A. Yeah.

2 Q. -- the --

3 A. Right.

4 Q. -- ACI.

5 A. And fine mesh screens?

6 Q. And fine mesh screens.

7 A. Yeah. I would --

8 Q. Right. 1.1 --

9 A. Dominated by the scrubber, which is 1.1 billion.

10 Right.

11 Q. Okay. And then for the aggressive scenario,

12 about how much is that plant facing in environmental control

13 costs?

14 A. It looks like about 1.7 -- 1.75 maybe.

15 Q. And then similar question to Rush Island, where

16 under the moderate scenario the IRP also projects the need for a

17 scrubber, ACI and fine mesh screens; is that correct?

18 A. Right.

19 Q. And about how much is that plant facing under

20 the moderate scenario?

21 A. Looks like 642 million.

22 Q. Okay. And under the aggressive scenario?

23 A. 784 million, I get.

24 Q. Okay. And then Meramec, under the aggressive

25 scenario, is also -- Ameren's projecting the need for a

1 scrubber, ACI, fine mesh screens, ash, landfill and a waste  
2 water plant; is that correct?

3 A. Right.

4 Q. And do you know about how much that would come  
5 to?

6 A. It looks like about 800 million.

7 MR. FISK: And Your Honor, may I approach?

8 JUDGE WOODRUFF: You may.

9 MR. FISK: Okay. Actually, I have an exhibit.  
10 It's a data request response. It's marked highly confidential.

11 MS. TATRO: Let me read this. I'm sorry.

12 If you want to talk about the numbers, we'll  
13 need to go in camera.

14 MR. FISK: What?

15 MS. TATRO: If you want to talk about the  
16 numbers, you'll need to go in camera.

17 MR. FISK: Okay.

18 JUDGE WOODRUFF: What's the situation?

19 MR. FISK: There are numbers that Ameren is  
20 claiming highly confidential so we would need to go in camera.

21 JUDGE WOODRUFF: Let's mark the exhibit as 39  
22 first.

23 MR. FISK: Okay.

24 (Wherein; NRDC Exhibit No. 39HC was marked for  
25 identification.)

1 JUDGE WOODRUFF: Or 39HC and then we'll go in  
2 camera.

3 (REPORTER'S NOTE: At this time, an in-camera  
4 session was held which can be found in Volume 3, Page 169 to  
5 Page 173 of that transcript.)  
6  
7  
8  
9  
10  
11  
12  
13  
14  
15  
16  
17  
18  
19  
20  
21  
22  
23  
24  
25

- 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



- 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

- 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

- 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

- 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

1 JUDGE WOODRUFF: We're back in regular session.

2 BY MR. FISK:

3 Q. Okay. And for Meramec, the -- what is the  
4 assumed retirement date in the preferred resource plan, the IRP?

5 A. In the preferred resource plan we haven't made  
6 an explicit assumption about retirement. We've simply reflected  
7 that it would continue to operate through the 20-year planning  
8 horizon through 2030, so beyond that we haven't made an estimate  
9 or what the retirement date would be.

10 Q. And if you turn to Chapter 9 of the IRP,  
11 Appendix A, Page 21, the top --

12 A. I see.

13 Q. -- box there R0?

14 A. Uh-huh.

15 Q. Which is the preferred resource plan; is that  
16 correct?

17 A. Right.

18 Q. Okay. And it says Meramec continues as is; is  
19 that correct?

20 A. Right.

21 Q. And it -- and the timing on that chart runs  
22 through 2040; is that correct?

23 A. 2039.

24 Q. 2039. Okay. And is the retirement of Meramec  
25 reflected anywhere on that?

1           A.           It's not because what we did in the IRP analysis  
2       was we froze resources at the end of 2030, at the end of the  
3       planning horizon. We ran additional 10 years to capture end  
4       effects of the decisions made during the 20-year planning  
5       horizon.

6           Q.           So the preferred resource plan's assumption was  
7       that Meramec would continue to operate through 2039; is that  
8       correct?

9           A.           No. That's not accurate. What -- what we did  
10      was, you know, whatever was in place at 2030, we're just trying  
11      to capture end effects so we have a apples-to-apples comparison  
12      across the different plans. So we didn't -- we didn't make an  
13      explicit assumption about when Meramec retires. This is just to  
14      capture the end effects of decisions made during the 20-year  
15      planning horizon.

16          Q.           But Meramec is -- under this preferred source  
17      plan, Meramec is operating in 2030. Correct?

18          A.           For modeling purposes we continue to operate the  
19      system in the same manner it is at the last year of the planning  
20      horizon. It's a -- it -- it's a technical issue about making  
21      sure that you reflect the cost over the period over which we're  
22      calculating PVRP based on decisions that are made during the  
23      20-year planning horizon.

24                      The fact that it doesn't show that Meramec  
25      retires does not mean that we are explicitly assuming that the

1 plant continues to operate to that timeframe.

2 Q. Are you assuming revenue from the plant after  
3 2030?

4 A. In all cases where Meramec continues to operate,  
5 so this would be included in RAP DSM plans or anything else that  
6 continues to reflect Meramec operations during that end effects  
7 period after the planning horizon.

8 Q. Through 2039?

9 A. Yes.

10 Q. And how old would the Meramec units be in 2039?

11 A. Let's see. 1950s, so 80 years. A little bit  
12 more maybe.

13 Q. And do you know of any coal-fired electric  
14 generating units that's over 100 megawatts that's still  
15 operating after 80 years?

16 A. I personally do not, no. But again, we didn't  
17 assume that it just operates out to that point. The point of  
18 including the additional nine years that we have here was to  
19 capture the end effects, so it doesn't -- it's not intended to  
20 reflect a specific assumptions about whether or not we retire  
21 the plant. It is simply to capture the financial effects of the  
22 decisions that are made during the 20-year planning horizon.

23 Q. But to get the revenue from the unit it would  
24 have to be operating. Correct?

25 A. Yes.

1           Q.       All right. Do you know -- do you know  
2 approximately when scrubbers for the capture of sulfur dioxide  
3 became commercially available for coal-fired boilers?

4           A.       No, I don't.

5           Q.       Do you think '80s -- 1980s?

6           A.       I would imagine that they became more prominent  
7 in the '90s after passage of the Clean Air Act, but I don't know  
8 for sure when they were commercially available.

9           Q.       Okay. The preferred resource plan assumes that  
10 there will be no scrubber on any of the Meramec units through  
11 the end of its life; is that correct?

12          A.       Through the planning horizon, yes.

13          Q.       And does it assume any scrubbers added in the --  
14 through 2039. Correct?

15          A.       No. We didn't assume any changes in the system  
16 after 2030.

17          Q.       So 50 years after -- at least 50 years after  
18 scrubbers have been installed on coal plants, Meramec's going to  
19 continue operating without a scrubber?

20               MS. TATRO: Objection. I think that  
21 Mr. Michaels a couple times now has said that's not what the  
22 years after -- the last nine years reflect. It doesn't mean  
23 that we are or aren't installing the scrubber or that we are or  
24 we aren't retiring a plant. I think he's misstating  
25 Mr. Michaels' testimony.



1                   MR. FISK: Well, in order to get revenue from a  
2     plant it has to be operating. And if they're assuming it in  
3     their preferred resource plant that they're getting revenue from  
4     this plant through 2039, then it has to be operating.

5                   JUDGE WOODRUFF: I'm going to overrule the  
6     objection. The witness can -- he can defend himself and answer  
7     as he believes is appropriate.

8                   I don't know if you got an answer to your last  
9     question, so I --

10                  THE WITNESS: What is the question?

11                  MR. FISK: Can you read the question back,  
12     please?

13                  THE COURT REPORTER: Question: And does it  
14     assume any scrubbers added through the period 2039. Correct?

15                  Answer: No. We didn't assume any changes in  
16     the system after 2030.

17                  Question: So 50 years -- at least 50 years  
18     after the scrubbers have been installed in a coal-fired plant,  
19     Meramec is going to continue operating without a scrubber?

20                  THE WITNESS: Again, I'll point to the fact that  
21     the additional 10 years is reflected to capture the end effects  
22     of the decisions made during the first 20 years. Under moderate  
23     environmental regulation, the same assumption exists in all the  
24     resources that -- resource plans that we evaluated based on the  
25     enviro-- moderate environmental regulation.

1                   So even -- even interpreting the inclusion of  
2 Meramec after the 2030 final year of the planning horizon, it's  
3 the same in all the different plans. It doesn't weigh in to the  
4 relative results of the different resource plans.

5                   MR. FISK: Give me one second here. If I may  
6 approach, Your Honor.

7                   JUDGE WOODRUFF: You may.

8                   MR. FISK: I have another --

9                   MS. TATRO: Okay.

10                  JUDGE WOODRUFF: This will be 40?

11                  MR. FISK: 40HC.

12                  JUDGE WOODRUFF: HC.

13                  (Wherein; NRDC Exhibit 40HC was marked for  
14 identification.)

15                  MS. TATRO: If you have an extra one, that's  
16 fine.

17                  MR. WILLIAMS: Will this be Exhibit 40?

18                  JUDGE WOODRUFF: Yes. 40HC.

19 BY MR. FISK:

20                  Q.        I've handed you Exhibit 40HC, which is entitled  
21 Report on Life Expectancy of Coal-fired Power Plants; is that  
22 correct?

23                  A.        Correct.

24                  Q.        Okay. And have you seen this document before?

25                  A.        Yes.

1 Q. Okay. Can you tell me what it is?

2 A. This was a report provided by Black and Veatch  
3 to support retirement date assumptions for the power plants.  
4 That, I believe, was provided as an exhibit in our -- must have  
5 been our 2010 rate case, I believe.

6 Q. Okay. And if you turn to Page 1-3 of that --

7 A. Correct.

8 Q. -- exhibit.

9 MS. TATRO: Are you going to ask questions that  
10 we're going to need to go in camera for again?

11 MR. FISK: Sorry. Yes. Well, about that  
12 stuff.

13 MS. TATRO: Yes. The document's marked HC.

14 MR. FISK: Okay.

15 JUDGE WOODRUFF: We'll need to go in camera?

16 MR. FISK: Yes.

17 (REPORTER'S NOTE: At this point, an in-camera  
18 session was held which can be found in Volume 3, Page 181 to  
19 Page 183 of that transcript.)  
20  
21  
22  
23  
24  
25

- 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

- 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

- 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

1 JUDGE WOODRUFF: And we're back in regular  
2 session.

3 MR. FISK: Thank you, Your Honor.

4 BY MR. FISK:

5 Q. Do you have a copy of your test-- your  
6 surrebuttal testimony in front of you?

7 A. I do.

8 Q. Great. If you could turn to Page 74 to 75.

9 A. Okay.

10 Q. And starting around Line 18 on Page 74 there is  
11 a discussion of Meramec continuing to operate at a greater than  
12 60 percent capacity factor; is that correct?

13 A. Right.

14 Q. Okay. And your response to the question  
15 discusses that the capacity factor is the result of the dispatch  
16 modeling?

17 A. That's right.

18 Q. Okay. Does dispatch modeling look at to whether  
19 it's technically feasible operate at a certain capacity factor?

20 A. No. To assess that we relied on Burns and  
21 McDonnell study that showed what expenditures would be required  
22 in order to maintain the plant at its existing level of  
23 reliability. And so therefore we assumed based on their expert  
24 advice that the plant would be technically operable during that  
25 time of the dispatch model simply dispatched the units in the

1 market with -- with an equivalent availability based on current  
2 performance.

3 (REPORTER'S NOTE: At this point, a Highly  
4 Confidential question was removed from the transcript and placed  
5 in-camera, Volume 3, Page 186)

6 MS. TATRO: Mr. Fisk, remember that report is  
7 confidential, so if you're going to talk about something  
8 specific that's in that report, you need to go in camera.

