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1	BEFORE THE FLORIDA PUBLIC SERVICE COMMISSION				
2	DOCKET NO. UNDOCKETĘD				
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4	In the Matter of				
5	PROPOSED RULEMAKING STANDARDIZING GENER				
6	INTERCONNECTION AGR	EEMENTS			
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9 10	THE .PDF V	ERSION INCLUDES PREFILED TESTIMONY.			
10	PROCEEDINGS:	WORKSHOP			
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13	BEFORE :	CHAIRMAN LILA A. JABER COMMISSIONER J. TERRY DEASON			
13		COMMISSIONER BRAULIO L. BAEZ COMMISSIONER MICHAEL A. PALECKI			
15		COMMISSIONER RUDOLPH "RUDY" BRADLEY			
16	DATE :	Wednesday, April 24, 2002			
17					
18	TIME:	Commenced at 9:45 a.m. Concluded at 2:40 p.m.			
19	PLACE:	Betty Easley Conference Center Room 148			
20		4075 Esplanade Way Tallahassee, Florida			
21			DATE		
22	REPORTED BY:	TRICIA DeMARTE Official EPSC Reporter	DOCUMENT NUMBER-DATE	MAY - J G	
23		Official FPSC Reporter (850) 413-6736	ž r		
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FPSC-COMMISSION CLERK

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1	IN ATTENDANCE:		
2	ROBERT ELIAS and JENNIFER BRUBAKER, FPSC General		
3	Counsel's Office.		
4	MENNES, F	BRIAN J. MURPHY, W.R. "BOB" SCHONECK, and C. MARTIN Torida Power & Light Company.	
5		GARY L. MACEY, Florida Power Corporation.	
6	Company.	ARTHUR L. NORDLINGER and GREG RAMON, Tampa Electric	
7			
8	Inc.	ROBERT C. MECHLER, Reliant Energy Power Generation,	
9		JOE WELBORN, Seminole Electric Cooperative, Inc.	
10	Agency.	ROBERT C. "BOB" WILLIAMS, Florida Municipal Power	
11			
12		JOSEPH REGNERY, Calpine Corporation.	
13		RICK WOLFINGER, Constellation Power.	
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		FLORIDA PUBLIC SERVICE COMMISSION	

## PROCEEDINGS

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CHAIRMAN JABER: Good morning. Let me
first apologize for being late. We had multiple proceedings
going on this morning. I think some of you probably knew that
we had a telecommunications collaborative going on in Internal
Affairs, and there was no real good time for me to take a break
and come over here. So I apologize for any inconvenience.

8 I want to welcome everyone here today. I know this 9 was a workshop that the Commissioners requested. These are 10 very timely, important issues, and we want to make sure that we 11 hear from everyone. I would ask before counsel reads the 12 notice that we all make sure we know not to interrupt each 13 other and that this workshop will be governed in a very orderly 14 fashion. I would ask that you listen to the Commissioners' questions carefully and give a very precise, concise answer and 15 16 prevent any confusion that might be created.

And with that, Ms. Brubaker, read the notice, andI've got some opening remarks.

MS. BRUBAKER: Pursuant to notice, the Florida Public Service Commission has set aside this time and place for the purpose of holding a public workshop on generator interconnection procedures and agreements. The purpose of the workshop is set out more fully in the notice.

24 CHAIRMAN JABER: Do you want -- do you need to take 25 appearances now or as they speak?

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MS. BRUBAKER: We can do it at your preference, Commissioner. We do have a sign-up sheet, so we should have a record of who all attended personally. We would ask that as people approach the microphones to speak that they do identify themselves for the record.

6 CHAIRMAN JABER: Okay. I think that's better. Let's 7 just wait and hear who the speakers are. As you all know, 8 Commissioners, in 1996 FERC issued Order 888 which laid the 9 foundation of the promotion of wholesale competition by opening 10 up access to the nation's grid. Order 888 encouraged but 11 didn't require the formation of the ISOs.

12 In December of '99 FERC issued Order 2000. The 13 objective of that order was that all transmission-owning 14 entities in the nation, including the nonjurisdictional entities, would place their transmission facilities under the 15 16 control of an RTO. As a further step in trying to promote competition, the FERC issued an advanced notice of proposed 17 18 rulemaking in October of last year stating that it intended to adopt a standard interconnection agreement and procedures that 19 20 would be applicable to all public utilities that own, operate, 21 or control transmission facilities.

As the FERC noted in that ANOPR, generator interconnection is a critical aspect of the open transmission service. We agree with the FERC that in order to fully realize the benefits of open access transmission service procedures

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must be established that will promote needed investment and infrastructure and encourage efficient siting processes.

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However, such procedures should not compromise the reliability
of the grid and must recognize that the states and regions may
have unique characteristics that need to be considered.

6 Parties, your presentations today will assist the 7 Commission in better understanding these issues. Let me add a 8 caution here. We do have a pending RTO proceeding, and we have 9 a workshop on the RTO proceeding; I think it's May 29th. I 10 would ask that you stay away from that proceeding to the degree 11 you can. We are not here to relitigate those RTO issues.

So with that, let's get started.

MS. BRUBAKER: Commissioner, if I could just add one 13 more thing. The presenters that we're having this morning have 14 asked that questions during the presentation be limited to 15 clarifying questions only. There will be time after the 16 17 presentations to ask questions, offer comments, differing viewpoints and what forth, and also to remind that since this 18 proceeding is being recorded, as you approach the microphone, 19 20 please do identify yourself for the record.

CHAIRMAN JABER: Okay. The first thing I have on the agenda, Ms. Brubaker, is there will be a joint presentation by FPL, FPC, and TECO.

24 MS. BRUBAKER: That's correct.

MR. NORDLINGER: Good morning, Commissioners, Staff,

ladies and gentlemen, my name is Art Nordlinger. I'm the
 manager of generation interconnection services for Tampa
 Electric, and I'll be making a presentation on behalf of the
 three companies.

5 To my left are -- and assisting me are Bob Schoneck 6 of Florida Power & Light, who's the manager of transmission 7 planning, and Gary Macey of Florida Power Corp, who is the 8 manager of transmission operations.

9 I have a lot to cover today, but to ensure that we're 10 all starting the day with a common knowledge of what generation 11 interconnection entails, I'll begin with some definitions, some 12 examples. I'll be discussing the interconnection process and 13 the treatment of interconnection costs, and then I'll try to 14 give some perspective on interconnection in Peninsular Florida. 15 the impact on transmission planning and siting, and ultimately, 16 I'll wrap up with some brief comments about FERC's ANOPR on 17 interconnections.

18 So what is generation interconnection service? Well. 19 it's a service under each transmission provider's Open Access 20 Transmission Tariff. but the important thing is that it be 21 distinguished from deliverability; that is, under the tariff, 22 there is transmission service or deliverability service. 23 Generation interconnection service is a separate service from 24 that. So as things stand today, generation interconnection 25 service entails a connection to the grid, but it does not

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1 include transmission rights.

0kay. Generation interconnection is governed for all
the transmission providers by their individual procedures. And
each of the three companies have their procedures posted on
their OASIS. And although they're very similar to each other,
they -- and they're very consistent, they are unique to each
company.

8 Transmission -- or excuse me, interconnection 9 procedures guide the interconnection process, and I'll be going 10 over that in some detail in just a minute. Generation 11 interconnection entails also a generation interconnection 12 agreement, and it could also be an interconnection and 13 operating agreement between the transmission provider and the 14 generator. And this is nothing more, really, than a contract 15 that spells out all the details of an interconnection: What 16 facilities need to be built, when they're going to be built as 17 far as construction schedule, the cost of the facilities, and 18 who's going to pay for them. And then in terms of an operating 19 agreement, it may also spell out the details of the operation 20 of the interconnection and also the operation of the generator, 21 it may have some details about that as well.

Okay. So when we say, "generation interconnection,"
just what are we talking about? So I'm going to try to give
you a feel for that. This is a substation, and the black boxes
represent circuit breakers, and the lines with arrows represent

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1 transmission lines. Say we want to connect a generator to the 2 substation. Well, there's a number of ways that we could do 3 that, and the first one I'll talk about is called radial 4 service. So there's what we call a radial connection from the 5 generator to the substation.

6 Now, to connect this generator, we'd need to put in 7 some new equipment. One would be this new circuit breaker 8 that's kind of outlined in dotted lines there. And there would 9 be a line, that is, a transmission line, that connects the 10 generator to the substation, and that could be short or long. 11 And then there would also be some other ancillary equipment, 12 possibly switches, metering, protection equipment, some other 13 things like this.

14 Now. additionally, the connection of this generator 15 to a substation could also have other impacts; that is, some of the equipment that existed in the substation might be impacted 16 17 by this generator; that is, that the equipment was not 18 originally sized in order to be able to handle the extra power 19 that a generator would put out and therefore might need to be 20 replaced as well. So some of those other circuit breakers, for 21 instance, might need to be replaced.

Additionally, it's possible that equipment that's in other substations that are nearby also might be impacted by the interconnection of the generator and might need to be replaced as well. Now, this is one way, as I said, a radial service

that we could connect a generator. Now, there's other ways.

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2 For instance, if we have two substations that are 3 connected by a transmission line, a generator might elect to 4 connect somewhere along that transmission line. So just how 5 would you do that? Well, what we would do is, we would break 6 the line at some point and run lines, either short or long, 7 depending on how far away the site was from the transmission 8 line, to the generator site and then we'd connect in. And this 9 is what we call looped service because there's not just one 10 connection like there was in the radial service but there's two 11 connections. Again, this generator could possibly also cause 12 impacts on some equipment in Substation 1 or Substation 2 that 13 might need to be replaced as well.

Okay. There's a variety of different facilities that might be part of an interconnection that might need to be added or, again, upgraded. It could be circuit breakers, line switches. You can certainly read the list. But we just wanted to give you an idea of some of the facilities that might be impacted by generation interconnection.

20Okay. Let's go on to the process of connecting a21generator. Well, the process, as I said before, is governed by22each transmission provider's procedures. And like I said, at23least here in Florida they're very similar, so that means I24can -- it makes it easy for me. I can do one set of procedures25here that pretty much covers it for all the companies. It's

1 pretty much the same steps.

Now, the procedures also spell out what the time frame is for each of the steps, and I don't really elaborate on that as we go along, but I just wanted you to be aware of that, that each step has some limited time frame in which it needs to be completed.

7 So the process begins, according to if you Okav. 8 read the procedures, when the generator submits an application 9 to interconnect, but really, the process begins long before 10 that because the generator would be looking for a site. It 11 needs to find a place to build this generator, someplace of 12 course that has all the facilities that he needs to build a 13 generator. So by the time the generator comes to submit an 14 application, they're pretty far down the road. They've got a 15 lot of background done on this project.

So they submit an application. What's that entail? Well, they need to tell the transmission provider just where it is they want to interconnect. They need to tell them when, and they need to provide a whole bunch of data about their generator so that the transmission provider can properly assess what the impact of that generator is going to be on the system.

They also need to provide that data so that the generator -- or the transmission provider could figure out just what equipment would need to be added and what size of equipment would need to be added in order to facilitate the

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1 interconnection. They provide a deposit that's used to pay for 2 the studies that would need to be done, and additionally, some 3 transmission providers require that the generator show that 4 they have control of the site, where they're going to build a 5 generator.

Now, once they have a completed application, that
establishes the generator's queue position. Now, all the queue
position really is, is a date. For a transmission provider
that has a lot of people wanting to interconnect, it basically
just dictates what order they're all going to be studied and at
what -- and what order they're going to move through the
process.

CHAIRMAN JABER: How is that order decided?

MR. NORDLINGER: It's just first in time. So when
you have a completed application, you get your date, and that
determines your order.

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17 So once you've got your queue position, the Okay. 18 transmission provider would send you a study agreement. The 19 study agreement basically says, this is what -- based on the 20 information you've provided us, this is the study that we think 21 we need to do, or studies that we think we need to do, in order 22 to determine your impact on the system. And we'll give you an estimate of what we think it's going to cost us to do your 23 24 study, and we'll tell you when we're going to have it done. 25 So you sign an agreement, and you start the

first study. Now, the first study is the feasibility study, 1 2 and that looks at basically, you know, is it feasible to 3 connect a generator here? Things like, well, as we said, we 4 need to add equipment to the substation. Is there even room to connect it? Or if there were a looped kind of connection, what 5 6 are the practicalities of being able to run lines from the 7 existing right-of-way where the existing line runs to where the 8 generator says he wants to be? So some of those things need to 9 be looked at, as well as things like generally what equipment 10 do we need to interconnect? A circuit breaker, switches, 11 meters, whatever it might be.

12 We'd also look at impacts on existing equipment, so 13 circuit breakers that might be what we call overdutied, that 14 is, they would need to be upgraded in order to accommodate the 15 generator. And we'd also look at this point at impacts on 16 other adjacent transmission systems. Oops, it seems to me I didn't push my button here. There it is. Okay. Sorry. 17 Anyway, there would be possibly impacts on adjacent 18 19 transmission systems, and those would need to be coordinated. 20 So, again, we have our one-line diagrams, and I already described some of the facilities that might need to be upgraded 21 22 or added in here.

Okay. So, now, there's a decision point. The
transmission provider gives the generator the feasibility
study; says, this is what I think it's going to take to

interconnect your generator; this is pretty much the equipment 1 2 that's required; and these are the impacts that you're going to 3 cause on other existing parts of the system. And the generator 4 would then decide, well, that seems to be reasonable, or it 5 agrees with what they thought it would be, and we're going to 6 go on, or well, maybe there is some things we didn't anticipate 7 here, maybe we need to pick a different site or start over, or 8 whatever it may be. But let's assume that things turned out to 9 everybody's satisfaction and we decide to go on.

10 The next thing we do is a facility study. A facility 11 study really builds on the feasibility study. Where the 12 feasibility study says, this is the equipment that I think 13 you're going to need to interconnect your generator, a circuit 14 breaker, a switch, meters and what have you, a facility study will say, you need a circuit breaker, this model number, this 15 16 size. It might be that detailed, it might not be quite that detailed, but at least this is the size of the circuit breaker, 17 18 this is the size of the switch, this is the kind of metering 19 equipment and protection equipment that would need to be added. 20 And it would be detailed enough that I could come up with a 21 cost estimate at that point and say, this is what I think it's 22 going to cost to do this interconnection, and this is the time 23 it would take to construct it.

Additionally, for the upgrades of existing equipment, same story; that is, a cost estimate of what it would cost to

1 replace that equipment and the construction time that would be 2 required. So now the generator hopefully has a good feel for 3 what this is going to cost and what it's going to take to 4 interconnect this generator to the system, and they have 5 another decision: Should we go on?

Assuming that they say, yep, this sounds like a good 6 7 project, let's keep going, the next thing we do is, we 8 negotiate an interconnection agreement which might be, again, 9 an interconnection and operating agreement. Again, this is 10 just a contract to build these facilities that might have some 11 operating parameters in them. So -- but there are other things 12 that are included there as well: Milestones for construction 13 of the facilities and construction of the generator, allocation of the cost, who's going to pay for this thing. There is 14 15 probably provisions for security to be posted, payment terms, 16 construction standards. You can see them all there and all 17 kinds of other contract terms and conditions.

So assuming that we agree on the terms and conditions and details of this interconnection agreement, we would execute the agreement, everybody would sign the contract, and it would be filed at FERC for their acceptance. If we, for whatever reason, couldn't agree on some of the terms and conditions, it would still be filed at FERC, and we'd then ask FERC to rule on what the proper procedures -- or what it should be.

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So FERC would issue their order. There possibly --

1 if they don't agree with -- if they were asked to rule or if 2 they don't agree with something that's in the agreement, they 3 would require compliance filing, possibly. Ultimately, you'd 4 have a final order and a final agreement. The generator would 5 provide security, and the facilities would be built in the time 6 frame that hopefully the agreement calls for. 7 Okay. That's pretty much the process, and that's

8 about all I have on the process. So the next thing I'd like to 9 cover is the treatment of costs for interconnection.

CHAIRMAN JABER: On the process --

MR. NORDLINGER: Yes.

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12 CHAIRMAN JABER: -- what's the point of entry for the 13 parties to address their disagreement with FERC? At what point 14 would you be able to go to FERC and say, we don't agree with 15 your decision, or give us a hearing, or --

16 MR. NORDLINGER: Well, my understanding of the 17 process is that -- now, are you saying that we didn't agree up 18 front, or that we didn't agree with what FERC ordered? I don't 19 understand the question.

20 CHAIRMAN JABER: With what FERC has ordered. You 21 said FERC issues an order.

22 MR. NORDLINGER: I see. Okay. Yes. Yeah, FERC 23 issues an order, and either of the parties, my understanding 24 is, can ask for a rehearing of the FERC order. So they would 25 ask to rehear the order, and then FERC -- well, first they

1 would say, yes, we'll rehear it, or no, we won't. And then if 2 they do rehear it, then they take some type of arguments, I 3 guess, and then rule.

CHAIRMAN JABER: Is there anything that happens
between when you file it with FERC, when you file the agreement
with FERC, and when it issues its order? Is there any
negotiation with FERC, any workshop with FERC?

8 MR. NORDLINGER: Allow me to ask one of our FERC 9 attorneys. It's a 60-day clock that runs, and usually they do 10 not hear any kind of argument or anything like that; is that 11 right? Oh, right. When you make your filing for 12 reconsideration, that's when you make your points, make your 13 arguments.

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CHAIRMAN JABER: Thank you.

15 MR. NORDLINGER: Okay. Treatment of interconnection 16 Okay. Initially, as it says here, the generator funds costs. 17 all of the facilities necessary for interconnection and that 18 includes upgrades to the existing equipment. So the generator 19 is going to pay for all this -- whatever, circuit breakers, 20 lines, whatever would have to be added. And also, if some of 21 the existing equipment has to be upgraded, they will pay for 22 that as well.

Now, it used to be that that was the end of the story; that is, FERC used to use what we call the "But For" test. So they'd say, well, we wouldn't have had to add any of

1 this equipment but for the interconnection to this generator, 2 so the generator would pay for it. That was that. Over the 3 past year or two, that's changed to some extent. And I'll try 4 to get into the details of that.

5 Okay. The facilities that are added to interconnect 6 the generator that are now considered part of the transmission 7 system, and so, for example, if you want to -- I don't want to go back to Slide 11 here because it's too hard to deal with, 8 9 but if you want to shift back to your Slide 11 and look at the 10 radial facility there, you can see that we added a circuit breaker, for instance. Under the "But For" test, the generator 11 would pay for the circuit breaker. Well, the generator still 12 13 pays for that circuit breaker, but that circuit breaker is now 14 considered what they call a system upgrade. And what that 15 means, the implication of that is that system upgrades are eligible for credits when transmission service is taken. 16

Now what's "credits" mean? All that means is that at 17 18 some point in time in the future when the generator takes 19 transmission service, they get a bill for transmission service, 20 but they can use those credits, dollar for dollar, against that 21 bill. So if the bill is \$10,000 and they have credits for the 22 cost of the facilities which is a million dollars. let's say. 23 then the bill is \$10,000, they get a credit of \$10,000, the 24 bill is zero, or the amount owed is zero, and that account which was a million dollars, let's say, is now reduced by the 25

1 10,000 until it's used up.

2 COMMISSIONER DEASON: Who has title to that item 3 of -- that is considered a system upgrade, who has title to 4 that piece of equipment?

5 MR. NORDLINGER: Well, no. it's owned by the 6 generator -- by -- excuse me, I misspoke. It's owned by the transmission provider. So it's part of the transmission 7 8 system. Now, the effect of this ultimately, and I'll get into this a little more, is that after all the credits are used up, 9 10 that is, you've given all the money back, that's essentially 11 the same as the transmission provider having paid for the 12 equipment because you've given the generator the money back 13 that they paid you for it, so it goes into rate base, or it 14 becomes eligible to be part of rate base.

15 COMMISSIONER DEASON: When that item is first put 16 into the system and it's considered a system upgrade, it is 17 owned by the transmission company?

MR. NORDLINGER: Yes.

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19 COMMISSIONER DEASON: Okay. But you have the 20 obligation to -- it goes in, but you have not invested any 21 money in that facility yourself, so --

MR. NORDLINGER: Exactly.

23 COMMISSIONER DEASON: -- it's not part of your24 investment base.

MR. NORDLINGER: Exactly.

COMMISSIONER DEASON: But as you refund the credits,
 well, then, you start getting an equity position in that piece
 of equipment yourself.

MR. NORDLINGER: Exactly.

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COMMISSIONER DEASON: Okay.

COMMISSIONER BRADLEY: Talk a little bit more aboutthe credits. Who refunds the credits?

MR. NORDLINGER: Okay. The transmission provider is 8 9 holding this account, if you will; that is, the generator has 10 paid for these facilities, and the transmission provider has actually used that money to pay for the facilities since they 11 12 built them, pay the vendors, the constructors and whatever. But there is basically now an amount of money, a dollar amount, 13 14 that is eligible for credits, and it's the same amount that the generator paid you. So if the generator paid you a million 15 dollars for the interconnection, then the amount that they're 16 eligible to use for credit is a million dollars. 17

So, essentially, the next million dollars of transmission service that they take, they get a bill that says whatever the amount is for the transmission service, you used your credit of the same amount, so the bill is zero.

