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BEFORE THE  
FLORIDA PUBLIC SERVICE COMMISSION

In the Matter of:

DOCKET NO. UNDOCKETED

REVIEW OF THE 2024 TEN-YEAR  
SITE PLANS FOR FLORIDA'S  
ELECTRIC UTILITIES.

\_\_\_\_\_ /

PROCEEDINGS: COMMISSION WORKSHOP

COMMISSIONERS  
PARTICIPATING:

CHAIRMAN MIKE LA ROSA  
COMMISSIONER ART GRAHAM  
COMMISSIONER GARY F. CLARK  
COMMISSIONER ANDREW GILES FAY  
COMMISSIONER GABRIELLA PASSIDOMO

DATE: Tuesday, September 10, 2024

TIME: Commenced: 9:45 a.m.  
Concluded: 10:25 a.m.

PLACE: Betty Easley Conference Center  
Room 148  
4075 Esplanade Way  
Tallahassee, Florida

REPORTED BY: DEBRA R. KRICK  
Court Reporter

PREMIER REPORTING  
TALLAHASSEE, FLORIDA  
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I N D E X

PRESENTATION BY:	PAGE
Florida Reliability Coordinating Council (FRCC) Presentation by Vince Ordax	3

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

2 CHAIRMAN LA ROSA: Excellent. Well, good  
3 morning, everybody. Just it felt like it was a few  
4 seconds we saw -- we saw you.

5 Today, again, is September 10th. I would like  
6 to call to order our review of the 2024 Ten-Year  
7 Site Plan. I would like to turn it to staff, if  
8 you would please read the notice.

9 MR. FAROOQI: Good morning, Commissioners. By  
10 notice issued on August 29th, 2024, this time and  
11 place has been set forth for a workshop. The  
12 purpose of this workshop is set forth more fully in  
13 the notice.

14 CHAIRMAN LA ROSA: Excellent. Thank you.

15 With us is Mr. Vince Ordax. I'm going to  
16 throw it to him -- or throw it back to you guys to  
17 introduce him.

18 MR. FAROOQI: Yeah, this is Vince Ordax with  
19 the FRCC, and he has a presentation for us.

20 CHAIRMAN LA ROSA: Excellent.

21 Mr. Ordax, welcome. We are looking forward to  
22 your presentation, as we do annually.

23 MR. ORDAX: Thank you. I appreciate it.

24 CHAIRMAN LA ROSA: Of course.

25 MR. ORDAX: Good morning, Chairman La Rosa,

1           Commissioners. I am Vince Ordax. I am the Senior  
2           Director of Planning at the FRCC.

3           I provided you a summary of our analysis of  
4           the aggregated 2024 Ten-Year Site Plans --

5           CHAIRMAN LA ROSA: Do you mind maybe moving  
6           your microphone down a little bit?

7           MR. ORDAX: Is that better?

8           CHAIRMAN LA ROSA: Yeah. Sounds good.

9           MR. ORDAX: Thank you.

10          The aggregated Ten-Year Site Plans that were  
11          filed by the individual utilities. Our mission is  
12          to coordinate a safe, reliable and secure bulk  
13          power system in Florida. We are a not-for-profit  
14          corporation formed in the 1970s. We have 20  
15          members, utilities in Florida, investor-owned  
16          utilities, cooperatives, municipalities.

17          The FRCC carries out activities on behalf of  
18          our member utilities, including being a reliability  
19          coordinator, overseeing the electric grid, and the  
20          planning coordinator coordinating long-term  
21          transmission planning.

22          So the topics that I will cover today will  
23          include overall summary, the process that the  
24          utilities use for integrated resource planning, and  
25          the aggregated load forecast and capacity

1 additions, reserve margins and generation mix in  
2 the Ten-Year Site Plans, as well as reliability  
3 considerations of both solar additions and the  
4 natural gas infrastructure.

5 In addition, this year I will discuss  
6 transmission adequacy and FERC Order 1920.

7 So the data from the individual utility  
8 integrated resource plans are brought together by  
9 the FRCC to create what we call the loading  
10 resource plan. So we use, you know, the members we  
11 use and update their load forecasts annually, and  
12 they take into account, you know, energy, fuel,  
13 economy, resources, including plans and  
14 modifications for retirement. And they will  
15 compare those with any needs that may be short some  
16 years, whatever needs of resources they have. And  
17 then they consider options, such as supply-side  
18 options, demand-side options. And they take into  
19 consideration costs and operating data.

20 From here, they will go ahead and evaluate  
21 several alternatives, and then they will choose the  
22 best alternatives. And they go ahead, and that's  
23 what creates the individual resource plan.