9 MR. FISK: Okay. I apologize.

10 MS. TATRO: Or perhaps I should address that to  
11 the judge.

12 MR. FISK: Yes.

13 MS. TATRO: I apologize.

14 JUDGE WOODRUFF: Yes.

15 MR. FISK: We need to go in camera.

16 JUDGE WOODRUFF: It does need to be  
17 confidential. If we need to discuss it, we can go back in  
18 camera.

19 MR. FISK: Yeah. If we could go back in camera.

20 JUDGE WOODRUFF: All right. We'll go back in  
21 camera.

22 (REPORTER'S NOTE: At this point, an in-camera  
23 session was held and can be found in Volume 3, Page 186 to Page  
24 188 of that transcript.)  
25



- 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

- 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

- 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

1 JUDGE WOODRUFF: And we're back in regular  
2 session.

3 MR. FISK: Thank you.

4 BY MR. FISK:

5 Q. Line 18 there's a discussion regarding  
6 combustion turbines and the feasibility -- economic feasibility  
7 of converting them to combined cycles; is that correct?

8 A. Right. Right.

9 Q. Okay. And in Line 18 you state that the IRP  
10 show the combined cycle generators are -- quote -- very  
11 competitive resource options?

12 A. Uh-huh.

13 Q. And what do you mean by that?

14 A. Well, that means that they perform very well in  
15 the IRP analysis as a resource options. They're attractive  
16 resource options.

17 Q. In what sense are they attractive?

18 A. You know, compared to other supply-side options.  
19 They're pretty low cost, low capital cost. You know, with --  
20 with gas prices are where they are now, they're even more  
21 competitive than what we showed in this analysis.

22 Q. Okay. And was there any comparison in the IRP  
23 of converting combustion turbines to combine cycle plants as an  
24 alternative to the environmental control cost facing Labadie  
25 that we discussed earlier?

1           A.       I'm sorry, state the question again.

2           Q.       Was there any comparison in the IRP of  
3       converting combustion turbine generators into combined cycle  
4       plants as an alternative to the pollution control installations  
5       at Labadie?

6           A.       There was. It was indirect. During the  
7       alternative plan evaluation we looked at several different  
8       combined cycle options. One was a green field, one was putting  
9       a combined cycle unit at Meramec by converting, I believe it was  
10      the unit 4 steam turbine. And then another one was converting  
11      existing CTGs at our Venice plant combined cycle operation.

12                    When we evaluated those three options as part of  
13      alternative resource plans, they all came out very close on the  
14      PVRR cost measure. And so we simply used the green field  
15      combined cycle operation to represent all three understanding  
16      that if we got to the point where we had to begin implementation  
17      of a combined cycle unit that we'd have to do a specific  
18      evaluation of what made the most sense at the time whether it  
19      was a conversion, whether it was putting in a an existing site,  
20      whether it was put in the green field site or whatever.

21                    So in that way we've reflected the cost of -- of  
22      a combined cycle generic option. And when we looked at  
23      candidate resource plans we looked at it with retirement of --  
24      and replacement with a combined cycle. And we also looked at  
25      putting the controls on the units. This was all under the

1 aggressive environmental regulation scenario.

2 So indirectly we did make a comparison of  
3 whether it was better to retire Meramec and put in a combined  
4 cycle, whether that be based on a green field installation of a  
5 conversion.

6 Q. All right. So you did that comparison of  
7 Meramec. My question was if you did that comparison for  
8 Labadie?

9 A. We did not do it for Labadie. As I mentioned  
10 earlier, we were looking at Meramec as a test case because of  
11 its lower efficiency and higher cost.

12 Q. All right. And you also did not do that  
13 comparison for Rush Island; is that correct?

14 A. Correct. For the same reasons.

15 Q. There's -- there's been a lot of discussion  
16 today about the RAP versus low risk DSM plan and you were  
17 involved in the decision-making around -- around that issue; is  
18 that correct?

19 A. Yes.

20 Q. Okay. And do you know approximately how much  
21 lost revenue Ameren would incur through the RAP plan rather than  
22 the low risk DSM plan?

23 A. Yes. We did an evaluation of what the impact of  
24 lost revenue would be over the planning horizon for both the RAP  
25 and the low risk portfolios for assumptions on rate case

1 frequency of, I believe, it was one year, two years, and four  
2 years. That impact ranged from, I believe, 20 to \$70 million in  
3 each year for the RAP portfolio and it was in the -- maybe the  
4 15 to 20 million range for the low risk for a few years, again  
5 depending on rate case frequency.

6 Q. And is that -- are those numbers included in the  
7 IRP?

8 A. There's a chart of those numbers in the -- and  
9 there's a supporting work paper that has -- has the specific  
10 numbers in them.

11 Q. Are you referring to the -- Pages 4 and 5 of  
12 Chapter 10?

13 A. Let me look. Yeah. The two -- the two charts  
14 on Page 5, those show the -- the impact of lost revenue on ROE,  
15 but I believe the work papers shows the specific dollar numbers  
16 in each year.

17 Q. Okay. So I guess I'm a bit confused. On Page  
18 4, Table 10.1 there is a discussion there -- or there's a table  
19 that discusses earning sensitivity, the sales volume changes --

20 A. Uh-huh.

21 Q. -- is that correct? And towards the bottom  
22 there's a reference to fixed cost revenue difference, a loss of  
23 \$18 million of there's a 1 percent reduction in sales? Do you  
24 see that?

25 A. Yeah. This is -- this is sort of a generic

1 example to illustrate the workings of lost revenue whereas the  
2 charts on Page 5 are an explicit determination of the impact of  
3 lost revenue for the specific portfolios that we evaluated.

4 Q. Okay. So Table 10.1 you're saying is not --

5 A. It's a generic example.

6 Q. Okay. And you're saying that Table -- the  
7 numbers in Table 10.2 and 10.3 --

8 A. Are not related to the numbers in Table 10.1.

9 Q. Okay. But the -- you're saying that the data in  
10 Figure 10.2 and 10.3 translates into 20 to \$70 million?

11 A. 20 to \$70 million a year depending on rate case  
12 frequency, yes.

13 Q. Okay. And so under a one-year rate case  
14 frequency is around 20 million a year?

15 A. I believe --

16 Q. For RAP?

17 A. -- that's correct. 20 to 30, I believe was the  
18 range.

19 Q. And did you -- did Ameren compare that -- that  
20 figure to the amount of PVRR that would be saved through RAP  
21 versus low risk DSM?

22 A. Are you asking me how these were considered by  
23 management in making the decision for the preferred plan? How  
24 the PVRR was considered? How the impact of lost revenue was  
25 considered?



1 Q. Yes.

2 A. Is that what you're asking? Well, PVRR was  
3 considered by looking at the range of results for all the  
4 different candidate resource plans and specifically looking at  
5 the preferred plan selection scorecard we made, you know,  
6 relative comparisons of those plans on that basis; still looking  
7 at the detailed results of the PVRR analysis in the context of  
8 the decision that was being made.

9 But the lost revenue was viewed as one of the  
10 other considerations pursuant to 22.010 (2)(C), which really  
11 provides a practical constraint on the company's ability to  
12 implement what turned out to be the lowest PVRR plan. So that's  
13 how that how that -- those two pieces were incorporated into the  
14 decision-making.

15 There wasn't a straight up comparison of, you  
16 know, how much -- how many, you know -- what's the dollar lost  
17 revenue worth relative to a dollar of PVRR reduction. There  
18 wasn't a comparison like that.

19 Q. So I -- I -- earlier -- in earlier testimony  
20 Mr. Wood, I think, we compared the candidate -- the preferred  
21 resource plan, which is found on Chapter 10, Appendix B, Page  
22 5 -- or I'm sorry. Yeah. Page 5.

23 A. Appendix B? Okay.

24 Q. To the -- to the plan found on Page 1 of  
25 Appendix B, which is the same plan essentially except that the

1 one on Page 1 assumes low risk DSM and the one on Page 5 assumes  
2 RAP DSM; is that correct?

3 A. Right.

4 Q. Okay. And the difference in PVRR going with RAP  
5 rather than low risk is about \$1.6 billion?

6 A. That's right.

7 Q. Okay. Would there be an amount of lost revenue  
8 that a company would accept in order to reduce PVRR by \$1.6  
9 billion?

10 A. I don't believe there is, particularly when you  
11 look at the recent history and the fact that we spent \$70  
12 million on energy efficiency programs in the last three years  
13 and by the time the effects all wash through, in particular rate  
14 cases, we will have incurred \$50 million in lost revenue as a  
15 result of doing that.

16 So I think the threshold is not one of, you  
17 know, what could be on an ongoing basis. It's, you know, we've  
18 done this to this point. We need to have this issue addressed  
19 before we can constructively continue to pursue energy  
20 efficiency. So really it's the -- it's the mounting weight of  
21 the financial harm that was already occurred or will be  
22 incurred, is guaranteed to be incurred that weighed into the  
23 decision-making process.

24 Q. Okay. And the -- the RAP leads to a -- to a  
25 reduction in return on equity in comparison to the low risk

1 scenario?

2 A. Yeah. That's --

3 Q. Is that correct?

4 A. That's illustrated by the tables that we were  
5 looking at previously that showed the ROE impact of lost  
6 revenue.

7 Q. Okay. So if you look at the -- the preferred  
8 resource plan dashboard on Chapter 10, Appendix B, Page 5 --

9 A. The preferred plan is on Page 1.

10 Q. The preferred -- I'm sorry. You're right. On  
11 Page 1.

12 A. Uh-huh.

13 Q. And it's very small print, but it says average  
14 ROE 12.34 percent; is that correct?

15 A. Uh-huh.

16 Q. Okay. And then the RAP version of that plan is  
17 on Page 5; is that correct?

18 A. Right.

19 Q. Appendix B?

20 A. Right.

21 Q. And it says average ROE is 12.44 percent?

22 A. That's right. And those reflect the results  
23 over the entire 29-year period over which the financial measures  
24 were -- were developed and reflects the fact that, you know --  
25 in those charts that we were looking earlier it shows that as

1 the impacts of energy efficiency level off, the lost revenue  
2 problem kind of tails off because you're then replacing, you  
3 know, energy efficiency reductions with ones that have rolled  
4 off and so there is no -- no significant net reduction in sales  
5 that leads to lost revenue at that point.

6 So all the lost revenues that impact the ROE are  
7 concentrated at the front end of the study period.

8 Q. But over the whole life of the IRP study period  
9 Ameren actually has an higher ROE under the RAP approach than  
10 under the low risk approach; is that correct?

11 A. Yes. And that's also partly driven by the fact  
12 that under -- under the regulatory treatment that currently  
13 exists there is a return on the -- on the regulatory asset by  
14 which the DSM program costs are recovered. The one that I spoke  
15 of earlier where, you know, in -- the regulatory asset builds up  
16 to 100 of millions of dollars that also presents a potential  
17 cost recovery risk to the company.

18 Q. And what is -- what is Ameren's current return  
19 on equity?

20 A. I -- I don't know for sure.

21 Q. Do you know is it --

22 A. Are you asking Ameren or Ameren Missouri?

23 Q. Ameren -- Ameren Missouri.

24 A. It's less than 10. It may be around 9 percent  
25 for -- for calendar year 2010.

1 Q. Okay.

2 A. Something to keep in mind though, you know, is  
3 when we're looking at these analysis results particularly with  
4 PVRP is that this -- this reflects no regulatory lag at all, so  
5 you don't see the effects of lost revenue.

6 Q. One second here. So if you turn to Page 18 of  
7 Chapter 9 of the IRP.

8 A. Okay.

9 Q. And at Table -- it says 0--

10 A. 0.10. Yeah.

11 Q. 0.1?

12 A. That's a -- that's a typo.

13 Q. It talks about uncertain factors; is that  
14 correct?

15 A. Uh-huh.

16 Q. And one of them is return on equity; is that  
17 correct?

18 A. That's right.

19 Q. Okay.

20 A. That represents allowed ROE that would be  
21 assumed for purposes of calculating rates.

22 Q. Okay. And so the low base and high assumed ROEs  
23 for purpose of calculating rates are all higher than Ameren's  
24 current ROE; is that correct?

25 A. That's right.

1 Q. Okay.

2 A. This represented a rising interest rate  
3 environment, so we were trying to reflect this over the 20-year  
4 planning horizon and not just what exists today where we've got  
5 very low interest rates.