22 COMMISSIONER PALECKI: Are the credits determined by 23 FERC or negotiated between the parties? How is that agreed 24 upon?

MR. NORDLINGER: Well, it's the actual amount that

1 the generator paid for their facilities.

2 COMMISSIONER PALECKI: What happens if that's subject 3 to dispute?

4 MR. NORDLINGER: Well, when you say, "subject to dispute," that is, the way it typically works is that if I 5 6 build a circuit breaker, a short transmission line, some other 7 facilities. I'm going to submit to the generator the bills for 8 just what that cost to build. Now, they may say, wow, you gold 9 plated this or whatever, but it shouldn't get to that point 10 only because the interconnection agreement should spell out 11 exactly what I'm going to build.

12 So way up front when we did the facility study, we 13 said, this is what we're going to build, and everybody agreed. 14 This is what we're going to build, and this is pretty much what we think it's going to cost. So hopefully it's pretty well --15 16 by the time you get to the point where the generator is 17 actually paying you for it, it should be pretty much what 18 everybody expected, I would hope. So -- and it's the actual 19 amount, not the estimate, that's eligible for credit. So 20 however much they wrote you in checks to pay for these 21 facilities, that's the amount that's eligible for credits.

COMMISSIONER BRADLEY: Okay. Just one other
question. Let me see if I understand this. The generator
builds the -- does the facilities upgrades; right? He upgrades
the system.

MR. NORDLINGER: No. the generator builds his own 1 2 generator. 3 COMMISSIONER BRADLEY: Okay. So the transmission --4 okav. That's where I missed. 5 MR. NORDLINGER: Yes. The transmission providers 6 builds the --7 COMMISSIONER BRADLEY: Builds the upgrade. 8 MR. NORDLINGER: -- upgrades to the transmission 9 system. 10 COMMISSIONER BRADLEY: Okay. And gets the credit. MR. NORDLINGER: 11 Right. 12 COMMISSIONER BRADLEY: Okay. That answers my 13 question. 14 MR. NORDLINGER: And something that is an important 15 point, and thank you for reminding me. is there has to be 16 designated a point of interconnection. That's the point -- and 17 it's typically also the point in change of ownership; that is, 18 the generator is going to build up to here, and the 19 transmission provider is going to build from that point back to 20 the transmission system and all the upgrades in the substation 21 as well. 22 COMMISSIONER DEASON: I have another question. You 23 indicated that if, for example, there's a million dollar amount 24 expended for system upgrades, once the generator is 25 interconnected and actually starts taking transmission service,

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22 that they get credits -- immediate credits for that million 1 2 dollars as -- for example, if the first month, if their 3 transmission bill is a million dollars, their bill is zero; 4 correct? 5 MR. NORDLINGER: Correct. 6 COMMISSIONER DEASON: Is that FERC policy, or is that 7 just the way you do it? And I quess my question is, if, for 8 example, there's a million dollar upgrade and engineers 9 estimate that it would last ten years, why don't you amortize 10 that one-tenth per year while they're taking transmission 11 service and give them credit one-tenth a year over ten years? 12 MR. NORDLINGER: I understand your guestion, and to my knowledge, FERC policy is that it's on a dollar-for-dollar 13 14 basis as you take transmission service; that is, that is the 15 FERC's policy for system upgrades. 16 COMMISSIONER DEASON: That's a pretty rapid recovery, 17 isn't it? 18 MR. NORDLINGER: Yes. Generally, you could estimate 19 that a generator would get all their money back in less than 20 three years and most -- and very often less -- in a year or so. 21 COMMISSIONER DEASON: Well, you anticipated my next 22 auestion. On average, full recovery of system upgrades is 23 achieved from one to three years? 24 MR. NORDLINGER: Yeah, three years would be a very 25 expensive interconnection. Most interconnections just, you

23 1 know, doing a guick calculation, you'd think that the generator 2 could -- would take that much service in about a year, could be 3 two, and three, you know, we would guess at the outside. 4 COMMISSIONER DEASON: Thank you. 5 MR. NORDLINGER: Okay. Now. there's another part to 6 this, and that is that these credits up until recently were on 7 a dollar-for-dollar basis, but now FERC has also ruled that the 8 credits need to be returned with interest. So. now. if the 9 generator pays the million dollars, that's what's in their 10 account, and they take transmission service for a million 11 dollars, they actually have a million dollars plus interest at 12 the FERC rate. 13 So if it's 4 percent right now or so and it takes a 14 year, so that would be \$1,400,000 that they have to -- or 15 \$1,040,000? \$40,000. Thank you. Oops. No calculator, I'm 16 lost. Anyway, \$1,040,000 in credits that they'd actually 17 have -- be able to take. 18 COMMISSIONER DEASON: How do you recover your 19 interest expense then that you're paying the generator? Has 20 that become part of your cost of doing business for your 21 transmission system as a whole? 22 MR. NORDLINGER: I believe that's true. Yes. 23 Okay. One other change that's recently happened as 24 far as the way cost recovery works are the treatment of interconnection costs with FERC. If you look at the -- again, 25 FLORIDA PUBLIC SERVICE COMMISSION

24 at Page 11 where I had the one-line diagram. I'm going to talk 1 2 about the looped service now for just a second. As you can 3 imagine, for some part of this --4 COMMISSIONER BRADLEY: Excuse me. 5 MR. NORDLINGER: Oh. I'm sorry. COMMISSIONER BRADLEY: Before we move from Page 19 --6 7 MR. NORDLINGER: Oh. okay. 8 COMMISSIONER BRADLEY: -- it says that since 2001, credits that generators receive for system upgrades are 9 10 returned with interest. 11 MR. NORDLINGER: Yes. 12 COMMISSIONER BRADLEY: Okay. I guess I'm getting a little confused here because I'm trying to figure out -- I 13 14 think you said previously that system upgrades were the responsibility of the transmission companies. 15 16 MR. NORDLINGER: They're owned by the transmission 17 company, and they are built by the transmission company, but the generator initially pays for them. Then after they have 18 paid for them and start taking transmission service, they can 19 20 get that same amount of money back in transmission service. COMMISSIONER BRADLEY: Okay. Okay. Now we're on the 21 22 same page. 23 MR. NORDLINGER: Okay. All right. Another change 24 again that FERC has made is that -- and again, I was referring to the looped service on Page 11. As you can imagine, at some 25 FLORIDA PUBLIC SERVICE COMMISSION

point in time that transmission line is going to need to be out of service. And depending on how major or minor that line might be, it's possible that while that line is out of service for construction of the interconnection, generation on the system might need to be redispatched in order to keep overloads from happening on other adjacent transmission lines as a result of this line being out for some period.

8 Now, during that time that the system is 9 redispatched, by definition the system is economically 10 dispatched; that is, the generators are dispatched in a way that is the most economical as far as burning fuel. Now, if we 11 12 have to change that dispatch, by definition that's going to 13 cost more in fuel. There's going to be generators that are 14 going to be running more that have a more expensive fuel and 15 others that are going to be running less or might not be 16 running at all that have a less expensive fuel. So there will 17 be an incremental fuel cost that's realized during the time 18 that that line is out.

Now -- and FERC has ordered in a number of cases that the generators can't be assigned that fuel cost -- that differential fuel cost directly. So the result of that is that it just becomes part of the fuel -- that additional fuel costs just becomes part of the system fuel cost.

24 COMMISSIONER PALECKI: What is FERC's reason for 25 that? Is it to encourage additional building of additional

1 generation?

MR. NORDLINGER: That may be part of it. What their rulings indicate is that they don't feel that there's been a proper justification of the reasonableness of the additional fuel costs. They don't know that they can assess whether that fuel cost differential is just and reasonable. So they have said -- so they have ruled as they have.

8 COMMISSIONER DEASON: I mean, isn't that, the effect 9 of that an immediate pass-through to retail customers of 10 additional fuel costs, that but for the addition of this 11 generation would not have existed? I mean, you're talking of 12 fuel costs.

13

MR. NORDLINGER: Right.

14 COMMISSIONER DEASON: Fuel costs generally, and I 15 guess it depends from utility to utility as to what their 16 wholesale versus retail is, but, you know, most utilities in 17 this state, 90-plus percent of fuel costs are passed through --18 directly to the retail jurisdiction fuel through a direct 19 pass-through through a fuel adjustment clause. So I guess my 20 question is, does this FERC policy have the effect of directly 21 increasing retail customers' bills that they pay for fuel 22 costs?

23

MR. NORDLINGER: Yes.

24 COMMISSIONER BAEZ: Are those costs quantifiable,
25 easily quantifiable? I mean --

MR. NORDLINGER: Generally, yes; that is, you can
 figure out how much -- or how you would have run your
 generation versus how you did run your generation and therefore
 figure out a differential.

5 COMMISSIONER DEASON: How long is this period of time 6 does it take for a transmission system -- when there's a loop 7 facility for the transmission system, basically to be -- you 8 have to redispatch generation while this transmission system is 9 being upgraded?

10 MR. NORDLINGER: It really depends on the situation. 11 And I should also say, in all fairness, that in every instance with this line out does not mean that the generation would need 12 to be dispatched. It's only in the case where taking out a 13 14 major transmission line would cause overloads or other adverse 15 impacts on other lines that the generation has to be 16 redispatched. But -- and also it just depends on the 17 configuration of this -- of the interconnection.

So you would hope it would just be, what, for a few weeks that you have to -- that it's just -- that you have to have it out for -- you do as much as you can without taking it out, of course. And then what's a reasonable estimate? I'll defer to my colleagues here.

MR. SCHONECK: It could take months as you're building to accommodate the new interconnection. What you do is try to find a window for clearances. And if you're up

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against a schedule to meet kind of an in-service date and you
 can't find those windows where you don't have to run out of
 economics, that you get into this redispatch situation in order
 to accommodate those clearances on the system.

5 COMMISSIONER DEASON: Well, you anticipated my next 6 question. Is there flexibility in the negotiation process 7 between the transmission company and the generator to time this 8 such that it minimizes the impact on the necessity to 9 redispatch generation?

10 MR. SCHONECK: I think you attempt to do that, again, 11 based on your windows. As you're coming up, you try to take 12 your -- your clearance is kind of in your off-season. Like, 13 when you take your units down, you take your lines out, but as 14 you're coming up, if you need to meet an in-service date, you 15 try to do that the best you possibly can.

But to the extent that you have to take these clearances in order to do this work and that you have to change the dispatch a little, there's a differential in cost there that has to be covered somehow. But, yes, they do try to work to the extent that they can.

COMMISSIONER BRADLEY: And my question would be this then: After the system upgrade has occurred, and just to follow up on Commissioner Deason's question about the additional cost to the customer, is the new interconnection system upgrade going to be more efficient and as a result in

1 the future drive down the cost of service to the customer? Is 2 this temporary or -- the question is, is this a temporary 3 condition, or is it a permanent increase?

MR. NORDLINGER: I'd say generally an interconnection
doesn't have an impact one way or another as far as the system
being more efficient. Now, as far as having additional
generation that might -- that certainly might have impacts on
system efficiency at some point in the future, but the
interconnection itself really doesn't -- generally it doesn't
affect system efficiency.

11 COMMISSIONER DEASON: Let me follow up on the 12 Commissioner's question, though, but there is the argument, 13 maybe more than just an argument, maybe it is in fact that if 14 the new generation that comes on-line which is requiring the 15 system upgrades, if it is an efficient generator and it's going 16 to be part of this system and is there for retail utilities to 17 purchase more cost-effective energy, that it may in the long 18 term reduce customers' fuel costs.

19

MR. NORDLINGER: Yes.

CHAIRMAN JABER: Let me follow up on something you said about the FERC order. You said it's FERC's policy not to allow the transmission provider to collect the additional fuel costs from the generator because in FERC's opinion the transmission providers didn't provide justification showing that that was a reasonable cost that could be collected from

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1 the generator. Did FERC go further and say, however, you can 2 pass on the cost to the consumer, or is that just how the 3 transmission providers have reacted? 4 MR. NORDLINGER: I'd say that's the net effect. 5 CHAIRMAN JABER: Uh-huh. So is it possible that FERC 6 hasn't allowed the transmission provider to collect that 7 incremental fuel cost from the generator because they've found 8 that there was an uneconomic redispatch of generation. or are 9 the two not related? I'm reading your bullet point --10 MR. NORDLINGER: Right. 11 CHAIRMAN JABER: -- trying to put all the pieces 12 It says, the cost to uneconomically redispatch together. 13 generation cannot be collected from the new generator. 14 MR. NORDLINGER: Right. So that is to -- when you 15 redispatch the system, by definition that's less economic than 16 you would have otherwise dispatched it. 17 CHAIRMAN JABER: And I suppose as it relates -- and I 18 recognize you may not even be familiar with our fuel clause, 19 but I suppose one could argue that because there was an 20 uneconomic redispatch and FERC has found that there isn't 21 enough justification to allow the transmission company to 22 collect the incremental fuel costs from the generator, then 23 perhaps there isn't enough justification to allow that recovery 24 even through fuel clause adjustments that are passed on to the 25 retail ratepayer.

1MR. NORDLINGER: I really don't know the answer to2that.

COMMISSIONER PALECKI: So even if a party was able to successfully argue to FERC that the redispatch of generation during this construction process was the most economic redistribution possible with the construction going on, FERC still would not allow the additional fuel costs?

MR. NORDLINGER: I really can't say; that is, I can tell you how they've ruled up until now on a number of cases, you know. And what they have said is that they don't feel that -- or my understanding of the orders is that they don't feel that there's been proper justification for them to be able to say that these redispatched costs are reasonable and justified, so as a result, they have disallowed them.

Now, whether there is some other way that they could
be presented such that they might change their mind, I'm afraid
I really can't say.

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COMMISSIONER PALECKI: Thank you.

19 COMMISSIONER DEASON: Well, how does that relate to 20 this "but for" standard, which apparently they're not using? 21 But it seems like these are fuel costs that would not have been 22 incurred but for the construction period and the redispatch 23 that had to take place. So FERC must have been accustomed at 24 some point to calculating "but for" type costs, but they're not 25 willing to do that anymore, I take it?

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MR. NORDLINGER: I don't know as far as redispatch is
 concerned, but as you can see from this, generally FERC is not
 using "but for," it would seem, in many instances as far as the
 assignment of costs for the generators.

5 Okay. Well, I think we've probably covered most of 6 what I have on my next slide, which is just really to sum up, 7 to say that previously facilities that were part of the -- that 8 were built for the benefit of the generator or upgraded for the 9 benefit of the generator were paid for directly by the 10 generator and that was that.

But now they are all considered system upgrades, or most of them are considered system upgrades, for which the generator can get credits, and those credits come back, that same amount of money comes back to the generator with interest which they can use when they take transmission service.

The net effect of that is that the cost of these facilities that were built to interconnect the generator that are now -- that FERC rules are system upgrades and also the upgrade of existing parts of the transmission system are -ultimately become part of the transmission provider's rate base, and they're socialized to all customers.

COMMISSIONER PALECKI: If we had a merchant power plant in the state of Florida and the transmission system that the interconnection was made to was owned by an investor-owned electric utility and that generation was then transmitted to

33 1 out of state, to Alabama, for their use, would the credits 2 still be paid by that investor-owned utility to the generator 3 despite the fact that the ratepayers of that utility do not 4 benefit at all from that transaction? 5 MR. NORDLINGER: Yes. 6 COMMISSIONER PALECKI: And what is the reason for 7 that? 8 MR. NORDLINGER: That's the net -- that's the effect of FERC's current rules as far as how they treat the costs of 9 10 these facilities. 11 CHAIRMAN JABER: Can we go back to the FERC order we 12 were just discussing on the incremental fuel cost? 13 MR. NORDLINGER: Sure. 14 CHAIRMAN JABER: If FERC knew that you were not able 15 to recover that from the retail customer, do you think it would 16 result in a change in policy? That's the first question. 17 And the second question is, have the companies not 18 pursued a change in that policy because they know they can 19 recover it from the retail ratepayer? 20 MR. NORDLINGER: Okay. Well, two parts to this, and 21 I'll also let Bob answer as well. But one is that as far as 22 what they might otherwise rule if they knew that the costs 23 could not otherwise be recovered. I can't say what they might 24 However, I am aware that Florida Power & Light has an rule. 25 interconnection agreement at FERC that -- where it was ruled

1 that they could not recover these incremental fuel costs that 2 were caused because of redispatch; that my understanding is 3 that FERC told them they needed to take that clause out of 4 their contract. And Florida Power & Light has asked FERC to 5 rehear that. Am I correct on that, Bob?

6 CHAIRMAN JABER: And you can come up to the 7 microphone if you'd like.

8 MR. MURPHY: I mean, we both know the issue. 9 CHAIRMAN JABER: Why don't you come up to the 10 microphone so we can hear you?

MR. MURPHY: My name is Brian Murphy of Florida Power 11 & Light. I've spoken to you before. I think -- I just wanted 12 to clarify one thing. I think what Art has said is correct, 13 that FERC has generally not been inclined to look at 14 redispatch. My understanding of what FERC has done in this 15 issue is, they said it's a complex issue. You have to make a 16 very specific showing that these costs are attributable to the 17 18 generator.

About a year ago they had a case, I believe it was involving AEP, where they said, this is such a complex issue. We don't want to tackle it right now. We'll tackle it in the ANOPR that's supposed to come out today, and we'll give people a chance to make a showing why it's important during their standardization of their procedures in the agreement.

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Art is correct that it looks like FERC has generally

1 not been inclined to take utilities' arguments on this, but 2 there are opportunities for this Commission and for us to clarify our position on it. We have not had to make a specific 3 4 showing yet. We've just made a general statement in our 5 agreements that we think this redispatch cost should go to the 6 generator. FERC has said, take it out. We'll look at it at 7 the NOPR process. So there are opportunities on this issue to 8 come.

9 CHAIRMAN JABER: And that NOPR is due today? 10 MR. MURPHY: Yes. Actually, as we speak they might 11 be talking about it.

12

CHAIRMAN JABER: Okay. Commissioner.

13 COMMISSIONER BRADLEY: Yes. Here in the state of 14 Florida our IOUs as per a Florida statue are guaranteed a reasonable rate of return on their investments, the investments 15 16 that is that they make into their capital investments or into 17 their facilities. When -- let's just talk about this process 18 in terms of solvency and the transmission company. Who is 19 going to guarantee the transmission company a reasonable rate 20 of return on their investment when they take the investment 21 from the -- from when they purchase or receive the facilities 22 upgrade from the -- or upgrades from the generator? Is that the FERC's responsibility? 23

24 MR. NORDLINGER: Well, that is, the transmission 25 rates for the transmission provider are approved or accepted by

1 FERC and these facilities, by the way FERC has ruled, become 2 part of the interconnected transmission system and therefore 3 part of the transmission rate base. So I would guess that then 4 if FERC is the jurisdiction that rules on transmission rates. 5 then these facilities would go into transmission rates. 6 COMMISSIONER DEASON: But let me ask you -- let me 7 follow up on that question. It becomes part of your 8 transmission investment, and if you were TECO, you have 9 transmission facilities, you have generation facilities as part 10 of your retail rate base, and isn't there an allocation 11 procedure that takes all your transmission costs and allocates 12 it between the wholesale and retail jurisdiction? 13 MR. NORDLINGER: Absolutely. 14 COMMISSIONER DEASON: And that if you have to 15 capitalize more costs as a result of FERC policy, it increases 16 your retail rate base. does it not? 17 MR. NORDLINGER: Yes. 18 COMMISSIONER DEASON: Okay. 19 MR. NORDLINGER: So I guess to anticipate what you're 20 asking, is it possible that this Commission could be ultimately 21 asked to be looking at including these facilities that were built for the generator in rate base? Yeah, I think that could 22 23 happen. 24 COMMISSIONER BRADLEY: And what I'm thinking about is 25 what protections that there are for the ratepayers who

ultimately, as you said, are going to pay for these facilities. 1 2 What happens if -- and I'm thinking about a worst case 3 scenario, and I'm thinking about a California type of situation. What happens if the transmission company folds? 4 Ι mean, how do we deal with divestiture? Who then takes over the 5 6 facilities? I mean, do they revert back to the generator who 7 initially built them? I mean, the assumption is that these 8 companies are going to be able to effectively and efficiently 9 run a transmission company and remain solvent and provide a 10 high-guality service at a reasonable rate to the ratepayer. 11 What happens if this company goes belly-up? Has the

12 FERC given any consideration to -- I mean, who eats that? The 13 FERC or the ratepayer? I mean, what has FERC -- have they 14 anticipated --

MR. NORDLINGER: Commissioner, I really don't know. I'm sorry. To my knowledge, you know, I haven't read any FERC rulings that have addressed that in anyway, but -- so I really don't have any knowledge of it. I'll defer to my colleagues if they do.

MR. SCHONECK: I don't know of any either.

MR. MACEY: Nor I as well.

COMMISSIONER PALECKI: These credits, do those -- do they run through your rates or through the fuel clause or one of the cost recovery clauses?

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MR. NORDLINGER: Why I'm hesitating is that

short-term transmission service when it's taken, it's my
 understanding of your rules, short-term transmission service is
 credited back to the ratepayers through the fuel clause. So
 I'm not sure. Let me see if I can work through it.