24 So for -- at the FRCC, what we do is we  
25 aggregate the individual plans, and we create

1 Florida resource plans, as I mentioned earlier.  
2 Now, this plan we provide -- the aggregated data,  
3 we provide to the Public Service Commission, so you  
4 guys have a copy of that. We also populate our  
5 planning models. Loss of load probability studies  
6 are produced from this data as well. And we  
7 perform transmission studies, and several  
8 reliability assessments that we will talk about  
9 later in the presentation. And some of this data  
10 is also provided to NERC and SERC for their  
11 assessments that they do annually.

12 So turning to the load forecast. Firm summer  
13 peak demand growth is projected to be about 1.3  
14 percent per year throughout this 10-year horizon.  
15 And the energies that growth is expected to grow  
16 about one percent per year. As you can see, the  
17 demand response reduces firm summer peak demand by  
18 5.3 percent by 2033. Customer-owned distributed  
19 solar is expected to reduce summer demand by nearly  
20 4,000 megawatts by 2033.

21 So the factors that surround the load forecast  
22 really include, you know, the obvious. The  
23 population growth is projected to remain strong in  
24 Florida. The impact of the electric vehicles is  
25 forecasted to grow to about 2.8 gigawatts by 2033.

1 This is an estimated number.

2 Currently, there are no impacts from potential  
3 data center load reflected in the individual  
4 utilities load forecasts, but the entities are  
5 obviously monitoring this particular thing.

6 Energy efficiency codes and standards, and  
7 conservation, and distributed solar are dampening  
8 energy use growth throughout the 10-year horizon.  
9 And wage and income growth have not kept pace with  
10 employment growth.

11 So now we are getting to the actual, what we  
12 call the firm peak summer demand forecast. And  
13 here, we are comparing 2023 versus 2024. The 2024  
14 forecast is the solid orange line. And the dashed  
15 blue line is the 2023 forecast. As you can see,  
16 they are pretty close to each other. They have  
17 about the same growth. In the later years, 2024 is  
18 growing a little bit faster.

19 Next we have the comparison of the net energy  
20 for load. You can see again the solid orange line  
21 is the 2024 forecast, and the dashed blue line is  
22 the 20 if forecast. You can see that the growth  
23 rate is about the same. The slope of the line is  
24 the same, but it is a little higher, and that was  
25 kind of pushed up -- we did have about 2.6 percent

1 higher energy actuals for 2023 than we had before.  
2 So the forecasters adjusted the expected energy use  
3 in the future.

4 So here, we have sort of -- kind of to explain  
5 what the different terminology that we use here for  
6 the demand. The yellow line on top is really the  
7 projected demand. You know, if you didn't have any  
8 demand response for energy and efficiency codes  
9 were not in place, so that would be the demand  
10 without those.

11 The blue line, which is slightly below the  
12 yellow line, reflects the impacts of the energy --  
13 the energy codes and standards that are expected to  
14 have that kind of an impact on the demand.

15 And then the final one is if we include the  
16 demand response, then we come down to what we call  
17 projected firm peak demand. That's the orange  
18 line. And so that's -- the actual numbers that are  
19 used to calculate the reserve margins, is based on  
20 the firm peak demand. And actually, throughout  
21 this whole presentation, all the forecasts that you  
22 see here include the impacts of energy efficiency  
23 codes and standards.

24 So this chart shows the incremental generation  
25 changes by year. You can see, you know, coal is



1 blue, and you can see there is some retirements  
2 taking place, you know, in 2024 and '26 and '29.  
3 We still have also natural gas, some older units  
4 retiring later on in the 10-year horizon, they are,  
5 like, in 2028.

6 Then on the addition sides, you can see there  
7 is a significant amount of solar being added.  
8 That's the -- kind of the yellow bars. And then  
9 the orange bars are the natural gas and then the  
10 gray bars are the battery.

11 One thing to note here, on the solar, these  
12 are the firm capacity values, not the nameplate  
13 values for solar, which brings us now to the  
14 reserve margin calculations.

15 You know, the orange bars are for showing the  
16 reserve margins throughout the 10-year horizon for  
17 summer, and the blue bars are representing the  
18 winter. And you can see that in all of the years  
19 throughout the 10-year were above the 20 percent  
20 mark.

21 One thing to note, and you see that you have  
22 higher reserve margins in the winter. And that's  
23 kind of driven by the thermal capabilities so some  
24 of the units, they can actually put out more --  
25 more capacity in the winter months because of the

1 colder air. All of these, like I mentioned in the  
2 previous slide, reflect the use of demand response.  
3 And so that's reflected in the reserve margins.

4 This next slide shows the forecasted firm  
5 summer resource capacity values. And you can see,  
6 you know, for 2024, from natural gas, we have -- 75  
7 percent of the total fleet is gas, then expected to  
8 slightly drop by down to 71 percent by 2033.

