PLACE: Dobbs Building, Raleigh, North Carolina

DATE: Friday, September 16, 2022

TIME: 1:00 p.m. - 3:05 p.m.

DOCKET NO.: E-100, Sub 179

BEFORE: Chair Charlotte A. Mitchell, Presiding

Commissioner ToNola D. Brown-Bland

Commissioner Daniel G. Clodfelter

Commissioner Kimberly W. Duffley

Commissioner Jeffrey A. Hughes

Commissioner Floyd B. McKissick, Jr.

Commissioner Karen M. Kemerait

IN THE MATTER OF:

Duke Energy Progress, LLC, and

Duke Energy Carolinas, LLC,

2022 Biennial Integrated Resource Plans

and Carbon Plan

VOLUME: 14

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T A B L E O F C O N T E N T S

E X A M I N A T I O N S

E X H I B I T S

P R O C E E D I N G S

CHAIR MITCHELL: Let's go back on the record, please. We're gonna go straight through to 3:00. All right. We are with --

MR. JIRAK: Chair Mitchell, one procedural matter just very briefly?

CHAIR MITCHELL: Sure.

MR. JIRAK: Just for completeness of the record, at this time, if it please the Chair, Duke would like to just formally move in a number of items into the record at the appropriate time.

CHAIR MITCHELL: Okay. Go ahead.

MR. JIRAK: And those items are the verified petition for approval of a carbon plan that was filed on May 16, 2022, and that was consisting of 18 pages. And, obviously, the attachment to that verified petition was the Carbon Plan, itself, which consists of the executive summary, four chapters, and Appendices A through T. And with the Chair's leave, we would like to have those moved into the record at the appropriate time.

CHAIR MITCHELL: All right. Hearing no objection to the motion, those documents will be copied into the record at the appropriate time. And Mr. Jirak, just for purposes -- just abundance of caution, there's no confidential information in the Carbon Plan?

MR. JIRAK: That is correct, there is no confidential information.

(Whereupon, Duke Energy Progress, LLC and Duke Energy Carolinas, LLC, Verified Petition for Approval of Carbon Plan; Executive Summary, Chapters 1 through 4; Attachments I through IV; and Appendices A through T were admitted into evidence and attached to Volume 7.)

Whereupon,

LON HUBER AND TIM DUFF,

having previously been duly sworn, were examined and testified as follows:

CHAIR MITCHELL: All right. With that, we will continue. Mr. Neal, you're up.

MR. NEAL: Thank you, Chair Mitchell. David Neal on behalf of SACE, et al. And in consultation with Ms. Fentress, I'm gonna streamline my cross and put off some questions until rebuttal in the interest of trying to get the panel off today.

CROSS EXAMINATION BY MR. NEAL:

Q. Starting with net metering. Mr. Huber, good to see you this afternoon.

A. (Lon Huber) Likewise.

Q. There were some questions earlier about the settlement and docket that's pending before this Commission in docket E-100, Sub 180, and then also the solar saver dockets as well; isn't that right?

A. That's correct.

Q. And in coming to a negotiated settlement in this dockets, it was not Duke's intention for those new tariffs and that new incentive to reduce the number of customers adopting rooftop solar in any way; isn't that right?

MR. QUINN: Your Honor -- Chair Mitchell, I would object to this line of questioning. I think we have a standing rule in the Commission against sweetheart or friendly cross examination, which is where I think this is perhaps going.

CHAIR MITCHELL: I'm gonna overrule the objection. Mr. Neal, I'll let you continue.

THE WITNESS: So the objective was meet

the statutory requirements, right, and produce, you know, a long-term, basically, platform for rooftop solar to thrive on in conjunction with other dispatchable resources.

Q. And you've been clear that the modeling that Duke used for its net energy metering forecast in this docket did not take into account the proposed new rates or incentives; isn't that right?

A. That's -- that's correct.

Q. So the pending tariffs, the net energy metering tariffs and smart saver solar, whether adopted or not, are just not reflected in this docket in any way; isn't that right?

A. That's correct.

Q. And you heard the modeling testimony -- you weren't in the room, but I understand you heard some of the modeling testimony earlier?

A. Bits and pieces, yes.

Q. So you may have heard the term "check and adjust" that was used by Duke witnesses; isn't that right?

A. That's correct.

Q. So if needed, if somewhere down the road the Companies and stakeholders found there was some need to check and adjust with net energy metering, the Company would be open to that possibility down the road; isn't that right?

A. Absolutely. And yeah, looking where the market dynamics are, what customers are gravitating towards with -- you know, customers might be wanting to adopt batteries along with the solar. So we will be taking into account all those things.

Q. Now, turning our attention, I think it's page 34, lines 5 through 12, you testified about the need to update the DSM/EE mechanism.

And it's your intention to propose an update that would be based on levelized marginal supply-side resource costs from the most recently approved Carbon Plan production cost model; is that about right?

A. That's about right, yeah.

Q. And that's because you believe that the updated methodology will more accurately reflect actual utility system benefits in a post-HB 951 world; isn't that right?

A. Yeah. What we want to make sure is that we're having the right units on the margin. And so if it's not a -- you know, for instance, just throwing this out there, if it's not a simple frame combustion turbine, it might be a battery, it might be solar plus storage on the margin. Want to make sure that's reflected as we look forward of what are we actually pushing out in -- from the supply side.

Q. And switching to you, Mr. Duff, you're -- through your work with Duke, you're generally familiar with Duke Ohio's energy efficiency programs; is that right?

A. (Tim Duff) There are none.

Q. Well, you're familiar with Duke Energy Ohio's efficiency programs that existed prior to 2019 law?

A. That's correct.

Q. So under that prior law, Ohio utilities were required to achieve at least 1 percent savings of retail sales in the years 2017 to 2020; isn't that right?

A. Yes. Using statutorily based counting, that 1 percent was calculated based off of that, yes.

Q. And again, recognizing that law's since been repealed, those requirements were set to ramp up to 2 percent savings as a percentage of retail sales starting in 2021?

A. Yes. The original bill was scheduled to ramp up, but subsequently, they reduced -- they reduced it because it was determined that they didn't think they could cost-effectively achieve those savings levels.

Q. But at the time the law was in effect -- well, first I'm gonna turn your attention back to --

MS. FENTRESS: Objection. I fail to see how an Ohio law is relevant to the Carbon Plan in North Carolina.

CHAIR MITCHELL: Mr. Neal?

MR. NEAL: It's relevant both to the issue of -- that came up earlier about comparing energy efficiency savings that have been achieved in other states, but more importantly, it's relevant because it's an example of where a Duke utility achieved more than 1 percent savings in energy efficiency when required to do so by law.

CHAIR MITCHELL: Okay. I'm gonna overrule the objection. I'll let you ask the question.

Q. Turning your attention back to Appalachian Voices Grid Edge Panel Direct Cross Examination Exhibit 2, which is from the 2020 utility scorecard from American Council for an Energy-Efficient Economy.

A. Yes.

Q. You got it?

Recognizing that you take issue with how ACEEE does the math, you would agree that Duke Ohio, as mentioned before, according to ACEEE, achieved 1.32 percent savings as a percentage of sales in 2018?

A. So I didn't want to delve into this detail, but as I said, the statute in Ohio allows for things that are not considered energy efficiency programs to be counted towards this 1.3.2 percent [sic].

For example, the statute says that all efficiency savings will be claimed -- for new construction shall be claimed versus a 2008 baseline, meaning doesn't matter if there are new energy codes in place -- building codes in place, all the savings are calculated versus the 2008 baseline.

The statute also allows us to count transmission and distribution investments that provide system savings. Those would be considered part of rate base investment here in the Carolinas, definitely outside of utility program achievements.

So while the 1.32 percent was calculated, it's calculated off of a number that is not apples and apples with what we call efficiency in North Carolina.

Q. Agreeing with you that it's not apples to apples, you would agree that the law, as written there, required Duke to achieve a certain level of savings as defined by that law, correct?

A. As counted in a -- what would not align in other jurisdictions, yes.

Q. And Ohio -- Duke Ohio was complying with that law in 2018; isn't that right?

A. We were complying with that law, subject to utilizing the counting provisions.

Q. And just really quickly, you're familiar with the United States Energy Information Administration?

A. Vaguely, yes.

Q. And you are aware that they collect utility data?

A. Yes.

Q. Just drawing your attention to the bottom of Appalachian Voices Grid Edge Panel Direct Cross Examination Exhibit 2, do you see at the bottom where ACEEE reports that they used EIA data for sales data at the very bottom of the page?

A. It says we adjusted -- I'm sorry, it says we adjusted EIA retail sales data?

Q. Uh-huh. So you see that they got the sales data from EIA, according to that language?

A. Correct.

Q. And they also reported here that they got the savings data for this chart from EIA at the very last line as well.

A. That's what it says, yes.

Q. All right. Thank you. You would agree that the Commission has the authority to develop the ultimate Carbon Plan in this proceeding; isn't that right?

A. That's my understanding, yes.

Q. And it remains the Commission's discretion whether to direct Duke Energy to achieve a certain savings level or not; isn't that right?

A. I believe so, yes.

Q. And at the end of the day, if the Companies were directed by the Commission to achieve a certain savings level, they would do their utmost to comply with that directive of the Commission, wouldn't they?

A. Yes.

Q. And you would agree that the P1 through P4 scenarios that were discussed yesterday, those all had the same assumption of efficiency savings baked into them; isn't that right?

A. I believe that's correct.

Q. And you wouldn't object, would you, in the future to including additional savings projections in Carbon Plan portfolios going forward, would you?

A. I think that, as witness Snider testified yesterday, we're interested in the check-and-adjust approach, which means monitoring how the programs are performing and updating our forecast. With respect to what scenarios are included, that's beyond my scope of expertise.

Q. But you agree there might be some utility for the Commission to see a range of savings forecasts as they're reviewing potential portfolios for planning purposes?

A. I don't want to speculate what the Commission wants to see.

MR. NEAL: I'm gonna -- in the interests of moving this panel along, I'm gonna hold the rest of my questions for rebuttal.

CHAIR MITCHELL: All right. Tech Customers?

MR. SCHAUER: Thank you, Chair Mitchell.