5 The generators paid some money in for these 6 facilities. They take -- if they take long-term transmission 7 service, then they get this money back and the -- and clearly 8 then these facilities are just part of the transmission system. 9 They're part of the costs of the utility's or the transmission 10 provider's transmission system.

Now, if they take short-term transmission service and
there's credits given back, there's another level of
complication because short-term transmission service has some
implications in the fuel clause, and I'm not sure exactly how
that would exactly work. Is it just interchange or is it -Gary, why don't you go ahead and chime in here? Thank you.

MR. MACEY: The process that's used is that when a customer takes point-to-point service, that is normally credited against the revenue requirements for transmission service, all transmission service, and that, therefore, would be a credit as long as the customer is taking point-to-point service. So, in essence, it reduces the rates for network customers, which would be also retail customers.

24 COMMISSIONER PALECKI: That's if you receive a 25 credit. What if you have to pay a credit?

1 MR. MACEY: Well. what I was talking about is, the 2 transmission rates themselves, if it's point-to-point service 3 that we're talking about, let's assume a customer -- the 4 generator gets a credit for the transmission service because of 5 upgrades, then he is going to get that credit when he is charged for transmission service once he takes transmission 6 7 service. And the credits will go forward against his 8 transmission service, and in essence, he's paid back his money.

9 But as far as the rates are concerned, what happens 10 with the revenues, once you get beyond the credit process, 11 let's just talk about that for a minute without the credits, 12 those rates -- or the revenues that are collected for 13 point-to-point rates or service are credited against revenue 14 requirements. Therefore, all network customers are receiving 15 this credit and the revenue requirements for network service 16 are reduced, okay, and that would include the retail customer. 17 COMMISSIONER PALECKI: Thank you.

18 MR. NORDLINGER: Okay. So what I'd like to do next 19 is, I'd like to give you a little bit of perspective on 20 interconnections that the three companies have received in 21 Florida, or interconnection requests, I should say. To date, 22 well, at least since January '99 when these things started 23 coming in, these requests, the three companies have received 24 96 requests, and this is just requests from independent power 25 producers.

Now, since that time -- excuse me -- since that time,
 42 requests have withdrawn. There are 49 requests that are
 currently either pending, they're in some point in the process
 as far as being studied, or their interconnections are being
 negotiated or whatever point they are in the process, and 5 of
 the projects are in service.

CHAIRMAN JABER: Forgive my naivete on this issue.
I'm going to ask you a series of questions that are probably
just not very intelligent, but that's how I learn.

10 When you say "requests," those are the ones that are 11 in queue?

MR. NORDLINGER: Yes; that is, that have submitted an application and the application has been accepted as complete and they've been given a queue date.

15 CHAIRMAN JABER: Okay. What incentive -- is it 16 possible, let me just be blunt about it, is it possible that 17 companies will make requests that never really come to fruition 18 but they're held in queue and in the meantime other companies 19 are precluded from making requests?

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MR. NORDLINGER: That could happen.

CHAIRMAN JABER: Okay. Is there a maximum --

MR. NORDLINGER: Oh, I'm sorry. Excuse me. I may
have misspoken because I may have misunderstood your question.
It is possible that somebody could put in a request that is
somewhat speculative. Let's characterize it that way.

1 However, would that preclude anybody else from putting in a 2 request? No. There's at least for the three companies no maximum number of requests that we can take. Now, of course --3 4 CHAIRMAN JABER: There is no maximum? 5 MR. NORDLINGER: There's no maximum; however, the 6 more you get, the longer it takes. You start to get a backlog 7 of them, or at least there's the potential for that, and therefore, it could delay the process for people who have a 8 9 later queue date or who come later. 10 CHAIRMAN JABER: Okay. So is there an evaluation 11 process when you get that original request that has you kicking 12 one back because it's just not a legitimate request or --13 MR. NORDLINGER: Okay. There's no evaluation process 14 as far as it's not up to the transmission providers to judge 15 and say, this is a reasonable request, or you're never actually 16 going to build this, so we don't believe you, or anything like 17 that. However, there are some assurances that the transmission 18 providers try to put in place to make sure that the requests that they get are valid. One is site control, and I think 19 20 that's a big one; that is, the generator actually has to 21 have -- they either own a piece of property, they have some 22 options on a piece of property. So that, I think, goes a long way towards assuring that you only get reasonable requests, and 23 24 they're not just totally speculative where they don't even know exactly what property they're going to use. It's just, well, 25

1 we're going to connect somewhere near over here. So that gives 2 them an idea. 3 CHAIRMAN JABER: When you get to the next request in 4 queue, do you ever have a situation where that company is not 5 ready, no longer has a need, do you just go to the next one in 6 queue? 7 MR. NORDLINGER: That is, is possible that somebody might drop out? Absolutely. And as we said, 42 requests have 8 9 withdrawn, and they withdraw at all different points in the 10 process. CHAIRMAN JABER: Is it a fair statement to say 11 12 that -- to make that the requests that are withdrawn are the 13 companies that have bought generation from another company or -- I mean, what makes a company withdraw its request for 14 15 generation? 16 MR. NORDLINGER: There could be all kinds of circumstances. It's -- I think one of the biggest ones right 17 18 now, frankly, is that, in my opinion, it's unfortunate that 19 because of Enron and some other things that have happened in 20 the market, some of the generators are having trouble getting 21 credit right now. So they've had to scale back the number of 22 requests or the number of projects that they're thinking about 23 doing, which means to the transmission providers, withdrawal of 24 requests. I hope that's just a short-term thing, but for right 25 now that's the realities.

There are a variety of other reasons a generator 1 2 might withdraw, including as they get down the road a ways and 3 they find out that the impact that they thought they had --4 were going to make on the transmission system is a lot 5 greater -- or excuse me, the impact that the studies show is a lot greater than the impact that they thought they would have, 6 and therefore they say, well, you know, this probably wasn't 7 8 the best spot to interconnect, let's find another one. That 9 might be a reason for withdrawal.

10 CHAIRMAN JABER: And one final question: Is there 11 ever a situation where you would move the order of the requests 12 in the queue based on need, based on a showing that some 13 generation is extremely necessary in some pocket of the world?

MR. NORDLINGER: I can only speak for Tampa Electric
in that we don't have any provisions in our procedures to allow
for that.

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CHAIRMAN JABER: What about Power & Light?

MR. SCHONECK: We don't either as long as they maintain a valid request with the procedures; they have site control; they move forward in the process. Basically, they're able to maintain their space in the queue.

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MR. MACEY: Florida Power does not as well.

CHAIRMAN JABER: Thank you.

24 MR. NORDLINGER: Okay. So this was -- the idea of 25 this slide was to give you a perspective of how many requests

there have been. Okay. Of those, 14 of these have reached the 1 2 point where they actually had an interconnection agreement, 3 whether it was executed or not, filed at FERC, and the cost of 4 system upgrades for those 14 projects that were filed at FERC 5 is approximately \$72 million. So the net effect here is, 6 there's the potential that \$72 million in costs to build system 7 upgrades for these generators that at some point in the future 8 the case is that the generator takes transmission service, 9 those costs eventually would become part of the transmission 10 provider's rate base, or at least the cost of their system. 11 COMMISSIONER DEASON: And for TECO, how much of that 12 will go to retail rate base? 13 MR. NORDLINGER: TECO is about 95/5 for 14 retail/wholesale, so --15 COMMISSIONER DEASON: So of the 72 million --16 MR. NORDLINGER: Okay. 17 COMMISSIONER DEASON: -- just for simplicity, let's 18 assume TECO of the 72.2 million is --19 MR. NORDLINGER: TECO is fortunate --20 COMMISSIONER DEASON: Go ahead. What is the number? 21 MR. NORDLINGER: Yeah, let me get it right. I have 22 it here. I had it here. If you will bear with me just a 23 second. 24 MR. SCHONECK: FPL's is the 66 of the 72 million. 25 MR. NORDLINGER: Okay. I've got it.

COMMISSIONER BRADLEY: Before you do that, repeat 1 2 that last statement, please, about whose rate base this enters 3 into. 4 MR. SCHONECK: I think we were looking. I quess, for 5 the distribution between the three companies of the 72 million, 6 and Florida Power & Light's of the 72 million was 66, and I 7 guess Tampa has their numbers. 8 MR. NORDLINGER: Right. I can give you the numbers 9 for the three companies that add up to the 72. It's 66.8 for 10 Power & Light, it's 2,400,000 for FPC, and it's just under 11 3 million for Tampa Electric. 12 COMMISSIONER DEASON: And your retail percentage is 13 95 percent? 14 MR. NORDLINGER: I believe that's correct. My retail 15 rates people are shaking their heads yes. That's good. 16 COMMISSIONER BRADLEY: Let's deal with rate base and 17 base rate. Who -- FERC is going to -- I mean, who is going to 18 deal with, I mean, with those two issues? I mean, is that 19 something that we would be dealing with? 20 MR. NORDLINGER: I'm really not sure. That is. I 21 mean. to the extent --22 COMMISSIONER BRADLEY: As it relates to the 23 transmission company. 24 MR. NORDLINGER: To the extent that you have a say so 25 over what goes into retail rates, I guess the answer would have

1 to be yes.

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2 COMMISSIONER DEASON: You mentioned earlier that 3 point-to-point service gets allocated, those revenues get 4 allocated to the retail jurisdiction. Did I understand that 5 correctly? Or short term -- something about short-term 6 service. What revenue gets credited to retail, and what 7 revenue gets credited to wholesale? How is that done?

8 MR. MACEY: That's based on a jurisdictional split, 9 and it varies from company to company. But as Art had said, I 10 think it's 95 percent retail for TECO and 75 for Florida Power. 11 COMMISSIONER DEASON: So it's based upon a

12 jurisdictional separation factor as well; correct?

MR. MACEY: That's correct.

14 COMMISSIONER DEASON: Now, you mentioned earlier, I 15 think, in answer to a previous question that there was some 16 type of service that the amount gets credited immediately 17 through the fuel adjustment clause. Was this some type of a 18 short-term transaction of --

MR. MACEY: No, it's not credited through the fuel adjustment. What I was referring to was what's called point-to-point service. It gets credited to the revenue requirements for transmission rates. Okay. And obviously, well, not obviously, but that credit, of course, would effectively reduce the rate to network customers, which are the other transmission customers.

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1	COMMISSIONER DEASON: But as far as wholesale and
2	retail, it's based upon an allocation factor.
3	MR. NORDLINGER: Yes.
4	COMMISSIONER DEASON: Okay.
5	CHAIRMAN JABER: Mike, are you all using that
6	overhead right now?
7	MR. STADEN: No.
8	CHAIRMAN JABER: Can you move that out of the way,
9	please.
10	MR. TWOMEY: Yeah, sure can.
11	CHAIRMAN JABER: Thank you. Go ahead.
12	MR. NORDLINGER: Okay. The next thing I just wanted
13	to point out is where a generator is located. Now, this
14	doesn't represent all the requests; that is, there are
15	54 active, either active or in-service requests, the 49 plus
16	the 5. This is only 43 of them, but they tend to cluster. And
17	you can have a look at the map. And then if you turn to the
18	next page, I believe that the generators tend to cluster
19	well, to start with, I wouldn't for a second tell you that it's
20	easy to site a generator. It's a very complicated process.
21	And generators have a lot of requirements, utility generators
22	as well as nonutility generators.
23	Those requirements are fuel which for most of the
24	IPPs is natural gas, water. They obviously have to find a site
25	that they can use and that can be permitted, hopefully that the

1 local jurisdictions will allow them to site there, and 2 hopefully they can find a piece of land at a reasonable price. However, I would also say that there's a possibility that 3 because of the way FERC is now treating interconnection costs 4 5 in that the generators, although they do initially have to pay 6 them and that is an expense to them initially, since they get 7 all of that money back with interest in arguably a relatively short period of time, that the incentive for them to locate in 8 a way that minimizes the cost of their interconnection might --9 10 that economic incentive might not be there.

11 COMMISSIONER DEASON: Let me ask a question, and this 12 may be a really stupid one, but I'm going to ask it anyway. If 13 these are the considerations that a generator looks at, 14 availability of gas, water, ease of siting, and inexpensive 15 land, if I were a generator and that was the criteria I was 16 looking at and I really didn't care where the load was because all I've got to do is get you to connect me to a transmission 17 18 system and then I get all my credits -- get it back, and if this was the criteria. it looks to me like folks would be 19 20 flocking to build power plants in North Florida.

You've got a part of a gas transmission line that goes through the Panhandle all the way. Land generally is probably less expensive in North Florida than South Florida. There are probably local communities in North Florida who would welcome the tax base who right now have zero tax -- or very

little tax base so you wouldn't be, not in my backyard type
 syndrome; in fact, it may be welcomed. So why aren't we seeing
 clusters of these in North Florida if people really aren't
 concerned about transmission costs?

5 MR. NORDLINGER: Because there's still the 6 practicality that whatever the price may be, transmission lines 7 would have to be sited and built to interconnect the generator 8 and move the power to the market, like you said. And, in fact, 9 the ability to build and site long transmission lines is 10 definitely very difficult.

11 COMMISSIONER DEASON: So there's not adequate 12 transmission infrastructure currently in place in the northern 13 sections of the state to accommodate --

MR. NORDLINGER: To move the power south, that's correct. So that's a reason that if you look at where the generators are clustering, and they understand transmission --

17 COMMISSIONER DEASON: Well, couldn't they -- I mean, 18 an extreme situation under FERC policy, would it be possible 19 for someone to locate a generator in North Florida and say, 20 I've got plenty of time, build a transmission system capable of 21 getting power from North Florida to Miami, and I'll get it all 22 back in credits once you get it built?

MR. NORDLINGER: Yes.

23

COMMISSIONER DEASON: I mean, that's really extreme,but under FERC policy, conceivably that can happen?

MR. NORDLINGER: Yes.

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COMMISSIONER PALECKI: So under FERC policy, the credits would apply to a full scale transmission line that might run a hundred or more miles?

5 MR. NORDLINGER: Well. now. that's different because 6 now we're talking about delivery service. That is -- and 7 that's a separate part as far as if a transmission -- or excuse 8 me, if a generator comes to a transmission provider and says, I 9 want to move "X" amount of power from Point A to Point B; the 10 transmission provider says, sorry, there's not adequate 11 capacity on the system to move that power, and they say, nope, 12 I want you to do it anyway, then you run into what we call the 13 "Higher Of" test for the FERC, which is that the transmission 14 provider would be required to build the line and the generator 15 would pay a transmission rate that is either the higher of the 16 total of revenues that they would pay over the course of time 17 that they would be moving power or a rate that's based on the 18 incremental cost of the facilities.

19 So if they say, I want -- if the facilities cost a 20 billion dollars but they say, you know, that's okay, I'll sign 21 up for 30 years, and if the net present value of 30 years of 22 service is more than a billion dollars, then the transmission 23 provider is going to build those facilities and the generator 24 is going to sign a contract that says, I'll take 30 years of 25 service on that -- on those facilities at your transmission

rate.

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2 But if they say, you know, I want you to build those 3 billion dollars' worth of facilities but I only want to take service -- I only want to commit to five years; you say, okay, 4 5 what's the net present value of a stream of dollars that would 6 add up to the billion dollars of facilities over five years? 7 And that's how you determine the transmission rate. And they 8 would pay that -- the cost of those facilities. So that's 9 delivery service which is also under the Open Access 10 Transmission Tariff, but it's separate from the interconnection. 11

12 COMMISSIONER PALECKI: Where do they draw the line? 13 What if a power plant is located in a phosphate mine in Hardee 14 County 20 miles from the nearest transmission line and they 15 decide to interconnect to the transmission line 20 miles away? 16 Is that --

MR. NORDLINGER: The way it's set up today, the connection from the generator to the transmission provider or to the transmission system are, quotes, interconnection facilities; that is, they fall under what we're talking about today.

Now, the way that FERC has ruled recently, though, that 20-mile line that's looped -- probably looped into the generator substation, or the generator may say, I want you to build a substation where I am, and I want you to loop a 20-mile

1 line in here, and my point of interconnection is going to be 2 outside of your substation, and FERC would say, I believe, that 3 those are all upgrades to the existing transmission system. 4 Network power, that is, power from other facilities or other 5 plants, could flow down that line and down through that 6 substation and back up around, so that's part of the 7 interconnected transmission system; therefore, that's a system 8 upgrade. And although the generator admittedly might have to 9 front a lot of dollars up front, which, you know, that's not 10 necessarily a small task, they would when they take 11 transmission service get those dollars back against their bills 12 as a credit on their bills with interest until it's all paid 13 back.

14 So as we were talking about before, typically these 15 things are paid back in a year or two. I suppose if you sited 16 it badly enough, and I don't think most generators do that, but 17 hypothetically, so it could take longer than two years, it 18 could be, you know, any number of years after that, I suppose, 19 if you have to build enough facilities. And again, I wouldn't 20 for a second tell you that generators, you know, try to do that 21 in any way because they do have to front the money.

COMMISSIONER PALECKI: Where does the FERC draw the line, though? Is there a clear line? What if it was a 70-mile line that was required to be built between the generation and the transmission line? Would that be a system upgrade? Is

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there a clear line, or is that still not answered?

2 MR. SCHONECK: I don't think there is a mileage. 3 What FERC has basically, I guess, ruled on in the past that what they have considered a radial connection, and on 4 5 Page 11 we had two different examples, that getting to the system from a radial was considered the interconnection 6 7 facilities, and that if it -- as Art had said, if it's a loop 8 type, which was the second example on the page, where power can 9 flow through the station, then it's more handled like a system 10 upgrade. So that's kind of the approach. I don't think 11 there's any type of mileage that FERC has come up with. I know you kept looking, is it 14, is it 70, but there's nothing that 12 13 I've seen as far as how far away.

14 CHAIRMAN JABER: Commissioners, for the benefit of 15 the audience and the speakers, let me explain what we were just 16 handed. Apparently FERC did take up their rulemaking today on 17 standardization of generation interconnection agreements and 18 procedures. They voted to release a notice of proposed 19 rulemaking that builds on the ANOPR. Comments are due 45 days after publication in the Federal Register. The rulemaking 20 21 asked whether the current pricing on interconnection should be 22 retained and seeks alternative proposals.

Go ahead. We're going to wrap this up.
MR. NORDLINGER: I'd like to.
CHAIRMAN JABER: Go ahead.

1 MR. NORDLINGER: Okay. So we were speaking about 2 I want to talk a little bit about planning and some of siting. 3 the challenges that the transmission providers are finding that 4 they're facing as far as planning. As we said -- or excuse me, we didn't previously say this. Sixty-eight of the 96 proposed 5 6 projects have significantly changed scope or withdrawn or been 7 significantly delayed; that's 71 percent. The problem here is that when that occurs, it can cause restudies, it can cause 8 9 delays. It certainly causes uncertainty, and it can increase 10 the costs for other generators who are in the queue.

11 Let me kind of -- let me explain a little further. 12 Generators that fall farther down in the gueue are dependent on 13 the results of studies that happen before them because let's 14 say a generator who is number one in the gueue is required to 15 pay for the costs of upgrading certain equipment. Well, all 16 the generators that are past that generator in the gueue are 17 going to depend on the fact -- their studies depend on the fact 18 that that equipment is already upgraded. Well, what happens if 19 when it comes to the point of some other point in the process. 20 in any event, that generator drops out, or says, you know, the 21 market is not right, I want to delay three years? So those 22 facilities wouldn't otherwise be upgraded for three years hence 23 or maybe never because that generator dropped out.

Well, now, the next people in line who were dependent on the result of that study now face the uncertainty that they

might have to pay for those upgrades in order for their
 interconnection to be made. So there's uncertainty here.
 There's uncertainty for the transmission providers, there's
 uncertainty for the generators.

5 Okay. I'd like to really guick -- hopefully guickly 6 go through an example. This is an example just to illustrate 7 the potential conflict between economic incentives for the 8 generator and the transmission provider. Now, at the top we 9 have the cost of the generator, which is the biggest cost in 10 the whole process certainly that the generator pays. This is 11 what it costs them to build the facilities. And some of the 12 radial facilities, as Bob was talking about, might be directly 13 assigned to the generator as far as the interconnection. So 14 that's the second line.

Now, then there additionally might be system upgrades that need to be built. That's the third line. And those, again, the generator would be eligible to get back with credits. And last, like Commissioner Palecki was saying, there might be a transmission line that needs to be built in order to move this power from where the generator decided to locate to where the market is.

Well, as you can see from the example, the generator has the incentive to construct Project C because their costs are only ultimately the cost of the generator and the direct assigned facilities because the rest they get back in credits.