9 Solar is expected to grow from the seven  
10 percent in 2024, up to 12 percent in 2033.

11 Coal is green, and you can see it's going down  
12 from six percent to four percent. And that's, you  
13 know, reflects those retirements that we saw in the  
14 other slide.

15 Nuclear is remaining fairly constant.

16 Battery is going from one percent up to four  
17 percent.

18 This slide shows the net energy for load by  
19 fuel type. So here, you know, there is -- the  
20 biggest change, as you can see, is gas is expected  
21 to be 72 percent of the energy this year, and it's  
22 going to drop to 54 percent by 2033. Solar is the  
23 big increase here, from eight percent to 31 percent  
24 by 2033. You can see that, you know, nuclear is  
25 pretty constant, and coal will be dropping from

1 three percent down to one percent.

2 So I am going to talk a little bit about solar  
3 generation output variability. There is usually a  
4 lot of talk about what is a variable energy  
5 resource, and why do we call it that. And so this  
6 slide is actually actual output from solar in the  
7 FRCC region for -- from May 15th of this year.

8 You can see that the nameplate solar is up  
9 there, about 7,500. We are getting an output of,  
10 say, on this particular day, of 4,500. And then  
11 you see on the upper right-hand, you see a little  
12 map, the radar map, we have the storms coming  
13 through. And then what that does is we had a drop  
14 of 1,200 megawatts, you can see. In about a  
15 90-minute period, we dropped 1,200 megawatts, and  
16 then it, in about the next two-and-a-half hours, we  
17 got the 1,200 back that we dropped.

18 But in that interim there -- so the  
19 traditional generation is really used to manage the  
20 variability of solar generation, right? We have  
21 something you can actually control to meet the  
22 demand. So this is what is meant by output  
23 variability, or, you know, variable energy  
24 resource.

25 Now, keep in mind, this is for one particular

1 day. The curves are similar. In other days, you  
2 don't see any dips at all, right? You know, they  
3 will -- they will be pretty solid all the way  
4 through.

5 This slide is another daily -- it's a daily  
6 load curve for May 9th of this year, as an example.  
7 You know, this is trying to show the -- what the  
8 traditional peak hour would be normally. So the  
9 orange line on the top is the demand that's being  
10 served that day, and then the blue line is the  
11 demand minus the output of solar. So that means  
12 that the blue line is what the remaining  
13 traditional generation needs to serve.

14 And so without solar, you can see that, you  
15 know, around hour 17:50, about 5:50 in the  
16 afternoon, is when we would have peaked. That  
17 would have been the summer peak for that day, or  
18 the peak for that day. And then when we take into  
19 consideration the effects of solar output, it  
20 actually shifts this, it shifts the daily peak into  
21 what we call the net solar, and it shifts it down  
22 -- up to -- or past the 2010, right? That's like a  
23 little bit past 8:00 in the afternoon.

24 And so there is less -- obviously, if that's  
25 the peak for the day, as you shift your daily peak

1 later in the afternoon, there is less sun available  
2 at that time. So any incremental additions of  
3 solar will be counted less towards the firm  
4 capacity, right? Obviously, during the day, they  
5 are still generating power and they meet -- as you  
6 saw from the net energy for load charts that we had  
7 earlier.

8 And this slide is kind of just to kind of  
9 complete the slides on solar. It's January 21st of  
10 this year. It's what we call, like, a typical  
11 winter day. So you can see, we have two axis here.  
12 So the axis on the right really corresponds to the  
13 solar curve there in dark blue and the yellow line  
14 on top for the nameplate capacity. And then the  
15 scale on the left is for the, I guess the magenta  
16 and the green line is for load. And then the net  
17 load, which is the load minus the output of solar.

18 You can see our typical load profile in the  
19 winter is we peak in the morning, around 8:30 in  
20 the morning, and then we have another afternoon  
21 peak, you know, past 6:30 or so in the afternoon.  
22 You can see, really, that during these -- these  
23 times that we are peaking, you know, the solar is  
24 very little, especially in the morning. There is  
25 nothing in the afternoon for that second peak. And

1 so the contribution of solar for -- as capacity for  
2 winter peak is minimal. So most of the entities  
3 call -- consider very small amount of capacity for  
4 the winter peak, and it's reflected in the reserve  
5 margin's calculations that way. It's very -- for  
6 reserve margins, we use the values at peak.

7 So this slide shows a comparison of the  
8 nameplate solar compared to the firm solar capacity  
9 attributed by the utilities. The nameplate is  
10 shown in orange, and the firm solar available at  
11 the time of summer peak is the blue, right? So in  
12 2024, you can see that the firm capacity is about  
13 50 percent of nameplate. By the time we get to  
14 2033, it's about 22 percent of nameplate for the  
15 reasons that we talked before. Since we are  
16 shifting the actual net peak later in the  
17 afternoon, there is less contributions from the  
18 incremental solar towards the -- that peak.