6 Q. All right. And so as part of the IRP process  
7 Ameren evaluated retirement of Meramec in different possible  
8 years; is that correct?

9 A. Yes. When we were looking at alternative  
10 resource plans, initially we were looking at a couple of  
11 different retirement dates, 2022 and 2015. When we incorporated  
12 the compliance with the two different environmental regulation  
13 scenarios, then we had a specific driver for a potential  
14 retirement date to avoid large investments in control equipment.

15 Q. And did natural gas price projections play a  
16 role in assessing whether to retire Meramec?

17 A. Certainly they did. They were part of the  
18 scenarios in what we call a dependent uncertain factor.

19 Q. Okay. Okay. And do you have your response to  
20 comments?

21 A. Yes.

22 Q. Would you turn to Page 69.

23 A. Okay.

24 Q. And there's a discussion on this page regarding  
25 natural gas prices; is that correct?

1           A.       That's right.

2           Q.       Okay. And there's Ameren's response to Staff's  
3 concern that the forecast gas prices used in the IRP are higher  
4 than what is being reported in -- by the EIA; is that correct?

5           A.       Right. Right. Based on AEO-2011 that came out  
6 earlier this year. That's correct.

7           Q.       Okay. And Ameren has acknowledged that -- it  
8 states here that -- quote -- major shifts have recently occurred  
9 in natural gas markets and the price forecasts have changed  
10 dramatically since the IRP analysis was performed; is that  
11 correct?

12          A.       That's right. That's why we're incorporating it  
13 into our 2012 IRP annual update.

14          Q.       Okay. And those natural gas prices are now  
15 lower?

16          A.       That's right.

17          Q.       Okay. Which would -- if you plug that into your  
18 modeling that would -- that would militate in favor of  
19 retirement over continued operation of Meramec in comparison to  
20 what you previously modeled?

21          A.       Not necessarily because our expectations with  
22 respect to the environmental regulations have changed at the  
23 time that we did this analysis in 2010. So it doesn't  
24 necessarily mean it's going to favor retirement if for instance  
25 there's no requirement for a scrubber under the environmental

1 regulations that we expect now.

2 Q. But holding up to everything else constant, if  
3 all you change is the natural gas price?

4 A. If we used all the other assumptions that we  
5 made in 2010 and only changing natural gas prices, then you  
6 know, power prices you would expect to be lower and therefore  
7 the value in continuing to operate Meramec would be lower.

8 Q. Which would -- holding everything else equal  
9 would be more in favor of retirement than the initial analysis.  
10 Correct?

11 A. Right. Right.

12 Q. If we could go back to Exhibit 39HC. We can go  
13 into in camera.

14 JUDGE WOODRUFF: We need to go in camera, then?

15 MR. FISK: Yes, please. Thank you. So we're  
16 back to --

17 JUDGE WOODRUFF: Just a moment.

18 MR. FISK: Sorry.

19 MS. TATRO: He's not quite there yet.

20 (REPORTER'S NOTE: At this point, an in-camera  
21 session was held, which can be found in Volume 3, Page 202 to  
22 Page 203 of that transcript.)  
23  
24  
25



- 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

- 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

1 JUDGE WOODRUFF: We're back in regular session  
2 then. And just to be clear, you're saying nothing else  
3 entirely, not just --

4 MR. FISK: Yeah. Nothing else.

5 JUDGE WOODRUFF: All right. We are due for a  
6 break. We'll take a break before we go on to the next --  
7 continuing this cross-examination. And we'll come back at 3:05.

8 (Off the record.)

9 JUDGE WOODRUFF: All right. Let's come back to  
10 order, please. We're back from our break and we'll move on for  
11 cross-examination to MIEC.

12 CROSS-EXAMINATION BY MS. VUYLSTEKE:

13 Q. Good afternoon, Mr. Michaels.

14 A. Good afternoon.

15 Q. Mr. Michaels, I think you testified that the  
16 revenue requirement projection that's associated with the  
17 resource plans evaluated in Ameren's IRP process reflected  
18 consideration in potential greenhouse gas regulations that will  
19 impose costs on CO2 emissions?

20 A. They do, 33 percent probability.

21 Q. Please explain how that was factored into the  
22 resource plan evaluations.

23 A. Okay. We looked at uncertain factors including  
24 what we referred to as dependent uncertain factors, which are  
25 those that have an interactive nature with one another to come

1 up with the estimates for the values of those dependent  
2 uncertain factors. We relied on Charles River Associates, CRA,  
3 to perform some sophisticated econometric and electric system  
4 modeling to develop price scenarios that reflected variations in  
5 gas prices, electric system load growth for the Eastern  
6 interconnect and the also greenhouse gas regulations.

7           There were ten scenarios and with a 33 percent  
8 probability we had, I think it was four scenarios, that  
9 reflected a cap and trade scheme in combination with two  
10 different levels of load growth, two different levels of gas  
11 prices, so that had a 33 percent probability. All of the  
12 alternative and candidate resource plans were run through a  
13 probability tree that included those scenarios. In the case of  
14 alternative resource plans, we ran it only those scenarios.

15           When we got to risk analysis and evaluation of  
16 candidate resource plans, we evaluated each of the plans under  
17 both those scenarios and what we call independent uncertain  
18 factors, which included project costs for supply-side resources,  
19 DSM cost and performance for DSM resources and then also  
20 financing costs in the form of long-term debt, interest rates  
21 and allowed ROEs.

22           Q.       Okay. Approximately what magnitude of cost per  
23 ton was used for the CO2 costs?

24           A.       I'd have -- I'd have to look. I -- I believe it  
25 was in the \$30 range in 2025, but I can tell you for sure. What

1 we assumed was about \$30 by 2030.

2 Q. If the IRP process were to be repeated today, do  
3 you think that the probability of greenhouse gas regulation  
4 would be higher or lower than what was used in your projections?

5 A. In the form of cap and trade, I would expect the  
6 probability to be lower.

7 Q. If the IRP process were to be repeated today, do  
8 you think that the level of greenhouse gas emission prices or  
9 penalties would be higher or lower than what is assumed in the  
10 current plan?

11 A. I would then expect them to be around the same  
12 level of magnitude.

13 Q. Okay. I think you said if the IRP process were  
14 conducted today the forward prices for natural gas would be  
15 lower than what is included in your current plan?

16 A. That's correct.

17 Q. If forecasted prices for natural gas were lower  
18 and the assumptions about the level of any greenhouse gas  
19 related emission allowance cost or penalties were lower, would  
20 this mean that Ameren Missouri's avoided costs would be lower?

21 A. That's correct.

22 Q. If avoided costs were lower, does this mean that  
23 demand-side management programs would generally be less  
24 attractive than they are under your current IRP assumptions?

25 A. They wouldn't be as cost effective as they

1 appeared in our 2010 analysis. I would expect that they would  
2 by and large still appear cost effective in general.

3 Q. Less cost effective? It would be less cost  
4 effective; is that correct?

5 A. Yes, to the -- to the extent the avoided costs  
6 were lower than what we assumed in 2010.

7 Q. Okay. Now, can you list for me the primary  
8 factors that Ameren Missouri believes should be considered in  
9 making a resource plan selection?

10 A. Sure. They're the ones that were listed on the  
11 scorecard that we were talking about in Chapter 10, which  
12 included PVRR, rates, rate impacts, financial and regulatory  
13 considerations, economic development and environmental and  
14 portfolio diversity.

15 Q. Okay. Can I refer you to Page 29 of your  
16 surrebuttal testimony.

17 A. Okay.

18 Q. And you discuss there the difference between  
19 decision factors and -- quote/unquote -- other considerations.  
20 Do you have that?

21 A. Yes.

22 Q. Okay. On Lines 14 and 15 you refer to Kansas  
23 City's Power and Light Company's regulatory plan to support the  
24 construction of Iatan Unit 2 as a plant financing solution that  
25 is achieved through regulation under current law. Do you see

1       that?

2               A.       Yes.

3               Q.       So I -- would you agree that there are  
4       regulatory solutions available under current law to permit  
5       financing or large, new capital-intensive investments in  
6       generation facilities without changing the law; is that  
7       accurate?

8               A.       I believe so, yes.

9               Q.       If the cost associated with the emission of  
10      carbon dioxide were decreased from what was assumed in your  
11      economic evaluation, would that have the tendency to reduce the  
12      economic attractiveness of nuclear facilities relative to  
13      combined-cycle gas facilities?

14              A.       In general, I would expect so, yes.

15              Q.       If the forecasted of natural gas prices were for  
16      lower values than what has been included in your economic  
17      evaluations, would that also have the effect of reducing the  
18      relative attractiveness of a nuclear expansion option?

19              A.       I think we'd have to consider what the -- what  
20      the relative risk ranges are around the different variables  
21      involved in order to really come up with a conclusion. Those  
22      are the kinds of questions that we're trying to answer in  
23      conducting our 2012 IRP update.

24              Q.       All other things being equal?

25              A.       Yes. I would expect so.

1           Q.       Is it true that under a moderate environmental  
2 regulation scenario that a nuclear expansion option is not part  
3 of the preferred resource plan?

4           A.       That's correct.

5           Q.       Do you discuss your assumptions regarding the  
6 cost of constructing nuclear units beginning at Page 88 of your  
7 surrebuttal testimony?

8           A.       Yes.

9           Q.       Do you continue to maintain that the cost  
10 effectiveness -- excuse me -- the cost estimates used in your  
11 IRP filing are reasonable given nuclear industry construction  
12 cost experience and estimates as of today?

13          A.       I think in general the range is still fairly  
14 close. We're updating that range for our 2012 IRP update and  
15 expect it to be higher than what we used in the 2010 IRP.

16          Q.       Have you followed the progress of escalating  
17 cost forecasts for nuclear units under construction for plants  
18 such as the Vogtle plants in Georgia, the Sumner Units in South  
19 Carolina, the Duke Power Company units in North Carolina and the  
20 Florida Power Appropriation in Florida Power and Light cost  
21 estimates for units proposed to be constructed in Florida?

22          A.       I haven't personally followed the construction  
23 costs of elements of all of those units, but we do rely on  
24 experts in our nuclear operations to follow that and inform of  
25 us of relevant trends.



1           Q.       Based on the knowledge that you gain through  
2       your experts who follow those, what is your understanding of the  
3       experience with cost estimates and construction time estimates  
4       for these units?

5           A.       In general over the, you know, the mid-2000s,  
6       say 2005 and thereabouts, we've seen some increases in cost  
7       estimates driven heavily by increases in -- in material costs  
8       due to global demand for things like copper, steel, concrete.

9           Q.       Okay. Now, I'd like to refer to Chapter 10 of  
10      your integrated resource plan entitled Strategy Selection.

11          A.       Okay.

12          Q.       And I'll refer you to Chapter -- excuse me --  
13      I'll refer you to Table 10.1 on Page 4.

14          A.       Okay.

15          Q.       Does this illustrate the impact of sales  
16      variations on Ameren Missouri's return on equity?

17          A.       Yes, in a generic sense.

18          Q.       Does the last line on that table indicate that  
19      your modeling suggest that a 1 percent variation in sales  
20      volumes, either up or down, produces about a 36 or -- excuse  
21      me -- 36 or 37 basis point change to return on equity?

22          A.       Yes.

23          Q.       Could variations in weather from year to year  
24      cause changes in sales volumes of more than 1 percent as  
25      compared to normal weather?

1           A.       I don't know for sure, but I don't think it  
2 would be unreasonable to expect something like that.

3           Q.       Okay. And now could you please turn to Table  
4 10.3 on Page 6 of Chapter 10?

5           A.       Okay.

6           Q.       And does this table show certain financial  
7 parameters under four different approaches for recovering DSM  
8 program costs?

9           A.       Yes.

10          Q.       And could you explain what those four are?

11          A.       Yes. I'm going to start at the right end  
12 because that's the treatment that's in place today; six-year  
13 capitalized and amortized. And in that case program costs are  
14 collected in a regulatory asset and amortized over six years,  
15 accruing AFEDC from the time they're incurred until the time  
16 they're placed into rates.