56 However, from a least-cost planning perspective, you'd select 1 2 Generator B as being the total least-cost. 3 COMMISSIONER DEASON: Let me ask you a question. Under the section there, "Additional transmission facilities 4 5 required for delivery" --6 MR. NORDLINGER: Right. COMMISSIONER DEASON: -- for Generator C, you've got 7 8 \$70 million there. How would -- is that subject to getting a credit back, or as you mentioned earlier, a "Higher Of" test, 9 10 whatever the rate would be our incremental cost? Would 11 70 throw it into an incremental rate or -- explain that. 12 MR. NORDLINGER: It depends on the term of service, generally; that is, what determines the incremental rate is two 13 pieces -- or whether it's incremental or rolled in is two 14 pieces; that is, the total number of dollars that it costs to 15 build the facilities and then the amount of time you agree to 16 17 take service. So the longer you agree to take service, the more the rolled in rate would accumulate, if you will. So if 18 you agree to take service for long enough, your rolled in rate 19 20 would be higher than your incremental rate, and that just depends on those two factors, the total cost of facilities and 21 22 the length of time. COMMISSIONER DEASON: What period of time do most 23 generators indicate that they're going to take service? And 24 what obligation do they have if they say they're going to take 25

the service for 20 years? Do they have some guarantee? 1 2 MR. NORDLINGER: My experience to date has been that 3 most generators take service or firm service if they have a 4 long-term sales agreement with a customer. So the transmission 5 service is most typically tied to the long-term service or sale 6 to that customer and that's what predicates the length. 7 COMMISSIONER DEASON: And what type guarantee do they 8 have to provide if they want a long-term commitment that 9 transmission will be available? And if they say they're going 10 to take it, what guarantee do they have to provide? 11 MR. NORDLINGER: Generally what they provide is --12 well, I guess the first part is whether facilities need to be 13 built incrementally, that is, additional transmission 14 facilities need to be built, in order to accommodate their 15 service. Let's, for instance, say that they're not required to 16 be built. Then under the Open Access Transmission Tariff. the 17 transmission provider who's taking long-term service provides 18 typically a letter of credit for one month's worth of service. 19 If facilities have to be built -- let's say. a 20 transmission line has to be built and it's \$10 million. It 21 would be normal for the transmission provider to ask for some 22 type of security, like a letter of credit, that would basically 23 assure that the transmission -- that the generator was going to 24 take at least the amount of service that the "Higher Of" test 25 was based on. So basically if we say -- if the generator says.

1 I'll take five years of service, and you say, well, you know, 2 if you use our rolled in rates, that's going to be higher than 3 the 10 million that cost to build the line, so no problem, 4 we'll build you a line, but you want to make sure that sometime 5 after you get that line built, that the generator truly does 6 take that service and doesn't back out in some way. So you'd 7 ask for some type of security, typically a letter of credit. 8 that ultimately when that much service is taken. \$10 million. 9 or the present value of \$10 million. then you'd say, okay, 10 here's your letter of credit back because you satisfied your 11 obligation, you took --12 COMMISSIONER DEASON: Is that something you 13 negotiate --14 MR. NORDLINGER: -- enough credit. 15 COMMISSIONER DEASON: -- or is there FERC 16 specifications on that as well? 17 MR. NORDLINGER: As far as -- I mean, the amount --18 COMMISSIONER DEASON: The amount of the letter of 19 credit. 20 MR. NORDLINGER: I guess it could be negotiated, but 21 I would say from Tampa Electric's perspective that it's 22 typically the cost of the facilities is the amount of the 23 letter of credit. so --24 COMMISSIONER DEASON: Thank you. 25 COMMISSIONER PALECKI: This slide is a hypothetical, FLORIDA PUBLIC SERVICE COMMISSION

1 but can you cite to any real world examples where this has 2 occurred or where a generator has poorly sited its plant with 3 regard to transmission expense?

4 MR. SCHONECK: This is meant to be an illustration. 5 but this does happen in the real world. When you have a system 6 that is somewhat limited in its capability and you basically 7 cross over that threshold to where you have to put a lot of 8 infrastructure in place in order to move power from the receipt 9 point, being the generator, to the load, you have to build 10 additional facilities, where on some other places on the system 11 that you might be able to accommodate that with some existing 12 capability or minimal type upgrades, so, yes, this definitely 13 happens.

This type of situation happens, and it really is just a siting issue of trying to find the places on the system that can accommodate the amount of generation that you're trying to connect. At a certain point, you will reach that threshold, and you do have to add additional facilities.

19 COMMISSIONER PALECKI: So you're aware of specific20 examples of this then.

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MR. SCHONECK: Yes.

COMMISSIONER PALECKI: Thank you.

MR. NORDLINGER: Okay. Let me try to wrap up
quickly. We talked quickly about the FERC ANOPR, which the
Chairman was just referring to. It's an advanced notice of

proposed rulemaking which was at least in some ways a little different in that FERC kind of took an extra step in this case to kind of get everybody's ideas on generator interconnections before they actually put out the NOPR, which I understand came out today. And the purpose of this was to standardize interconnection agreements and procedures.

Just a little history real quick. It was initiated October 25th, 2001. There were workshops held last fall. Comments were due and filed February 1st. They were filed by over 100 parties, including most of the folks in this room and this Commission. And as we said, it's on FERC's docket today, and now we know what happened.

Okay. There were some outstanding issues from the ANOPR, and one of them was that pricing and cost responsibility were to be addressed at a later time according to the ANOPR. Well, from what the Chairman read, I guess this is the time, that is, that in the NOPR process it seems that, from what I understood her to read, that pricing and cost responsibility are going to be addressed as part of the NOPR.

Regional differences. This was an issue as far as to
what extent regional differences should be allowed in
interconnection agreements. And in specific, Florida -- a
number of folks in Florida filed and made comments about -- you
know, Florida has its own unique reliability situations. We
have our own unique reliability standards, and those should be

part of Florida interconnection agreements, and FERC shouldn't
 have to rule on whether Florida reliability standards are
 proper. We have our own processes for that. So that was one
 of the regional differences kind of issues that came up.

5 Flexibility. As we were talking about, when 6 generators change their parameters, their dates, when they 7 change their projects, that causes some uncertainty. It causes 8 uncertainty for other generators. It causes uncertainty for 9 the transmission providers. So to what extent should a 10 generator be allowed to be flexible, to move their dates to --11 and to otherwise change their project without losing their 12 queue position, without basically going back to square one and 13 starting all over again and possibility waiting in line for 14 their first study? That was an issue.

15 What constitutes interconnection service also was an 16 issue, and we kind of discussed this a little bit: that is. 17 right now interconnection service is what some refer to as 18 extension cord service; that is, it's just the connection from 19 the generator to the transmission system and that's it. 20 There's no transmission rights involved with that. There's no 21 discussion of deliverability. And the issue was, well, should 22 it be? That is, should interconnection service include some 23 considerations for deliverability? And that was certainly one of the issues that was discussed in the ANOPR. 24

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And then last, it's our understanding that FERC is

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1	working with the state commissions to coordinate the
2	development of interconnection policy. That concludes my
3	presentation. We'll certainly address any other questions you
4	might have, and thank you very much for your attention.
5	CHAIRMAN JABER: Thank you for your presentation.
6	COMMISSIONER PALECKI: Thank you.
7	CHAIRMAN JABER: We're going to take a ten-minute
8	break and come back for our next panel.
9	(Brief recess.)
10	CHAIRMAN JABER: We're going to go ahead and get
11	started. Commissioner Baez will join us shortly, so we're
12	ready for our next presentation which should be the FMPA,
13	Seminole and others.
14	Go ahead and identify yourself.
15	MR. WILLIAMS: Oh, I thought it's on. Okay.
16	Okay. My name is Robert Williams. I'm from Florida Municipal
17	Power Agency. I have a few brief comments this morning we'd
18	like to make. Let's see if we can get this and
19	(Loud noise.)
20	CHAIRMAN JABER: Do you always have that reaction?
21	MR. WILLIAMS: I hope not. And Joe Welborn will
22	follow me for Seminole with a few comments of his own. The
23	how do I back up here? Okay. All right. FMPA generally
24	favors the FERC policy and where it's going on generator
25	interconnections for several reasons. We think it promotes

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comparable treatment, and that's an issue that was not
 discussed in the previous thing, is that how the investor-owns
 treat their generation, they need to treat everybody else the
 same way.

We also have a transition problem going from the way things were done in the past and how we're going to do it in the future, and there is some serious inequities that have been done in the past. We can't rectify them all, but we're hoping we can work that out and make this go forward.

10 We believe a standard interconnection policy will 11 promote wholesale competition, and we also believe the general 12 way that FERC is heading reflects the broadest shared benefits 13 of upgrades to the AC transmission grid. As a discussion, they 14 talked about queuing and this guy gets a benefit if he comes 15 first or second. It just shows how complex and how 16 And both cross-benefits are between who comes first or second. 17 parties benefit from the other's contribution or additions 18 often. And that really argues that, well, if I come first and 19 pay all the money and somebody uses the transmission that I put 20 in there, shouldn't I get repaid when they get benefits of what 21 I paid for? And I think that's why FERC's policy is developing 22 as it is, as we think they should.

We even have a recent example we'd like to use here, and that is, FMPA with KUA owns some power plants at the Cane Island plant down south of Orlando. And when we put the last

unit in, it's not the first unit, this last unit in, we had to put in another piece of transmission line, and it happened to go over and connect to Intercession City to reinforce our generating plant to be able to get the power out into the grid. We were already connected to the grid, had to get it out, spent several million dollars to do that.

7 Florida Power Corporation added generation in that 8 Intercession City plant on the other end of that transmission 9 line, and they had to add more transmission line from there to 10 Lake Bryan and maybe more because of the increased generation 11 and getting it out in the area. Same problems we had. Their 12 transmission cost rolled into their transmission rates for 13 wholesale and retail customers, whereas our costs were not 14 rolled in. In the future, it seems obvious to us that that 15 transmission expense we made should have been a grid facility 16 improvement, and we will argue as we go forward in the RTO that 17 eventually we ought to get credits for that as well.

This example -- there's a couple of solutions, I 18 think, that people are maybe considering. If the upgrades are 19 20 not rolled in, and everybody seems to be fearful of that, I 21 don't think these upgrades are that big of an expense, but if 22 they're not rolled in, then to be truly comparable for all 23 generators, the existing transmission for existing generators 24 should be removed from the grid price and not charged -- and 25 only charged to the retail customers that are taking that

1 service.

2 So in other words, if a third of the transmission 3 costs were removed from wholesale cost, it would be left with 4 the retail customers, but then we wouldn't add our cost on to 5 the retail customers. So there's no free lunch.

6 COMMISSIONER PALECKI: Why only retail customers?7 I'm not sure I understand.

8 MR. WILLIAMS: Well, it would actually -- if you 9 don't roll it in, then you're saying that the generator 10 interconnection cost for Turkey Point ought to go to Florida 11 Power & Light's customers, not to everybody. I pay for those 12 interconnection costs that were built at Turkey Point, and they 13 may be depreciated now, but I could chose a newer plant, but 14 everybody pays for the interconnection cost for Turkey Point.

15 When Calpine wants to come put one and Calpine has to 16 pay that, it's not fair that Turkey Point's interconnection 17 costs are charged to everybody. If you don't roll them in, 18 then you have to allocate them to all the retail customers they 19 service or the generation they serve. So if you don't roll 20 them in, you would take the Turkey Point, and that would be 21 only for FPL, not for everybody that uses the grid. We would 22 separate the grid now. This is a functional unbundling. It's not easy. I'm not saying I want this. I'm not saying we could 23 24 easily do this, but to be fair, if you're going to not roll in. 25 then you have to functionally unbundle. You have to go

separate everybody's transmission and treat everybody the same.
 It would be the fair thing to do, in my opinion. The
 alternative to that is a --

4 COMMISSIONER DEASON: Excuse me. The entire 5 transmission system or just the interconnection --

6 MR. WILLIAMS: Just the interconnections for the 7 generation. I mean, you can get into more problems as well, 8 but I'm just saying right now just the interconnections. You 9 ought to -- if you're going to not roll it in, then you ought 10 to separate out each generator's interconnection cost and not 11 roll any of them in. If you can't roll one in, you don't roll 12 any in.

13 CHAIRMAN JABER: Well, how do you isolate -- if you 14 were going to charge only to the retail customers taking the 15 generation service, how do you isolate those costs to just the 16 retail customers taking the service?

MR. WILLIAMS: I didn't say it would be easy. And we've tried -- we've made this argument before at FERC, and we've tried to get certain investor-owns to separate out what those are. And they've been -- indicated it would be very difficult, and I believe they're telling the truth. It would be very difficult from their records because they were not kept in that fashion.

CHAIRMAN JABER: And wouldn't that add to the cost,though, of the system and therefore increase rates even more?

1 MR. WILLIAMS: No. no. What I'm saying is that. 2 if -- let's take the Turkey Point, for instance. If there was 3 a Turkey Point charge for interconnection -- this is not for 4 transmission now. We're isolating what the grid is, and the 5 grid is going to be a new definition away from the generators, 6 and the interconnections to the grid are going to be pulled out and charged only to those generators. So FPL's Turkey Point 7 generators would carry with them the transmission for the 8 Turkey Point interconnection, and my Cane Island plant would 9 10 carry with it to my customers the Cane Island interconnection 11 cost. But if I have to pay for Turkey Point's interconnection 12 cost, then everybody ought -- if everybody has to pay for 13 Turkey Point's interconnection cost, then everybody ought to 14 pay for my Cane Island interconnection cost as well.

15 When I say "interconnection cost," to the extent FERC 16 has defined that bright line. I think the first graph they 17 showed you with the two examples, the breaker in the single line connection would have been socialized. The transmission 18 19 line from that to the generator itself would probably not be socialized. So all of the costs were not socialized. Granted, 20 21 a very large part would be socialized, but not all of it. And 22 I think we will be debating those costs -- those allocations 23 for a while to come.

If we try not to roll in some of this, we're going to have bigger fights is my opinion. The path we're on is

probably going to -- when we get used to it, it will probably
work out, and we'll all know what the rules are, and we'll live
by them and go on about our business.

4 The -- so the alternative to not -- if you don't roll 5 in, you've got to consider functionally separating all 6 interconnection costs. On the other hand, a bright line 7 definition, very much like what GridFlorida has proposed, if 8 that stays, that looks to me like that can work. And we've 9 said this consistently. That bright line definition they have 10 for what is in the grid and what is not in the grid and taking 11 that with FERC's -- what's in the interconnection -- what's an interconnected cost and what is a system cost, I think we're 12 getting close to something that will work. And we support that 13 14 effort.

So this standard that we're going to start working on in earnest here, apparently, we believe will -- consumers will benefit because of more timely access to competitive generation. Generators will benefit because the standardized interconnection policy removes various entry. Hopefully more of it they will know where to go, and utilities, we think, will benefit through increased reliability.

A couple of points on Art's presentation. The upgrade costs are substantial, 72 million he's talking about there, but without considering load growth, without considering whether this is replacing old generation or it's new generation

1 or whatever. The cost per customer per month is about seven 2 cents. It is not as significant as it looks. And I think a 3 bigger cost that they did not talk about is the fact that 4 locating in North Florida is going to -- not going to be very 5 valuable when you try to sell your generation as it is going to 6 be when you sell your generation as close as you can get to 7 South Florida. And if you look at where all the generation 8 interconnection activity is, it's not in North Florida. These 9 people know where to go. They're trying to find the best place 10 to put their generation where it meets all the criteria, 11 including getting the generation closer to where the load is to 12 where they'll have more value in their generation, they can 13 make more profit.

14 And the cost of interconnection, while there's not a direct incentive for them to choose the cheapest 15 16 interconnection, there is an incentive to get it least-cost and 17 most value to the customers of Florida, and that means moving 18 it as far south as you can without the environmental limitations you have and all that. And so I think we have 19 going forward what's going to drive location of generation. 20 Ι 21 think it will solve most of the problems that are brought up 22 there, and that if we have proper market design, which is 23 something I don't think we have yet but we're working on it. 24 that will be critical to giving the incentives of where to 25 locate generation.

And once you know where generation is going, I think we would like to engage this Commission on the second item, and that is to make sure we have an open inclusive regional planning process to expand the grid in an efficient and timely manner to meet everybody's needs. And I think there's a lot of room for how we go about that through the RTO and all of the players in Florida and the Commission to plan how we do that.

And I think some of the problems that were mentioned in Art's presentation, I think the Commission can have an opportunity to comment on that before it goes to FERC for final approval and rates and all of that. And we would welcome the Commission's assistance and input into the planning process and would like to encourage that.

14 CHAIRMAN JABER: Do you think we currently have the 15 ability to participate in the FERC process on planning? Set 16 aside the RTO procedures, that's not what I'm talking about, 17 but --

18 MR. WILLIAMS: On the regional planning?
19 CHAIRMAN JABER: Yes.

20 MR. WILLIAMS: I don't have my lawyer with me today, 21 but I think so.

CHAIRMAN JABER: And what vehicle would we have? I mean, and we would file some sort of pleading?

24 MR. WILLIAMS: I mean, I'll go way back. We've had 25 generation planning in the past. I don't know why we couldn't

1 have transmission planning with the Commission and all the 2 affected parties. I think we have the Grid Bill. I mean, I 3 would think you could use that as your vehicle. I didn't 4 research the legal part of that, but anyway --

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CHAIRMAN JABER: Thank you.

6 COMMISSIONER PALECKI: When you talk about rolling in 7 network upgrades, are you including the credits that are then 8 paid by the investor-owned or by the transmission owners as 9 part of the rolling in process? I guess I'm not sure of what 10 you mean when you say "roll in."

11 MR. WILLIAMS: Well, "roll in" means that the -- Art 12 was right in that the effect is whether you -- if they pay up 13 front and get credits back, you're essentially rolling in those 14 transmission costs to everybody. Now, that customer that is 15 asking for the service is going to pay a substantial amount of money after the roll in is paid for. So he's going to be 16 17 contributing money to the grid to pay for part of the grid as 18 well.

COMMISSIONER PALECKI: In an ideal world, wouldn't it 19 be the customers that benefit from the generation that should 20 21 pay for the network upgrades?

22 MR. WILLIAMS: Well, that goes back to my argument, 23 is that's fine. If you want to do that, I think it's a much more difficult task than where we're going right now. 24 25

COMMISSIONER PALECKI: So you're saying

1 administratively that that's very difficult.

MR. WILLIAMS: Extremely difficult because when you put in one transmission line, you don't put it in for 2 megawatts or 50 megawatts, you put it in for whatever it requires to take, which may be several times that. And so somebody else gets benefits of that. So should I pay for all of that?

8 COMMISSIONER PALECKI: Well, let's say in the state 9 of Florida we have a plant built by a generator in Florida 10 Power & Light's transmission area, but all of the power is 11 being sold in Florida Power Corporation's territory. None of 12 Florida Power & Light's customers will benefit at all from that 13 power plant. Is it fair to require Florida Power & Light's 14 customers to pay for those transmission upgrades?

MR. WILLIAMS: Well, my opinion is, I guess you're talking about an interim stage that we're not at yet, and that interim stage would be the initial GridFlorida stage. Long term I see one state, one rate and we all pay, and these areas don't matter.

20 COMMISSIONER PALECKI: You're talking about after we 21 create our regional transmission system --

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MR. WILLIAMS: Yes.

23 COMMISSIONER PALECKI: -- with an independent system
24 operator.

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MR. WILLIAMS: Yes, sir. Long term I think that

1 issue will go away. Today, I guess it goes maybe the other way 2 around, but Light can sell to load in Corp's territory, and 3 somebody pays for the transmission over Light's system and 4 somebody pays for the transmission over Corp's system. So 5 there's two payments for both things. 6 As we go into the initial GridFlorida, I think what 7 would happen is the load would pay for the Corp transmission, 8 and they would not pay for the Light transmission over the 9 existing facilities, but as you add new facilities in the state 10 that get averaged over everybody, eventually you move to one 11 rate for everybody and it --COMMISSIONER PALECKI: And everything evens out 12 13 lover --14 MR. WILLIAMS: Over time, everything will --15 COMMISSIONER PALECKI: It might not be absolutely 16 perfect, but it's going to be pretty fair. 17 MR. WILLIAMS: Yes, I think it will be. The sooner 18 the better as far as I'm concerned, but --19 COMMISSIONER PALECKI: Thank you. MR. WILLIAMS: Thank you. 20 21 CHAIRMAN JABER: Seminole. 22 That presentation was complete; right? 23 MR. WILLIAMS: Yes. 24 CHAIRMAN JABER: Seminole. 25 MR. WELBORN: I'm Joe Welborn. I'm vice president of

energy delivery for Seminole Electric. I'd like to go through and just address some of the issues that were brought up today by -- in the previous presentations. One of the things that had been discussed, and it was discussed by Bob, is to how credits would be paid and how the initial costs would be rolled in on the generator interconnections.

7 One of the things that I'd like to point out is that, 8 first off, when the credits are reimbursed back to the 9 generator and he has received all of the credits for his 10 initial capital investment, he continues to invest into the 11 transmission system by purchasing services that ultimately 12 provide revenues that are rolled in to the transmission rates over a long period of time. So even though the facilities may 13 14 be -- the transmission facility upgrades may be paid off in a 15 three-year period, that new generator as a transmission 16 customer will continue to pay for services into the 17 transmission system for the life of his facility.

In addition to that, one of the things that was shown in the presentation earlier was that there were 7,000 megawatts of generation added into this state. One of the things I'd like to point out also is that that generation, I won't say loo percent of it, but some of that generation served network load in this state. And, for example, contracts with Seminole were served by part of that generation.

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Now, what does that mean? That means that in lieu of

1 Seminole building facilities where we would have incurred interconnection costs that would have ultimately been 2 3 transferred to our consumers through our rates, it's paid 4 through the transmission rates, and it displaces generation 5 that we would have built in this state. So I don't think it's 6 fair to characterize the fact that all the generation was 7 merchant facilities in this state and all the network upgrades 8 were not a benefit to the overall transmission system.