19 So this is sort of a brief summary here, but  
20 with the significant growth of solar forecasted,  
21 utilities in the FRCC are working to understand the  
22 reliability considerations of this change in  
23 resource mix. At the current levels of solar  
24 penetration, members have been able to reliably  
25 incorporate solar without negative operational

1 impacts.

2 As we saw, solar shifts the period of the  
3 lowest operating generating margins, the net peak  
4 to later in the day. And the planners are assuming  
5 lower capacity value to solar as penetration  
6 increases in and the net peak moves to a time of  
7 the day when less solar energy is generated.  
8 Planners are evaluating resource adequacy beyond  
9 the summer and winter peaks. Utilities are also  
10 developing experience with these resources,  
11 understanding the importance of solar output,  
12 forecasting and integrating that into the  
13 generation dispatch to ensure reliable and  
14 efficient operations.

15 Now, we continue to review lessons learned  
16 from other parts of the country that have already  
17 have had high levels of solar, you know, such as  
18 California and ERCOT.

19 And, you know, finally, members are studying  
20 the impact of solar and batteries on the resource  
21 adequacy measures, and we are doing additional  
22 calculations and analysis to ensure that we are  
23 considering the attributes of these resources  
24 appropriately. I know many of the members are also  
25 doing energy hourly energy assessments to make sure

1           that there is enough energy for all hours of the  
2           year, not just the peak.

3                   This table shows -- or the chart shows the  
4           battery capability, similar like we did with solar,  
5           but -- so the orange line is the nameplate  
6           capability, and then the blue is the firm  
7           contribution at the time of summer peak.

8                   You can see that in the earlier years, you  
9           know, they are matching almost 100, you know,  
10          one-for-one. And the more you start to add,  
11          similar to solar, you have, you know, penetration  
12          levels going up, then you have a little bit less  
13          contribution towards the summer peak. But both --  
14          you know, they do show diminishing returns for firm  
15          contribution, but the batteries have different --  
16          different uses. And they may not have been -- the  
17          members may choose to use them during different  
18          times for different purposes, not necessarily at  
19          peak, right? They may use them to respond to  
20          system disturbances. If they lose a unit, they  
21          may, you know, increase the output of the battery.

22                   The batteries are slightly different in solar.  
23          The batteries need to be designed according to how  
24          they are going to be used. So the members would  
25          specify certain use of the battery, and then the



1 manufacturer would build it to that. So the ones  
2 that are being installed, and the members plan to  
3 use them for the peak, or available at peak are  
4 reflected on this chart.

5 Next we will turn to natural gas  
6 infrastructure.

7 So for years, the FRCC members have employed a  
8 consultant to maintain a comprehensive gas  
9 infrastructure model and utility fuels database.  
10 And this allows the members to identify periodic  
11 reliability studies examining different  
12 infrastructure contingencies, and perform studies  
13 to see if the expected infrastructure capacity is  
14 projected to be adequate. So based on these  
15 studies, the natural gas infrastructure capacity is  
16 on pace to support the planned generation  
17 additions.

18 On a realtime basis, as needed, due to system  
19 conditions, FRCC coordinates regional response to  
20 fuel emergencies with the utilities and pipelines.  
21 So the utilities in Florida have a large percent of  
22 gas generation with alternate fuel capability,  
23 which ranges between a 55 and 58 percent, which  
24 provides operational flexibility.

25 And -- and -- well, one thing that's pretty

1           unique in Florida is the natural gas is almost  
2           entirely dedicated to the electric industry in  
3           Florida. So in the winter, there is really not a  
4           lot of competition for the gas from other sources.

5           Next we will return to transmission adequacy  
6           and reliability.

7           So at the FRCC, and our members, we do -- we  
8           run significant amount of transmission studies to  
9           test the performance and adequacy of the  
10          transmission system. So we thought we would show  
11          -- share with you the types of scenarios that we  
12          look at.

13          So the scenarios involve peak loads, as you  
14          would expect for summer and winter. We also look  
15          at off-peak loads for summer conditions. And then  
16          we add about six other sensitivity scenarios to  
17          represent those 10 years out, or closer into the  
18          near terms. For example, we will look at a winter  
19          peak that's 20 percent higher than the forecasted  
20          peak that you have seen on the slides. We will  
21          also do a summer peak six percent higher than what  
22          you have seen on the slides.