17          Q.       And would you --

18          A.       That's -- that's the first one.

19          Q.       Okay.

20          A.       Do you want me to keep going through them?

21          Q.       Yeah. Please do.

22          A.       The -- the second column from the right is  
23 essentially the same as the -- the one I just explained except  
24 the amortization period is three years. And then the forecast  
25 expense tracker would look forward over some period of time to

1 estimate an average expense that would be incurred over that  
2 time and included in rates and have a tracker around it to  
3 measure the over or under recovery of costs associated with  
4 those program costs.

5 The historical expense tracker would do a  
6 similar thing, but instead of looking forward and taking an  
7 average, it would be based on history.

8 Q. Okay. Would you agree that all the four methods  
9 set forth in -- excuse me -- of all the four methods set forth,  
10 Ameren Missouri's average return on equity is the highest with  
11 the six-year capitalization and amortization approach?

12 A. Yes.

13 Q. Is it true that Ameren Missouri's utility's  
14 earnings are also highest under the six-year capitalized and  
15 amortized scenario?

16 A. They are if you assume no risk with respect to  
17 recovery of the regulatory asset.

18 Q. Is it true that when the six-year capitalized  
19 and amortized approach is used, Ameren has a higher investment  
20 base that it can earn on?

21 A. It's -- it's not necessarily true. It depends  
22 on what the competition for capital is across all investment  
23 opportunities within the company. We don't have an unlimited  
24 capability to finance investments in projects that we think on  
25 an individual basis are appropriate. So there is competition

1     for capital among any resources which are capitalized and  
2     recovered over some period of time.

3                 So in that respect, you know, if we had no  
4     choice but to capitalize the costs of these resources, it's  
5     likely that we would have to reduce the amount that's invested  
6     in other projects through -- through deferrals of some sort. So  
7     I don't think it's necessarily true that we have a larger  
8     investment base if we capitalize the cost of DSM programs.

9             Q.         Well, if I refer back to your chart, Table 10.3.

10            A.         Uh-huh?

11            Q.         And you look at regulatory asset in 2030 under  
12     six-year capitalized and amortized, is that not the highest  
13     amount?

14            A.         Absolutely. That's what causes us some concern  
15     about the potential for disallowance of those costs.

16            Q.         So your -- and if they work, you're not likely  
17     to get a disallowance, is that fair to say?

18            A.         I'm sorry. What?

19            Q.         Your -- do you believe that it would be likely  
20     that you would get a disallowance if that worked?

21            A.         I'm not going to hazard a guess about what any  
22     future commission might find with respect to the recoverability  
23     of costs that are collected in regulatory assets. I also have  
24     some concerns based on advice from our accounting experts with  
25     respect to imposition of international accounting standards that

1       may not allow for the booking of regulatory assets. So that's  
2       kind of why I shy away from the -- from the capitalization  
3       approach to recovering DSM costs.

4               Q.       Those accounting regulations are not in place,  
5       are they, Mr. Michaels?

6               A.       Not today, no. But we expect those to be in  
7       place at some point in the future and there's some uncertainty  
8       about whether or not regulatory assets would be allowed.

9               Q.       And some uncertainty about whether the rules  
10      will change?

11              A.       Sure.

12              Q.       Okay. And then --

13                      MS. VUYLSTEKE: I have no further questions.

14                      JUDGE WOODRUFF: Okay. Then we'll move on to  
15      MDNR.

16                      MS. FRAZIER: Thank you. I have just a few.

17      CROSS-EXAMINATION BY MS. FRAZIER:

18              Q.       I believe in response to some questions from  
19      Mr. Fisk when you were discussing or preparing various plans,  
20      you stated that lost revenues continued to build up? Do you  
21      remember that statement or that context to that discussion?

22              A.       Are you referring to my reference to the lost  
23      revenues that we have incurred and will incur as a result of the  
24      programs that we've already implemented?

25              Q.       Right.

1           A.       Yes.

2           Q.       And I think you said something to the effect  
3       that they would continue to build up over the next course of 20  
4       years under which the plans were formulated; is that right?

5           A.       Are you asking me about the programs that we've  
6       already implemented in 2009 to 2011 or are you asking about the  
7       different portfolios in the candidate resource plans?

8           Q.       The latter.

9           A.       Okay. In the candidate resource plans, yes. So  
10      the chart that we were referring to earlier showed the lost  
11      revenue impact on earnings, on ROE specifically, for both the  
12      RAP and low risk portfolios under a variety of rate case  
13      frequency assumptions.

14          Q.       Okay. But isn't it true that lost revenues end  
15      every time rates are reset?

16          A.       No. That's not true because one of the -- one  
17      of the particularities of the rate setting process is that costs  
18      are not trued-up to the same date that billing units are  
19      trued-up and also you have ongoing effects from -- you know, say  
20      for instance during the test year somebody implemented and  
21      energy efficiency measure in December. Well, you've only got  
22      one-twelfth of the year reflected in the billing units  
23      associated with that particular measure and so in the future  
24      you're going to have 12 months of that measure.

25                    So if you've only got one-twelfth of it, you

1 still have to wait until a future rate case, maybe even two or  
2 three rate cases to fully reflect the impact on the billing  
3 units of those measures that are implemented during and up to  
4 the test year.

5 Q. Okay. So based on what you just said, it is  
6 reflected or may be reflected in future rate cases?

7 A. Yes.

8 Q. Okay. All right. Do you have the rules in  
9 front of you?

10 A. I do.

11 Q. Okay. Can you please refer to 4 CSR 240-22.010  
12 Subparagraph C.

13 A. (2) (C)?

14 Q. (2) (C). Thank you.

15 A. Okay.

16 Q. And I'd like to focus on the second sentence in  
17 (2) (C).

18 A. Okay.

19 Q. It says: The utility shall document the process  
20 and rationale used by decision makers to assist trade offs and  
21 determine the appropriate balance between minimizations of  
22 expected utility costs and other considerations in selecting the  
23 preferred resource plan and developing contingency options. Are  
24 you with me?

25 A. Yeah. I'm with you.

1           Q.       All right. During the management meetings that  
2       you referenced in early testimony in October and November of  
3       2010, I believe you stated you were present; is that correct?  
4       Did the management teams specifically review, discuss the three  
5       decision factors that would be used as constraints under  
6       (2) (C) -- Section (2) (C)?

7           A.       Yes.

8           Q.       And did the management team specifically discuss  
9       the requirements of -- did the management team -- excuse me --  
10      discuss the -- assess the trade offs associated with those  
11      constraints?

12          A.       Yes. For the DSM cost recovery decision factor,  
13      the analysis that we did, which is what I just described, showed  
14      what the lost revenue impact was of both the RAP DSM and low  
15      risk DSM portfolio. At that point when we were looking at  
16      candidate resource plans, we had already eliminated a no DSM  
17      portfolio.

18                   Based on the increasing concern about the -- the  
19      impact of DSM programs and the ability to earn a -- our allowed  
20      return, management wanted to include in the preferred resource  
21      plan a portfolio that minimized the impact of that lost revenue.

22                   At that time we were also involved in our most  
23      recent rate case in which we were seeking first a fixed cost  
24      recovery mechanism, essentially a lost revenue recovery  
25      mechanism and switch to a billing unit -- a billing unit



1 addition to try and address the throughput disincentive for the  
2 programs that we were implementing at the time and expected to  
3 be implementing in the near future at that time.

4 As -- as those -- those efforts to seek an  
5 interim solution to the throughput disincentive were disallowed,  
6 that -- that -- that concern has increased to the point where we  
7 filed our notice of change in preferred plan in late October to  
8 reflect only a small amount of DSM in -- in the current year, or  
9 in 2012, until we were able to make a MEEIA filing and get  
10 approval of that at which point we would seek RAP DSM starting  
11 in 2013 and for a three-year period.

12 Q. I'll take that as a yes? The answer to my  
13 question was yes, you did --

14 A. Yes.

15 Q. -- consider the --

16 A. Yes. We did.

17 Q. -- trade offs? Thank you. And where is that  
18 document?

19 A. In Chapter 10? I'll have to find a specific  
20 reference.

21 Q. If you say Chapter 10 --

22 A. It's in Chapter 10.

23 Q. All right. Did the management team receive and  
24 review any analysis that pertains to the requirement in that  
25 section of determining the appropriate balance between

1 minimization and expected utility costs and other  
2 considerations?

3 A. Did they receive any information?

4 Q. Uh-huh.

5 A. Well, what we were provided was the evaluation  
6 of the lost revenue impact and they used that in their  
7 determination of whether or not we could pursue a plan with RAP  
8 DSM based on the -- based on the rule citation we were just  
9 discussing.

10 Q. Did the management team specifically discuss and  
11 analyze the requirements in (2)(C) Subsections 1, 2 and 3, which  
12 are specific considerations that are listed?

13 A. Yes. Number 1 through the risk analysis, you  
14 know, we did evaluate the impact of critical uncertain factors  
15 on plan performance. Under Sub 2 we evaluated two different  
16 scenarios for environmental regulation; the moderate and  
17 aggressive, which we've discussed during previous Q And A.

18 And 3, rate increases associated with  
19 alternative resource plans. We didn't see a rate impact that  
20 rose to the level, you know -- for instance in the RAP DSM plans  
21 we saw -- under moderate environmental regulation, we saw an  
22 increase in -- in rates of maybe up to a penny a kilowatt hour.  
23 That, you know, based on the review by management, didn't rise  
24 to the level of something that we believed would constrain the  
25 minimization of PVRR.

1 Q. All right. I'd like to change gears a little  
2 bit then. Did you participate in stakeholder meetings in 2010?

3 A. Yes.

4 Q. All right. And do you recall a September 14,  
5 stakeholder meeting?

6 A. I --

7 Q. Or a meeting in September 2010, let's say.

8 A. I -- I understand from looking at some materials  
9 that we had one and that I participated. I don't -- I don't  
10 have a specific recollection of it in my mind.

11 Q. All right.

12 MS. FRAZIER: Your Honor, may I approach?

13 JUDGE WOODRUFF: You may.

14 MS. FRAZIER: I should have said that before I  
15 stood up. I just handed you, everyone, that I just handed  
16 Mr. Michaels a copy of MDNR's comments dated June 23rd, 2011,  
17 which are marked as Exhibit No. 18. They have not been admitted  
18 yet, but they have been premarked and we will be admitting those  
19 later.

20 BY MS. FRAZIER:

21 Q. Have you seen this document before?

22 A. Yes.

23 Q. And can you please turn to Page 11. I'll be  
24 happy to wait for others to catch up. And this is a discussion  
25 of MDNR deficiency No. 2?

1 A. Okay.

2 Q. At the bottom paragraph on Page 11 it's talking  
3 about September 14th stakeholder meeting of 2010.

4 A. Right. Right.

5 Q. That you said you were at. And there's a quote  
6 from the transcript of that meeting that begins on Page 11 and  
7 goes to the top of Page 12. And I'd like to focus on the last  
8 page -- or the last sentence, which is at the top of Page 12.

9 A. Okay.

10 MS. TATRO: I'm sorry. I'm having trouble  
11 finding it.

12 MS. FRAZIER: You bet. Okay. So June 23rd.  
13 It's Page 11 of 33 of MDNR's comments.

14 MS. TATRO: Okay.

15 BY MS. FRAZIER:

16 Q. Okay. So now we're on Page 12, though. We  
17 started on -- the quote begins on Page 11 and goes on to Page  
18 12. Would you agree that that's a discussion of DSM cost  
19 recovery decision factors? The quote that begins on Page 11 and  
20 goes to Page 12.

21 A. It looks like that's subject of the discussion,  
22 yes.

23 Q. And the last sentence reads: But the idea here  
24 again, is that again we'll look at our potential portfolios  
25 under different cost recovery mechanisms and be able to

1 determine what kind of cost recovery does it take in order to  
2 enable achievement of different levels of demand-side savings.

3 A. Uh-huh.

4 Q. Do you know who made that statement?

5 A. Was it me?

6 Q. I believe it might have been. Do you recall  
7 making it?

8 A. I don't recall making it, but since we have a  
9 transcript, I accept that it was me.

10 Q. All right. So based upon that statement, do you  
11 think it's reasonable for stakeholders to assume that you're  
12 going to be looking at potential portfolios under different cost  
13 recovery mechanisms to determine what type of cost recovery  
14 it'll take to achieve different levels of demand-side savings?