CROSS EXAMINATION BY MR. SCHAUER:

Q. Craig Schauer on behalf of the Tech Customers.

In your testimony, you discussed how the

Gabel report relied in part on a 2020 report by ACEEE; do you recall that?

A. (Tim Duff) yes.

Q. And on page 4 -- I'm sorry, on page 24 of your testimony, one of your criticisms -- one of your criticisms of Gabel's use of the report by ACEEE is that the report relies on state-level data which includes savings from customers not served by the Companies; is that right?

A. Yes. The ACEEE report referenced is an overall state scorecard. So it's looking at efficiency. Not just utility efficiency, it's looking at the state's efficiency policies and practices, and that's what it makes its ratings off of.

Q. Do you recall that the Gabel report stated that it adjusted the state level numbers to remove savings associated with co-ops and municipalities?

A. I recall that it did say that.

Q. All right. Another one of your criticisms of Gabel's reliance on the ACEEE data is that the report uses a 2020 baseline; is that correct?

A. That's correct.

Q. All right. And do you recall that the Duke Energy North Carolina EE and DSM market potential study, which is attached as Attachment 4 to the Carbon Plan, used a 2019 baseline?

A. That is -- the market potential did -- it was performed using a 2019 baseline; that's correct.

Q. Did you have a chance to review the testimony submitted by Ms. Bowman, the direct testimony?

A. Not -- I've read it once, but it's been a while.

Q. Well, do you recall that she stated in her direct testimony that, quote, the CO2 reduction achievement ahead of the Companies, as required under House Bill 951, are nation leading and transformational; do you recall that testimony?

A. Subject to check.

Q. All right. Well, do you agree that the General Assembly, in enacting House Bill 951, adopted carbon reduction requirements that are nation leading and transformational?

A. I think that they are aggressive and national leading base off of what you just quoted witness Bowman as saying.

Q. Is it Duke's position that the General Assembly, which adopted aggressive and national leading carbon reduction requirements, would refuse to pass transformational legislation that would be necessary to improve EE adoption in North Carolina?

A. That's kind of a broad question. I'm not sure -- I think it would get down to what the transformational legislation would be.

Q. Well, what would you need to know about the legislation in order to make a decision on whether or not the General Assembly would reject it?

A. I would need some specifics.

Q. Yet, in your criticism of the ACEEE report, you said that it was unreasonable to assume legislative policy changes would be enacted, correct?

A. The critique was that the numbers quoted by the Gabel report were the numbers assuming these broad policy changes were to occur in North Carolina. And that's where we struggled with the fact that it was applicable across all fields, not just utilities, and felt it was an overgeneralization on what savings could be achieved by the Duke utilities.

Q. Was it your position that the General Assembly would refuse to adopt those broad policy changes that are recommended by the ACEEE report?

A. So my position is that the General Assembly would need to consider all of them in full context. I believe one of the -- one of the mechanisms that was brought up was CPACE financing. CPACE financing is something that has a lot of hair on it, and there's a lot of issues associated with it that the legislation would need to consider before whether or not it would advance such a financing mechanism.

Q. And so therefore, you concluded it was not safe to assume they would pass such legislation?

A. I said that I didn't believe it was appropriate to have an energy efficiency forecast based off of the assumption that those would be approved.

Q. All right. No further questions.

CHAIR MITCHELL: All right. Let's see. Next up we've got Walmart.

MS. GRUNDMANN: Thank you, Chair Mitchell.

CROSS EXAMINATION BY MS. GRUNDMANN:

Q. Good afternoon, gentlemen, how are you?

A. (Lon Huber) Doing well, thanks.

Q. I am focusing on pages 43 to 46 of your direct testimony. And I assume that these questions are probably best directed to you, Mr. Huber, but if I'm wrong about that, please defer to your colleague.

Looking at page 43, line 22, you indicate

that the Company is currently engaged in a stakeholder process with customers to consider new customer programs, correct?
A. Correct.
Q. And as a result of that, looking at pages 44 and 45, I see two things. Number one is you indicate that the Companies intend to make a filing later this year, and then I believe you describe some of the programs that you would envision would be included in that filing; is that correct?
A. That's correct.
Q. Okay. And so it continues to be the Companies' position that you would propose to this Commission a program somewhat similar to what you've identified as clean energy impact and clean energy connection?
A. Correct, yeah. Similar details are obviously being worked out.
Q. Absolutely. And then I look at page 44, lines 11 to 14, you say the Companies are engaged in ongoing stakeholder processes that will inform any future program proposals.
Is the Company willing to commit -- and again, I'm not asking you to commit to the same

cadence, but to commit to continuing to engage with customer stakeholders, even beyond the filing you intend to make this year, as it relates to continuing to consider future customer programs that may be put forward in additional filings with this Commission?

A. We are always open to having those discussion with customers and stakeholders. So that would be a yes. In terms of maybe, like, a formal stakeholder process after we file, I think we would assess that need, you know, when the time gets closer, but certainly would not close any possibility there either.

Q. And so you do think there would be some ongoing benefit, as we check and adjust with this Carbon Plan iterative process, to continue to touch base with customers with respect to future customer programs?

A. Yeah. I think we've got potentially some, I think, just really impressive programs that we've been developing with stakeholders. Some of them are going to really be national leading where we can have a 24/7 carbon match, which is a next evolution of customer programs. So it's instead of just RECs being -- or energy being produced during one part of the day and saying, well, that clean energy absolves all sins for the rest of the day, we're actually proposing something to align clean energy to a customer's 8760 load profile.

So this is -- this is relatively new territory. It's the scaleability we need in these programs to meet the Carbon Plan in the long term. Since they are new, there is going to be some adjustments we're gonna need to make, I guarantee it, in certain directions. Little tweaks to the program, to sign-up processes, so that's why we're always going to be open to having those engagements to make sure that the programs are as streamlined as possible and making the maximum amount of impact per the intention.

Q. Thank you. I have a question on one other topic.

Some of the programs you are considering will involve the ability of a customer to obtain RECs from the Companies' renewable generation resources; isn't that correct?

A. That's correct.

Q. To the extent there are RECs generated by Company sources -- and you may not be the right witness, and I'm presuming you are not, so I'm asking for you to tell me who you think would be the right witness -- to tell me what the Company intends to do with the RECs that it either does not retire as part of a voluntary RPS program or are not selected by customers on a voluntary basis?

A. I'm not --

MS. FENTRESS: I would object. That does seem to call for some speculation on the part of Mr. Huber.

MS. GRUNDMANN: I just think my question was I don't think you're the right witness. Can you tell who me who would be the witness? And so if he doesn't know, I'm happy for him to say "I don't know."

THE WITNESS: I don't know.

MS. GRUNDMANN: That's a perfectly fine answer. Thank you. Those are all the questions that I have.

CHAIR MITCHELL: Okay. Public Staff?

MS. KEYWORTH: Thank you.

CROSS EXAMINATION BY MS. KEYWORTH:

Q. Hi. My name is Anne Keyworth. I'm an attorney with the Public Staff. Thank you both for being here today.

MS. KEYWORTH: And just to get it on the

record, as Mr. Neal did, I have conferred with counsel for Duke, and we've agreed that I may pursue certain lines of questionings in rebuttal instead of here to save time.

Q. Mr. Huber, in your direct testimony at page 6, beginning at line 1, you state that the Companies' modeling assumed an annual reduction of 1 percent of eligible load from its EE programs; is that correct?

A. (Lon Huber) That's correct.

Q. And at page 7, beginning at line 16, you state that the Companies are requesting that the Commission approve this modeling assumption as a reasonable and prudent assumption for annual EE savings that can be achieved, right?

A. Correct.

Q. In the next sentence, you clarify that to do so, certain changes will need to be made as enablers to achieving this 1 percent target, right?

A. Correct.

Q. And so just to be clear, if the Commission accepts the Companies' Grid Edge forecast, then we would be counting on these projected energy savings coming into fruition so that Duke can meet its Carbon

Plan reduction goals; is that correct?

A. (Tim Duff) Sure. I'll jump in there, if you don't mind.

Q. Sure.

A. So what the Company is saying is that we've identified these enablers in order to achieve that long-term forecast of the 1 percent, but, obviously, in the early years, we don't believe that there's quite the urgency or necessity for those in order to achieve it. But it's important that we clearly are in agreement with the Modeling Panel that you're gonna have to check and adjust on how things are going.

So if, in fact, we proposed an approval of a program that contained one of the enablers or modified the mechanism, as was discussed and supported by the vast majority of stakeholders, then we would seek to check and adjust what that forecast was that was both aggressive and achievable.

Q. Thank you. Mr. Duff, in your words here on page 13, the Commission's adoption of these enablers would merely potentially allow the Companies to achieve more EE reduction than what was included in the 2020 IRP; is that correct?

A. We believe they would potentially allow us to achieve the energy efficiency.

Q. Thank you. And by incorporating this 1 percent assumption into its modeling without first incorporating these enablers into the DSM/EE portfolio within the rider proceeding, doesn't the Companies' proposed Carbon Plan, in essence, presume that the Commission will, in fact, approve each of these three proposed enablers?

A. No, it does not presume that. The assumption is, again, used for modeling what the load shape would be. As I said before, we're gonna have to monitor the progress of proposing and gaining Commission approval for the enablers. But given, as I pointed out, the real stretch in maintaining that 1 percent of eligible load over the long term occurs after 2030, that we felt it was an appropriate forecast that you could check and adjust.

Q. Thank you. My co-counsel is gonna hand out an exhibit. This exhibit contains multiple excerpts from different filings made by the Companies in prior proceedings. I have complete copies of -- I have complete copies of each of the referenced docket -- or filings in there, so I'm happy to give those to you if you'd like to see the complete filing for additional context.

MS. KEYWORTH: So, for the record, this exhibit contains filings made by the Companies in Docket Numbers E-100, Sub 137; E-100, Sub 141; E-100, Sub 165; and E-7, Sub 1249. I would ask that this exhibit be marked as Public Staff Grid Edge Panel Direct Cross Examination Exhibit 1.

CHAIR MITCHELL: All right. Hearing no objection, the document will be identified as such.

MS. KEYWORTH: Thank you.