23          We will do a summer peak high imports into the  
24          state. We will do an off-peak with solar at zero  
25          and solar at maximum. We will do another one that

1 will represent a clear sunny day, winter peak day  
2 in southern Florida. And we will do, say, a summer  
3 peak case with a couple large units unavailable,  
4 and solar at its maximum capacity.

5 Now, once we've built these scenarios with the  
6 models that we have, we test -- we test the system  
7 pretty rigorously. And basically we -- we follow  
8 the standards that are developed and approved by  
9 the North American Electric Reliability  
10 Corporation, which are then presented to the  
11 Federal Energy Regulatory Commission for final  
12 approval.

13 These reliability standards have performance  
14 requirements in them. And, you know, our members  
15 and ourselves, we are audited on these every --  
16 every three years to make sure that we are  
17 following the standards.

18 And the standards basically test -- have us  
19 test every single element. So the loss of a single  
20 element, such as a generator, a line or a  
21 transformer, and then reviewing the results of that  
22 test. And we similarly will do an additional,  
23 where we take out a single element, and then we hit  
24 it -- we go ahead and outage another element. It  
25 could be another generator, another line or another

1 transformer, and then we review those results.

2 And the results of those -- all of that  
3 testing, and there is a few other tests that are  
4 done, have told us that existing and planned  
5 facilities within the FRCC region's transmission  
6 system meet the performance criteria that's  
7 contained in this NERC reliability standard,  
8 TPL-001-5.1.

9 The next couple of slides are related to FERC  
10 Order 1920, requirements that just came out. You  
11 know, the intent of this order is to drive  
12 interstate transmission expansion to access  
13 renewable energy.

14 This new FERC order will not impact the  
15 current order that's in place, the Order 1000  
16 process that we have in place. That will remain.

17 The modifications of -- they modified in this  
18 order what they mean by long-term. So it's now 20  
19 years into the future for transmission planning  
20 process, including, you know, Enhanced  
21 Transparency, and Right-Sizing and Interregional  
22 Transmission Coordination of Long-Term  
23 Transmission.

24 The investor-owned utilities must submit a  
25 plan to comply with this order by June of next

1 year. And the first study that's going to  
2 incorporate these requirements will begin by June  
3 of 2026, and then every five years thereafter.

4 And increase, Interregional Coordination  
5 allowing entities to propose new projects is what  
6 is expected. And these studies, as you might  
7 imagine, they are going to be extremely complex and  
8 will probably take up to three years to complete.

9 So some specifics on FERC Order 1920. It  
10 requires that we identify three distinct scenarios  
11 in addition to the base case, and we must consider  
12 an extreme weather sensitivity for each scenario.  
13 And then there is seven categories of factors to  
14 drive the development of transmission. And these  
15 -- the scenarios will be built addressing those  
16 factors. And I have listed those factors in a  
17 background slide, that's slide 29 included in your  
18 package, so you can see them, but there are seven  
19 factors. And that's going to drive, potentially  
20 drive identifying specific projects to meet those  
21 long-term needs established by these seven factors.

22 The projects will then be evaluated based on  
23 maximizing the seven benefits. And there is  
24 another slide and background information that just  
25 lists out the seven benefits on slide 30.

1           There will be two methods -- there are two  
2 methods for cost allocation of selected projects  
3 that commensurate with benefits. The -- there is  
4 one, the Ex Ante is the predetermined tariff  
5 approach, the cost allocation. And Ex Post, state  
6 agreement process for specific projects.

7           I know the FRCC and its members are willing to  
8 coordinate, collaborate with the State of Florida  
9 on this -- in this -- on this order when it comes  
10 to cost allocation.

11           And in conclusion, to summarize the aggregate  
12 Ten-Year Site Plans. Florida utilities continue to  
13 increase plant, solar and battery capacity  
14 installations with decreasing incapacity value  
15 attributed to solar as net peak shifts to later  
16 hours of the day.

17           Distributed, or customer-owned solar  
18 penetration noticeably decreases utility -- utility  
19 load forecasts.

20           Electric vehicle impact to load forecast is  
21 expected to increase substantially but still  
22 relatively small on a percent basis.

23           Planned reserve margins are above 20 percent  
24 for the 10 years.

25           Florida utilities continue to coordinate at

1 the FRCC to ensure reliability through studies of  
2 transmission system, natural gas infrastructure,  
3 solar and battery impacts to operational and  
4 planning.

5 And on this final slide here, the existing and  
6 planned transmission facilities within the FRCC  
7 transmission system meet the performance criteria  
8 for expected future conditions.

9 And with respect to FERC Order 1920, long-term  
10 planning horizon is -- will be 20 years. There  
11 will be seven categories of factors and seven  
12 benefits to consider.

13 Cost allocation will be commensurate with  
14 benefits. And this study will be conducted every  
15 five years, and must be completed within a  
16 three-year period.