9 I'm sure that also some of these facilities are used to serve load within the FP&L and FPC area, that it's not just 10 11 Seminole load that's being served by these facilities. In 12 addition to that, I think that the thing that is not being addressed is the future benefit that these facilities will have 13 14 to the state. When other generators come in and interconnect 15 with the transmission system, obviously since these upgrades 16 have improved the overall transmission system and made it more 17 robust today, when those interconnection -- those new 18 generators come in and interconnect with the system, that 19 there's a likelihood that additional system upgrades will not be required. And those are just things to -- some things to be 20 taken into consideration when you're looking at the crediting 21 22 back to the generators that are interconnecting, that it's 23 not -- there are some other benefits besides just the 24 transference of cost to the ratepayers or --

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CHAIRMAN JABER: But help me under your position. So

all of that being said, is it that you would want to receive your credit earlier or do you dispute that the --

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3 MR. WELBORN: No. We're in agreement with the fact 4 that credits -- that the generators that are interconnecting 5 should pay the initial cost for the transmission upgrades, and 6 that they should be reimbursed as they use the transmission 7 facilities through their transmission rates. My point is that 8 after those rates are paid, that that facility still serves and 9 pays for transmission use and the use of the transmission 10 system for the whole life of the facility and not just during the time period that it's getting credits. And like I said --11

12 CHAIRMAN JABER: Well, the transmission providers 13 don't disagree with that, do they?

MR. WELBORN: I don't think that they disagree with it, I just think that it wasn't pointed out in their presentation. And part of the discussions this morning were how these credits would affect the retail rates, and my point being is that all interconnection facilities with generators that go into this state are treated exactly the same way.

When Florida Power & Light or Florida Power Corp interconnects a facility in this state, they have redispatched cost, they have interconnection cost, and if there is redispatch associated with the generation, they incur those costs, and they pass those costs on to their ratepayers. And our position is, is that any new generation into the state is

beneficial to the state, that it adds to the wholesale market
 and the competition within the wholesale market, and in turn
 adds to the overall state reserves.

4 COMMISSIONER DEASON: But do you see any distinction 5 that -- you gave an example of Florida Power & Light. An 6 investor-owned utility builds generation. They incur costs. 7 interconnect costs, and they incur redispatch costs. Do you 8 see any distinction that that generation has been approved by the state of Florida as least-cost and it's needed and that it 9 10 becomes part of their rate base and that it is there to serve 11 retail customers, and to the extent that they make wholesale sales, that part of those benefits are shared with retail 12 customers and that someone else that comes in and builds a 13 plant, that there's no obligation to serve those retail 14 15 customers of Florida Power & Light, they can sell to whomever 16 they wish at the highest price that the market will bear? Is 17 there any -- do you see any distinction there?

18 MR. WELBORN: Well, I think, like I said, two things. I think that it benefits the overall state from the fact that 19 it adds to competition at the wholesale level within the state. 20 21 I also believe that new generation that's added to the state 22 when they use the transmission system after they have received 23 the credits are paying for the transmission service, so 24 therefore, that that benefits the overall revenues for the 25 transmission system. And like I said, I don't believe that the

upgrades that are made to the transmission system are solely
 for the benefit of the one generator that's interconnecting,
 that it provides a benefit to the overall robustness of the
 transmission system.

Just to continue on, we also agreed with how the queue priority was established by using the chronological sequence of a valid request. We think that by using a single date to establish the queuing eliminates the possibility of getting into disputes over, let's say, for example, if you had multiple criteria, as to how those criteria would be applied and how the queue would be established.

12 We do realize that there has been a large number of 13 applications made to the investor-owned utilities for 14 interconnection. One of the ways that they have handled this 15 previously is to go through joint studies. They did this, for 16 example, looking at several generation requests, and I don't 17 know the exact number of the '96 interconnection requests that 18 they had that they did address in the joint study, but that is 19 another way that they could handle the fact that there are a 20 large number of interconnecting -- or interconnection requests 21 into the system.

Some of the concerns that we had in the documents that were provided to the Commission was, first off, that we didn't feel that the direct assignment costs that were defined in the documents were very explicit. We don't know, for

example, what was represented today as -- that a radial line
 would or would not be a direct assignment cost to an
 interconnecting generator. I realize that in the presentation
 today that was presented as a position.

5 Seminole is of the opinion that any facility that is 6 a 69 kV facility or above should be considered transmission 7 facilities, and that those facilities should be included as part of the network upgrades, that direct assignment costs 8 9 should be limited to the actual interconnection to the 10 transmission grid. We don't believe that this is any different 11 than how the investor-owned utilities treat their current 12 transmission facilities today, and we believe that that should 13 be continued in the future.

14 Adding to that, one of the things that we think is a 15 deficiency and what is not being addressed in any of the 16 procedures is that we honestly believe that there has to be 17 some sort of a strong signal pricing that is provided to the 18 generators for location in the state. We think that by 19 providing them either zones or some sort of a pricing signal to tell them where to locate in the state, it will reduce the 20 21 potential of impacts on the grid because of a poorly located 22 generator trying to serve load in an area that will require 23 additional network upgrades.

24 One of the -- the fallacies that we see in the 25 current system is that the generator doesn't get a pricing

1 signal for interconnection services until the studies are 2 complete, and this is after he has located his site and after 3 he has finalized an application to whoever he is 4 interconnecting with. And what the difficulty is with that is 5 that the pricing signal is given too late to the 6 interconnecting generator, and we think those pricing signals 7 need to be given much earlier so that they know where to locate 8 within the state to best suit not only the load but the grid.

9 COMMISSIONER PALECKI: Would you then agree with the 10 investor-owned utilities that under current pricing policy 11 there is little incentive for generators to site their plants 12 to minimize the cost of interconnection?

MR. WELBORN: I would say that right now -- the answer is yes, and right now I believe that there's not good pricing signals to indicate where a generator should interconnect initially, and it really should be done much earlier in the process.

18 COMMISSIONER PALECKI: Is this something that you're 19 working with the investor-owned utilities to work out some sort 20 of procedures that could be put it place?

21 MR. WELBORN: We have not really directly -- we have 22 worked with them through the RTO workshops, and this has been 23 an issue that's been brought up previously in the workshops.

24 COMMISSIONER PALECKI: Because this seems to be a 25 very important issue and one that needs to be resolved as we

81 1 move forward on the RTO. Thank you. 2 MR. WELBORN: That concludes my presentation. 3 CHAIRMAN JABER: Thank you. Let me get a feeling 4 from the independent generators, how long they'll need for 5 their presentation. And that's not to rush you. I just need 6 an estimate. 7 MR. MECHLER: A half hour. 8 CHAIRMAN JABER: Commissioners, we have that 9 presentation which is supposed to last half an hour. Our Staff 10 has allowed at the very end an open discussion -- time for an open discussion, and obviously I don't think we can gauge how 11 12 long that will take. What's your preference? We can take a very short lunch break here and come back. 13 14 COMMISSIONER DEASON: (Nodding head affirmatively.) 15 CHAIRMAN JABER: Okay. Let's do that. We'll come 16 back at ten till. 17 (Lunch recess.) 18 CHAIRMAN JABER: Let's go ahead and get started. The 19 next presentations are supposed to be by representatives of 20 independent generators. 21 How are you? 22 MR. MECHLER: Hi. 23 CHAIRMAN JABER: Do you have handouts? 24 MR. MECHLER: Yes, there was a handout. 25 CHAIRMAN JABER: We don't have it. FLORIDA PUBLIC SERVICE COMMISSION

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Go ahead.

2 MR. MECHLER: Good afternoon. My name is Robert 3 I'm the manager of transmission policy for Reliant Mechler. 4 Energy. I've been asked to come today and speak on behalf and 5 in general for the Florida PACE group. Florida PACE is an 6 association -- loose association of six energy companies. It 7 includes Calpine, Competition Energy (sic) Venture, 8 Constellation. Duke Energy North America. PG&E National Energy 9 Group and ourselves.

10 And somehow, I'd like to just briefly go over some of 11 the things that we heard again this morning and maybe expand on 12 a few ideas and maybe provide some clarification on some of 13 these issues. My outline is just to quickly go over the 14 process and talk about something where FERC has been, and obviously we heard today that FERC has moved forward with the 15 16 NOPR, and then a brief discussion of some of the benefits we 17 see with the interconnection of new generation into the grid 18 here in Florida.

As was mentioned this morning, there is a current process that handles interconnections for new generators as well as the transmission service and is frequently referred to as the IA or IOA process and the TSA process. In both of these cases, generally following some series of computer studies, it's at that time that there's a determination of a need for some upgrades in those processes.

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1 And if -- I think Art did a good job this morning. 2 I'll just use this slide very briefly. This is a generic 3 outline of the generation interconnection process as it occurs in many utilities but not all. And it moves from left to right 4 5 on this screen. And during the process, the IPP is obviously working with the local utility through the series of studies 6 7 and is making deposits for those studies along the way and is 8 making decision points, like Art pointed out, as to whether he 9 should continue or not. And it's through this process, then, eventually the generator and the utility get down to finally 10 11 negotiating and signing an interconnection agreement which is 12 filed at FERC.

13 I don't know if there's any more questions from this 14 I think they were pretty well answered this morning, process. 15 but I can answer any questions now if you'd like. But the key 16 to take away from here is that there are certain milestones 17 that the IPP must maintain to be maintained in the queue. and that through the process he is paying for the studies that are 18 19 being performed by the utility that that's not -- that is part 20 of the cost of interconnection.

CHAIRMAN JABER: I've heard allegations from time to time from the IPPs, no one is to be named, but from the IPPs about the ability to tie up access to transmission by applying for generation, you know, sort of flooding the queue list and therefore restricting access. Can you walk me through that?

MR. MECHLER: Sure.

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CHAIRMAN JABER: Have you heard that before?

3 MR. MECHLER: Yes, we have. Let me -- let's keep the 4 two gueues separate because there are two separate gueues. And 5 on this slide we're talking about the generation queue, and 6 I'll answer my question relative to the generation queue. 7 There have been accusations or at least suggestions that there 8 are some projects that may not be as viable as others. This 9 may occur. Keep in mind that when a generator, a developer 10 looks out for a new site, they may start in-house with 20 or 30 11 potential sites, and they begin to widdle that list down and 12 maybe they get down to 10 that might be viable, and they 13 internally begin to do more and more studies.

14 Some developers are more sophisticated than other 15 developers. Reliant, for example, has a fairly extensive staff 16 of employees who do a combination of economic studies, transmission studies, and other evaluations to determine what 17 18 should go forward. And eventually we may get down to two or 19 three sites that we think might be viable. And it's at this 20 time that we have to decide whether we want to go forward or 21 not. And if we do submit a request in to a utility, it's not 22 without some cost because there's an application fee of generally around \$10,000 or more. And so for a developer just 23 to flood a queue with a bunch of bogus requests, he's out some 24 25 money, and he would -- that, I think, would be foolish if he's

not -- doesn't have some level of expectation to take those
 projects forward.

3 However, currently there is not as much flexibility 4 when a generator submits those requests. And a good example is 5 this: If the generator sees a site that he likes that's next 6 door or adjacent to a. say, a 500 kV line and a 230 kV line. 7 under some queues or some procedures if he's not sure what 8 might be the best connection into that system. he might be 9 forced to submit three requests, one to tie to the 500, one to 10 tie to the 230, and one to tie to both. This is not just what 11 happens in Florida, but in some cases, some utilities would 12 require three requests, and they would study each request 13 differently. Other utilities would say, no, no, no, give us 14 one request, we'll work together to find the best solution to 15 connect your generator into the system. So that's part of the 16 variation that occurs today with today's nonstandardized 17 interconnection process.

It was suggested in the ANOPR filings that this kind of flexibility, this kind of interaction, cooperation between the generator and the owners of the transmission system would probably benefit the queue process and provide a much smarter process in the long term. Did that answer your question? CHAIRMAN JABER: Yes.

24 MR. MECHLER: Okay. Moving on to the next slide. 25 Just in comparison, this slide seems kind of busy, but it was

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my attempt to try to show that there is a somewhat similar 1 2 process when a transmission customer wants to take transmission 3 There's a request made generally through OASIS: service. there's some evaluation. And at that evaluation, it finds that 4 5 it may require more computer studies. called a system impact 6 study, that also can -- may lead to eventual contracts, or it 7 may require system upgrades eventually. Both processes go 8 through a fairly rigorous process of studies and a fairly 9 structured format, in most cases.

What this gets to is that FERC does have some fairly structured or at least some direction on the current policies on cost responsibility and pricing. And the three areas I want to talk on briefly are: OR pricing, the credits again for system upgrades, and the interest for an up-front cost for these system upgrades.

OR pricing was mentioned this morning a few times, 16 17 and as the slide shows, it's a fairly lengthy definition of 18 what OR pricing is. And rather than read through this, I'll --19 I think it might be beneficial to talk about an example. But OR pricing really goes to the transmission service part of 20 21 interconnection and not so much the interconnection part, and 22 you'll see why that is in a minute. But I think Art and some 23 others defined this pretty well this morning, and I won't go 24 through that again unless there's a question on OR pricing. Ι 25 think the example will show exactly how it falls out of the

1 mathematics.

So on the example on Slide 9, I've assumed that there's been a new request for 500 megawatts of transmission service. And through the computer modeling and studies and the facility studies, they've determined it will take \$35 million of upgrades to accommodate this service. The question is, how will it be paid for under the OR pricing? And this is for transmission service, not interconnection.

9 Well, in the first part, let's make sure we 10 I have understand where we got our existing wholesale tariff. 11 simplified this greatly from where -- many of you may know, 12 it's more complicated than this, but I've tried to get it 13 simplified. Basically the existing wholesale tariff is just 14 the transmission revenue requirement, annual revenue 15 requirement, divided by the peak transmission usage. And in my 16 example, I've assumed \$100 million per year transmission 17 revenue requirement divided by a system transmission uses of around 8,000 megawatts. 18

And if you do the math out, you can get down to a rate, and you can pick your rate there. It's either around 12,000 megawatts -- or \$12,000 per megawatt year or a thousand dollars per megawatt month or if you get them to get down to \$1.04 per kW month. And that's how that service is sold, and that's what's published and approved by FERC as it appears in the -- in their tariff, their pro forma tariff.

1 So a good rule of thumb is, most transmission runs 2 about a thousand dollars per megawatt month, and that's how we 3 kind of think about it. In this OR pricing, we have to decide 4 if this \$30 million is going to have an impact or not to the rate if it got rolled in or if it should be a separate rate for 5 6 the customer. So in the -- and we're moving to the right then 7 for the rolled in rate. We have to take the existing revenue 8 requirement and add the new project revenue requirement, which 9 is a calculated value, which is a project cost times some adjustment factor. And that adjustment factor varies from 10 11 utility to utility for their return on equity, depreciation, 12 taxes and other costs.

13 I've assumed here about .17, and then that's again 14 divide by the existing 8,000 megawatts plus the new 15 5,000-megawatt usage of the system. And in this case, we see 16 that the rate actually will go down. If the utility would 17 invest the \$30 million to handle this new service, then under 18 ideal ratemaking, he would go ahead and invest that 19 \$30 million, adjust his rates, and all customers would then see a reduced rate. all customers. 20

But the question comes in, well, gee, what if the upgrades were worth \$50 million? We'll do the same mathematics. Below we can see in that case a \$50 million cost for the same amount of additional usage would actually drive the rate up by a little bit. And under this case, for this

service the utility would have the ability and the right to 1 2 charge the higher cost directly on to the transmission user who 3 asked for the service, and that would be calculated, as Art 4 suggested, over the term of the contract.

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It's interesting to note using the numbers from this 6 morning's presentation by the utilities, I made a quick 7 calculation, it looks like most of the upgrade costs on average 8 for each of the projects they listed for 14 projects for 9 72.2 million, the average price for the upgrades were running 10 about 5 million per project based on the megawatts.

11 COMMISSIONER PALECKI: Now, under the second example 12 where the upgrades cost 50 million, the generator would then 13 receive the \$50 million in credits?

14 MR. MECHLER: No, sir. This is somewhat confusing. 15 This is for a transmission service request. This is the OR 16 pricing scenario. The \$50 million here, the utility would 17 invest that if the transmission customer agreed to pay over the 18 term of the life of their contract for the service, then the 19 utility would be obliged to build the \$50 million and invest 20 the \$50 million. And then the customer over the term of their 21 contract will pay for the service which recovers those dollars 22 for that utility. At the end of the contract, essentially that 23 facility is paid for and is used and useful for the rest of the 24 But there's been no impact to any other ratepayer. system. 25 COMMISSIONER PALECKI: Where do we draw the line

between the transmission service part and the interconnection
 upgrade part? That's what I don't understand.

3 MR. MECHLER: Okay. I will try to -- this is also 4 the big question that has come out of the ANOPR. In the 5 generator interconnection process, there may be system upgrades 6 that are required. And if there are, then in that case the 7 generator will pay for those and he gets credits. But the same 8 time, he may also ask for transmission service separately. 9 separate queue process, and they may also suggest system 10 upgrades. And in those cases, it's handled under the OR 11 pricing process, similar processes but handled slightly 12 different.

13 COMMISSIONER DEASON: In your \$50 million14 hypothetical, what rate does the generator pay?

MR. MECHLER: I didn't calculate it because I didn't assume a term here, but you would take the \$50 million investment by the utility. They would have to look at their rate of return and the other factors that go into their operational costs, do, like Art suggested this morning, a net present value over the term and generate a rate that would be charged to that customer alone, a special rate.

I didn't do the math here, but I would imagine it's probably something higher than -- it would be higher than the \$1.04 per kW month, but I did not calculate that. I didn't include the term in these calculations.

91 COMMISSIONER DEASON: But it would certainly be 1 2 dependent upon the term. 3 MR. MECHLER: Yes, yes. 4 COMMISSIONER DEASON: Similar to amortizing a 5 mortgage. 6 MR. MECHLER: Pardon? COMMISSIONER DEASON: Similar to amortizing a 7 8 mortgage. 9 MR. MECHLER: Yes, right. And the transmission 10 customer, you know, has agreed to this through his contract he signed, the transmission service agreement contract. He says, 11 12 I'm taking service, firm service for 10, 15 years, or whatever 13 it might be, 5 years, and that is recovered there. COMMISSIONER DEASON: But it would have to be 14 15 something in excess of the \$1.06 per kilowatt per month; 16 correct? 17 MR. MECHLER: I'm sorry? 18 CHAIRMAN JABER: He didn't hear you. COMMISSIONER DEASON: I'm sorry. It would have to be 19 20 something in excess of the \$1.06 per kilowatt per month; 21 correct? 22 MR. MECHLER: I think so, yes. 23 COMMISSIONER PALECKI: Is there anything that 24 provides an incentive for a generator to site plants to 25 minimize the cost of transmission upgrades and/or FLORIDA PUBLIC SERVICE COMMISSION

interconnections? And if you could, refer to your \$50 million
 example.

3 MR. MECHLER: Yes. I'm going to cover that in more 4 detail later, maybe, but let me answer it now. Let me see if I 5 can go forward here real guick on my slides. There are 6 incentives, we think, for generators to site efficiently and 7 reduce their cost. And these factors really are a combination 8 of the interconnection costs, upgrade costs, water 9 availability, fuel deliverability, and certainly environmental 10 concerns, land use, permitting. The developer has to put all 11 these together to find a best location.

12 Certainly if -- in answer to your question, if I'm 13 facing a scenario where the upgrade costs are 50 million and we 14 have to go out and get that money up front because we have to 15 pay those up front, I have to go to the banker and say, well, 16 rather than the 300 million I need for the plant, I also need another 50 million. So I have to borrow 350 rather than 300 17 18 million. There's certainly some economics there in borrowing 19 that money. Even if we get interest back, which we're supposed 20 to now under FERC rules, the interest we're getting back over 21 the period of time the money is out the door will probably be 22 less than the interest we're getting -- we're having to pay for 23 that money at the bank.

Could there be better incentives? We think probably so, as was mentioned this morning through some of the

1 presentations, but there are certainly incentives today to site 2 correctly. 3 There was some suggestion this morning about 4 least-cost planning. I would doubt that if a utility was 5 trying to do a least-cost plan for Florida, that they would 6 site a plant outside their own service territory. Whereas, an 7 IPP has no boundaries and will site anywhere where all the 8 factors make sense. And those factors make sense because we 9 can build it for less in total cost; therefore, our product is 10 cheaper. Now, if we can sell a cheaper product, it benefits 11 all consumers. 12 COMMISSIONER PALECKI: Let me make sure I understand. For the interconnection part, the generator has to come up with 13 14 the dollars up front. 15 MR. MECHLER: That's right. 16 COMMISSIONER PALECKI: And the fact that they need to 17 come up with those dollars and invest them do provide an incentive to minimize the cost of interconnection in siting the 18 19 plant. 20 MR. MECHLER: Certainly, certainly. 21 COMMISSIONER PALECKI: With regard to the 22 transmission service part, if we have a large upgrade required, 23 then we have a large enough increase that the transmission 24 service provider may charge a higher incremental rate which 25 would then need to be paid by the generator in order to

1 transport the power to the customer.

2 MR. MECHLER: That's right, and that cost would be 3 passed on to those ultimate consumers. So our product --

COMMISSIONER PALECKI: And if that product was toohigh, it would make it so your plant was not profitable.