15 A. I think I would expect that as a stakeholder,  
16 based on our expectation as we knew it at the time, yes.

17 Q. Thank you. All right. So I'd now like to turn  
18 to your testimony.

19 A. Okay.

20 Q. Surrebuttal testimony on Page 16, if you could  
21 refer to that. And the question at the top of the page has to  
22 do with an explanation of why an evaluation of different cost  
23 recovery mechanisms were not -- was not conducted.

24 A. Uh-huh.

25 Q. And the very last sentence -- I'm sorry -- the

1 last two sentences of the first full paragraph answer of your  
2 testimony says: Therefore there are no points on a continuum of  
3 cost recovery possibilities at which the constraint is removed.  
4 It's either addressed or it isn't. Establishing the need to  
5 address disincentives is all the analysis that is required and  
6 all the analysis that can be meaningful as part of an IRP.

7 A. Yes.

8 Q. Is that correct?

9 A. Uh-huh.

10 Q. So at what point in the IRP process was the  
11 decision made to not conduct the cost recovery analysis?

12 A. I believe it was at the time that we were  
13 having -- having our discussions with the Ameren Missouri  
14 management team about really what -- what does it take to do RAP  
15 DSM. It came out during those discussions that really the  
16 throughput disincentive was a -- was a minimum requirement that  
17 had to be addressed, but also the recovery of costs that  
18 currently are being collected through amortization of a  
19 regulatory asset.

20 So during those discussions it was determined  
21 that this was really a threshold addition rather than a  
22 continuum of possibilities. And really as I say in this same Q  
23 and A that you pointed to, it doesn't really matter to a great  
24 extent how that throughput disincentive is addressed, it's just  
25 important that it be addressed.

1                   And so that was really the -- the basis for  
2     saying, you know, what we really need to do is assess the  
3     problem, identify the issue, show it as a constraint and then,  
4     you know, after the -- after the IRP filing and after the MEEIA  
5     rules were adopted, determine that really the way to resolve  
6     this is through a MEEIA filing.

7                   Q.        So that -- so was it at that point that the use  
8     of demand-side cost recovery mechanism as a decision factor was  
9     created or formed?

10                  A.        No. We had -- we had introduced the term, which  
11     describes the concept listed in 22.010 (2) (C) earlier than that.  
12     It's just that the way we evaluated it became different than  
13     what we expected to at a previous point.

14                  Q.        How much earlier in the process?

15                  A.        Well, this was September, where you're pointing  
16     to the quote. And the -- and the stakeholder meeting, the  
17     discussions with management were in October and November.

18                  Q.        How and when was this decision communicated to  
19     stakeholders?

20                  A.        We didn't have another stakeholder meeting  
21     until, I think -- I think we had one the day before we filed the  
22     IRP. I don't remember if we -- if we specifically highlighted  
23     that. Certainly we had some meetings after the IRP was filed in  
24     early April and those were fuller of discussions of what was  
25     included in the filing.

1           Q.       So to your recollection, that was not  
2       communicated to the stakeholders in that meeting you just  
3       referred to?

4           A.       At which meeting?

5           Q.       The day before the filing?

6           A.       The day before the filing? I don't remember if  
7       we did or not. We -- really what we did the day before the  
8       filing was just do sort of a quick walk-through of what was in  
9       the IRP. I don't remember how much we got into specifics. I  
10      think it was a fairly short discussion.

11                   MS. FRAZIER: If I could just have a minute. No  
12      further questions.

13                   JUDGE WOODRUFF: Thank you. Public counsel?

14      CROSS-EXAMINATION BY MR. MILLS:

15           Q.       Good afternoon, Mr. Michaels.

16           A.       Good afternoon.

17           Q.       You got a lot of questions from a lot of people  
18      and some of them overlap with some of the things I want to talk  
19      about, so I'll try not to be repetitive, but I run the risk of  
20      being somewhat disjointed.

21           A.       Okay.

22           Q.       Try to bear with me. Just starting with the  
23      general background of your position, how many employees do you  
24      supervise currently?

25           A.       Currently -- hold on a second. It just changed.



1 Four.

2 Q. Okay. And in your -- do your current job  
3 responsibilities only including -- only include planning  
4 analysis for Ameren Missouri?

5 A. No. We also do work for Ameren Energy  
6 Resources.

7 Q. Okay. Do you do any for Ameren Energy  
8 Generation?

9 A. When I say Ameren Energy Resources, I'm talking  
10 generally about the business segment, which includes Ameren  
11 Energy Generation.

12 Q. And Ameren Energy Marketing as well?

13 A. Yes.

14 Q. Okay. And so is that just you or you and the  
15 employees that work for you?

16 A. Me, the employees that work for me and then also  
17 upper employees in corporate planning do tend to get involved.

18 Q. So as part of those other duties have you been  
19 involved in some Amerenwide planning analysis such as the  
20 Amerenwide Generation planning initiative?

21 A. Do you mean the Ameren Generation Initiative?

22 Q. Yes.

23 A. Okay. Yes.

24 Q. Can you give me a brief description of that  
25 initiative?

1           A.       The purpose of the initiative was really to  
2       evaluate the long-term portfolio mix of generation across the  
3       Ameren companies, which would include Ameren Missouri and what  
4       I've referred to as AER, the business segment, and to determine  
5       what an appropriate portfolio mix would be given the potential  
6       for future environmental regulations. That was the initial --  
7       initial charter for that initiative.

8           Q.       And what's the current status of the initiative?

9           A.       The -- the main thrust of the initiative is  
10      essentially wrapped up, so we've done some sort of wrap-up  
11      reporting about what was -- what was going on with each of  
12      Ameren Missouri and AER. So essentially that phase of it is  
13      complete. The planning for generation-related things continues  
14      to go on, but the main thrust of that initiative as it was  
15      conceptualized is complete.

16          Q.       Okay. And when you said reporting, was the  
17      report on the findings reported to the Ameren Board of  
18      Directors?

19          A.       Some of -- I believe the major decisions were  
20      reported to the Ameren Board of Directors. I don't know that  
21      there was a comprehensive report on the entire initiative  
22      provided to the Ameren Board.

23          Q.       Okay. And did any of those decisions have  
24      impacts on -- on Ameren Missouri?

25          A.       Absolutely. I think the main one was -- was our

1 decision to enter into long-term contracts for ultra low sulfur  
2 coal for compliance with environmental regulations.

3 Q. Was one of the goals of the initiative to  
4 develop a plan that optimized the Ameren fleet of generation on  
5 an Amerenwide basis?

6 A. I think that was true with respect to Ameren  
7 Missouri and AER, individually, to the extent that it was to  
8 optimize the Ameren generation fleet. I believe the focus was  
9 on how that would be accomplished with AER.

10 Q. Now, turning back to the IRP -- to this  
11 particular IRP filing, can you describe specifically your role  
12 in the -- in the process including the plan selection and rule  
13 compliance process?

14 A. Sure. I had general oversight responsibility  
15 for the specific analysis that was done for the IRP and when it  
16 came to the management decision process, I was the primary  
17 coordinator for organizing those discussions, preparing  
18 materials and then -- and then leading the team through the  
19 discussions of the various analyses and materials that we had  
20 provided to them on which to base their decisions.

21 Q. With -- and I think I asked Mr. Wood this  
22 earlier and he wasn't sure of the answer: Were there  
23 consultants hired to work on the IRP process who didn't file  
24 testimony in the case?

25 A. Yes. You know, we used Black and Veatch for a

1 number of analyses including an evaluation of coal and gas  
2 supply-side resource options. Black and Veatch also separately  
3 performed an evaluation of renewal energy potential within the  
4 state of Missouri and -- and immediate surroundings. We relied  
5 on a -- the Burns and Mac study that we discussed earlier with  
6 respect to cost property, Meramec out in the future for a number  
7 of different retirement date scenarios. That wasn't -- actually  
8 that was done as a -- as a result of review of the 2008 IRP.

9 We used Charles River Associates, CRA, to run  
10 out scenario model that we used for risk analysis for dependent  
11 uncertain factors, that's gas prices, low growth and greenhouse  
12 gas policy. Let's see, I think -- I think RIZZO may have  
13 provided an estimate of the cost for -- for a pump storage plant  
14 at Church Mountain that we evaluated in our alternative resource  
15 plans. Those are the main ones that come to mind.

16 Q. Now -- and this is -- I'm not even sure exactly  
17 how this came up, but in response to one of the questions from  
18 Mr. Williams you discussed a scenario in which a regulatory  
19 asset could grow to \$600 million.

20 A. Right. Yeah. 659 was actually the number if  
21 you look on the table that we were discussing earlier.

22 Q. And how many years between rate case filings  
23 does it take for it to grow to that amount?

24 A. How many years between rate case filings? Well,  
25 I'm not sure that it matters how many years there are between

1 rate case filings. What matters is at what point do you sort of  
2 level off where what you're spending is equivalent to what  
3 you're amortizing in any given year, so you know the regulatory  
4 asset reaches a -- over points in time really regardless of what  
5 the rate case assumptions might be.

6 Q. Do you have a copy of the integrated resource  
7 plan filing there with you?

8 A. Yes.

9 Q. Can I get you to look at Chapter 9, A?

10 A. Chapter 9, Appendix A?

11 Q. Chapter 9, Appendix A. Yeah.

12 A. Okay. What page?

13 Q. Page 30.

14 A. 30. Okay.

15 Q. Table 9A-3, that table is intended, in part at  
16 least, to comply with requirements in 070 (5)(A); is that  
17 correct?

18 A. Yes.

19 Q. And those figures are all expected values.  
20 Correct?

21 A. Right.

22 Q. Does the -- do the numbers that we see in the  
23 first column reflect the expected value of complying with future  
24 EPA regulations of air emissions, ash waste and water?

25 A. Yes, they do.

1           Q.       Can you show me the subjective probabilities  
2       that you assigned to different levels or types of future EPA  
3       regulations of air emissions, ash waste and water?

4           A.       We didn't assign separate probabilities to the  
5       two different environmental scenarios that we discuss. We  
6       looked explicitly at plans under moderate environmental  
7       regulation and then separate plans under aggressive  
8       environmental regulations. So those plans are mutually  
9       exclusive.

10          Q.       So you've got expected values in there, but  
11       they're under two different scenarios; is that correct?

12          A.       That's right. So for moderate environmental  
13       regulation, that includes the expected value of complying with  
14       those moderate environmental regulations and similarly for  
15       aggressive.

16          Q.       And do you consider that a probabilistic  
17       assessment, that process?

18          A.       For each of these plans, yes. These are the  
19       probability weighted averages of the cost for those plans under  
20       all of the different scenarios and independent uncertain  
21       factors.

22          Q.       Did you -- did the modeling of possible future  
23       EPA regulations of air emissions, ash waste and water -- did you  
24       perform that in the same way that you did for possible future  
25       CO2 regulations?

1           A.       No. For future CO2 regulations we included the  
2 potential for different types of greenhouse gas regulations as  
3 part of the scenarios, particularly because there wasn't an  
4 explicit compliance requirement associated with those. So while  
5 the different CO2 regulations through either a specific price on  
6 carbon or through the effects of what we called energy bill  
7 mandates on power prices and other commodities, those -- those  
8 impacts were reflected on the performance of the alternative  
9 resource plan whereas the other EPA regulations that we're  
10 discussing here required some specific action to comply with the  
11 rules on Ameren Missouri's system.

12                   MR. MILLS: Judge, I'd like to have an exhibit  
13 marked.

14                   JUDGE WOODRUFF: Okay. We're up to No. 41.

15                   (Wherein; OPC Exhibit No. 41 was marked for  
16 identification.)