17 And this concludes my presentation.

18 CHAIRMAN LA ROSA: So we will -- thank you for  
19 your presentation.

20 Commissioners, are there questions or  
21 thoughts?

22 Commissioner Fay, you are recognized.

23 COMMISSIONER FAY: Thank you, Mr. Chairman.

24 And thank you, Mr. Ordax -- Ordax, correct?

25 MR. ORDAX: Yes.

1           COMMISSIONER FAY: Yeah, thank you for being  
2 here.

3           I just want to get first just some clarity of  
4 FRCC and the operation, just to make sure I  
5 understand how it aligns with the information.

6           So, obviously you intake the data from the  
7 utilities, and then input that data into various  
8 models that give you an idea, I guess, to  
9 oversimplify, of maybe things that work  
10 appropriately when needed to, or maybe where you  
11 would need to shift resources in a certain  
12 hypothetical circumstance, is that --

13          MR. ORDAX: So our transmission models are  
14 extremely detailed. So they will provide very  
15 accurate results as far transmission. So that  
16 would be for expansion transmission.

17          On the resources side. Yes, there -- and we  
18 do -- do probabilistic assessments that involve  
19 studying the entire 8,760 in the year, and so we do  
20 those at the FRCC in coordination with our members.  
21 So we use the same data that they provided; the  
22 capacity of all the units, their expected load  
23 forecast, and any sensitivities to those load  
24 forecasts and any average, say, forced outage rates  
25 of the -- of the units. And all of that is taken



1 in account in those resource adequacy assessments  
2 that are done.

3 COMMISSIONER FAY: Okay. And is that part,  
4 that information distributed to SERC, or I guess to  
5 NERC for review, or is that a -- like, I am  
6 aligning those two things. Are they -- are they  
7 the same?

8 MR. ORDAX: Yes. It is, and it's also  
9 included in the reliability assessment that was  
10 provided to -- to the Commission in the report. So  
11 there is a section there on reliability assessment  
12 and probabilistic assessment.

13 COMMISSIONER FAY: Okay. Great.

14 And then when you run those models, I am  
15 presuming some of the circumstances that you looked  
16 at were maybe you have an extra 20 percent needed  
17 for a certain time period, and I think you got a  
18 six-percent adjustment, so you run those scenarios.

19 Are there scenarios that raise the need for  
20 adjustments for the time being, or are those just  
21 so if a situation does occur, you are prepared to  
22 maybe advise on how resources could be reallocated?

23 MR. ORDAX: So the studies will show the times  
24 when the margins are at their tightest, and so  
25 there would be hours, say, maybe a couple of hours

1 in the winter, maybe during the winter peak, that  
2 may -- the program may say that we may be short in  
3 capacity. But when we get to those, like,  
4 specifically in the winter, the members do not plan  
5 to have any -- any generation outages, right?  
6 Their maintenance outages are -- are not allowed  
7 during that time. So they have all their fleet,  
8 except for the forced outage rates, available.

9 And they will have -- in operations, what they  
10 do is they will have -- you know, you expect a cold  
11 front coming, they will have operation calls on a  
12 daily basis coordinating with each other, and  
13 sharing resources if they have to if one of them is  
14 short?

15 COMMISSIONER FAY: Okay. And then in the real  
16 world application, FRCC provides notification to  
17 the Commission if there is a scenario where maybe a  
18 NERC requirement is met, is that correct?

19 MR. ORDAX: Yes. Yes. We do notify your  
20 staff when there is, like, a realtime issue  
21 happening. There has been a notification of an  
22 energy emergency alert, we let the Commission know  
23 as well, and so that's how we communicate.

24 COMMISSIONER FAY: Okay. Great.

25 And I know your -- your entity is going

1 through some transition with leadership. I think  
2 your -- your past CEO has stepped aside for the  
3 time being. But just for purposes of -- of  
4 understanding maybe how we fit into the -- the, you  
5 know, region and maybe the entire country, it  
6 appears, from my conversations with other  
7 commissions, that our reliability is some of the  
8 best. And I think that's probably the reality from  
9 what we see from our customers, and the utilities,  
10 and the information that's brought to us.

11 But do you have any thoughts maybe of beyond  
12 maybe the reserve margin? Is there -- is there a  
13 reason that -- you know, and Texas gets picked on  
14 all the time. They -- they are -- you know, since  
15 their first issue, and even recently, but they are  
16 not the only ones that deal with, you know, some of  
17 these issues of rolling blackouts, and -- and those  
18 challenges all over the country. So I know  
19 Commissioners ask me why is Florida, from a  
20 reliability perspective, even with the storms that  
21 we have.