6 MR. MECHLER: Not profitable. And so that would be a7 disincentive to take on too many costs.

8 COMMISSIONER PALECKI: So for both the transmission 9 service part as well as the interconnection part, there are 10 incentives.

MR. MECHLER: We think there are. And the more sophisticated developers know these up front or at least try to know these up front as best they can. We recognize there may be some developers who aren't quite as sophisticated who may make some mistakes, and that's in any business. People make mistakes in their business models.

17 COMMISSIONER PALECKI: On the transmission service 18 part, can that increase in the higher incremental rate that can 19 be charged by the transmission provider, can it be significant 20 enough to affect the cost of the end product? Could it be a 21 significant hit?

MR. MECHLER: We think it could, yes.
COMMISSIONER PALECKI: Thank you.
COMMISSIONER BRADLEY: Go ahead. Sorry.
CHAIRMAN JABER: Were you done, Commissioner Palecki?

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1	COMMISSIONER PALECKI: Yes.
2	CHAIRMAN JABER: Commissioner Bradley.
3	COMMISSIONER BRADLEY: As it relates to the system
4	upgrades and the generator funding or capitalizing those system
5	upgrades, what type of incentives are there that are out there
6	to serve as an impetus for the generator to capitalize the
7	upgrades? You know, what suppose a generator says, well, I
8	don't want to get involved in this as a business transaction
9	and capitalize your upgrades. Are the IPPs in a position then
10	to, if that's the case, to come in and to put their own capital
11	up front to invest in the capital improvements or the
12	infrastructure that's necessary in order to do the system
13	upgrades?
14	MR. MECHLER: The generators now for generation
15	interconnection process and for any upgrades required for the
16	interconnection, the generator puts the money up and pays the
17	utility to get the work done.
18	COMMISSIONER BRADLEY: Okay. But that's my question.
19	MR. MECHLER: Oh, sorry.
20	COMMISSIONER BRADLEY: What is there that's involved
21	in this process that guarantees that the generator will be
22	willing to
23	MR. MECHLER: If he doesn't want to pay, then he
24	doesn't want
25	COMMISSIONER BRADLEY: do that?
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MR. MECHLER: -- interconnected. I mean, it's pretty 1 2 clear. If I'm not willing to pay the \$5 million for the 3 upgrades, I probably -- I won't -- I fail the process and the 4 interconnection stops. COMMISSIONER BRADLEY: Okay. But I'm getting 5 6 confused now because --7 MR. MECHLER: Okay. I'm sorry. 8 COMMISSIONER BRADLEY: My understanding is that the 9 IOU -- well, let's use the IOU as an example, as the generator, 10 and maybe I'm wrong, and maybe you need to correct me. But the 11 way that I understand this is that the generator agrees with 12 the transmission company's concern to do the upgrades, and they 13 in turn will sell the upgrades to the transmission company or 14 turn them over to them, and the transmission company through 15 the business process will in turn pay the generator back for 16 having invested in the upgrades and then turning them over to 17 Is that -- am I wrong? them. 18 MR. MECHLER: That's fairly correct. That's what We pay up front. They're owned by the utility. The 19 happens. 20 utility gives us back credits which can be consumed in 21 sometimes even months if we take service, transmission service, 22 and they are then part of the transmission system for the 23 utility, and they own and operate those facilities for the good 24 of all. 25 MR. REGNERY: Actually, the easiest way to think

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1	about it Joe Regnery, by the way, from Calpine Corporation.
2	The easiest way to think about it is the context of the what
3	you're asking the generator to do is make a loan to the
4	transmission provider. The transmission provider
5	COMMISSIONER BRADLEY: Okay. Help me out with this
6	in plain old simple terms. Identify who may be a
7	prospective generator might be.
8	MR. REGNERY: A generator would be, for instance,
9	Calpine Corporation, or Reliant, or it could be an IOU
10	generator also. It can be anyone that is building the power
11	plant itself.
12	COMMISSIONER BRADLEY: Right.
13	MR. REGNERY: They're building the electrical
14	generation facility.
15	COMMISSIONER BRADLEY: Okay.
16	MR. REGNERY: They then if you treat it like a
17	loan, just from that perspective, what you're asking the
18	generator to do is say, okay, I'm going to locate my generator
19	at this site, and it's going to cost there is going to be
20	impacts on the overall grid of "X."
21	COMMISSIONER BRADLEY: Okay.
22	MR. REGNERY: I will loan you, Transmission Provider,
23	"X" amount of money to make those "X" upgrades, the amount to
24	cover the "X" upgrades. You will then pay that back to me with
25	interest at a time in the future when I utilize that system.

FLORIDA PUBLIC SERVICE COMMISSION

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98 COMMISSIONER BRADLEY: Okay. Stop right there. 1 2 MR. REGNERY: And that's essentially what we're --3 COMMISSIONER BRADLEY: Okay. What is the incentive 4 to ensure that the IPP or the IOUs would be willing to make 5 that loan? 6 MR. REGNERY: The fundamental incentive is, if you 7 don't do it, you won't get interconnected. You won't be able 8 to build your power plant. That's the incentive. You're just 9 not participating in the business if you're not willing to do 10 it. 11 MR. MECHLER: That's how it works. I mean. that's 12 the deal between us and the IOUs. is that if we want to 13 interconnect, then we have to pay up front for all the 14 facilities that need to be built for us to tie into their 15 system and operate. And that's the rules of the game today. 16 And that's -- although -- and my next slide shows, you know, as 17 mentioned this morning, FERC has greatly expanded how they 18 characterize these upgrades. That's the rules of the game 19 today. 20 FERC has been very -- in the last, say, year or so, 21 they have changed these definitions guite a bit on system 22 upgrades, what they are. And they have allowed for these 23 interests to be paid for those upgrades, as Joe has mentioned,

24 kind of like a bank loan.

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Just to help with that definition of what is in what

bucket, there's really two buckets. There's the direct 1 2 assignment bucket, and there's the system upgrade bucket. And 3 this is for the generator interconnection process. The 4 generator pays for those facilities that are deemed to be 5 direct assignment. A lot of times, as mentioned this morning I 6 think by Mr. Schoneck, a lot of times that refers to maybe the 7 extension cord tying the generator back into the grid. And 8 that's kind of a broad definition of what that really means, 9 and I don't want to get too detailed there.

10 And the system upgrades pretty much or everything 11 else we can think of at this point is currently defined, 12 although there's probably some dispute as to some specific 13 item, but in general it's the construction, or upgraded 14 substation, transmission lines, and all the breakers and relay systems that go along with that. That's all considered part of 15 16 this system, and any kind of betterment of that system or 17 improvement of any kind, construction, rebuilding, is 18 considered to be a benefit to all who use the system. And 19 that's how FERC has ruled pretty consistently over the last 20 year.

So, finally, then kind of in summary of this section, on the interconnection service, the customer pays the up-front costs and receives credit with interest for those system upgrades, not the direct assignment, but just system upgrades, and then that credit is for transmission service when taken.

Certainly there's some transmission service involved, and the
 customer will pay the higher of either the rolled in rate or
 some kind of incremental rate over the term of the service. So
 that's kind of my summary slide.

5 COMMISSIONER PALECKI: If in the state of Florida 6 enough generators sited here so that we far exceeded the needs 7 of the state of Florida and those generators wanted to sell 8 their product out of state and significant transmission 9 upgrades as well as interconnection costs were incurred, the 10 entire output of this generator or generators is contracted 11 outside of the state of Florida, does the Florida ratepayer 12 bear the burden of paying for that transmission and 13 interconnection for power that does not benefit the state of 14 Florida in any way?

15 MR. MECHLER: I would say no. The transmission 16 customer is paying for that transmission service, and the 17 transmission provider is getting recovery of that facility that 18 he built to deliver that service wherever it may go. And, if 19 anything, the rate may drop because of that additional usage of 20 the system. As shown in my example, the rate can go down with 21 higher usage. And we'd be like any other -- we'd be like 22 any -- if the IOU was selling power, say, to Georgia. If 23 they're selling one of their generators out of state, you know, 24 it's over the same lines.

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COMMISSIONER PALECKI: I guess I understand that that

1 holds true with regard to the transmission service part, but 2 what about with regard to the interconnection part? Wouldn't 3 the Florida ratepayers end up paying those credits? MR. MECHLER: I don't believe so, no. 4 5 COMMISSIONER PALECKI: And why not? 6 MR. MECHLER: The same reason. As those credits get -- or and that facilities get rolled in ultimately, and the 7 8 usage is -- the system is taken, the rate will tend to come 9 down or stay the same, and the utility is recovering that 10 facility through the customer. So there is no impact to the 11 retail server -- retail customer. 12 COMMISSIONER BRADLEY: That sort of ties into -- it 13 segues into what my question basically was about. It would 14 seem to be a more prudent idea to me if those who are 15 interested in entering in the market would make the up-front 16 investment and take sole responsibility for the success of the 17 project. It's still kind of unclear to me as to why that would 18 not be a best case scenario as opposed to maybe having the 19 Florida ratepayers pay for the capital improvements or the 20 infrastructure upgrades. 21 MR. MECHLER: I don't see where the retail consumers 22 at any point get involved for paying for any of this. The new 23 users pay for their use. Ratepayers today pay for their use of 24 the system. It is a network system. There is benefit for all

parties to be on the system. Even if that power is being sold

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out of state, there is a benefit for having that generation in
 state because it helps develop a more robust, reliable system.

COMMISSIONER BRADLEY: What advantage then is it to the state of Florida, other than the economic development, to have generation being sold outside of the state and being produced and generated in the state of Florida?

7 MR. REGNERY: Actually, I was going to say, this is a 8 fundamental misconception, and there is physics that go to the 9 limitations of being able to sell power off-system. You as an 10 IPP, if you wanted to sell power in Alabama, would not be smart 11 to build a power plant in Florida with the intentions of 12 selling it in Alabama. If you were smart, you would build it 13 in Alabama. You always want to locate your generation as close 14 to the load center that you're going to serve as possible.

15 The only time you have off-system sales that actually 16 flow in that context is when it is -- when there's no demand in 17 the local area. Okay. So there's -- and this applies to 18 Florida Power & Light. It applies to TECO. It applies to Calpine. It applies to Reliant. It applies to Florida Power 19 20 Corp. If there is load in the area that is going to be 21 accepting generation, the generation in the local area will be 22 providing it. It's when the load drops off and there's no load 23 in the area and you have excess generation that you have 24 off-system sales.

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And so when you think in that context, you have --

what benefit does it go to Florida, it creates the competitive
 wholesale market for when the demand exists to keep prices
 down. And Bob's going to go into the next series of slides
 that will show you how that actually effectuates a lower price
 in the state of Florida.

6 MR. MECHLER: Before I do that. let me point out one 7 guick example. I probably should have added some math here, 8 but back to that example where I had a 500-megawatt net new use 9 in the system. If you think about what kind of revenues that 10 generate for the transmission owner at a thousand dollars per 11 megawatt month, it generates half a million dollars every month 12 or about \$6 million a year of revenue. If the upgrade was a 13 \$5 million upgrade, essentially after 10 months, the credits 14 are consumed, and from then on, the transmission owner is receiving those cash revenues every month. Just kind of a neat 15 16 little mathematical -- I think this was mentioned this morning, 17 and I just want to hit it briefly.

18 COMMISSIONER DEASON: Excuse me. Before you 19 change --

20

MR. MECHLER: Yeah, I'm sorry.

COMMISSIONER DEASON: -- subject matter here, you do agree that when the interconnection is made and the credits are repaid, that those costs become part of the transmission owner's rate base; correct?

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MR. MECHLER: I believe that's how it's accounted

1 for. You know, I'm told that's correct.

2 COMMISSIONER DEASON: Okay. And that that rate base 3 is allocated between wholesale and retail jurisdiction, and 4 we've -- for example, 95 percent for TECO. So 95 percent of 5 those dollars will become part of the retail rate base. The 6 rates that you pay as a generator to the transmission company, 7 do they somehow get allocated to the retail jurisdiction to 8 help cover the 95 percent of those costs which are now part of 9 the retail rate base, or they stay with the wholesale 10 jurisdiction?

11 MR. REGNERY: I would say from an accounting side we 12 are making payments of our transmission rate to take the power 13 to the load-serving entity, or for example, as Seminole and 14 FMPA represented, they would actually be paying the cost, and 15 it would be coming from us in their transmission customer 16 costs. So that rate then -- that amount of money goes in to 17 effectuate a lower rate from a cost buildup perspective with 18 regard to what goes to the retail customer.

19 COMMISSIONER DEASON: So is the --

20 MR. REGNERY: There is more revenue coming in as a 21 result of that generation going out.

22 COMMISSIONER DEASON: The retail-consuming entity 23 pays for the transmission; correct?

24 MR. REGNERY: That's correct.

25

COMMISSIONER DEASON: And so when the entity

1 evaluates whether they're going to buy from as an independent 2 generator, they need to calculate in what the retail -- what 3 the transmission costs are going to be as to whether that's an 4 economic transaction or not?

5 MR. REGNERY: Yes, sir. And that goes into their RFP 6 evaluation of whether or not I'm competitive versus whether or 7 not they should self-generate, whether or not they should buy 8 from someone else.

9 COMMISSIONER DEASON: Now, to the extent that these 10 costs are borne, the interconnection costs are borne, and even 11 though you may be a sophisticated generator and you believe 12 that you're going to be able to sell your generation and make lots of money, that's not always the case. And if you do not 13 14 generate enough to sell, you may go out of business, or 15 otherwise you may just be marginally profitable, and you may 16 not really through put very much energy, but the costs are 17 still in the retail jurisdiction; correct?

MR. REGNERY: No, that's actually not the case,
because if you remember how the offset works, until such time
as I actually make a generation sale and transmission occurs,
it does not go into the transmission provider's rate base. He
doesn't give me credits until that transmission service occurs.
COMMISSIONER DEASON: All right.

24 MR. REGNERY: So if I build a really uneconomical 25 power plant like was suggested this morning with a very long

network interconnection of a billion dollars, I've got that billion dollars in my up-front cost, I've got to sell that power plant from a power purchase agreement standpoint, my price is going to reflect those costs in it. If I don't -- and no one buys from me, I'm sitting there with a billion dollar expenditure, and there's no way --

7 COMMISSIONER DEASON: No. I agree totally. What 8 happens if you generate enough electricity that over 9 three years you recoup all your credits, and then for some --10 you know, then you're no longer -- for some reason, you're no 11 longer competitive, somebody else comes into the market and is 12 more competitive, isn't the fact that those credits have been 13 repaid to you, that investment is sitting in retail rate base. 14 and if you don't generate, you're not paying the revenue 15 requirement on those costs?

16 MR. REGNERY: That's correct. And the new generator 17 who comes on, the total transmission capacity on the system 18 will have gone up by the amount that I have contributed and 19 paid to it.

20 COMMISSIONER DEASON: No, I'm talking about -- I'm 21 talking about interconnect, your interconnect cost of your 22 unit.

23 MR. REGNERY: Correct. And for the context of system 24 upgrades that are on the system, remember, when you make a 25 system upgrade, it improves the capacity on the entire grid.

1 That's the nature of why it's a system upgrade, because it 2 effectuates something on the grid and by having that increases 3 increasement on the grid that would be available to the next 4 person that generates. So to the extent I'm not generating, 5 they're filling my shoes, and it functionally rotates through 6 that.

CHAIRMAN JABER: Commissioner Deason, I'm trying to
understand your question. If the interconnection costs you've
referred to, and perhaps this is a question for the IPP
representatives, aren't those paid theoretically by the credit,
by the amount the generator gives, and then the credit --

12 MR. REGNERY: Yes. it's a refundable loan. but it 13 doesn't get refunded until such time as there is transmission 14 service taken. So if I never generate and I never produce 15 power that somebody in the system consumes. no transmission is 16 ever taken from my power plant. With that being the case, you 17 would not pay me a refund under my transmission credits, so the 18 utilities -- utility doesn't have to pay any money back to the 19 generator. Since it's not paying any money back to the 20 generator, it's not rolling that into its rate base until such 21 time that it actually does that.

22 Once it actually does that, then it rolls into the 23 rate base, and acting like a loan on the system, the system has 24 been improved by the nature of those system upgrades, it's paid 25 back the bank, the generator, for the value that it lent it to

108 1 upgrade the system. And now there's that capacity that exists 2 on the system that can be utilized by the load-serving entities 3 who are going to be customers on the transmission system 4 itself. 5 CHAIRMAN JABER: Commissioner Deason, now say your 6 question again. COMMISSIONER DEASON: Well, I believe I understand 7 8 the point that's being made. I guess I need to follow up, 9 though, that are you making the assumption that if a new 10 generator comes in, displaces your generator, that that 11 generator then doesn't have any interconnection costs? 12 MR. REGNERY: No, but it will have significantly 13 less. 14 COMMISSIONER DEASON: Because you have made system 15 upgrades. 16 MR. REGNERY: That's right. There are system 17 upgrades on the system that have now improved the system. 18 CHAIRMAN JABER: But they may have their own 19 interconnection costs. That's a whole different issue. 20 MR. REGNERY: There will be interconnection costs. 21 They will be less because they will be riding on the coattails 22 of the people that came before them. 23 CHAIRMAN JABER: The incremental difference to 24 upgrade the system to meet their needs. 25 MR. REGNERY: Correct.

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1	COMMISSIONER DEASON: Now, is there any debate as to
2	whether what what you referred to as system upgrades are in
3	fact system upgrades and not just costs directly attributable
4	to your project?
5	MR. MECHLER: I think we're fairly pleased the
6	direction FERC has taken.
7	COMMISSIONER DEASON: Okay. Do the IOUs agree with
8	that position?
9	MR. MECHLER: Pardon?
10	COMMISSIONER DEASON: Do the IOUs agree with that
11	position?
12	MR. MECHLER: I think based on many of their filings
13	against us, I would say many of them don't agree with the
14	way direction FERC has taken, and based on the
15	COMMISSIONER DEASON: All right. Thanks.
16	MR. MECHLER: I think that's where it stands. Moving
17	forward then. How are queues managed today? Well, differently
18	among different providers, perhaps. Different studies are
19	required. Some are doing some clustering of projects, some
20	aren't. Different criteria for entering the queue. The issue
21	here is that every independent generator has to kind of learn
22	what the local utility is doing and get into their system, and
23	backlogs are common, as was mentioned this morning. As the
24	queues kind of fill up, it takes longer and longer. And
25	recently FERC has been very unhappy with the backlog of these

and has told several utilities to do what it needs to be done to get the queues down. They're being paid for to do these studies by the generators, and there should be sufficient funds there for them to either hire more staff or to hire consultants to get the work done.

Well, this slide seems to be out of date already, but
we'll try to cover it quickly. As Art said this morning,
Phase I was last fall with the ANOPR. Quite a -- weeks and
weeks of meetings between owners and generators. Three key
things came out of those meetings that were in the filing, and
116-plus groups commented on those filings, and we'll go
through those momentarily.

13 And I guess now we know where Phase II is headed with 14 the announcement today of the NOPR, but in the three key areas, 15 a product of an interconnection, this is kind of where the 16 ANOPR left it, was there may be at least two different products 17 for interconnection. One called a network resource, and may be 18 an energy-only resource. Most of the IPPs feel this approach provides comparable treatment for our generation with native 19 20 load -- or native integrated utility generation. And that 21 would be a benefit to all parties. And certainly studying new 22 generation this way provides much more information as to the 23 full cost of interconnection and integration into the local system, and that would give us a much enhanced price signal on 24 25 siting.

1 As far as the procedures went, there was a fairly 2 lengthy discussion on these in D.C. over those months, and a 3 few of the -- some of the things that came out of that was, 4 there was fairly good agreement on what was required for 5 studies to take care of a new generator, a discussion of 6 optionality as to how the generator and the transmission owner 7 can work together to find a best fit. a best solution. Certainly there was some discussion on milestones that the 8 9 generator should maintain to maintain his position in the 10 queue.

We discussed at length if there is some sequencing issues during construction, how that should be handled between the generator and the transmission owners. And then there was certain flexibility for clustering or doing individual studies as well. And there was many other items, but those are some of the key items that came out of the procedures as currently contemplated in some of the ANOPR filings.

18 Also, coming out of the ANOPR filings was a standard IOA, a standard contract, if you will. It certainly 19 20 standardized definitions, general contract terms and 21 conditions, and a general standardized format and structure. 22 We feel this is very important because those of us who go 23 through these with different utilities, every time we walk into 24 a utility, we're having to renegotiate the same basic contract 25 over the same basic items. And this would certainly speed up

that process and make it simpler for all parties to know what's
 allowed.

Finally, my last part of my presentation, I want to move forward and think about what -- in a broader context, you know, what -- is this a good thing, all this generation? And how does it compare to the whole issue of transmission costs? Certainly we think that more generation on the system provides a more reliable and robust system, and certainly more generation facilitates competitive markets.

10 I pulled some numbers out of a presentation that was 11 presented to the Florida Public Service Commission back in 12 1999. The ITA group, which I believe was Seminole -- at that time, Seminole, FMPA, and TECO, I believe, if I'm not -- and 13 14 these are some numbers that they had shown. And I asked FERC's staff last week if these were still reasonable numbers as far 15 16 as a cost breakdown of a 6.8 cents power. And they said, sure, 17 those are pretty reasonable. And the thing you note right off 18 the bat is, generation costs are substantially higher in total -- in percentage-wise than transmission costs by a factor 19 20 of more than 10 to 1.