17                   MR. MILLS: Judge, are we at 41?

18                   JUDGE WOODRUFF: 41, yes.

19 BY MR. MILLS:

20           Q.       Mr. Michaels, do you recognize what's been  
21 marked as Exhibit 41 as a data request submitted to you by  
22 Public Counsel and your response --

23           A.       Yes.

24           Q.       -- to that DR?

25           A.       Yes.

1 Q. And is that -- is that response accurate?

2 A. Yes.

3 MR. MILLS: Judge, with that I will offer  
4 Exhibit 41 into the record.

5 JUDGE WOODRUFF: Exhibit 41 has been offered.  
6 Any objections to its receipt?

7 Hearing none, it will be received.

8 (Wherein; OPC Exhibit No. 41 was received into  
9 evidence.)

10 BY MR. MILLS:

11 Q. Okay. Changing gears here. In your  
12 testimony -- I believe it begins at about Page 88, you talk  
13 about nuclear cost assumptions.

14 A. Since we talked about it very recently, I recall  
15 that to be correct.

16 Q. And I believe you said in response to some  
17 earlier questions that you are in the process of updating  
18 nuclear construction cost estimates?

19 A. That's right.

20 Q. And are you far enough in that process to -- to  
21 give us an idea of the -- sort of the order of magnitude of  
22 changes you expect to see from that analysis?

23 A. No. I don't believe. My head's so been deeply  
24 delving into -- into the 2011 IRP, I -- I have trouble recalling  
25 what we're using. We have developed the -- for the IRP update



1 analysis, but -- and I know that generally the costs are higher  
2 than what we used in the 2010 IRP. I just can't give you a  
3 specific number.

4 Q. Can you give me any sort of subjective analysis?  
5 Dramatically higher or slightly higher?

6 A. I'd say less than dramatic, but greater than  
7 slight. It's not insignificant.

8 Q. Okay. Now, can I ask you to turn to Page 93 and  
9 the answer at the very bottom of the page. 93. And I'm going  
10 to refer you to -- were you here when Mr. Wood was on the stand  
11 earlier today?

12 A. Yes.

13 Q. And I asked him a question about the roadmap?

14 A. Uh-huh.

15 Q. As I understood, his response was that if there  
16 was legislative action or commission action such that the two  
17 contingencies with respect to nuclear plant construction and DSM  
18 cost recovery were both met in the relatively near future, that  
19 that would trigger an almost immediate reanalysis of some of the  
20 plans. Do you recall that?

21 A. Yes.

22 Q. And when I look at your answer at the bottom of  
23 Page 93, it seems to me that you're indicating that -- that the  
24 company's not even going to be looking at possible new  
25 construction on the nuclear side until 2016. Am I reading your

1 answer incorrectly?

2 A. That's correct based on the inclusion of the  
3 nuclear plant in that specific contingency plan.

4 Q. Okay. So which is it? Is it going to be you're  
5 going to reevaluate almost immediately if that -- if that  
6 contingency is met or you're still going to not be looking at it  
7 until 2016?

8 A. Well, I know of -- I know of no effort in the  
9 legislative arena to try and change in any grand way the  
10 prohibition against QWIP recovery. So in that respect there  
11 really is no urgency.

12 Q. So that's -- that's not going to be something  
13 that Ameren's pursuing this next legislative session?

14 A. I don't know of anything in that respect.

15 Q. Do you still have -- and I'm switching gears  
16 back again. Appendix A to Chapter 9, do you still have that  
17 handy?

18 A. Yeah.

19 Q. I believe I'm going to ask you to look at Table  
20 9A-1, which is near the beginning, but I don't have an exact  
21 page.

22 A. Okay. With capacity position tables?

23 Q. Yes.

24 A. Okay.

25 Q. Now, isn't it -- isn't it true that throughout

1     these various plans that the company allows the capacity  
2     position to vary from one year to the next and from one scenario  
3     in the next and make up the difference with purchases and sales?

4             A.       The purchases and sales become part of the  
5     capacity position, but yes. Those are used to fill the  
6     difference between resources that we have and what the need is  
7     for load and reserve requirements.

8             Q.       And isn't it true that under some of the  
9     scenarios that capacity swings can go from as much as 200  
10    megawatts minus to 300 megawatts plus?

11            A.       That sounds about right. That's -- that  
12    reflects the criteria that we used when determining when a new  
13    supply-side resource would go in either half the size of the  
14    resource a 500 megawatts minimum or maximum.

15            Q.       Given that, why is it appropriate to install  
16    wind resources with combustion turbines the way that you've  
17    done -- the way you've modeled them in this integrated resource  
18    plan filing?

19            A.       Well, what we were trying to do was to reflect  
20    relatively similar blocks of capacity for meeting load and  
21    reserve requirements. If you look at the capacity that they  
22    were getting from MISO at the time we did this analysis, it was  
23    only 8 percent. So if you were looking for a resource in the 4  
24    to 600 megawatt range, you know, 400 minimum to be comparable to  
25    the other resources that we evaluated, it would take 5,000

1 megawatts of wind in order to give you 400 megawatts of  
2 regulatory capacity.

3 Since we didn't want to go more than 500  
4 megawatts short simply putting in, you know, 500 megawatts of  
5 wind for instance and getting -- whatever that would be -- 40  
6 megawatts of regulatory capacity, we didn't want to be that  
7 short going out into the future.

8 Q. But you have times on these tables where you are  
9 that far short?

10 A. Two to 300 megawatts, yes. But those are based  
11 on installing a resource when you get to half the size of that  
12 resource. So you have a slight shortfall before the resource is  
13 put in -- into service, and then an excess. Both of which are  
14 made up in the market, either we're purchasing based on the  
15 market price at capacity or we're selling the excess into the  
16 market at market price capacity.

17 Q. And in some instances you're 600 megawatts short  
18 capacity. Correct? For example, plan C-2 in 2013?

19 A. C-2. In what year?

20 Q. 2013.

21 A. That's -- well, we're long right now, so that  
22 643 --

23 Q. Right.

24 A. -- megawatts capacity --

25 Q. You're --

1           A.       -- sales. Yeah.

2           Q.       And for many of those similar plans, you're that

3 long for --

4           A.       Yeah. 2013 is the same for virtually all of

5 them, if not all of them.

6           Q.       So for several years you're either -- you're

7 either 600 -- over 600 or almost 600 --

8           A.       Long, yes.

9           Q.       Long. Right.

10          A.       And that's a function of our -- just our current

11 capacity position. The resources that we have today.

12          Q.       Now, staying on Table 9A-1, there are -- there

13 is one particular plan -- it's the very last one -- where you

14 show that you can achieve, by the end of the planning horizon,

15 an 826 megawatt load reduction through demand response; is that

16 correct?

17          A.       That's right.

18          Q.       And yet in none of the other plans do you show

19 anything much greater than about 200 megawatts of demand

20 response; is that correct? About 244, I think, is the maximum

21 in any of the other plans.

22          A.       Yeah. It's 329 megawatts in Plan B-1. It looks

23 like the rest of the plans on that same page is 244 and for all

24 the plans on Page 2, it's 244.

25          Q.       And for a number of plans it's -- at least one

1 or two of the plans it's zero or 20. Correct?

2 A. Yes. Those are -- those are the plans on Page  
3 3.

4 Q. Plan R-0, for example?

5 A. Yes.

6 Q. Has zero for demand response?

7 A. R-0, R-1, R-2. That's correct. Well, 20  
8 megawatts in 20 -- R-2.

9 Q. And given that at least one of the plans you  
10 achieved over 800, how can -- how can you -- how did you analyze  
11 the other plans to know that they've included enough demand  
12 response such that you have achieved all cost effective DSM?

13 A. Well, what we did in constructing all of our  
14 alternative resource plans was to look at what the capacity need  
15 is. The first resource that we put in was energy efficiency,  
16 and that was all the energy effi-- energy efficiency that we  
17 could do in a particular portfolio.

18 So you see for the RAP DSM plans on Page 3,  
19 that's all, you know, over 1,000 megawatts by the end of the  
20 planning horizon for those plans with RAP DSM.

21 We then assessed the extent to which demand  
22 response resources would be needed in order to meet the load and  
23 reserve requirements. And so we had a -- we had a portfolio of  
24 demand response resources and we -- we simply slid the timing of  
25 those in order to meet the capacity need for whatever the

1 particular resource plan was.

2 Q. In other words, you didn't add demand response  
3 in any year in which you were not capacity short; is that  
4 correct?

5 A. Well, I don't know that that would necessarily  
6 be true, but what we did was try to target meeting the load and  
7 reserve requirement really. For plans where we retirement  
8 Meramec, we targeting meeting load and reserve requirement with  
9 additional demand response in the year that it retired.

10 But for those plans where Meramec was not  
11 retired, which would be the top three plans on Page 3, we simply  
12 looked at what the -- what the -- what the need would be in 2030  
13 and then set the timing of the beginning of the DR programs in  
14 order to match the load and reserve requirements in that year.

15 Q. So looking, just for example, at Plan R-0, have  
16 you done any analysis to determine whether -- and that shows  
17 zero demand response through the planning horizon. Correct?

18 A. That's right.

19 Q. Have you done any analysis to show that that  
20 PVRR would be lower if you did include demand response in some  
21 of those years?

22 A. We did an analysis of an alternative portfolio  
23 which we called the capacity calibrated portfolio. I'll explain  
24 what that means, but in those portfolios we -- we kind of took  
25 the opposite approach that we did in these portfolios where we

1 put the energy efficiency impacts on peak load requirements in  
2 first and then later demand response on top. In the capacity  
3 calibrated portfolio we did it the other way around; we put in  
4 demand response first and then we -- then we tailored the energy  
5 efficiency impacts in order to meet load reserve requirements.

6 The analysis of that portfolio showed that it  
7 resulted in higher PVRR than the plans that we constructed in  
8 which we put the energy efficiency first and then the demand  
9 response.

10 Q. So as I understand the way you constructed  
11 those, you essentially used demand response and energy  
12 efficiency as offsets and just chose one to be implemented first  
13 and one to be implemented second?

14 A. Yeah. Essentially we treated the demand-side  
15 resources the same way we treated the supply-side resources. We  
16 put them in when we need capacity with that, you know, half the  
17 size of the unit criteria that I was talking about because, you  
18 know, supply-side resources come in large chunks. But we  
19 essentially treated them the same way, we didn't put in say  
20 additional combined cycles if it looked like it would reduce  
21 PVRR.

22 We just put in the resources that we needed,  
23 supply-side or demand-side, in order to meet the reliability  
24 requirement based on reserve margin in MISO.

25 Q. And did you do any plans in which you analyzed



1 essentially adding demand response to the level of cost  
2 effectiveness and energy efficiency and sort of stack them  
3 instead of chose them as alternatives?

4 A. Do you mean adding demand response beyond what  
5 we needed for load and --

6 Q. Yes.

7 A. -- reserve requirements? No, we didn't.

8 MR. MILLS: Judge, that's all the questions I  
9 have.

10 JUDGE WOODRUFF: Okay. We'll go to questions  
11 from the bench. Commissioner Kenney.

12 COMMISSIONER KENNEY: No. I don't have any  
13 questions. Thank you.

14 JUDGE WOODRUFF: Okay. Then there's no  
15 questions from the bench, so no need for recross. Any redirect?

16 MS. TATRO: Just a bit.

17 REDIRECT EXAMINATION BY MS. TATRO:

18 Q. Mr. Michaels, when you were being cross-examined  
19 by Mr. Williams, there was discussions of Exhibits 9 and 10,  
20 which were the AmerenUE comments in the previous rulemaking and  
21 the Commission's order. Do you still have those exhibits up  
22 there?

23 A. I think I do.

24 Q. I think 9 and 10 were the right numbers. I'm  
25 sorry, it's 8 and 9.

1 A. 8 and 9. Okay.

2 Q. So the one that says initial comments of Union  
3 Electric Company.

4 A. Got it.

5 Q. All right. On Page 28 of that document --

6 A. Yes.

7 Q. -- Mr. Williams had you read to yourself the  
8 four different definitions of primary, which the company had set  
9 forth --

10 A. Right.

11 Q. -- in comments?

12 A. Right.

13 Q. Are those definitions consistent with the way  
14 that the company has interpreted primary in its current resource  
15 plan filing?