22 Do you have -- do you communicate with other  
23 coordinating councils about their reliability, and  
24 maybe what we are doing that's different?

25 MR. ORDAX: Yeah, we do. We -- we are part,

1 we do sit, like for SERC, we do go to their  
2 meetings, and we share information at those  
3 meetings. And we are part of the NERC as well, and  
4 the Reliability Assessment Subcommittee does talk  
5 about these things, and a lot of those weaknesses  
6 are identified.

7 Our generation mix is different, right? We do  
8 have a lot of generation that we can rely on, you  
9 know, from natural gas to nuclear, even a little  
10 bit of coal. That we have control of, right? And  
11 we don't have control of the sun or the wind.

12 And fortunately, in Florida, we do not have  
13 wind, but these other areas are heavily loaded with  
14 solar and wind, and they have their own challenges,  
15 right? They -- they've expanded so quickly on that  
16 that they may not have prepared adequately.

17 And we're -- in Florida, we are going much  
18 slower, and we are integrating the resources at a  
19 paces that we feel is reliable. And, yeah, we do  
20 have -- our numbers are really good when you  
21 compare it to the rest of the nation, from reserve  
22 margins to even the probabl -- probabilistic  
23 assessments that we perform, we have very, very low  
24 numbers for expected uncertain energy, extremely  
25 low.

1           COMMISSIONER FAY: Yeah. Great.

2           Yeah, and to your point, it's so hard -- it's  
3           so difficult to implement at the -- the perfect  
4           speed, right? I mean, you want -- you want costs  
5           to come down. You want to make it worthwhile, but  
6           then when you bring this information forward, there  
7           is also recognition that we need to be thoughtful  
8           of the peak, and the adjustments in the peaks.

9           And so just real quick, last question. The  
10          aggregation creates a summer peak, I think, based  
11          on the information you provided. But it's my  
12          understanding, with some of our utilities, we will  
13          see variation between a summer and winter peak.  
14          Does that impact your -- your modeling at all?

15          MR. ORDAX: It's reflected in the modeling --

16          COMMISSIONER FAY: Okay.

17          MR. ORDAX: -- we take into account. Yes.

18          There is a very little diversity in the summer  
19          peak. But in the winters peak, there could be a  
20          lot of diversity between the members because of the  
21          region. If the cold front doesn't quite make it  
22          all the way, then we don't, maybe, get the loads we  
23          -- we could get.

24          So -- but all of that is reflected in our  
25          models. That's why we do -- look at seasonal

1 models on the transmission planning side, and then  
2 we do the entire 8,760 on the probabilistic side.

3 COMMISSIONER FAY: Okay. Great.

4 Yea, because I know it's, I think, since maybe  
5 '89 that we've seen that -- that winter impact, but  
6 it -- I think it's fair for just seeing what we  
7 have seen all over the country, with -- with some  
8 instability when -- when those things occurred to,  
9 you know, ask the question of how prepared are we  
10 with our reserves, and where would we be with some  
11 scenario that plays out. And it sounds like you --  
12 you do the modeling for that. Maybe it's not  
13 identical, but at least gives you a general idea of  
14 some level of comfort for where we might be.

15 MR. ORDAX: Yeah. That's correct. We do have  
16 very healthy reserve margins. And then on the  
17 operations side, you know, there are also other  
18 NERC reliability standards that require  
19 weatherization of the units, right, based on your  
20 region. So the members are on top of that every  
21 year. They do review the status of their  
22 winterization to make sure the units are prepared  
23 for the upcoming winter.

24 COMMISSIONER FAY: That's great.

25 Yeah. And once again, I appreciate you

1 stepping up. I don't know if you drew the short  
2 straw, or anything, while that transition is  
3 occurring. I appreciate you coming in and giving  
4 us some information.

5 MR. ORDAX: Thank you. Appreciate it.

6 CHAIRMAN LA ROSA: Thank you.

7 Commissioners, other questions?

8 I have got -- I have got a few. I second the  
9 comments. Thank you for -- for presenting for us  
10 today.

11 So on slide 7, you talked a little bit about a  
12 few different things, but especially data centers.  
13 We are going to hear more in a coming Internal  
14 Affairs meeting about data centers and some things  
15 that we expect to kind of impact the economy, and  
16 so forth. And, of course, data centers are the  
17 talk of multiple industries, including ours, from a  
18 consumption perspective.

19 And I know you mentioned that the impact is  
20 unknown currently. But is there a methodology to  
21 kind of understand what this is going to look like  
22 in the future by looking at other states, or, you  
23 know, trying -- trying to get your arms around what  
24 you think data centers might --

25 MR. ORDAX: So we rely on our members to let

1 us know about that and reflect it in their  
2 forecasts. And so we know for this particular one,  
3 they -- they may be hearing rumblings about it, but  
4 nothing has really developed yet that they can feel  
5 comfortable putting into their load forecast.