(Public Staff Grid Edge Panel Direct Cross Examination Exhibit 1 was marked for identification.)

Q. So first please turn to page 2 as marked in the upper right-hand corner of this packet. This is the Companies' reply comments in its 2013 IRP, which is Docket Number E-100, Sub 137.

Do you see the highlighted language on that page, which is page 24 of that document -- which again, I have in full if you would like to see it for reference -- in which Duke stated that until the Company has more certainty that it can achieve these aspirational levels of EE, it is using the more moderate assumptions based on the market potential studies in the IRP base plan?

Do you see that?

A. That's what it says, yes.

Q. Thank you. And next please turn to page 4, as marked in the upper right-hand corner of this packet. This is the Companies' reply comments in its 2014 IRP, Docket Number E-100, Sub 141.

Do you see the highlighted language on that page, which is page 22 of the document, in which Duke stated that it would be imprudent for the Companies to include projected impacts from EE beyond the levels estimated in the market potential studies?

A. At the time of the 2014 IRP, that's what the Company said, yes.

Q. Thank you. Let's turn our attention to more recent proceedings. If you can turn to page 6, as marked in the upper right-hand corner of this packet, this is the Companies' reply comments in its 2020 IRP, Docket Number E-100, Sub 165.

Do you see the highlighted language on that page in which Duke stated that the purpose of developing the achievable potential estimates in multiple scenarios in the NPS is to identify the amount of DSM/EE that can be reasonably included in the system planning where reliability is a fundamental requirement?

A. I see that's what it says.

Q. And then further down on the same page, Duke further explained that modeling outcomes do not affect customer adoption decisions and could result in a plan that artificially overstates the potential future of DSM/EE savings, and thereby understate the net load forecast, an amount of traditional supply-side resources required to reliably serve customer load, which I believe you discussed earlier in your testimony?

A. Yeah, that's what it says. But I think it is important to point out that all of these documents were developed in the context of resource planning prior to the Carbon Plan and HB 951.

Q. Understood. Thank you. Finally, please turn to page 8, as marked in the upper right-hand corner. This is the Company witness Robert Evans' rebuttal testimony, which was filed just last year in DEC's 2021 DSM/EE rider, Docket Number E-7, Sub 1249.

And do you see the highlighted language in that page beginning at line 22 which states that the Company, as part of its recovery mechanism, has a significant incentive to achieve the 1 percent of -- level of savings over this period, referencing the next six years. This 1 percent target, however, is an aspirational goal. It is not, nor should it be considered, anything more than this.

A. Yes, I see it. But I want to make sure that we're on the same page, because this is one -- this is part of the cost recovery mechanism, which is 1 percent of total load, not of eligible load, which was the Carbon Plan modeling assumption.

Q. If sales continue to increase but customer adoption trends and UEE do not materialize, then will the 1 percent forecast continue to incorporate more and more ERA in the forecast as time goes on?

A. So again, I think it's important to point out that when you look at the variants between what the IRP forecast was and the Companies' Carbon Plan assumption, which is 1 percent of eligible load, that there is very little difference in those forecasts over the next eight years. In fact, over the first two years, the total difference is 0.35 percent in projected impacts.

So the Company believes that, again, in the context of operating under a Carbon Plan, that identifying and using a more aggressive assumption where the aggressiveness is really back-loaded, it gives us the necessary time to, A, try and get the enablers necessary to achieve those higher levels; but B, really check and adjust so there are no reliability concerns if the forecasts are not met. Particularly since it's such a small difference in the near term.

Q. Thank you. Moving on to the discussion of the low-income expanded definition.

Under the Companies' currently approved DSM/EE mechanisms, am I correct that the UCT is used to evaluate cost-effectiveness for program approval and for continued cost-effectiveness?

A. That is correct.

Q. And for program approval, a new program must demonstrate cost-effectiveness unless it's a low-income program; is that right?

A. That's -- I think it's a little bit broader than that. I think it's if the Commission determines that it should be approved for societal benefits.

Q. Thank you. And in evaluating cost-effectiveness, the costs used in calculating both the UCT and the TRC tests do not include Duke's portfolio performance incentive or program return incentive; is that right?

A. No. Consistent with how those tests are calculated, they do not.

Q. And all customers, including the low-income customers participating in these programs, ultimately have to bear the costs of these non-cost-effective programs; is that right? Or -- I'm sorry --

A. I can -- yeah, yeah, the answer to your question is yes.

Q. Okay.

A. All customers that pay the energy efficiency rider would pay the residential component, which could include the cost of non-cost-effective residential programs.

Q. Okay. Thank you. To date, and understanding that not all eligible low-income customers participate in programs due to a variety of circumstances, would you agree that Duke's low-income programs have only served a small percent of the customers who have gross household incomes that are below 200 percent of the federal poverty guidelines?

A. Again, I would go back to, kind of, the exchange I had earlier with the App Voices' attorney. I apologize for not remembering her name off the top of my head. But the program specifically targeting income-eligible customers, we do have generally a lower percentage participation for a number of reasons that I won't bore the Commission with at this time.

But we have seen over 60 percent, I think it's 62 percent, getting -- participating in a targeted low-income program or the general portfolio programs, and that's as of 2021.

Q. And the 60, I believe, 2 percent you said includes the MyHER program; is that right?

A. It includes MyHER program, yes.

Q. Okay. And that's a program where participants are included in that program even just by receiving mail or electronic communication about --

A. A customer's participation is around engagement. So yes, that's the -- that's how we determine participation, if they're participating in the education engagement empowerment that the program provides.

Q. But does a customer have to open that, you know -- any mail or do anything affirmatively to be considered a participant?

A. They don't have to, but the measurement and verification that determines the energy savings, as well as the process report I was talking about earlier, it talks about how we can get customers to open it in case some don't. But the impacts would reflect any customers that don't, because it's an average that's applied to all participants.

Q. Thank you. I'm gonna hand out another packet. This packet contains an excerpt from the Low Income Affordability Collaborative's final report. I have the table of contents and entire chapter that this comes from, if you would like to see that for context.

MS. KEYWORTH: And for the record, this is Docket Numbers E-7, Sub 1213; E-7, Sub 1214; E-7, Sub 1187; E-2, Sub 1219; and E-2, Sub 1193, which I'm aware the Commission's already taken judicial notice of. I would like to move this exhibit in as Public Staff's Grid Edge Panel Direct -- or label this as Public Staff's Grid Edge Panel Direct Cross Examination Exhibit 2.

CHAIR MITCHELL: All right. The document will be marked as Public Staff Grid Edge Panel Direct Cross Examination Exhibit Number 2.

MS. KEYWORTH: Thank you.

(Public Staff Grid Edge Panel Direct Cross Examination Exhibit Number 2 was marked for identification.)

Q. You can turn to page 3, as marked in the upper right-hand corner. Do you see the highlighted language that reads that -- with regard -- this is specifically with regard to DEC's weatherization program and equipment replacement program. Approximately 33 percent of DEC's residential customers at or below -- at 200 percent or less of the federal poverty level guidelines are eligible for the program. Since the program's inception, only 0.068 percent of eligible customers have participated in the programs.

A. Yeah. Can I go on and get that in context since it's actually part of the circle? So that is correct, but it says the low participation rate is attributed to various barriers, including the need for health and safety repairs. And so, you know, that's something that's been discussed on how to try and address those health and safety, because our programs are focused on delivering energy savings.

And I think it's important to note that, even when we were talking internally about that potential enabler for 300 percent, you may not have those health and safety barriers at a higher level of income qualification. It's something we need to investigate. But it is an important differentiation. The participation is in many cases, even though they're eligible and identified participants, we have to turn them away for health and safety reasons.

Q. When this was program adopted?

A. I believe, in its current form, in 2015. We've had a weatherization program, but it's been tweaked over time in different portfolios.

Q. Okay. Thank you. The following page, let's see, page 4 of this exhibit, do you see the highlighted language?

A. Yes.

Q. Thank you. This states, approximately 33 percent of the Companies' North Carolina customers, we've talked about this, are eligible for -- or I'm sorry. Approximately 30 percent -- 33 percent of the Companies' North Carolina customers are eligible for the NES, which is the Neighborhood Energy Savers Program. Since the program's inception, 7.8 percent and 10 percent of eligible DEC and DEP customers respectively have participated in the program. The average participant in 20- -- the average investment per participant in 2020 was $299 and $329 for the Companies respectively; do you see that?

A. I see it, yes.

Q. And the customer data utilized in the LIAC final report originated with Duke; is that right?

A. Yes, it was put together in coordination. I do think it's important you look at the footnote down below on how participation was determined. Because if -- when we're talking about the Neighborhood Energy Saver Program, that program actually targets customer -- it targets areas, geographies where 50 percent -- at least 50 percent of the households are identified as having incomes.

So just I want to make sure that when you're referencing a baseline, that it's appropriately reflected.

Q. Thank you. Should Duke do more to increase engagement from customers who are at or below 200 percent of the federal poverty guidelines before expanding the pool and increasing the number of customers who can participate in non-cost-effective programs?

A. The Company has never contended that it's not -- it shouldn't do more and it's not doing more. As I mentioned, we recently filed the DEP weatherization program and the high energy use program, and continue to have ongoing conversation with stakeholders in our EE/DSM collaborative on how to improve the performance of our existing programs as well as develop new programs that also might better serve that segment of our population.

Q. What percent of customers at or below 200 percent of the federal poverty level would you consider to be a measure of success, in terms of participation in a low-income program?

A. You know, I'm not really an expert to say that, because each program is different. And so you may design a program to hit a certain targeted range. And that's why, for example, the high energy use program is so interesting, because instead of having to work just with income and providing a lot of the deep weatherization measures, we're actually utilizing a couple of targeting methodologies for these customers.

A, they have to be income qualified; but B, they have to have energy use that's above 18,000 kilowatt hours a year. So what it's doing is it's helping us identify those customers that would have the highest benefit from savings. Another thing that we did in the pilot is we identified communities where there are dollars available from other funding sources to supplement those health and safety needs which have been such a barrier for the weatherization programs to go through the low-income agencies.

So to give you a specific number is going to be a challenge. Our goal is to reach as many as we can, but there are a number of barriers, including, kind of, competing interest sometimes with the weatherization agencies.