16 A. The first one absolutely is. The second one  
17 absolutely is. The third one, which appears to be called 2B --  
18 the third, preparatory to something else on a continuing  
19 process, I don't think applies to what we did. As I read these  
20 comments, I see the distinction that the company was trying to  
21 make at that time was whether or not primary meant the first of  
22 importance in a list of criteria or whether it meant it was done  
23 earlier in time than evaluation based on other criteria.

24 What we did is based on the first definition,  
25 that it's of first importance.

1           Q.       All right. And then in Exhibit 8, which is the  
2 Commission's order of rulemaking --

3           A.       Yes.

4           Q.       -- which doesn't have page numbers -- but he had  
5 you read a section that was under 4 CSR 240-22.010?

6           A.       Right.

7           Q.       The last paragraph right before it gets to 010  
8 Sub 2.

9           A.       Right.

10          Q.       Are you on that page?

11          A.       Yes.

12          Q.       Okay. What did the Commission -- did the  
13 Commission make a change to the rule based on the definition of  
14 primary?

15          A.       The last sentence says: Based on the foregoing,  
16 the Commission finds that this section will be adopted as  
17 modified. I'm not real sure what that modification refers to,  
18 but the last paragraph refers to holding to the proposition that  
19 cost minimization should be of primary importance.

20          Q.       Okay. Later on, Mr. Williams asked you who  
21 determined that energy efficiency wouldn't be on the final  
22 scorecard after pointing out that it was earlier on the  
23 screening scorecard. Do you remember --

24          A.       Right.

25          Q.       -- part of that conversation?

1           A.       Yes.

2           Q.       And can you explain why it was included in the  
3 screening and not included later on?

4           A.       The reason we included it in the screening  
5 scorecard was that at the time we began evaluation of the  
6 alternative resource plans, we didn't know how those results  
7 were going to turn out. And one of our objectives in evaluating  
8 alternative resource plans was to make sure that we had a robust  
9 and diverse set of candidate resource plans to evaluate during  
10 risk analysis.

11                   So not knowing what those results might be, we  
12 wanted to make sure that we would have some energy efficiency  
13 plans in the mix, some heavily weighted energy efficiency plans  
14 in the mix. So we included the 10 percent weighting at that  
15 point.

16                   When we got to the time of determining what the  
17 preferred should be -- or actually when the management team got  
18 to that point -- the -- we looked at that and said, well you  
19 know, we included this bias during the screening of alternative  
20 resource plans, we don't really need that in here because now we  
21 see the effects of the -- of the PVRR analysis and all the other  
22 related analysis.

23                   We didn't include any such bias for a particular  
24 supply-side resource for instance. So once it had done its job  
25 in the alternative plan screening, we dropped it for the

1 preferred plan selection.

2 Q. So it wasn't an attempt to tilt the selection of  
3 the preferred plan against energy efficiency?

4 A. Not at all.

5 Q. All right. NRDC asked you some questions about  
6 the 29 years of the end -- and you kept talking about you wanted  
7 to capture the end effects of the decisions made in the 20-year  
8 plan. Do you recall that discussion?

9 A. Yes.

10 Q. Can you explain to me what do you mean by end  
11 effects?

12 A. Well, when we construct our resource plans,  
13 we're looking out over a 20-year planning horizon. So for us in  
14 this IRP it was 2011 to 2030. When you're putting in resources  
15 and -- you know, for some of these alternative resource plans we  
16 were looking at supply-side resources that we're going in as  
17 late as 2029.

18 It wouldn't be reasonable to evaluate the PVRR  
19 effects of a power plant going in 2029 and only include two  
20 years of those effects. So for all of the alternative resource  
21 plans and for all the candidate resource plans we conducted our  
22 evaluation with an additional -- it turned out to be nine years,  
23 through 2039 so that we could see the effects on PVRR of the  
24 decisions that were made during that first 20-year period.

25 So there -- there is no connection between

1 expectations, for instance, about retirement of the Meramec  
2 plant and the simply continuation of the system as is from 2030  
3 on in order to capture the PVRR impacts of the decisions that  
4 are made during the first 20 years.

5 MS. TATRO: Your Honor, my next follow-up is  
6 about an exhibit -- Exhibit 40, which was marked HC. Can we go  
7 in camera, please?

8 JUDGE WOODRUFF: We certainly can.

9 (REPORTER'S NOTE: At this point, an in-camera  
10 session was held, which can be found in Volume 3, Page 248 to  
11 Page 250 of that transcript.)  
12  
13  
14  
15  
16  
17  
18  
19  
20  
21  
22  
23  
24  
25

- 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

- 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



- 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

1 JUDGE WOODRUFF: And we're back in regular  
2 session.

3 BY MS. TATRO:

4 Q. All right. Also in response to of some NRDC's  
5 questions, there was a discussion about gas prices and whether  
6 they had changed since the assumptions that were put into the  
7 IRP. Do you remember that discussion?

8 A. Yes.

9 Q. Can you explain why you believe the gas price  
10 assumptions that were used in the IRP filing are reasonable?

11 A. Yes. At the time we did our IRP analysis --  
12 this was, you know, most of 2010 when it was conducted. CRA  
13 actually did their modeling scenarios in February of 2010. At  
14 that time the assumptions that were made with respect to gas  
15 prices were consistent with what the Department of Energy's  
16 annual energy outlook that was published at about that same  
17 time, maybe a little bit later.

18 So the gas price assumptions that we used in the  
19 analysis in 2010 were -- were in line with other reliable  
20 sources available at that time.

21 Q. And the fact that gas price assumptions have  
22 changed, does that mean the original filing wasn't in compliance  
23 with the Commission's IRP rules?

24 A. No, it doesn't. In fact, the IRP rules  
25 contemplate potential changes in uncertain factors. We included

1 in Chapter 10 of our filing our plan for monitoring critical  
2 uncertain factors including gas prices. And as a result of  
3 those monitoring activities, we are updating our gas price  
4 assumptions for our 2012 IRP annual update.

5 Q. And when is that due?

6 A. It's -- the meeting has to be held in early  
7 April and the report has to be provided at least 20 days prior  
8 to the meeting, so early March.

9 Q. Then MIEC asked you some questions -- several  
10 different questions in which she said if the IRP process was  
11 repeated today this would have changed and that would have  
12 changed. One was greenhouse gas assumptions.

13 A. Right.

14 Q. Were the greenhouse gas assumptions you used at  
15 the time of the filing reasonable assumptions?

16 A. They were. They were based on the informed  
17 expectations of internal experts that are -- or were -- probably  
18 still are actively engaged in the regulatory and legislative  
19 arena to make an assessment about what greenhouse gas regulation  
20 would be in the future.

21 Q. And the fact that some of those assumptions may  
22 have changed since the filing date, do you believe that means  
23 Ameren Missouri's initial filing is deficient?

24 A. No, it doesn't. Just like I stated with gas  
25 prices, we have to continue monitoring all the critical

1 uncertain factors and update as appropriate. As a result, we're  
2 updating our assumptions about greenhouse gas regulation for our  
3 2012 annual update.

4 Q. You were also asked about cost assumptions for  
5 nuclear power. Do you remember that?

6 A. Yes.

7 Q. Same question: If those cost have changed, does  
8 that mean the assumptions -- well, first of all were your  
9 assumptions at the time of the filing reasonable?

10 A. Yes, they were. They agreed with a number of  
11 external sources. And in fact, we're still in line with the  
12 report produced by DOE, the annual energy outlook, earlier this  
13 year after we filed the IRP.

14 Q. And the fact that there may -- if you were to do  
15 the analysis again, you may have different values, does that  
16 mean that the initial filing was deficient?

17 A. Yes.

18 Q. It does mean it was deficient?

19 A. No. It doesn't mean that it was deficient.

20 Q. You've been up there a long time.

21 And you were asked some questions by the  
22 Department of Natural Resources specifically about a quote from  
23 one of the stakeholder meetings. Do you remember that  
24 conversation?

25 A. Yes.

1           Q.       Do you believe that the fact that you didn't do  
2       the analysis you thought you were going to do violates any  
3       portion of the Commission's integrated resource planning rules?

4           A.       No, I don't. I think the stakeholder meeting  
5       process that we used was an effort to try and keep everybody up  
6       to date as to what we were doing at the time we were doing it  
7       and what we were expecting to do. I don't think that we would  
8       want a process where everything that we said we might do would  
9       be construed as a promise to do something.

10                   And in fact the analysis that we did  
11       specifically addresses the issues that we identified as another  
12       consideration under 22.010 (2) (C).

13                   MS. TATRO: I have no further questions. Thank  
14       you.

15                   JUDGE WOODRUFF: All right. Then Mr. Michaels,  
16       you can step down.

17                   (Witness excused.)

18                   JUDGE WOODRUFF: We would then be moving to  
19       staff witnesses, but it is 4:30. I don't anticipate doing  
20       another witness today. We have had some discussions off the  
21       record about whether there would in fact be cross-examination of  
22       all of Staff's witnesses. Has any decision be made on that?

23                   MR. WILLIAMS: I'm not aware at this point, but  
24       if no parties and the Commission have no questions for any of  
25       Staff's witnesses other than Mr. Rogers, I propose to offer all

1 of Staff's exhibits and tender Mr. Rogers for examination.

2 MR. BYRNE: Your Honor, we don't have any  
3 questions for anybody other than Mr. Rogers.

4 JUDGE WOODRUFF: All right. Anybody else want  
5 questioning of Staff witnesses?

6 MR. MILLS: No. Just Mr. Rogers.

7 JUDGE WOODRUFF: All right. Well, we'll  
8 certainly bring Mr. Rogers in tomorrow, then. Mr. Williams, if  
9 you want to go ahead and offer the exhibits that you were  
10 talking about.

11 MR. WILLIAMS: That's what I was about to try to  
12 do.

13 JUDGE WOODRUFF: Okay.

14 MR. WILLIAMS: Staff offers Exhibit 11, which is  
15 its report including the affidavits and errata sheet, as Exhibit  
16 No. 11. I'll offer that at this point.

17 JUDGE WOODRUFF: Okay. And that's -- what was  
18 the date on that report so it's clear?

19 MR. WILLIAMS: The report was file June 23rd.  
20 The affidavits, I believe, were filed on the 27th, if I recall  
21 correctly. And the errata sheet was filed on June 27th.

22 JUDGE WOODRUFF: Okay. And you said that was  
23 marked as 11?

24 MR. WILLIAMS: Yes.

25 JUDGE WOODRUFF: All right. Exhibit 11 has been

1       offered. Any objection to its receipt?

2                       Hearing none, it will be received.

3                       (Wherein; Staff Exhibit No. 11 was received into  
4       evidence.)

5                       MR. WILLIAMS: And I'll also offer the rebuttal  
6       testimony of David Roos, which has been marked as Exhibit  
7       No. 11.

8                       JUDGE WOODRUFF: It must be 12 because 11 was --

9                       MR. WILLIAMS: I'm sorry, 12.

10                      JUDGE WOODRUFF: Mr. Roos rebuttal. Any  
11       objections to its receipt?

12                      Hearing none, it will be received.

13                      (Wherein; Staff Exhibit No. 12 was received into  
14       evidence.)

15                      MR. WILLIAMS: I offer Roos surrebuttal, which  
16       has been marked as Exhibit 13.

17                      JUDGE WOODRUFF: All right. Exhibit 13 is  
18       surrebuttal. Any objections to its receipt?

19                      Hearing none, it will be received.

20                      (Wherein; Staff Exhibit No. 13 was received into  
21       evidence.)

22                      MR. WILLIAMS: I offer Leon Bender's rebuttal,  
23       which has been marked as Exhibit 14.

24                      JUDGE WOODRUFF: All right. 14 has been  
25       offered. Any objections to its receipt?

1                   Hearing none, it will be received.

2                   (Wherein; Staff Exhibit No. 14 was received into  
3 evidence.)