6 I know that in the Virginia area, there is  
7 lots of it going on. I know PJM area, they've --  
8 they've got thousands of megawatts that they are  
9 projecting for data centers and AI stuff.

10 But right now in Florida, we haven't seen it  
11 yet. I mean, obviously, I would expect some. So  
12 maybe the next year's Ten-Year Site Plan, we might  
13 see -- maybe the demand may show that a little bit,  
14 if -- if there are some solid plans.

15 CHAIRMAN LA ROSA: Understood.

16 On slide 15, kind of switching gears a little  
17 bit, when you talk about solar generation, the  
18 output. So you use this date of May 15th, showers  
19 coming across -- or a storm coming across the  
20 center of the state. I mean, that's -- to me,  
21 that's kind of a typical day. But what's -- what's  
22 the significance of this day, and is this kind of  
23 consistent in estimating, you know, a typical solar  
24 productive day in the state?

25 MR. ORDAX: So actually, no. This one we sort



1 of picked because it was easy to demonstrate the  
2 variability of solar, right, because we can't  
3 control the weather, and so that -- that's why it  
4 was picked. But we've got other -- there is many,  
5 many other days where the output is almost at the  
6 nameplate during the day, you know, during 1:00,  
7 2:00, 3:00 in the afternoon. It's and it sits  
8 there solidly until the sun starts to come down.

9 So we just picked this -- this particular one  
10 on that slide to demonstrate the, you know, there  
11 is times that things are variable, and we do have  
12 to have other resources to account for that and be  
13 able to manage it.

14 CHAIRMAN LA ROSA: Well, I appreciate you  
15 adding the picture to it. That kind of makes it --  
16 makes it a little more tangible.

17 MR. ORDAX: Yeah.

18 CHAIRMAN LA ROSA: And then last -- the last  
19 question for me.

20 On FERC 1920, do you feel that Florida could  
21 maybe be either absorbed to take on projects that  
22 maybe are not in the best interest of the state?  
23 And I know we are still trying to digest what 1920  
24 maybe does or does not do over the last couple of  
25 months.

1           MR. ORDAX: Yeah, and one -- well, it depends  
2           if the -- the only one I can factor, since we are  
3           sort of peninsula, it's kind of hard for that to  
4           happen, but if something near the interface, near  
5           the Florida-Georgia border, if something shows up  
6           on their end that they might be interested in, and  
7           then they might want to coordinate with us and see  
8           if it's -- if it makes sense to come into it.

9           I -- I don't expect other, other than that,  
10          maybe inside Florida it would be -- in my opinion,  
11          it would be difficult because the members do a  
12          really good job at -- at planning that, identifying  
13          the best options. But, you know, you never know.  
14          I mean, we still have to go through the motions.

15          And the issue is, that you got those seven  
16          categories of factors that you have to consider  
17          when you build your cases, your models, and to  
18          study those. That might drive something that we  
19          haven't seen before.

20          CHAIRMAN LA ROSA: Does -- does that process  
21          change how you forecast?

22          MR. ORDAX: The forecasting of demand, and  
23          things like that, no. But what it will change is  
24          the things that we would have to meet. So if there  
25          is some federal goals that we have that would apply

1 in Florida, then we would have to model those  
2 goals, or how do we address those goals? And same,  
3 you know, state or local, you know, they went  
4 through the whole category of lists there.

5 You know, retirements, I know was on the list,  
6 but we always account for that. That was an easy  
7 one. But mostly, any, I guess, laws that get  
8 passed may impact what we have to consider in that  
9 arena.

10 CHAIRMAN LA ROSA: Awesome. Thank you. I  
11 appreciate you --

12 MR. ORDAX: Yeah.

13 CHAIRMAN LA ROSA: -- answering those.

14 Commissioners, any further questions?

15 Okay. Well, thank you for the presentation.

16 I will open up if there is any public comment.  
17 Is anyone here from the public that would like to  
18 comment?

19 Okay. Seeing none. I am going to throw it  
20 back to staff.

21 Any concluding matters?

22 MR. FAROOQI: I don't think we have anything  
23 else. We didn't receive any requests for public  
24 comment. But I will mention that we left the  
25 opportunity for written comments to stay open until

1           October 3rd. So once the public has seen this  
2           presentation, if they have any written comments,  
3           they can file it with the Clerk.

4                   CHAIRMAN LA ROSA:   Awesome. Well, thank you  
5           very much. Again, thank you very much for your  
6           presentation.

7                   If there is no further business before us, I  
8           can say, I guess, that we are adjourned. Thank  
9           you.

10                   (Proceedings concluded.)

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