Q. Thank you. Just a few final questions.

Would you agree, Mr. Duff -- I'll direct this to you -- that it will be important to update the modeling for each biennial Carbon Plan update to account for new customer adoption trends and new laws and equipment standards governing DSM/EE as well as Company adoption trends in EVs and customer-sided solar?

A. My apologies for almost interrupting you. I thought you were done. No, it -- yes, that's -- that's one of the strong beliefs that we have is important and is a benefit of the way we're doing this as almost of a resource plan replacing IRPs, is that you're constantly updating it, because there are things that occur that may not have been contemplated.

You know, high inflation, higher than you've seen in 40 years impacts customers' abilities to make investments. Supply change shortages, workforce issues. Workforce issues are a huge barrier that we haven't experienced before in terms of just having the trade alleys necessary to do things.

So yes, we're gonna follow those trends closely and make sure that those market trends as well as new technologies and customer adoption rates are appropriately reflected in the check and -- the check and -- the "check and assess and make updates" plan.

Q. Thank you. And right now, when is the next NPS currently scheduled for?

A. I believe work on it will start in '23 to be completed in '24.

Q. Could we do one before that?

A. We could do one before that, but they take a considerable amount of time. We've really tried to increase the amount of stakeholder engagement around the market potential study process, but it's a pretty comprehensive process that takes a considerable amount of time. So could we kick one off a little bit earlier? We may be able to.

But I don't want to over-promise, because it does revolve -- it does involve getting an RFP performed, and providing, again, a bunch of new parameters that currently haven't been in there. And we would need some new assumptions regarding potential changes in how the inputs would be utilized for calculating the net system benefits.

Q. I believe you testified earlier that the NPS that was utilized in the 2020 IRP came from 2019 data; is that correct?

A. Yes.

Q. Okay. Thank you. And if I understood your testimony in response to the previous question, a lot has changed since then; is that right?

A. Yes.

Q. Yeah. Thank you. Have you modeled the cost impacts of the enablers?

A. No.

Q. Okay. So generally, then, you don't know what the cost impacts of including the enablers, if the Commission decides to approve them, would have on customer bills; is that right?

A. We don't know the cost nor the specific benefits. I think we believe all of these will increase the benefits. But you are correct, there likely will be corresponding cost increase, particularly if you're talking about increasing

customer incentives.
Q. Thank you. And does the current mechanism for both Companies include an incentive for achieving a target of 1 percent savings of prior available retail sales?
A. No. It's not a target of prior year available retail sales. The incentive target is based off of total. There's a penalty that's based off of eligible retail sales.
Q. Okay. All right. That concludes my questions. Thank you.
CHAIR MITCHELL: All right. Redirect?
MS. FENTRESS: No redirect.
CHAIR MITCHELL: All right. Questions from Commissioners? Commissioner Hughes?
COMMISSIONER HUGHES: Thank you very much.
EXAMINATION BY COMMISSIONER HUGHES:
Q. I just love watching you guys say you're okay, so I'm gonna start with how are you this afternoon?
A. Okay.
Q. Still okay. All right. So there was a lot of questions and discussion earlier in the day about

the 1 percent and about -- there was some talk about the roll-off and everything. I think I understand this, but I'd just like to make sure I absolutely understand it, as far as accounting goes.

The 1 percent planning target is synonymous with what you-all consider to be a utility-funded program that's, sort of, active in the cost recovery mechanism. So -- so if you do something and it's -- you know, it provided savings, but it's no longer considered to be, sort of, an active program, do I have that right that that's sort of synonymous?

So there's a big link between the cost recovery mechanism, what's in the cost recovery mechanism at a certain time, what's utility funded, and that 1 percent?

A. (Tim Duff) Yes. The cost recovery mechanism would reflect both the reconciliation of how we did towards that 1 percent of eligible load as well as a projection of cost associated with achieving that 1 percent of eligible load.

Q. Okay. Good. That's what I thought. There's also been some discussion about the IRA, and we realize everyone's at a disadvantage given the timing for that in these proceedings. But there was -- there was a lot of discussion about the IRA, and in general, I think how much money is coming in, you know, once a generation has been used to describe it.

One of the -- one of the intervenors asked you about a leveraging, or that your kind of -- your role of leveraging. I want to just expand that question a little bit.

Can you envision -- now that we have this potential big plug of resources outside of utility-funded programs, can you envision Duke playing a role in supporting EE programs that would go toward meeting the overall Carbon Plan goal but that wouldn't be utility funded?

In other words, could you be -- we've used "enabler" a lot -- could you be enabler for one of your customers to go and take advantage of one of the programs that may have nothing to do with your existing funded program? So, I mean, when I say that, it could be bill inserts or sharing data, something that could have a meaningful impact on EE adoption that wouldn't be a utility-funded program.

A. So I think the Company is definitely interested in helping its customers be aware of potential IRA funds that could be available. We're actually gonna have to be very cognizant of it, because we need to make sure that we're not over-incentivizing. You don't want a situation where there's a -- there's money available from the IRA and then Duke's also paying an incentive. So not only -- is it not only covering cost, it's actually giving them additional money.

And so we're gonna be very closely monitoring it, but it's definitely -- and I think a great example of what you are talking about would be to have the My Energy report essentially serve as a way to look at a customer, and with some of the enhancements we're talking about doing, where we can target what pieces of their usage could be inefficient. We'll be able to potentially make them aware of different options that are out there, both from a Company-program standpoint, as well from IRA money.

But to be clear, we definitely plan on making sure that customers are leveraging the incentives, whether they be utility incentives or federal dollars that are available to them.

Q. Okay. So as a state and as a Commission, we don't have to rely on just looking at the utility-funded programs to try to achieve the carbon goal?

A. So what I would say is that's a -- I think that's a broader modeling question. But what I would say is what the Commission should be concerned with, with utility EE programs, is what we are identifying as being achieved, and the time horizon which those savings are anticipated to be achieved.

And so to the extent that the Commission has authority to approve those programs, any enablers that will facilitate more participation in those programs or new programs, that, in my mind, is where their focus would be. The naturally occurring that would occur will show up in the load forecast naturally, because those reductions would occur. But all will be holistically considered in the Carbon Plan.

Q. Okay. And you mentioned the behavioral program. And I think what you were saying is that it could evolve into somewhat of a hybrid program where Duke is taking the role on conveying the message, but some of the actual measures that would go to following up on, you know, new equipment, that sort of thing, wouldn't necessarily be funded by Duke, would be funded by someone else; is that --

A. What I was saying is we already use that program, Commissioner, to encourage and inform customers of other utility programs that can assist them. And so if there are other opportunities that can assist them in becoming more efficient outside, that seems like a great tool to make them aware of those. Because that report is all about helping customers become more efficient.

So if there are tools outside of utility programs, I definitely think it would be something that would be informed on. And then, obviously, a report isn't gonna give you the ability to give them all the fine print associated with what participation means, but I think we can direct them to where they can learn more.

Q. Okay. So, you know, that would probably fit into the category of leverage -- leveraging?

A. Yeah.

Q. Yeah. So with all this leveraging that may occur and we hope that could occur with the IRA funding, particularly with the behavioral program, do you see any need to look at the cost recovery mechanism for something that will evolve more into a -- kind of, a hybrid program than what you have now?

A. So, Commissioner, I don't think that's necessary, because the program today, as I said, it encourages participation in other programs to help customers become more efficient. And the measurement and verification which is done by a third party and then reviewed by a third party of the Public Staff, it actually removes the savings that are associated with other programs.

So we have the ability to understand what that program is actually motivating. And so I think that it's not necessary to have a hybrid approach, because we believe that it's -- it's -- part of the overall power of that tool, is to help them become efficient through other programs, utility or not.

Q. Thank you for that. The EMV, when they look at other programs, do you know now, and I can't recall, do they also look at other -- focus on evaluating the impact of other utility-funded programs so you're not, kind of, double-counting? I know that's a big part of it.

A. Yeah.

Q. Do they also look at, kind of, removing the impact of these other, kind of, projects that don't come from utility-funded? You know, so -- and I agree we don't know how they're gonna be funded, but the IRA has a lot of money to do things that look like some of your programs.

Have the EMVs done anything to, kind of, figure out if someone is participating in a program outside of a utility program?

A. Well, so what I would say is right now I'm not aware of a ton of other programs out there with respect to efficiency that we would be making them aware of. But what I would say is that we, through our EM&V, try and isolate those -- where we know it's coming from another program, we try and isolate those impacts and remove them from what's being counted as the program's impact.

Q. Okay. So that would just be done in, kind of, I guess, a more robust or more intense way, if there's a lot more money coming parallel to your programs?

A. Yes. I think that we will continue to look and understand what's driving the efficiency that's being realized by participating customers.

Q. Okay. Thanks. I think those are my questions. I have a few staff questions that I want to run through, and I think some of them may have been answered. And given the spirit of the whole day, the ones that can be rebuttal, I'll just save.

So as described on page 10 of your direct testimony, Grid Edge is more than just DSM/EE, it also includes -- you list customer self-generation, voltage management, other distributed energy resources.

As of now, is Duke planning or is going to seek cost recovery for all the Grid Edge programs in the DSM/EE riders including those programs that have not traditionally been considered DSM/EE?

A. No. The Company is only planning on seeking cost recovery associated with programs that are specifically approved as EE/DSM programs by the Commission in our approved annual cost recovery mechanisms.

Q. Okay. Thank you. Some of these questions have been answered. I think you answered a little of this, but on page 32 of your direct testimony, you state that Duke will seek approval to update inputs to the cost-effectiveness tests in the DSM/EE mechanisms.

Are the current inputs that are calculated using the Commission-approved avoided cost rates? Is that what they're --

A. They're -- they're based off of the Commission-approved avoided cost rates for avoided capacity, yes.

Q. Okay. And on page 33, you state that the new inputs would be likely derived from the avoided capacity benefits and avoided energy benefits from the Carbon Plan; is that --

A. Yes.

Q. Could you just talk a little bit on how those benefits would be calculated.

A. So with respect to the details of the calculation, I think we've recognized that that's going to take engagement with the Public Staff and others potentially to refine the mechanism to explicitly describe that calculation. But I think as witness Huber talked about earlier, essentially what we're trying to do is make sure that the avoided costs that are being considered by EE and DSM are reflective of carbon-free resources that are now being utilized.