4                   MR. WILLIAMS: I offer Exhibit No. 15, which is  
5 the rebuttal testimony of Randy Gross.

6                   THE COURT REPORTER: I'm sorry. Randy?

7                   MR. WILLIAMS: Randy Gross.

8                   JUDGE WOODRUFF: You said that was rebuttal?

9                   MR. WILLIAMS: Yes.

10                  JUDGE WOODRUFF: Exhibit 15 has been offered.  
11 Any objections to its receipt?

12                  Hearing none, it will be received.

13                  (Wherein; Staff Exhibit No. 15 was received into  
14 evidence.)

15                  MR. WILLIAMS: I'll also offer the rebuttal  
16 testimony of John Rogers, which has been marked as Exhibit  
17 No. 16.

18                  JUDGE WOODRUFF: That's rebuttal of Rogers. And  
19 I understand -- there will -- he will take the stand tomorrow?

20                  MR. WILLIAMS: Yes.

21                  JUDGE WOODRUFF: Anyone -- it's been offered.  
22 Does anyone want to object at this point?

23                  MS. TATRO: As long as it doesn't limit the  
24 right to do cross?

25                  MR. WILLIAMS: No.



1 JUDGE WOODRUFF: Yeah. It will not limit the  
2 right to give cross. So Rogers rebuttal is received, 16.

3 (Wherein; Staff Exhibit No. 16 was received into  
4 evidence.)

5 MR. WILLIAMS: And I'll also offer the  
6 surrebuttal testimony of John Rogers, which has been marked as  
7 Exhibit No. 17.

8 JUDGE WOODRUFF: Again, the same limitation that  
9 it certainly does not limit any right to cross-examination of  
10 Mr. Rogers, who will take the stand tomorrow.

11 Any objections to receiving 17 under those  
12 conditions?

13 Hearing no objections to it, it will be  
14 received.

15 MR. WILLIAMS: Thank you.

16 (Wherein; Staff Exhibit No. 17 was received into  
17 evidence.)

18 JUDGE WOODRUFF: Is that it for Staff? That was  
19 all?

20 MR. WILLIAMS: That's it.

21 JUDGE WOODRUFF: Okay. All right. And then  
22 we'll begin tomorrow morning at 8:30 with Mr. Rogers on the  
23 stand.

24 MR. ROBERTSON: Excuse me. There's one matter  
25 I'd like to bring up if I could.

1 JUDGE WOODRUFF: Certainly.

2 MR. ROBERTSON: That's the question of briefing  
3 schedule. We never settled on that in our joint filing. So now  
4 might be an opportunity to take that up.

5 JUDGE WOODRUFF: All right. We do have a few  
6 minutes here. I will expect briefs. It certainly will be  
7 helpful. One round or two?

8 MR. MILLS: Two.

9 JUDGE WOODRUFF: Mr. Mills says two.

10 MR. MILLS: Two.

11 JUDGE WOODRUFF: I think that would be helpful  
12 as well. I assume we'll want to get after the holiday  
13 obviously, so mid-January for initial, early February for late,  
14 or for the second round?

15 MR. FISK: When will we have the transcript?

16 MS. TATRO: Can you say that again?

17 JUDGE WOODRUFF: Mid-January and early February  
18 for the two rounds.

19 MS. TATRO: Well, can we ask first of all how  
20 long does it take to get the transcripts? That sometimes takes  
21 a --

22 JUDGE WOODRUFF: We can expedite the transcript.

23 MS. TATRO: I'd like to not work on a brief over  
24 the Christmas holiday to be perfectly honest.

25 JUDGE WOODRUFF: I can understand that. That's

1 true for the court reporter as well. As far as wanting these  
2 expedited, it's whenever I order it basically.

3 THE COURT REPORTER: I'm sorry?

4 JUDGE WOODRUFF: How quickly we can expedite the  
5 transcript is whenever -- the Commission can order it at certain  
6 times and so forth. But I don't want to make the court reporter  
7 work too hard over the holidays either, so let's say -- let me  
8 pull up the calendar here.

9 Let's say -- well, assuming we have the  
10 transcript in normal working -- would be 10 working days, that  
11 puts us around January 1st. Three weeks after that would be  
12 January 20th, which is a Friday for initial briefs? I don't  
13 hear anybody complaining about that.

14 Two weeks after that would be February 3rd. I  
15 hear wincing back there from Ameren.

16 MS. TATRO: Can we have --

17 MR. BYRNE: More time, please.

18 JUDGE TATRO: More time than that?

19 MS. TATRO: Another week at least.

20 JUDGE WOODRUFF: February 10th.

21 MR. MILLS: Judge, then you're in the middle of  
22 another Ameren case.

23 JUDGE WOODRUFF: I was going to say --

24 MR. MILLS: Which is the MISO case.

25 JUDGE WOODRUFF: That is the MISO case.

1 MS. TATRO: But that doesn't involve me.

2 MR. MILLS: And it's all about you.

3 MS. TATRO: It is.

4 JUDGE WOODRUFF: How about February 15th.

5 That's the following Wednesday?

6 MR. MILLS: Can we make it the 17th?

7 JUDGE WOODRUFF: We can make -- well, that may  
8 be a holiday. I'm not sure.

9 MR. MILLS: Okay.

10 JUDGE WOODRUFF: Let's make it to be -- to avoid  
11 holidays -- February 21st.

12 MS. TATRO: I'm happy with that. Thank you.

13 MR. WILLIAMS: What are the dates again?

14 JUDGE WOODRUFF: January 20th for the initial,  
15 and February 21st for reply.

16 MR. FISK: And we can expect the transcript  
17 when?

18 JUDGE WOODRUFF: Around January 1st.

19 All right. Then with that, we are adjourned  
20 until tomorrow morning at 8:30.

21 (Off the record.)

22

23

24

25

## I N D E X

## PAGE

## WARREN WOOD

Direct Examination by Mr. Byrne	40
Cross-Examination by Mr. Williams	42
Cross-Examination by Mr. Fisk	53
Cross-Examination by Ms. Vuylsteke	66
Cross-Examination by Ms. Frazier	75
Cross-Examination by Mr. Mills	78
Examination by Commissioner Kenney	106
Recross-Examination by Mr. Mills	109
Redirect Examination by Mr. Byrne	111

## RICHARD VOYTAS

Direct Examination by Ms. Tatro	115
Cross-Examination by Mr. Fisk	117
Cross-Examination by Ms. Frazier	129
Cross-Examination by Mr. Mills	130
Examination by Commissioner Kenney	135
Recross-Examination by Mr. Mills	137

## MATTHEW MICHAELS

Direct Examination by Ms. Tatro	139
Cross-Examination by Mr. Williams	141
Cross-Examination by Mr. Fisk	164
Cross-Examination by Ms. Vuylsteke	204
Cross-Examination by Ms. Frazier	214
Cross-Examination by Mr. Mills	225
Redirect Examination by Ms. Tatro	242

1	E X H I B I T S		
2	COMPANY EXHIBITS	Marked	Rcvd
3	Exhibit No. 1Hc		
4	Ameren Missouri IRP -HC	12	15
5	Exhibit No. 1NP		
6	Ameren Missouri IRP Public	12	15
7	Exhibit No. 2HC		
8	Response to Comments of Parties -HC	12	15
9	Exhibit No. 2NP		
10	Response to Comments of Parties Public	12	15
11	Exhibit No. 3		
12	Revised surrebuttal testimony of Warren Wood	12	41
13	Exhibit No. 4		
14	Surrebuttal testimony of Richard Voytas	12	116
15	Exhibit No. 5NP		
16	Surrebuttal testimony of Matthew Michaels	12	141
17	Exhibit No. 5HC		
18	Surrebuttal testimony of Matthew Michaels -HC	12	141
19	Exhibit No. 6		
20	Surrebuttal testimony of Steven Mills	12	15
21	Exhibit No. 7		
22	Not identified	12	
23	STAFF EXHIBITS		
24	Exhibit No. 8		
25	Title 4 Department of Economic Development rules	12	27
26	Exhibit No. 9		
27	Initial comments of Union Electric Company	12	27
28	Exhibit No. 10		
29	Reply comments of Union Electric Company	12	27
30	Exhibit No. 11		
31	Staff's report on UE 2011 IRP	12	256
32	Exhibit No. 12		
33	Rebuttal testimony of David Roos	12	256

## E X H I B I T S (continued)

## STAFF EXHIBITS

## Exhibit No. 13

Surrebuttal testimony of David Roos	12	256
-------------------------------------	----	-----

## Exhibit No. 14

Rebuttal testimony of Leon Bender	12	257
-----------------------------------	----	-----

## Exhibit No. 15

Rebuttal testimony of Randy Gross	12	257
-----------------------------------	----	-----

## Exhibit No. 16

Rebuttal testimony of John Rogers	12	258
-----------------------------------	----	-----

## Exhibit No. 17

Surrebuttal testimony of John Rogers	12	258
--------------------------------------	----	-----

## MDNR EXHIBITS

## Exhibit No. 18

MDNR Comments in response to Ameren's IRP	12	
---	----	--

## Exhibit No. 19HC

GDS report -HC	12	
----------------	----	--

## Exhibit No. 19NP

GDS Report Public	12	
-------------------	----	--

## Exhibit No. 20HC

Affidavit of John Davulis -HC	12	
-------------------------------	----	--

## Exhibit No. 20NP

Affidavit of John Davulis Public	12	
----------------------------------	----	--

## Exhibit No. 21

Affidavit of Richard Hasselman	12	
--------------------------------	----	--

## Exhibit No. 22

Affidavit of Robert Fratto	12	
----------------------------	----	--

## Exhibit No. 23HC

Affidavit of John Noller -HC	12	
------------------------------	----	--

## Exhibit No. 23NP

Affidavit of John Noller Public	12	
---------------------------------	----	--

## Exhibit No. 24

Affidavit of Brian Smith	12	
--------------------------	----	--

## E X H I B I T S (continued)

## MDNR EXHIBITS continued

Exhibit No. 25HC

Affidavit of Adam Bickford -HC 12

Exhibit No. 25NP

Affidavit of Adam Bickford Public 12

Exhibit No. 26HC

Affidavit of John Noller -HC 12

Exhibit No. 26NP

Affidavit of John Noller Public 12

Exhibit No. 27

Affidavit of Adam Bickford 12

NRDC EXHIBITS

Exhibit No. 28

Rebuttal testimony of Phillip Mosenthal 12 32

Exhibit No. 29HC

Rebuttal testimony of David Schlissel -HC 12 32

Exhibit No. 30

Resume of David A. Schlissel 12 32

Exhibit No. 31HC

Comments of NRDC, Sierra Club, Renew Missouri,  
Mid-Missouri Peaceworks, and Great Rivers  
Environmental Law 12 32

Exhibit No. 32HC 12 32

Reply to Ameren's response

Exhibit No. 33

The Brattle Group report 12 32

Exhibit No. 34

Five-page chart 12 32

Exhibit No. 35

EO-2011-0271 NRDC Attachment 1 12 32

Exhibit No. 39HC

Response to NRDC Data Response 31 183



## E X H I B I T S (continued)

## NRDC EXHIBITS continued

## Exhibit No. 40

Report on Life Expectancy of Coal-fired plants	179	182
--	-----	-----

## OFFICE OF PUBLIC COUNSEL EXHIBITS

## Exhibit No. 36

Data Request No. Ameren-OPC-004	99	106
---------------------------------	----	-----

## Exhibit No. 37

Data Request No. Ameren-OPC-013	99	106
---------------------------------	----	-----

## Exhibit No. 41

Response to OPC Data Request	232	233
------------------------------	-----	-----

## GREEN BELT EXPRESS CLEAN LINE EXHIBITS

## Exhibit No. 38

Comments to IRP	138	139
-----------------	-----	-----

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  

CERTIFICATE OF REPORTER

I, LISA M. BANKS, a Certified Court Reporter, within and for the State of Missouri, do hereby certify that the witness whose testimony appears in the foregoing deposition was duly sworn by me; that the testimony of said witness was taken by me to the best of my ability and thereafter reduced to typewriting under my direction; that I am neither counsel for, related to, nor employed by any of the parties to the action in which this deposition was taken, and further, that I am not a relative or employee of any attorney or counsel employed by the parties thereto, nor financially or otherwise interested in the outcome of the action.

---

Lisa M.Banks, CCR