So I asked myself a question. What if transmission costs went up by some value, say, 5 percent because of some action by parties? So that would -- if transmission costs went by 5 percent, the overall cost really only goes up .22 percent. Not a very big increase for, I think, a fairly healthy increase

1 in transmission costs. Well, then I asked the question: Can 2 that be offset? And if so, if generation costs were lower, how 3 much lower would generation have to go to compensate for that 4 increase? So I had to decrease generation costs by the same 5 amount I increased transmission, and come to find out that that 6 only requires a decrease of .28 percent in generation costs. 7 So I thought this was a good thing, that because of the 8 relative size of these two factors, transmission and 9 generation, that there's a lot of room to play with here if 10 there's a more robust wholesale market for generation. And we 11 think there is.

12 Based on the current fleet in Florida. it's an 13 18 fleet, I note here from one of the reports from FRCC that 14 over 25 percent of the installed capacity in Florida is shown to be 30 years old or older. That means you're getting --15 16 older plants are maybe reaching the end of their life and may 17 be not as efficient as the newer plants. The new plants that 18 are being built by us and utilities as well are cheaper to 19 build and operate at better performance and lower emissions and 20 are generally just an overall better deal.

And then we think Florida is a growing state, and given that the FRCC is showing a 2 to 3 percent growth rate, it looks like there's a need for generation to continue to come to Florida. Even at a 2 percent growth rate on a 40,000-megawatt peak, that's about 800 megawatts every year that needs to be

1 added; that's the size of a modern power plant. So you're 2 facing, we think, some growth in the state and more generation 3 is needed and we're here to help. 4 CHAIRMAN JABER: Thank for your presentation. 5 Commissioners, do you have any questions of this 6 group before we let them go? 7 Okay. Next on my agenda I've got, Ms. Brubaker, I've 8 got that there might be other presentations. So at this time 9 if you want to make a presentation, let me know. All right. 10 We've heard a lot this morning and this afternoon. If there 11 are companies that want to respond to each other, I'll ask that we go ahead and take that up too. 12 13 MR. REGNERY: Ma'am, I was going to make one comment. 14 CHAIRMAN JABER: Go ahead. 15 MR. REGNERY: There was an excellent slide that was 16 put out this morning by Art Nordlinger about price signals, and there's been a serious of discussions about price signals. 17 18 And --19 CHAIRMAN JABER: Can you tell us which slide you're 20 referring to? Do you have it in front of you? 21 MR. REGNERY: It's Slide 27 of Art's presentation. CHAIRMAN JABER: Okay. Least-cost planning example? 22 23 MR. REGNERY: Right. And what that's reflecting is 24 that, if you see the top line showing the generator cost, 25 that's the cost of his power plant.

COMMISSIONER BRADLEY: Which presentation is it?

CHAIRMAN JABER: The FP&L, FPC, and TECO presentation
this morning, Slide 27.

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MR. REGNERY: Yes, ma'am. The first -- I should say the first line where it says, "Generator, all the same size," that's basically reflecting the nature of the power plant itself. Then it goes into generator interconnection service, direct assignment versus system upgrades. What that line is reflecting are the costs, the cumulative costs, using what's called today the extension cord interconnection process.

11 So what it's talking about is the radial line Okav. 12 that goes into, as was shown on a previous slide by Art, going 13 into the substation, that would be the direct assignment, that 14 radial line, and then the system upgrades, the changes on the system, at either the substation or elsewhere on the system. 15 16 But those combined things represent simply an on-ramp onto the system, meaning when the plant gets interconnected, it doesn't 17 have an ability to serve. It has an ability to generate and go 18 across that on-ramp, but it can't get onto the highway. Okay. 19 20 That's all the service interconnection service gives you.

If you want to get onto the highway, you have to arrange for transmission service, or someone has to come and get it from you at that point of interconnection. That's like a power contract to a network customer like Seminole or Florida Power & Light or somebody who's a transmission customer

1 load-serving entity on the system.

You will not know that line until you make that 2 transmission request. And so what that third line is showing 3 is the costs that are going to be identified once you have the 4 5 transmission request process. Okay. Well, the problem is that 6 being that you're the generator up front looking at siting your 7 power plant, you only know lines one and two. So you miscalculate at times. Now, of course, we try our best not to 8 do that. We look at all of our price signals that we can and 9 make projections based upon where we plan to sell the power, 10 11 but there are inaccuracies in those projections. So what was represented and discussed in the context of the Commission, the 12 13 Federal Energy Regulatory Commission, workshops was how do we 14 create a system that captures all three of those lines early on in the process so that we get the best siting that we can, the 15 16 best price signals?

And we as generators, we proposed that by creating a new type of interconnection service called network service, you capture the third line. Now, what --

20 COMMISSIONER DEASON: Which line do you say is the 21 third line?

MR. REGNERY: "Additional transmission facilities
required for delivery." If you label them -- label Generator
1, "Generator, all same size," 1. Label the next line below
it, "Generator interconnection service," 2. And label

"Additional transmission facilities required for delivery" for 3.

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3 Today, being just -- having just information 4 associated with the extension cord, all we capture is 1 and 2. 5 You capture 3 when you go through your transmission service 6 queue process. This creates the problems associated with 7 siting. Now, we proposed how to relieve that. We said, you 8 can relieve that by creating a thing called network 9 interconnection service, and the Federal Energy Regulatory 10 Commission agreed with that principle and said, yes, you can.

11 And they agreed on the following basis: If everyone 12 is interconnected, every generation point is interconnected so 13 that every load-serving entity on the system can get access to 14 that generation no matter where their location is on the 15 system, you create the supply effect on the wholesale competitive market, and you also provide the price signal to 16 the entity that's planning on building his new generation where 17 18 it's going to be.

So when you -- when I or Reliant or FPL wants to site a plant and they say, okay, we want to build this power plant here, and they say, what would be our interconnection costs from a network basis? What the transmission provider at that point would do would be look at the entire grid system and all the load serving entities on that system and look at all of the sources of generation on that system and model them and turn

down each individual power plant that all exists on that system using a computer model so that they identify which specific project -- or what would be the network upgrades on the entire system so that every wholesale customer on the system could get access to that one generation point. And then those upgrades would be made at that time.

7 By making them at that time, you immediately affect 8 the supply curve from a competitive wholesale standpoint so 9 that everyone that is a network customer on the system could 10 get access to your power plant. I use the analogy of a Chinese 11 restaurant. That's the analogy I used when we were talking 12 about this at the Federal Energy Regulatory Commission. I 13 said, what we're talking about is, we're building a whole bunch 14 of Chinese restaurants throughout the state, and all we're 15 talking about is having access so that every consumer on the 16 system can get access to any one of those Chinese restaurants 17 rather than only some Chinese restaurants. You create access 18 to the entire system so that they can all as load-serving 19 entities select which Chinese restaurant they want to draw and 20 negotiate with.

It effectuates you in the forward market so that a load-serving entity can go out and negotiate competitively going forward, because when it looks at the RFP responses that come in, it looks at it as everybody is the same. I have equal access to this new generation the same way I have access to

this old generation. I have equal access to this Chinese restaurant just like I have to that Chinese restaurant, and we can go and pick it up from their restaurant at their bus bar.

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4 So you have more competitive nature in the forward-looking market. At the same time in the spot market 5 6 today when -- if you're just interconnected on an extension 7 cord basis and you put in an inc or dec to bid to someone that 8 wants to buy from you, they look at, can I buy from them? And 9 they say, well, they're generation on the point but they don't 10 have transmission deliverability to me, and I don't have access 11 to them. So I effectively can't buy from them, so I have to 12 buy from this other utility that -- I have to buy from the 13 generation that's IOU generation because they have 14 accessibility to me. And so by that nature, you've reduced 15 competition, affected supply, and in the spot market, you've 16 caused an artificial inflation of the rate -- or of the 17 competitive wholesale price, I should say.

18 And so by creating the network service where when 19 everybody gets interconnected, the improvements that are 20 necessary for full accessibility to every load-serving entity on the system, you allow for alleviating the price signal error 21 that exists with not having that 3 identified to the generator. 22 Because at the time, the studies go out and they say, okay, 23 we're going to have to build these local area system upgrades, 24 but we're also going to have to build these transmission system 25

1 upgrades. And the question that Commissioner Palecki asked 2 this morning was, in that case, you know, what would prevent you from building that hundred -- that \$1 billion, hundred-mile 3 4 line? Well, if you had network service, network 5 interconnection service, that hundred billion dollar line would 6 get reflected in the cost on the interconnection side because 7 it would be part of that study because you're interconnecting on a network basis, so that would be provided to you as a 8 9 generator and you'd go. a hundred million -- or a hundred mile 10 line a billion dollars? I've got to raise a billion dollars of 11 capital to build this plant? Perhaps we can find a better site, Mr. Developer. And it provides you that added incentive 12 13 of a better price signal so at the same time effecting a better 14 competitive wholesale supply side reaction to the cost of 15 power.

16 CHAIRMAN JABER: Help me understand what the status 17 of your proposal to FERC to implement a network interconnection 18 service. You said FERC agreed with the principle.

19 MR. REGNERY: Yes.

20

CHAIRMAN JABER: And where is it now?

MR. REGNERY: It is -- actually, you will see it in the draft filing that was presented by the three -- by the generators, the IOUs, the state commission representatives, the consumers, and the small generators. We got together and had a drafting committee. We drafted up a document that included the

nature of those two services so that there would be both
 network and extension cord service on an interconnection basis.
 And that was presented forth by the drafting committee to the
 Federal Energy Regulatory Commission.

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CHAIRMAN JABER: Okay.

6 MR. REGNERY: That's what was the document, the 7 strawman, that then people commented to. And so the NOPR will 8 reflect what the drafting committee put in, what the comments 9 were, and what FERC feels. And that's what we're hoping will 10 come out this afternoon, is how FERC has come down on the 11 nature of these -- of there being both extension cord service 12 and network service.

13 CHAIRMAN JABER: Okay. Hang on, Mr. Ramon. I am 14 going to let you address that, but with regard to your point on 15 the network interconnection service allows the price signal --16 allows for a price signal, help me understand why the 17 additional transmission facilities require to deliver a cost 18 can't be identified.

I don't -- what's the difference between your proposal to have one cost identified through the network interconnection service versus why that separate cost can't be identified now? Are there factors that do not allow a company to identify the cost?

24 MR. REGNERY: Well, the reason is because today if 25 you're a generator and if you're not a utility-based generator,

you do not know at the time that you're building your power 1 2 plant who you're going to sell to. You're competing in RFPs. 3 You're selling into the spot market, or you're planning on 4 selling into the spot market. You're projecting forward, but 5 you don't know exactly who you're selling your power to. And 6 so if you were to go and buy transmission service at the same 7 time you put in your interconnection service, you'd be making a 8 quess. It's an absolute guess. You do not know if that's 9 going to be the case. And so a lot of times we do, and Calpine 10 has done this.

11 We've put in point-to-point requests assuming a 12 certain project model of a power sale and that turns out to be 13 totally wrong. We were not able to sell that power to that 14 customer. Not to mention, if you're in an RFP process, the network customer that's buying from you, he will not put in his 15 transmission service request until such time as he decides to 16 buy from you. And so more often, you get the interconnection 17 18 results, and then once you've got interconnection results and 19 your plant is real and you're going forward, then the forward 20 market looks to buy at buying power from you, and then at that 21 point, the transmission service request goes in. So there's a 22 lag with respect to that price signal. And it's only logical 23 that a power customer isn't going to buy power from a burnt out 24 orange field. They're only going to buy power from you until 25 you can prove that you've got a legitimate project. And having

1 interconnection is one of the steps in demonstrating that you
2 have a legitimate project. And so that's where the lapse in
3 time is created.

CHAIRMAN JABER: It was just a matter of time, but
we've gotten people to respond. Mr. Ramon, we'll start with
you.

7 Commissioner Jaber, I just wanted to make MR. RAMON: 8 a couple of comments on the price signals and on the new tariff 9 that's coming out of FERC. The transmission products that were 10 a part of the ANOPR, I think, Joe, have evolved to this concept 11 that the FERC had in the options paper that they just put out 12 to go to a single tariff. I think they're calling it network 13 access. And Tampa Electric, for that matter, TECO Energy, 14 supports the concept of that single tariff and network access 15 service, but like most things at FERC, the devil is in the 16 detail. And if you read the options paper, there's at least 17 three options that they're seeking comment on.

18 The first option is that in terms of that product, 19 that all who use the system would pay. That may have some 20 merit in terms of price signals. The other option, and I can't 21 remember all three, but the other option is that load pays. 22 So -- and that gives me some concern about price signals 23 because no matter where you would put the generator, the load 24 is going to pay in the end, have we really solved the problem? 25 It's good that we're moving to a single tariff and

that generators can get access on a comparable basis, but the
 pricing and the cost allocation is still not a settled issue.

I thought there was some really good presentations this morning, and at least Tampa Electric agrees with a number of comments. Joe Welborn talked about some ideas of price signals about maybe impact fees, carving out Florida in terms of zones in terms of the better places where generators could locate, the transmission provider could actually post sites, better ones than others for optimal locations.

10 The other -- I know you cautioned us this morning 11 about focusing on generation interconnection in this workshop, 12 but the whole subject of price signals really gets at where 13 FERC is headed in terms of their initiatives, and as the update 14 that you gave us this morning says, that this very issue of pricing that we've talked about all morning has now been moved 15 16 into the FERC standard market design, the single tariff, so 17 it's an issue that needs to be vetted by all of us, you know, 18 in that NOPR and eventual rulemaking.

But in addition to these potential solutions for properly locating generators, and particularly in competitive markets, that the potential siting solutions have to be coupled with real-time information on the value congestion associated with transmission constraints. In real-time we're going to have to know what the costs and location of congestion is and its value. And that needs to be publicly available to the

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market to ensure price transparency and making that information available, as Bob Williams talked about, in the planning process. You need that pricing information coupled with a planning and expansion process efficiently to be able to properly make investment not only in generation but in transmission, and demand side, as you know, is getting a lot of attention.

8 CHAIRMAN JABER: Has anyone thought about asking FERC 9 to expedite that part of their process?

10 You're smiling, I guess you've done that several 11 times.

12 MR. MECHLER: We've asked FERC to explain many 13 things, and it is what it is, I guess. Although there were 14 times during the discussions we had with the transmission 15 owners during the fall that we actually asked for more time 16 because we thought we were making progress in a lot of 17 negotiations and consensus building on working through this 18 ANOPR process. And they gave us some extra time to finish up 19 and try to get as far as we could before we filed. We would 20 all love to see this wrapped up as soon as possible.

CHAIRMAN JABER: It just seems to me -- you know, obviously there's a lot I don't understand about the entire FERC process, but it just seems to me that that's, if not the most critical, a very critical piece of their new transmission policy. I don't know how -- well, let me not go there.

1 2 Were you done. Mr. Ramon?

MR. RAMON: Yes.

3 MR. WILLIAMS: Bob Williams again. I just was going 4 to really quickly just raise a couple of little points. Ι 5 think this -- a lot of your focus -- two things I've noticed 6 from the Commission, you tell me if I'm wrong, is the cost 7 transference here for -- two big issues were redispatch and the 8 upgrade cost. Redispatch, I think, is a really small quantity. 9 Every time you change anything in the transmission system, you 10 have risk of redispatch cost and that happens, and there's just nothing we can do about it. And I think that's what's FERC's 11 12 problem is, that it's not a big issue, and it's not easy to 13 define. The upgrade costs, I think, are also one of the things 14 that was left out of all the discussions so far, I think.

15 And back to the least-cost planning example, is the 16 system upgrades have value to the whole state, and there's no 17 way to easily evaluate how much value there is in those 18 upgrades. The most expensive system upgrade for generation 19 location may have serious benefits for other people to do other 20 things later on, but you can't see that in the numbers. You 21 can't know that ahead of time. So that's an issue that I don't 22 think anybody has mentioned here, is that there is a cost, but 23 then what's the value of it? What's the benefit of it? And 24 you just have to look at it on a case-by-case basis, I'm 25 afraid, to understand what those are. You can't easily do

those. I guess that's all my comments.

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CHAIRMAN JABER: Okay. Thank you.

3 MR. WOLFINGER: Commissioners, my name is Rick 4 Wolfinger. I'm with Constellation Power out of Baltimore. 5 Maryland, and we're also the developer of the Oleander Power 6 Project, a 680-megawatt peaking project over in Cocoa, Florida, 7 that is beginning commercial operations this summer. I had a 8 couple of points I'd like to make. One is on Art Nordlinger's 9 presentation on Page 24, which is the map that he showed about 10 active interconnection requests.

11 There's been a lot of talk about whether the right 12 price signals are out or whether the independents have the 13 right place to put plants, and believe me, we spent a lot of 14 time looking at the transmission system to determine where is a 15 good place to insert the power to be loaded. If you take a 16 look at where these load centers are where the interconnection 17 requests are and then you think about the two projects that 18 Florida Power & Light has asked you for a need determination, I 19 realize that's been put off for a little bit, but the Manatee 20 and Martin plants are in two of those load centers, which are 21 the next two plants that Florida Power & Light was looking at 22 building. Right now, Florida Power Corp is out for the Hines 23 3 project through an RFP process. That's also in one of those 24 load centers. And TECO has announced the repowering of the 25 Gannon station and is also looking at the Polk County station.

1 They're also in those load centers.

2 So if you take a look at where the IOUs are talking 3 about where their next load center -- plants are, they're in 4 the same places that the IOUs have asked for interconnection 5 requests. So I postulate that I think that the IPPs have got a 6 pretty good understanding of where the system is and what needs 7 to be done. And this whole idea of load -- excuse me, of price 8 signals I think is a red herring. It just doesn't exist. We 9 know where it is. We know what we're going to get with costs, 10 and we're not foolish in what we do because it costs a lot of 11 money to develop these plants.

12 My second point is, is that on Page 21, the treatment of interconnection costs, we tend to use this word of 13 14 socialization as if it's some sort of a negative term. And when we began the Oleander Power Project back in 1996 and then 15 started our permitting in 1998, we looked at load flow studies. 16 And we've paid Florida Power & Light \$7 million for the 17 18 interconnection of which about half of that was the interconnection cost and the other half was system upgrades. 19 20 Because when I signed my contract, some of my system upgrades -- some of my interconnection costs, my direct cost 21 22 now would be system upgrades. I get money back, but I don't now, and I don't get interest, but nonetheless, I would say 23 24 that the point in time I was asked --

COMMISSIONER DEASON: I'm sorry. You don't

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129 1 because --2 MR. WOLFINGER: I'm not getting it back, right, 3 because I came in too early. 4 COMMISSIONER DEASON: You signed your contract too 5 early. 6 MR. WOLFINGER: I signed a contract before all these 7 rules were made. Now, maybe I can go get it back at a later 8 date, I don't know, but right now I'm not getting it back. 9 UNIDENTIFIED SPEAKER: Don't give up, Rick. 10 MR. WOLFINGER: I haven't yet, but I haven't gotten 11 back yet. 12 UNIDENTIFIED SPEAKER: (Inaudible.) 13 MR. WOLFINGER: All right. That's irrespective of my 14 comment that I wanted to make. The comment is, though, is at 15 the point in time was made earlier by Calpine, I didn't know who must customers were going to be. The output of that plant 16 17 has been fully sold to Seminole Electric and to Florida Power & 18 Light. That plant now has got customers for it. They're in the state of Florida. And I really -- I mean, and the point of 19 20 it is where I'm at is that, is that positive or negative? I postulate that, in fact, the interconnection costs are 21 22 relatively low for 680 megawatts, and in fact, if you want to 23 call it socialization. I think sometimes there's very positive effects of socialization. Not every example is a negative 24 25 example by any means. And so I think that, in fact, there's an

example where it's perfectly right. We're serving the loads of
 existing ratepayers.

3 But then there was a further comment made on Page 19 4 where we talk about -- oh, they're talking about sometimes 5 redispatch because of construction facilities which I think 6 we've talked about very small. Well, it turns out where I'm 7 connected in the Florida Power & Light system, the Brevard 8 substation, there is a thousand megawatts, a thousand MVA of 9 230 to 138 kV transmission step down to serve the load in 10 central Brevard County. Now, probably one of those -- half of 11 that is probably redundancy, so maybe there's 500 megawatts a 12 load going through there. All the generation that was provided 13 to that substation was coming from -- away from that substation. There were losses. There were lines coming in, 14 and the load was being done. 15

16 When I'm up and operating now, that load -- those 17 losses will be gone. There will be fewer losses on the system 18 when I'm up and operating. Sure, there might be a redispatch cost for five days while the transmission system is, but I'm 19 20 not going to be getting -- also, I'm not being paid for 30 21 years of lower losses into the Brevard substation when I'm 22 running. So again, there's a lot of these mitigating 23 circumstances where you take a look at it and say, is it best 24 for the overall system or not? And I present to you that 25 there's always two sides of a coin, if there aren't many sides

to a coin. And I think overall the benefit of a robust 1 2 wholesale market that allows generators into this state in a 3 manner that we're able to know what we're doing, be able to 4 come in on a set of guidelines and have open access to all the 5 load centers will benefit the ratepayers and the citizens and 6 economic development of this state to a very high degree 7 compared to maybe some little bit of incidental transmission 8 costs that may occur. Thank you.