So it's really more an updating to approve the accuracy of the associated avoidance, or net benefits, if you will, from the investment in EE/DSM.

Q. Okay. So you're at, kind of, the philosophy or approach phase as opposed to the in-the-weeds detail?

A. Exactly.

Q. Okay. So are you envisioning a new proceeding to establish these inputs, or are we going to establish these inputs in future Carbon Plan proceedings? When do you think we're gonna get them?

A. So we believe -- and again this is a little bit of new territory, which is why there is some ambiguity around it, Commissioner Hughes, but we believe that, once the Carbon Plan is approved, we'll have an idea of, kind of, what the marginal resource is that can be utilized. And then it will be working with parties to put together the specific verbiage that says how those are to be taken from the Carbon Plan and utilized to value the net -- as the inputs to value the net system benefits.

Q. Great. I think there's one more question. There was already some debate and discussion about what moving to this 300-percent threshold and 200-percent threshold, what will be the outcome of it, why you're doing it. I heard from your answers that it was almost a way of addressing maybe a weakness of the mechanism -- or not a weakness, but a way of tweaking the current cost recovery mechanism to get more participants and more savings, and not necessarily targeted just to hit the goal of low-income recipients.

Does that question make sense?

A. I think I understand what you're saying. So the goal of the 300 percent really had nothing to do with the actual cost recovery mechanism. It really would have to do with the Company proposing a program that now, rather than an income qualification of 200 percent, had 300 percent of the federal poverty guideline.

And again, the Commission would have the ability to approve or it disprove that, because what you're doing is increasing the pool of customers that would be eligible for that program. And hence, given the history of those programs being non-cost-effective, they would be knowingly improving the amount of savings that would be coming likely in a non-cost-effective manner. But it's really a program-specific eligibility requirement.

But it would allow more efficiency to be achieved. And as we talked about a lot in those graphs, a lot of the customers on the lower income spectrum have a higher energy use, and so we believe it's an opportunity to get more energy savings and carbon reductions than under the current framework that identifies only those customers below 200 percent of the federal poverty guideline.

It was not done as a proposal to improve low-income programs, it was done as a way to say this is how we can get more efficiency over the long term to get to that 1 percent of available load each and every year.

Q. Okay. I think your answer at the end was answering the question that I was not making clear. So I appreciate that.

A. I'm sorry if I misinterpreted it.

Q. No, thank you very much. That's all my questions.

CHAIR MITCHELL: Commissioner Clodfelter?

EXAMINATION BY COMMISSIONER CLODFELTER:

Q. Mr. Huber, this may be for you, but if not, I'll take an answer from either one of you.

In Appendix E of the Carbon Plan, you don't -- I'm gonna ask you about something that's there, but you're not gonna need to refer to it for purposes of the question. In Appendix E of the Carbon Plan, which is the chapter on Grid Edge programs, there is a table in which the two Companies set out the number of customers that are currently taking the net metering tariff and the projected behind-the-meter generation, currently 2022 for both Companies. And then there's a following table that projects the Companies' best estimates of what the number of customers and the total energy generated from behind-the-meter technologies would be in 2030 for each of the two Companies.

And I've got that. And I understand from my reading of the Appendix E, and then confirmed by your dialogue with Mr. Neal and earlier with Mr. Quinn, that those 2030 projections do not make any assumptions about whether the pending revisions to the NEM tariff or the smart saver incentive are going to be approved or not. They don't assume that those will be approved.

So my question is this: If you were asked to do so, could you rerun the 2030 projections on numbers of customers and total behind-the-meter expected energy generation to -- on the assumption that one or both of those programs were approved? Could you do that? If you were asked -- I'm not asking you to do so. I'm asking you, if you were asked to do so, could you do it?

A. (Lon Huber) We -- I think we could put something together. I would question the accuracy, because there's a lot of moving pieces in the -- and I don't want to give you a false sense of accuracy between those different scenarios.

So a variety of different moving pieces. We have also the additional settlement that was put in place with the local solar installers that provides some runway scenarios if certain things aren't approved from the smart-saver side. So there's a variety of different pathways. Plus IRA on top of that.

So if it was very constricted, there's -- you know, we could, you know, do some modeling, but I would just, you know, caution of not thinking that that is actually how things are gonna actually end up, given all the different dynamics in the market.

Q. That's an excellent answer, because you anticipated some follow-on questions, so I don't need to ask them.

You were able to do the 2030 projections that in Appendix E now because you have a history under the current structure?

A. Right.

Q. And so you've identified for me what are the considerations that might constrain your ability to model that on the assumptions that one or more some components of existing proposals are not approved, correct?

A. That's correct.

Q. Got it.

A. The existing net metering --

Q. So the follow-on question is, if you were -- if you were to be asked to do that, how long would it take you?

A. So I would have to talk to the modeling team.

Q. Got it.

A. It'll be a mix of my team and the modeling team to try to figure out which of the different pathways, and then the energy efficiency team as well. So it would -- it would take -- again, I don't want to speak for the modeling team, but my guess, knowing the workload and everything, probably, I would say three weeks, three to four weeks.

Q. Fair answer. Thank you.

Okay. Mr. Duff, I've got a customer question for you. It's -- and as I say, it's the kind of question a customer might ask. It's coming from me, but it's the kind of question I think a customer might ask. So I'm reading your prefiled testimony, and I read that your job responsibilities involve, as you say, evaluating and tracking the performance of Duke Energy's integrated grid solution retail products and services.

And "integrated grid solution" is capitalized. And so when I read that, I went to the Companies' website. I went to the Companies' website and I tried to find, oh, this is interesting, I can look at the suite of programs and I can, sort of, see what is the collection of products and services that the Company has on offer to me as a customer. I couldn't find anything anywhere. What did I do wrong?

A. You did nothing wrong. The integrated grid solutions is an internal organization name, and so there's a suite of products that is under the organization and my responsibilities. And, essentially, what that was a very long-winded wordy way of saying was, my team does the EM and V for a lot of the customer products and services including that are within the integrated grid solutions organization, including EE/DSM.

We have also done some for the -- for some of the TOU rates, and we have had a third party under contract to do some EM and V related to the EV phase 1 pilots. So all those things kind of fall in, so I apologize for the confusion.

Q. It's not a confusion. I understand you. And I guess -- but it then led me to think, as a customer, if I wanted to see a comprehensive, sort of, menu of what might be open to me or available to me or that I might be eligible for or might try to ask whether I'm eligible for, where would I find it?

A. I would hope you would be able to find it on the web. I can't --

Q. How?

A. I believe, if you go to the residential page, there's a -- I know there's a section on energy efficiency about how to save money. I think there's also a section on EVs. But I agree with you, in terms of the overall suite of products that's under my organization, finding that all together would likely be an exceedingly hard challenge.

Q. Thank you. That's the answer I needed. Thank you. Thanks.

CHAIR MITCHELL: All right.

Commissioner Duffley?

EXAMINATION BY COMMISSIONER DUFFLEY:

Q. Following up on that, I know we've had past discussion about the number of clicks to get to different things, so I would stress to the Company maybe look at that and work on that issue. If you could turn to Appalachian Voices Exhibit Number 2.

A. (Witness complies.)

Q. And in some of the intervenors' questions to you about comparing Duke to the other Companies, you talked about, oh, this is apples-to-apples comparison. And you gave one example with Duke Energy Ohio stating that they were using a 2008 baseline.

Can you give other examples from this chart?

A. Sure. So I think first importantly, it's -- you need to look at things like what states they're from. So some states have programs that allow codes and standard advancement to count as utility efficiency. I believe Minnesota is one of those. So that X-L Minnesota. One that's very interesting is California recently, due to diminishing potential in their DSM/EE goals has allowed fuel switching to now count as EE and DSM savings.

So what is being counted really does play an important role to make sure that you're really comparing. But I think, fundamentally, it's also important to look that when you're looking at a percentage of sales, the regionality makes a ton of difference. And we tried to point this out in my testimony and with Carbon Plan stakeholders, the amount of usage that a customer has makes a big difference.

If a customer installs two efficient LED bulbs -- and I'm just using LED bulbs because they're kind of standard and across states. Let's say it saves 100-kilowatt hours a year. That's high, but for math purposes, we'll use 100-kilowatt hours. If that customer's total monthly average usage is 600-kilowatt hours like in some of the New England states, the percentage savings that are gonna be -- versus those retail sales will be much greater than in the Carolinas where we're at above 12,000-kilowatt hours a month. 1,200, rather, sorry. I was thinking for year.

But essentially, it's important. That baseline matters. And as well as what financial incentive customers have. If you're talking about some of the -- and we, again, pointed this out. In New England and in some states in the West Coast, you have rates that are almost two-and-a-half times what Duke's rates are in the Carolinas. And we think that's a great thing from our customers' perspective, but it makes participating in efficiency programs all that much more attractive.

Q. Okay. Thank you. Now, if you could turn to Appalachian Voices Exhibit 3.

A. I think I've got it. They didn't label them for me, so it just says "exhibit."

Q. It looks like this on the top.

A. Okay. Yeah. Gotcha.

Q. Okay. If you could, go to that back page. And we just want some clarification on the numbers. So on the bottom row you have total customers of 3 million, then your low income. Then you talk about the participation in programs that are specific to low income, or only offered to the low income, and then you have a total participation. So -- and then down at the bottom you have, like, the 4.21 percent and the 62 percent.

So the clarification is, how many of the 608 customers come from the 980? Meaning is the 62 percent low-income customers as well as non-low-income customers?

A. No. My understanding is, is that's the percentage of low-income customers that are participating in those programs.

Q. Okay. That's the clarification I needed. Thank you.

CHAIR MITCHELL: Commissioner McKissick?

EXAMINATION BY COMMISSIONER McKISSICK:

Q. Thank you. Just a couple of quick questions. And of course, you know, we've been hearing testimony all day about the 1 percent reduction in retail sales. And I guess I just want to cut to the chase.

What I want to know is -- and I understand there are enhancers and policy changes would have to take place, but if we change that to aspirationally being 1.5 percent, under what set of assumptions could you discretely identify that will help us obtain that aspirational goal? I mean, is that something you can share with me now or do you need to pull together a late-filed exhibit?

But I'm more interested in saying I understand there are obstacles, I understand there are challenges, I understand there are enhancers, but, you know, just discretely, kind of, identify what set of policies that would really need to be adopted and what set of circumstances to get there, because I don't want to see us at the average. I want to see us in the top 25 percent. I wouldn't mind if we were right there among the top 10 percent. But what can you say in response to that?

A. So what I can say in response to that, Commissioner McKissick, is that the Company is not sure that you could do 1.5 percent efficiency every -- of total load every year for the next 28 years. You're talking about a cumulative reduction of load that would be close to 50 percent. And we don't know if there's enough actual efficiency out there to get to that level.

While a number of parties threw that number out there, in our evaluation of what they put out, we didn't see a specific menu of programs or projected participation in that menu of programs that shows how you get there.

And so I don't want to volunteer that I could come up with a road map to get to 1.5 percent because, again, I think it's really important that you talk about the fact that 1.5 percent is great for a year, but you're talking about maintaining that level for 28 years. And I honestly don't think there's 1.5 percent of economic potential out there for customers. I don't even know about the technical potential to reach that level.

Q. Well, let's -- and I understand that, and in terms of looking at that long of a time frame and that window.

But suppose that window was narrowed, for purposes of discussion, to say a 5-year interval or a 10-year interval, being closer in time frame where it may be more realistically obtainable; is that something you could do?

I mean, before -- I mean, everything I hear, and if you go back through all the testimony, I think Public Staff was very good at, you know, these are aspirations, these are aspirations. Everything is purely aspirations, and I understand why. But I also would love to see an aspirational target that's higher than what's been articulated at this time.

And I want -- I think the two of you could help us get there and help us identify those programs or policies for what needs to be undertaken in a realistic way to have a constructive conversation so that we could start marginally getting closer to that goal. And if we're -- and maybe we're looking at something shorter in terms of a window of time that makes it more realistic to get there.

You know, maybe it's two-year intervals, you know what I mean, rather than a one-year interval. Nothing's magical about that number, necessarily, but something that's more aggressive. Does that make sense?

A. I think I understand your question. And if you want -- I think what I would say is that we could definitely, I think, identify potential enablers or things that could be done to achieve more. But I think what is really relevant to the Company when we were thinking about this is working with the modeling team, making sure that you're not putting in something that's so aggressive that it creates a hole that you can't fill in your Carbon Plan.

And so I have to be honest, it would likely take a pretty great deal of time to have something that was -- that we felt comfortable in saying, if you did this, this, and this by this date, you could get to this point. Because there -- as we've heard as recently as from Commissioner Hughes, there's gonna be a whole bunch of things that are gonna be coming into the energy efficiency space outside of our programs that potentially could erode the amount that would be utility EE. And we don't even know that big variable yet.

So I don't want to be evasive, but I really struggle to think that we could get you something in a short time that would be more aggressive along your lines. We actually think that what we put in is aggressive and is regionally leading. And we've sustained that regional leadership for quite some time. And that regional portion is really important, because that does factor in to customers' rates. There's a lot more rate parity in the Southeast; there's a lot more usage parity in the Southeast.

So we feel like, even these reports have lauded us as being a leader. It is -- it is -- when you start talking about national, our percentage is less, but I think the percentage is not the right driver. I think if you want to say can you do more, we could put together a plan to try and do more, but it would take a lot of policy advancement. And that really is uncertain, and is has a lot of ramifications for a number of different customer groups.

Q. Okay. Let me ask you this.

Assuming you're working under that set of assumptions, what kind of time frame are we looking at for pulling that together?

A. I would say for the next check and assess, to be honest with you.

Q. So you're looking -- I mean, you're talking, like, the next time we sit here and deal with a Carbon Plan or when?

A. Yes. And I hate to be that -- putting it off that long, but as I said, the IRA is gonna be a huge impact to what utilities can do with their programs. We also have a number of standard changes that are gonna go into effect January 1st which will reduce the efficiency savings associated with HVAC for replacing on failure measures.

So there's a whole bunch of changes that we haven't factored in yet that would need to be factored into this broader analysis to give you an accurate estimate of what the costs would be. Because we're gonna have to understand where the actual impacts are coming from, what end uses from what customers are being reduced, and that's a -- that's an aggressive ask.

Q. Suppose Lynn Good said I wanted something in 30 days; could you do it? I mean, I'm just being realistic --

A. No, and I --

Q. -- I mean, two years is a long time to ask us to wait, to be candid with you. I mean, we're dealing with this now. We're wrestling with it now, I think assumptions can be qualified. I think targets can be realistic. But to say we wait two years -- and I understand we want to be able to re-evaluate it and be able to -- and we should, you know, looking out two years. But I'm looking at something that is more realistic, in terms of providing us with some -- a bit of a road map.

A. (Lon Huber) Commissioner --

Q. Yeah.

A. -- I was gonna jump in and just talk this through a little bit, in terms of the accuracy, because I think, you know, that's where -- that's what takes a long time, is to run all the numbers and to get, okay, well, here's the exact megawatt hours from this specific program design. If it's a bit higher level, which I think you just alluded to with the road map --

Q. Yeah.

A. -- that might be a good bridge until the more advanced -- you know, very detailed modeling can come in with IRA impacts and so forth. So I'm just trying to think of a -- you know, a reasonable way of a high-level road map that gives a list of, you know, we think this technology is gonna come online in two years, we could include this into the DSM program. We have this policy enabler that we think you guys could, you know, further tweak. That type of thing I believe we could put together for you.

A. (Tim Duff) Yeah, I apologize. I thought you were talking of a modeling update which that's what --

Q. Sure.

A. -- you need to have shapes and understand where the savings are coming from. So I apologize if I misunderstood what your request was.

Q. And let me ask you this, Mr. Huber, in terms of the way you have articulated it, which I think is probably more consistent with what I envision, what kind of time frame could you pull that together? I mean, if you were to file a late-filed exhibit or give us some information, I mean, we're gonna be around here for a while based upon the way testimony is being provided. I appreciate the way the intervenors today did to cut through the chase, but --

A. (Lon Huber) So I would almost put the question back to you, which is, if there's a time frame specific that you have in mind, I can work backwards. And the faster it is, the lower the quality, basically. The lower the accuracy of -- because these are high-level assessments, right?

Q. God it.

A. And so I think if you could just -- ideally for you what that time zone would be, and then I can work backwards.

Q. Let me ask you this. What can you pull together in the next 30 days or so? Next 30 days, 45 days, something that gives us something that we can look at as we ponder what we're doing this cycle before December 31st. And would give also intervenors a right to comment upon.

A. (Tim Duff) It would be -- 30 days would be fairly rudimentary --

Q. Okay.

A. -- in terms of what could be put together. I just -- I guess, in my world, I'm used to trying to give a higher level of quality and certainty. So I would say that we could give a directionally correct estimate of what could be achieved by certain -- by following a certain road map.

Q. And in terms of having a higher level of accuracy, understanding we're talking about things that are -- that may not have the level of specificity that we'd all prefer, is that 30 days, 6 weeks out; is that a realistic time frame for you guys to work within?

A. So one clarification. And I'm sorry, one clarification. Are you just talking about EE/DSM?

Q. Yes.

A. (Lon Huber) And one more clarification, sorry. And are just talking about things within the Commission control or are -- would we be --

Q. Yes, Commission control. I mean, we can't control what might happen otherwise, but things in our purview and within our general authority being what it is statutorily.

A. (Tim Duff) I -- I think we can give you a road map with a lot of caveats in it within 30 days.

Q. I look forward to receiving it. Let's make sure they're caveats, not corpses. Okay. Now let me ask you this.

I know you've also talked some about, you know, more creativity and greater ability to deal with pilots moving forward. What do you have in mind there?

A. (Lon Huber) Well, for the -- in terms of things that we want to pilot or the structure of the regulatory mechanism?

Q. Both.

A. Okay. So -- oh, boy. There's a lot in the electric vehicle space, so maybe I'll start there.

Q. Okay.

A. Thinking about how do we have multi-family chargers out there. Knowing that certain customers may or may not have EVs in an apartment complex, how do we set up a station that has enough plugs and maybe has a little bit of energy storage in it so that it doesn't require a big upgrade. And also what are the billing mechanisms that you would then link to, if we could, a customer account? So how could we make that a seamless customer experience in a multi-family setting? That's -- that's one.

Two is, are there new bundles that we could put together in conjunction with more targeted AMI data analytics. So, for instance, if we can identify through AMI some really high winter peak users and dive into the load analytics and say, you know what, those are very inefficient heating systems, electric heating systems, mostly likely, right?

Q. Sure.

A. So then we can dive in and be, okay, well, those could be replaced. So we could say, hey, if you adopt a new heating system with a new smart thermostat plus a TOU rate, you would actually, customer, be saving money and reducing peak demand and so forth. So think a different bundling.

We have recently filed an innovative pilot around vehicle-to-grid, and we mentioned the fourth lightning in this filing. We decided to go the route of reducing a customer's lease payment. We are not sure if that is the best mechanism. We think it's a -- when, you know -- talking to -- forward, we think it's a good one, but we're not exactly sure. Are there other compensation mechanisms. Is it a bill credit, or do we say if you enroll in this program you will get unlimited charging for $19.99 a month per our prescription pilot? Are there different ways the package the offering so that we drive more adoption?

So I guess those are -- those are maybe a few -- you know, there's other rate designs. So, for instance, some customers really like bill certainty and think low, moderate-income customers as well where a high bill for just one month for whatever reason really hurts their ability to balance that month's budget, they're living paycheck to paycheck. So how can we tie a bill certainty product in with maybe a smart thermostat? And so we give the customer certainty while bringing them some new technology that will help reduce their load. Combinations like that, other rate designs like peak-time rebates.

So those are just -- I can keep going on, but I think -- start do get the idea of it's a mix of hardware, it's a mix of pricing, and it's a mix of customer -- the customer experience that we -- there's interchanging parts that we can perfect and optimize around.