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CHAIRMAN JABER: Mr. Wolfinger?

MR. WOLFINGER: Yes.

11 CHAIRMAN JABER: Let me make sure I understood your 12 position versus the Calpine representative. You said there 13 were adequate price signals that you could take a look at the 14 map and understand where the IOUs were projecting their needs 15 and know what the price signals -- so if I understood that 16 comment correctly, you disagree with Calpine on that position?

MR. WOLFINGER: No. I'm saying that the IPPs have picked the same locations the IOUs have picked to put in plants. So I'm saying the IPPs are not locating plants that would give a high cost of transmission unless you could say the IOUs are picking spots that are going to have high costs of transmission. I mean, we're picking the same spots that the IOUs are.

CHAIRMAN JABER: Okay. So then as it relates to the price signals, you agree with the network interconnection

1 service proposal?

2 MR. WOLFINGER: Well, I think that is -- Calpine, 3 Reliant, myself, almost anybody that's a relatively 4 sophisticated IPP, and guite frankly, you have to almost always 5 be because it's costing you too much not to be, we all do load 6 flow studies before we can pick sites. And so we do, in 7 essence, a network system to figure out -- a network analysis to figure out where to put our plants, and we do pick the right 8 9 spots. Ultimately, though, that's not what will occur -- what 10 costs you'll have until actually the transmission owner does 11 those studies. So I agree with Calpine. And guite frankly, if 12 early on you can get those price signals, it would even be 13 better. We do them as a general course anyway right now, but 14 they aren't official by any means.

Also, timing changes, things change, it does, but we all tend to do those studies when we're looking at it. And that's why you go from 30 sites to 10 sites that Reliant was saying and down to 2 or 3 you really look at. But we do those studies internally as it is, but it would be nice to have a more reliable, robust analysis by the transmission owners.

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CHAIRMAN JABER: Okay. Thank you.

MR. SCHONECK: I guess I'd like to go back and make a clarification on, I guess, the issue, a generator that had some upgrade costs. And the issue was that what would happen if basically they went up belly-up with, let's say, the switch

1 yard cost, and that switch yard is specific to that generator? 2 And I think it was represented that on the system upgrades, 3 that the guy that was downstream from that could use that. 4 That may be true if he's in the general vicinity for the 5 upgrades that are part of the existing transmission system, but 6 for those switch yard costs, they're site-specific. And if he 7 had already got his credits back, unless somebody came in and 8 bought that plant and basically was operating out of that 9 plant, I don't see the benefits to the rest of the ratepayers 10 out of that. So I wanted to make that clarification. 11 Additionally --

12 COMMISSIONER DEASON: Let me ask you a question on 13 that. How significant are those costs used in your switch yard 14 example? How significant are those costs, and if there truly 15 are costs as you just described, why are they considered system 16 upgrades if they're specific to that plant?

MR. SCHONECK: Because what FERC has come out with since -- remember, I think it was Page 11 when we talked about the two different types of interconnections. To the extent you took an existing line, you broke it, and you looped it through that switch yard, power flows through that. And part of FERC's definition was, if power flows through, it's part of the transmission system.

COMMISSIONER DEASON: So it's a definitional situation that considers it part of the overall system.

134 1 MR. SCHONECK: Right. 2 COMMISSIONER DEASON: How significant are those 3 costs? 4 MR. SCHONECK: Excuse me? 5 COMMISSIONER DEASON: How significant are those 6 costs? 7 MR. SCHONECK: They can be a good part of the system 8 upgrade costs. I would say --9 COMMISSIONER DEASON: For a 500-megawatt plant? What are you talking about? 10 MR. SCHONECK: They can be \$3 to \$10 million, I 11 12 quess. Another thing, and I'd like to comment on Calpine, was 13 in the ANOPR process. I think he was correct in stating, I 14 quess, that there was a need for this network service. And I 15 know Florida Power & Light has worked with many of the developers on trying to assess the system from the standpoint 16 17 of deliverability -- this is the transmission piece -- even 18 though they may not have a customer at that time. And we've encouraged in every study agreement that we have, we encouraged 19 20 them to please look further beyond the interconnection. And 21 you can probably count -- I mean, you saw the number of 22 requests. You can probably count on one hand the ones that 23 actually come in and want that type of an assessment. 24 Now, I think the point was made, there was no way for 25 them to ask for this network, so what we would do is try to

1 accommodate them by saying, well, where do you think your 2 markets will be? And we will try to do the assessment the best 3 way we know how to give you an answer back of what you might 4 see. And we've done that on occasion with several developers 5 that want to go that far to get that assessment.

6 But the purpose of this slide was -- and if we are on 7 the same goal, I guess is to find the least-cost plan, which is 8 to say that, you know, where are you getting those siting 9 signals for, you may have to spend a lot in transmission 10 investment in order to deliver the power.

11 And I think, I guess, to comment as far as the sites 12 that we talked about, they're only good for so many megawatts, 13 yes, but if you look here around the West Palm/Midway/Martin 14 area, you can see on the graph that there is approximately 7,000 megawatts in that vicinity. You know, that vicinity may 15 be good for, let's say, 1,000 megawatts or 1,200 megawatts or 16 whatever the number may be, but after that, you're going to 17 have to put a tremendous amount of infrastructure in place in 18 19 order to move that power.

So the answer is yes. It's good for so much, but then you have to put a lot more investment in place, to answer that question. And I think if you go around and you look at these pockets, what you have is, you have various places on the system where there's existing room, or there's room where you can make marginally upgrades and be able to accommodate it, and

there's other places where you have to make a tremendous
 investment in the system.

CHAIRMAN JABER: But are you making the investment,
or is it the generator that's straining the system?

5 MR. SCHONECK: On transmission service, it goes to
6 the OR policy.

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CHAIRMAN JABER: Okay.

8 MR. SCHONECK: Okay. And that was the -- on the 9 least-cost plan, we were trying to point out, you're not 10 looking at the entire picture. And Calpine agreed with that. 11 They're not looking at the entire picture because they're looking at only the cost of the generator, which includes the 12 siting, environmental, fuel, all those types of things, and the 13 direct assignment cost and potentially some upgrade costs that 14 15 we talked about for interconnecting, but they're not seeing that signal. 16

17 CHAIRMAN JABER: Okay. And that transmission 18 investment, though, related to the infrastructure, the major 19 infrastructure, you collect through transmission rates?

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MR. SCHONECK: Correct.

21 CHAIRMAN JABER: Okay. So you're recovering it, it 22 just takes major capital up front.

23 MR. SCHONECK: The purpose of this slide was to 24 demonstrate that depending on where the location was, when 25 you're looking at least-cost planning, it can be a large

difference. You're not kind of optimizing, if you will, and that signal -- I mean, there's various ways to get there, but that signal they're not seeing today. They're only seeing part of the picture. Whereas, a vertically integrated utility does look at all those things in making its assessment.

6 CHAIRMAN JABER: But they want to be able to see the 7 whole picture.

8 MR. SCHONECK: Yes. And the issue that was left out 9 is, who would end up actually reserving and paying for that? I 10 guess one of the concerns that -- if you're going to -- is the 11 customers going to pay for that -- how much generation do you 12 plan for, in other words? Or do you just roll -- do you 13 basically -- who reserves that transmission capability on a 14 system?

15 COMMISSIONER PALECKI: Let me ask you a question 16 related to your point about infrastructure and investment. The 17 IPPs have talked about making improvements necessary for access 18 to every load-serving entity on the network, and you heard 19 their example -- their analogy with the Chinese restaurants. 20 What type of infrastructure and investment in time would be 21 needed for that level of improvement?

MR. MENNES: I'm Marty Mennes with Florida Power & Light. I've never really heard -- and Joe, I thought it was a good presentation -- the Chinese restaurant thing, but delivery is very, very important to a developer. And let's use the

1 Chinese restaurant and build on it.

2 MR. REGNERY: Okay. Well, just change it back to
3 accessibility.

MR. MENNES: Okay. Deliverability, accessibility,
but the bottom line is, with the network integration service,
you want to be able to get to the customer. You want to be
able to get to the Chinese restaurants.

8 Now, instead of having cars and helicopters and trains and planes to get the restaurants, we now move at the 9 10 speed of light. So it is very difficult to ask the poor old 11 transmission provider, everybody today, because now can move at 12 the speed of light, we want to all eat at the Chinese 13 restaurant in Lake Worth. And then after -- and the other 14 problem that you do have with electricity is that you can't tell when people when to eat. They don't like to eat at 2:00 15 16 in the morning. There's a few that do: there's a few that eat at 4:00 a.m. They usually like to eat Chinese food sometime 17 18 around noonish to one, and probably if it's Chinese food, probably around six o'clock. So now the Department of 19 20 Transportation, with our new vehicles that can move at the 21 speed of light, have got some real, real problems.

Now, of course, that's a gross extreme, Joe, and, you know, I don't want you to come out of your chair, but I'm just trying to say, there are real problems when somebody says, I want to build a generator, and the customers, you know, I don't

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1 know where he is.

2 Now, in Rick's case, you can see -- you can have a 3 sophisticated developer. They built somewhere and, again, you 4 give himself credit for a lot of transmission -- saving 5 transmission loss as well. Half his customer really is on the 6 west coast of the state of Florida, and a lot of it's --7 probably the biggest customer is Marco Island. So I'm really 8 not too sure, Rick, whether we saved a lot on transmission on 9 losses with the power plant at Brevard serving Marco Island.

And again, remember, we do everything on the average,
average system, average that, so it does decrease the losses
probably for Florida Power & Light serving Florida Power &
Light's customers, but our average transmission system losses
which help Seminole out really aren't going to help us out
because Seminole's losses are going to go up.

But I just thought -- delivery accessibility. Accessibility I think you get, and the transmission providers are obligated to give accessibility into the transmission system with generation interconnection service. The problem then becomes, you can't serve -- you may be able to serve certain loads, but you certainly can't get to every load in this case, which is the Chinese restaurant.

And there are. There's a lot of gotchas in there that, gee, I really don't know what load I've got because I don't have a power purchase agreement signed up with anybody.

1 So again, maybe the whole thing you'd like to really look at as 2 There's certainly a lot of issues in there, and I a package. 3 think when you look at the NOPR coming out with FERC, when they 4 really try to talk about deliverability, I think also Joe used 5 in his example one statement that is really, really important. 6 that sometimes we can do and sometimes we can't. Joe said when 7 he puts his unit in, and let's just use examples, and Joe --8 and I think this is how we try to do it at least in our system. 9 we put in, let's just say, a thousand megawatt unit.

10 Well, certainly if you put in a thousand megawatt 11 unit, you want to study it economically for the next few years. 12 You've got certain loads you're going to pick up, and also 13 you're going to have to turn down certain units to run this and 14 try to model. Well, the next thing is, is who's going to 15 volunteer to turn down? Or who's going to give everybody all 16 the pricing information? So I'll go to Rick and say. Rick, are 17 we going to get you to volunteer to turn down? Because I'm 18 trying to run some studies. So I said, give me everything 19 you've got, all your future pricing of your fuel. 20 transportation, your heat rates, any degradations that you have 21 on your units, so I can figure out whether, you know, Rick, 22 you're going to turn down or not.

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So with all that said --

24 COMMISSIONER DEASON: Does he actually give that to 25 you?

MR. MENNES: No.

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COMMISSIONER DEASON: Okay. I was going to say --

MR. MENNES: Maybe, Joe, on his transmission guy, but no, I don't think Rick would want to give any of that information out, and I don't think Rick has it.

6 And when we -- and let me back a little bit. Now, the information he does give us are the characteristics of what 7 8 his generation when we connect it to our system will do. So 9 when we take his unit and we just put it there, we don't 10 deliver it anywhere. When we're talking about the system upgrades, just dropping it in right there and making 11 12 electricity so that we can kind of disburse it just as long as we can get it, if you will, out of this plant. 13

14 There's no deliverability that Rick originally asked 15 for when he asked for his power plant on the old Pat Wood 16 So when he does ask for deliverability, which was what regime. the next step that he did, I want to deliver to Seminole for 17 "X" amount of years, and Florida Power & Light for "X" amount 18 of years, then we're obligated to build a transmission 19 20 service -- a transmission system so that we can go ahead and 21 deliver his generation.

CHAIRMAN JABER: Okay. I'm going to give you the last word, but hang on. Anyone else in the audience that needs to make a presentation?

Okay. We're going to hear from one more party, and

1 that's over here, and then we're going to adjourn the workshop. 2 Commissioners, before we adjourn the workshop be 3 thinking about next steps. Mr. Ramon during the break did 4 ask -- make a request, and I'll share that with you after we're 5 done. Go ahead.

6 I just wanted to say one thing with MR. REGNERY: 7 respect to responding to Marty and then just an overall comment and some information for you all to take with you, and that 8 was, the first thing, there is a difficulty in this modeling 9 10 process. And Marty is making the recognition that in order to model the network service. it is a challenge because they're 11 12 using an economic model of the IOU that only applies to the 13 plants that they know about, and they may not know all of the 14 information or data about the IPPs' plants.

But that leads to Greg's comment, which was, if you 15 16 have a standard market design using locational marginal pricing, that pricing is transparent, and then that model does 17 18 work effectively. So you do achieve the benefits of both sides 19 of having the supply side effect from the interconnection and 20 then the demand side effect from the locational marginal 21 pricing on the market design. So they work in conjunction to 22 better serve the overall competitive wholesale market.

Then the last thing I wanted to say was, you may not know how the process worked at FERC from a perspective of the participants involved, but I would like to compliment all of

the parties that you've heard here today speak because every one of the parties that you heard here speak today was there at the tables at the Public Service -- or at the Federal Energy Regulatory Commission. They were there in such force that the persons that you see here today on these tables were the drafting committee representatives that went into drafting the documents that exist out there as the strawman proposal.

8 I was sitting across from Marty with Robert, with 9 Greg, with all of these people. That's how we're all on a 10 first name basis because we were locked in rooms together for 11 months on end and displaced countless numbers of birthdays, 12 family weddings. They let me get out to get married, so I was 13 very happy about that. But other than that, we -- there was a 14 level of participation from Florida that was just unsurmountable. 15

16 CHAIRMAN JABER: Well, good. See why you get the 17 last word?

18 MR. REGNERY: So I wanted to just pass out a19 compliment.

CHAIRMAN JABER: Well, good. Very good. He was supposed to get the last word. It better be a compliment of something.

23 MR. WILLIAMS: Just really, really quick. What I 24 hear today, and I just make this recommendation, is that it 25 just cries out for me that I think what we need in Florida, and

I would urge the Commission to consider it, is an annual transmission planning workshop to take -- because all of these issues that are hard for you to understand how to deal with, the only way you're going to deal with them is annually looking at all of the issues, and does this all come together for Florida and Florida customers?

And if it's looked at on a one-owner basis, forget who owns what, and what's best for Florida, I think that would be a great step for this Commission to take.

10 CHAIRMAN JABER: Do you have in your mind how -- what 11 the jurisdictional issues would be or how the workshop should 12 be designed or what issues --

MR. WILLIAMS: Again, I'm not a lawyer, but you have the Grid Bill, you have the Transmission Line Siting Act. If any of these transmission lines get big, they've got to come to you for that. We still have a Power Plant Siting Act if there's too much generation.

0ne of the problems you have here and what's proposed is, there's too much generation for what Florida needs, and all of that will be figured out by economics. Some of it won't be built, and that causes problems for transmission planning. And, it's a complex issue. I would urge the Commission to get involved.

CHAIRMAN JABER: Okay. Thank you.MR. WILLIAMS: Sure.

CHAIRMAN JABER: Commissioners. let me bring us back 1 2 to where we started this morning with the purpose of the 3 workshop. You may recall an Internal Affairs back, there were 4 several requests that we did in fact grant with respect to the 5 PSC filing comments at FERC on these issues. And during some 6 of those discussions, we requested that this workshop be held 7 so that we could better understand the issues surrounding the 8 interconnection and generation procedures at FERC.

I think this workshop accomplishes that, but during
the break, Mr. Ramon brought up the idea, now that we've got
FERC's decision today, perhaps a briefing on the new decision
is in order. Frankly, I envisioned having our Staff do that
anyway. And in conjunction with our Staff giving us a briefing
on FERC's decision today, certainly we can invite these folks
back and you could add to that briefing.

There is also a request for this Commission to set up an annual transmission planning workshop. Those are the only two requests I've heard today going forward. I'd love to have some feedback.

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MS. BRUBAKER: Madam Chairman, if I may? CHAIRMAN JABER: Yes.

MS. BRUBAKER: If nothing else, what we've learned today is, this is a very complex and evolving issue. I think we've touched on some very productive points. I would also like to note that in the agenda, Staff had some specified

1 issues listed, some of which we have been able to touch on 2 today, some of which we have not had the opportunity to do so. 3 We haven't really discussed specifically filing 4 post-workshop comments, but I think those would be useful 5 especially for Staff to get a sense of where the various 6 parties stand on those issues. And so I'd like to offer that 7 as a possibility. 8 CHAIRMAN JABER: And maybe have, what, a summary or a 9 presentation --10 MS. BRUBAKER: A summary, written comments probably 11 would be the best way, where we could do a summary and make a 12 presentation perhaps at IA, if that's appropriate. 13 CHAIRMAN JABER: And what you envision is -- you're 14 talking about post-workshop comments on the issues that weren't 15 referenced today, weren't discussed today. 16 MS. BRUBAKER: That's correct. Just as a note. Staff 17 would be specifically interested in tax issues which are listed 18 Subsections L through 0 of Number 6 on the agenda. But 19 certainly any other issues that --20 CHAIRMAN JABER: Is there a reason no one wanted to 21 discuss tax issues today? 22 MR. MECHLER: Yes. 23 COMMISSIONER PALECKI: The month of April. 24 CHAIRMAN JABER: Yeah. Commissioners? 25 COMMISSIONER PALECKI: I like the issue of the

post-workshop discussions that was discussed somewhat today, and that is the Chinese restaurant analogy. We've heard about what improvements would be necessary for access to every load-serving entity on the network, but we didn't hear about how much infrastructure and investment would be needed for that, and I'm interested in what it would take to accomplish that.

8 CHAIRMAN JABER: Okay. So we have a specific request 9 by a Commissioner to have comments made.

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In addition to that, Staff, the tax issues.

11 Commissioners, we'll go ahead and set up the briefing 12 of FERC's decision today. With regard to the annual 13 transmission planning workshop, if that is something that you 14 all have reached consensus on, okay. If you are so inclined to 15 file a request so that we can see a written proposal, that 16 would give everyone an opportunity to comment. You know, if 17 it's a good idea, I'm willing to do it. Okay.

MS. BRUBAKER: For purposes -- excuse me,
Commissioner. For purposes of consistency, I'd suggest perhaps
kind of a general page limitation, a time frame be set for
post-workshop comments.

CHAIRMAN JABER: They're going to talk about taxissues, they can't possibly be very long.

24 MS. BRUBAKER: All right.

CHAIRMAN JABER: Give me guidance. How long -- how

148 1 many pages do you think? 2 MS. BRUBAKER: I wouldn't anticipate any more than 3 perhaps 30 would be needed. 4 CHAIRMAN JABER: Okay. 5 MS. BRUBAKER: A time frame of perhaps 30 days. 6 CHAIRMAN JABER: That's way too many pages. MS. BRUBAKER: Way too many. 7 8 CHAIRMAN JABER: I just saw Mr. Litchfield --9 MS. BRUBAKER: Less is perfectly acceptable. 10 CHAIRMAN JABER: Why don't we leave it at that? 11 MS. BRUBAKER: Okay. 12 CHAIRMAN JABER: Thirty pages, and less is 13 preferable. And have those due in 30 days? 14 MS. BRUBAKER: Shall we make it May 28th? That would be the day after Memorial Day and the day before the RTO 15 16 workshop. CHAIRMAN JABER: No. Let's -- we'll let Ms. Brubaker 17 18 notify you by separate memo when your comments will be due. 19 MS. BRUBAKER: Okav. 20 CHAIRMAN JABER: Thank you for your participation 21 today. This workshop is adjourned. 22 (Workshop concluded at 2:40 p.m.) 23 24 25 FLORIDA PUBLIC SERVICE COMMISSION

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1	STATE OF FLORIDA )
2	: CERTIFICATE OF REPORTER
3	COUNTY OF LEON )
4	I TRICIA DOMARTE Official Commission Reportor do boroby
5	I, TRICIA DeMARTE, Official Commission Reporter, do hereby certify that the foregoing proceeding was heard at the time and place herein stated.
6	
7	IT IS FURTHER CERTIFIED that I stenographically reported the said proceedings; that the same has been transcribed under my direct supervision; and that this
8 9	transcript constitutes a true transcription of my notes of said proceedings.
10	I FURTHER CERTIFY that I am not a relative, employee, attorney or counsel of any of the parties, nor am I a relative or employee of any of the parties' attorneys or counsel
11	connected with the action, nor am I financially interested in the action.
12	DATED THIS 3rd DAY OF MAY, 2002.
13	
14	Fricie Berrach
15 16	TRICIA DEMARTE FPSC Official Commission Reporter
10	(850) 413-6/36
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