So talking about the regulatory mechanism, the question is what can we set up so that we could rapidly prototype these different types of programs and configurations and pivot if we need to so we don't take eight years just to finally get something right. And again, there's always market dynamics that make things even more complicated. So we could look at some parameters of this regulatory mechanism where it says, well, as long as it's under X amount of budget, it is in line with the Carbon Plan's objectives. Maybe it's a carbon objective, maybe there's a peak demand objective in there, and it's optional. There is an expedited review period.

Or in Vermont, the utility there, they filed the pilot within certain guardrails, and within 15 days it's accepted unless there's some major issue that the Commission would flag. And then they're allowed to innovate from there. Different states are experimenting, I think, with other forms of that type of concept.

But how I'd see it is you would have a certain set of guardrails that we'd be working with stakeholder on defining, certain objectives that be laid out, certain caps, and then from there we would be making whatever that filing would look like. And within a certain expedited time frame, that pilot would just be approved for us to move forward.

And a lot of this is around rate design because we would need to submit new tariffs, too, right? So -- and that's different than, oh, I can just go my sandbox and play with my technology in a lab. I don't need your permission to do that. But I do need it for a lot of these customer-facing programs that have different tariffs and rate designs, and then linkages to regulator programs, like the Bring Your Own Thermostat Program.

And so that's what I'm really talking about so that we can quickly file something, and then there's an expedited approval so that there isn't, you know, months of back and forth, and just the standard processes that have been laid out for a time period different than we find ourselves in today.

Q. And I greatly respect you thinking out of the box and giving it some serious thought and reflection and being willing to, you know, put some ideas out there which I think are very constructive and very positive.

Would you envision that we'd set up a separate docket to evaluate the way we might handle these type of pilot projects? Or how might that best be addressed?

A. Yeah. So my original plan was, if the Commission seemed interested, I would be working with stakeholders to find what is the best regulatory vehicle to bring -- to bring it forward. My guess is it would have to be a separate docket. That's my guess, but don't hold me to that.

Q. Well, I think it's an excellent idea. So, I mean, I would hope that that is something -- a concept that it's certainly, in my mind, meritorious that deserves further evaluation and discussion. And as I say, I respect your creativity and thinking out of the box about how we might package some of these programs to achieve and obtain results that we want to obtain with the Carbon Plan and in other ways as well.

Last question, that's this. We've talked today about the federal poverty guideline and where it is, whether it's 200 percent or 300 percent. It's an abstraction in terms of not having a target number that we're looking at.

If we're talking about 200 percent, what does that translate to in terms of dollars? If we're talking 300 percent, what does it translate to in terms of -- when I say dollars, the income. What are we looking at so I can get a better sense and feel of the space?

A. (Tim Duff) So if I understand your question correctly, Commissioner, you're asking for what those thresholds are?

Q. Yeah.

A. I --

Q. Because I always hear about them in the abstraction.

A. Yeah.

Q. And I know what I believe them to have been a few years back, but I don't know what they would be today.

A. Yeah. I don't have the -- I apologize, I don't have the current amount, because that number resets.

Q. I got it. I understand.

A. Seeing if it's in one of the excerpts that was presented to me.

Q. I didn't see it, but if you could get it back to us, that'll be fine.

A. Yeah, we can definitely get it. So you're interested in what the annual income is --

Q. Exactly.

A. -- for somebody at 200 and at 300?

Q. It gives you a greater sense of connectivity or connection to what the income level is of that particular family, or individual as the case may be. But that does it for me.

COMMISSIONER McKISSICK: Thank you, Chair Mitchell.

CHAIR MITCHELL: All right.

Commissioner Hughes, do you have a follow-up.

EXAMINATION BY COMMISSIONER HUGHES:

Q. Yeah, I'll see if I can seat it and maybe we can take it to the modeling or you in rebuttal. But something you just said about the 50 percent cumulative. I think you came up with -- you said if you raise the -- if you raise the annual savings target, eventually that was gonna lead to some very, very high number. And I think you said --

A. (Tim Duff) Roughly 50 percent.

Q. -- roughly 50 percent.

I've been curious about how these energy efficiency savings are modeled. So it might be a modeling question. I'm gonna tell you my question is and concern, happy to just -- you get together with modelers and get a late-filed exhibit.

But when you say 1 percent for EE -- I'm gonna grossly simplify it. If you're using 100 units and you have, in 2020, 1 percent, you're down to 99 units. In 2021, another 1 percent, it's not exactly 98, but it's close enough to 98. Another, 97. I'm just curious, for long term, because these do have a long-term cumulative impact, how -- how you're dealing with with this roll-off, and what becomes a permanent forecasted savings and what is reset? Specifically for your behavioral programs which is the majority, actually, of your retail savings now, I think. I think it's slightly over 50 percent, if I'm not mistaken. So it's a huge, huge part of your programs.

If you save -- from 2020 to 2021 you save that one unit in behavioral programs, you're down to

99. When you get down -- when you get to 2022, are your modelers assuming 98? So are they assuming that they had one unit of behavioral savings in 2021, that stayed, and then in the next year there was another 1 percent so it drops down to 98 percent? Does that question make sense?

A. I believe so. So it has to do with the measure life on how roll-off is treated, Commissioner Hughes. So if it has eight years, it essentially would roll off. Because MyHER is a one-year measure life, essentially that load would only be reflected in -- as an incremental savings the year that it's achieved. However, the following year, it's gonna be treated and it's gonna be updated.

So as we said, we do M and V. So the M and V actually came back and said participants are now saving actually slightly more for both DEC and DEP. So it's updated for the changes in the savings, and that's what's reflected as the incremental savings associated with participation.

Q. Okay. That's how I thought it was being done, I just wanted -- because it is such a big percentage. From what I can tell, you get this big drop, and then almost all of it rolls off. All of the behavior -- almost all of the -- from the EMD, almost all of the behavioral savings rolls off the next year. You can check it, but I think --

A. Yeah, it's factored into the -- it's factored into the naturally occurring, except for that M and V piece.

Q. So right now it's not like a line that goes down like this; the EE program jumps down, goes back up, and then jumps down?

A. But because of the fact it's a one-year life, it's not a bump, bump, bump, it's a flat line.

Q. Yeah, it's a flat line.

A. Yes, that's correct.

Q. But it's not going down.

So 1 percent of behavioral savings over 10 years doesn't necessarily get you that cumulative huge drop as some of these other programs?

A. Well, so to be clear, those -- a program that delivers a physical impact, the impact doesn't increase, it just persists for the life of the measure.

Q. Okay. Okay. I'm going -- I'm gonna probably bring this up again in the modeling just to kind of make sure I understood it, but at 2:40, I understand enough. Thank you very much.

CHAIR MITCHELL: All right. Just one question for you-all.

EXAMINATION BY CHAIR MITCHELL:

Q. This concept of eligible load, I just want to make sure I'm clear. So I'm looking at page 13 where you-all describe what you mean by load that's eligible -- well, you reference load that's not current eligible versus loads that are eligible to participate in EE programs. So help me understand the distinction.

A. (Tim Duff) So eligible really has to deal with our nonresidential opted-out customers. So there's -- a significant portion of our nonresidential customers have elected to opt out of either EE or demand response programs and -- or both. And therefore they're not eligible to participate in our programs. They may be doing things on their own and are actually required to attest to a level of evaluating efficiency, or doing energy efficiency in order to opt out.

But that load we can't touch with programs, so we didn't feel that was appropriate to reflect in the savings target for utility efficiency programs.

Q. Can you tell me what percentage of load would be ineligible for the each of the Companies? Off the top of your head, I don't want to --

A. Well, it's in the 30 percent.
Q. For each operating Company?
A. I believe so, yes. It might be a little bit higher for DEP than DEC.
Q. And that's -- I'm assuming you mean at the retail level?
A. Yes, at the retail level.
Q. And when you use the word "load" in your testimonies, I'm assuming you're referring to retail load; am I --
A. Yes.
Q. Okay. Specifically as you're talking about reductions related to DSM and EE, it's retail?
A. Right. We did talk about it a little bit when we talked about the enabler. Had something been able to work out with the wholesale customer, that could reduce the system emissions, but that would not be part of, quote, eligible load.
Q. Okay. You wouldn't factor that -- okay. I'm with you there. Okay. Okay. So as I think about this, 30 percent on each operating Company of that load that we're thinking of is not eligible --
A. Roughly off the top of my head, yes, that's the approximate percentage.

Q. Okay. Okay. Mr. Huber, for you, just one question. You're -- I'm attributing this testimony to you, but it's page 17, lines 1 through about 14, you're talking about the EV programs that you-all have had approved or working on. And you discussed exploring development of dynamic rates designed to lessen the system impact of nonresidential commercial and fleet.

Is that -- are you thinking -- so I'm interested in the work that you're doing to maximize the system benefit of electrified vehicles. Is this -- are we thinking about things the same way, or are you thinking about things differently than I am?

A. (Lon Huber) There's, I guess, two parts that we're trying to solve for, and one is a do-no-harm piece to the rate design that says, hey, this as a time you don't want to charge; if you do, we'll have to have system upgrades, it's going to be expensive. There's another part of that rate design that says, hey, charge here, that will help the system with, you know, possible integration costs of higher renewables, for instance, so it's doing both.

Q. Okay. And you're looking at both?

A. Oh, yes, absolutely.

Q. Okay. And when you say "charge here," do you mean charge here in this location or do you mean charge at this point in time?

A. Well, now that you mention it, there could be a locational element. But for the most part I was referring to the rate design that will -- or the hourly price signal for the, say, fleets. They're more sophisticated customers. So I can help -- Duke can help them essentially say, hey, this is the time to charge and load build, to the discussion I was having a little bit earlier.

And then in other tariffs, like the static TOU rate, CPP, that was approved by the Commission, you know, we generally said, hey, you know, this discount window is a good time to have a load.

Q. Okay. So are you -- are you the person or is your team the team that is looking at location for this type of activity, or is somebody -- some other unit looking at charge here at this location on the grid?

A. It's a team that's very adjacent to me that I work with closely.

Q. Okay.

A. And so, you know, from that standpoint, this is another one that will take regulatory innovation, but charging -- fleets tend to charge in clusters.

They're in sort of industrial clusters, if you will. When a, sort of, typical fleet-size customer goes electric, that's like adding the Empire State Building in that location, that's how much load we're talking about. Significant.

So multiple Empire State Buildings all up in the same location, and it's far cheaper to get ahead of that and build a system that's capable and ready for it than upgrades each time one customer transitions their fleet. So there's some proactive thinking that all stakeholders, Duke, everyone has to do to think about how to handle this coming issue that's going to be rapidly approaching us.

And then there's another piece of this which says where on our grid could we -- where could we accommodate a decent amount of charging, and how can we signal that, that type of charging there. And honestly, there could be mobile batteries -- and I'm thinking totally high level, so don't hold me to any of this. But there could be times where you take a mobile battery, charge in a specific location, bring it over to the constrained fleet location while you have enough time to get the supply chain for the transformer needed to serve that area.

We have to think about all these different business models and grid scenarios. And so that is a team relatively close to mine, and we're thinking about all of these.

Q. Okay. Thinking about them together?

A. Yes.

Q. Okay. All right. That's what I want to hear.

CHAIR MITCHELL: Okay. Questions on Commission's questions? Go ahead, Ms. Cress.

MS. CRESS: Thank you, Chair Mitchell.

EXAMINATION BY MS. CRESS:

Q. I've just got a couple for you this afternoon, gentlemen.

The regulatory sandbox concept, Mr. Huber, that you were testifying about, is one possible use of such a concept perhaps exploring whether and how the utility can receive credit of some kind for non-utility-funded EE measures?

A. (Lon Huber) I haven't gotten that far. You know, when I'm thinking rapid prototyping, I'm thinking more customer experience, customer acceptance, compensation mechanisms, and technology couplings to a customer. I wasn't thinking necessarily business model innovations on the Duke side. But if -- open to suggestions.

Q. Thank you.

Mr. Duff, same question to you.

A. (Tim Duff) So I would say that we haven't anticipated taking credit for EE or DSM programs that are not part of approved EE/DSM programs from the Commission. So when we talked about UEE, it's been focused on Commission-approved programs. Haven't really given a thought to taking credit for things that were done outside of utility programs as utility efficiency or DSM.

Q. Okay. House Bill 951 -- and this is for either or both of you.

House Bill 951 requires that the existing law pertaining to DSM/EE cost recovery has to continue to be followed; is that correct?

A. That's my understanding, yes.

Q. And House Bill 951 also prohibits cross-subsidization among non-participants --

MS. FENTRESS: Objection. This is far beyond the Commission's questions. It's asking legal questions of Mr. Duff. Two objections.

MS. CRESS: Okay. I'm following up on a

question from -- I believe it was Commissioner Hughes who was asking about cost recovery for Grid Edge customer programs. And to the extent that that is addressed in House Bill 951, I think it's fair game to ask these witnesses about that.

CHAIR MITCHELL: All right. I will overrule the objection, allow the question and --

MS. CRESS: Understood. I'm gonna speed it up. Thank you.

THE WITNESS: Can you repeat the question? Sorry.

Q. Yes. Does House Bill 951 also address cost recovery for new customer renewable programs?

A. To be honest with you, I didn't read that section of 951. I was really focused on the sections that pertained to EE/DSM which said the existing laws stayed intact, and then anything that would pertain to my piece of the Carbon Plan.

A. (Lon Huber) I am not fully aware of that section.

Q. Okay. Thank you. And final question.

Are there some things, some enablers that would be outside the Companies' control with respect to EE and DSM?

A. (Tim Duff) I think there are a number of enablers that we identified as part of the Carbon Plan stakeholder process that would be outside of our control. I think the ones that we identified are ultimately outside our control because they would require Commission approval, but we felt that they were things that could be proposed in conjunction with the approval of the Carbon Plan that were in our control to propose.

Q. Thank you. That's it. Thank you.

CHAIR MITCHELL: Additional questions on Commissioners' questions? Go ahead, Mr. Neal.

MR. NEAL: Thank you, Chair Mitchell.

EXAMINATION BY MR. NEAL:

Q. Again, David Neal for SACE, et al. Just following up on Chair Mitchell's question about eligibility.

When you say 1 percent of eligible load, that's net of opt-outs, right?

A. (Tim Duff) That's correct.

Q. And that's not a static category, you would agree?

A. No. That number changes every year.

Q. So if commercial or industrial customers opted back in, they would then become part of the eligible load that you want to count for purposes of a savings target, correct?

MS. FENTRESS: Objection. Again, I think this goes beyond the question that Commissioner Mitchell asked. This was addressed in his testimony and could have been asked when he was being crossed.

MR. NEAL: With all due respect, I understood Chair Mitchell to be asking for clarification about what eligible load meant, and I wanted to just --

CHAIR MITCHELL: All right. I'm gonna overrule it. Go ahead, Mr. Neal, ask your question again, and answer.

THE WITNESS: So if a customer is opted in and eligible to participate in the Companies' programs, then their load or sales would be included in that retail sales number.

Q. Thank you. That was all.

CHAIR MITCHELL: Any additional questions from intervenors? Go ahead, Ms. Cralle Jones.

MS. CRALLE JONES: Yes, please.

EXAMINATION BY MS. CRALLE JONES:

Q. And this is a follow-up to both Commissioner Duffley's question about the 608 number, and then Commissioner Hughes' question about roll-off of -- how that's counted in the roll-off of the behavioral programs versus material improvements, energy efficiency improvements.

Can you say -- can you give a percentage of that 608 that are material long-term improvements that low-income customers would be using?

A. (Tim Duff) Not off the top -- not off the top of my head, I can't, no.

Q. I mean, there's a big difference between the 41,000 number and the 600,000 number.

Would that mostly be behavioral programs?

A. In all honesty, I would have to -- I would have to look at the savings numbers. Because you're, kind of, blending a percentage of customers as well as different programs that are gonna have different per-participant impacts. So, for example, those targeted low-income programs have a high impact per customer versus the per-participant. So it's really hard for me to give you that number without having the facts in front of me.

Q. But would that be an important consideration to target, is for these low-income customers, that they're gonna benefit more from material improvements as opposed to the behavioral --

A. So what I would say is the impacts associated with participation in different programs vary. But the MyHER program, EM and V results demonstrate cost-effective savings and are programs that they participate in to the extent that they're not -- some of the income-qualified would demonstrate cost-effective savings. So I think the answer to your question is all the programs give them savings opportunities. The magnitude of the energy savings is going to vary, but if they're part of your regular portfolio, then that benefits exceeds the cost.

Q. Is that --

CHAIR MITCHELL: Mr. Blumenthal, do you have questions on Commissioners' questions? All right. And then Public Staff will go last. Go ahead.

MR. BLUMENTHAL: Thank you.

EXAMINATION BY MR. BLUMENTHAL:

Q. I'll just -- quick question following up on a question from Commissioner McKissick and I believe carried over to Commissioner Hughes about the 1 percent target and if that was raised to 1.5, what that would mean going out to 2050 and things like that.

Did the Companies, when doing this analysis, consider adopting separate targets for the 2030 and 2050 goals?

A. I don't -- I don't know with respect to what we put together, it was -- we were working with an assumption that was the 1 percent. So I don't know if that was considered or not.

Q. Okay. Would there be any major obstacles to having separate goals for 2030 versus 2050 within the Carbon Plan?

A. I think, if they're not based off of the same facts and potential and bases, it could create complexities and mischaracterizations of potential and the impact to the system.

Q. Thank you.

EXAMINATION BY MS. KEYWORTH:

Q. Just a few questions for you. Same subject.

Increasing the energy savings targets to 1.5 percent or higher than that to 2.5 percent, that would increase costs; is that right?

A. Yes.

Q. So it would not be least cost?

A. I can't tell you without looking at the details, but given what I know about our potential, I don't believe it would be a least cost.

Q. And would increasing the energy savings target make it more difficult to maintain cost-effectiveness in the portfolio?

A. Yes, unless you're changing how things are counted. As I pointed out, other states are taking advantage of opportunities associated with potential. California, in their most recently goals, for example, they saw a decrease in the potential associated with appliances, but they actually saw an increase in the potential for behavioral programs, and decided to count fuel switching as EE savings.

So if you change how you count it, will it reduce cost-effectiveness? Maybe not. But under the existing counting provisions, I believe that the cost-effectiveness would erode.

Q. Thank you. A couple of questions on Commissioner Hughes' questions.

What percent of energy savings come from behavioral programs?

A. I don't have that number off the top of my head. I'm sorry.

Q. Currently in the mechanism, is it the IRP or the Carbon Plan that determines avoided cost rates or is it the avoided cost proceeding that determines those inputs?

A. So it's not directly derived from the avoided cost proceeding. It's a -- it uses some of the information from the avoided cost proceeding, because, obviously, a Carbon Plan was not in place when the last mechanism was approved.

Q. Thank you. That's all my questions.

CHAIR MITCHELL: All right.

MS. FENTRESS: Madam Chair, I do not have any questions; however, I do have the answers, I believe, to Commissioner McKissick's questions about income levels associated with the percentages of the federal poverty level. I am happy to read them into the record.

COMMISSIONER McKISSICK: Sure.

MS. FENTRESS: Certainly. So this is from the Department of Health and Human Services. In 200 percent of the poverty level for a single-person household, that has an annual income of $27,180. For a household with four, it has an annual income of $55,500. At 300 percent of the federal poverty level, a household of one has an annual income of $40,776, and a household of four has an annual income of $83,250.

COMMISSIONER McKISSICK: Thank you sharing that information. Thank you.

MS. FENTRESS: You're welcome.

CHAIR MITCHELL: All right. I actually -- we're gonna go through -- I'm gonna have one more question, so we'll go through this whole thing one more time and we'll finish by 3:00. This is just an ironic twist, huh?

EXAMINATION BY CHAIR MITCHELL:

Q. The -- page 40, guys, your testimony identifies other opportunities to expand the customer pool, and you touch on that opt-out group. But then you also talk about wholesale customers. Who -- so update me there on work with wholesale customers. I mean, is that something that we're gonna see material -- I'll just ask the question. Where are we with working with the wholesale customers?

A. (Tim Duff) So I can't speak to the specifics of negotiations. My response was really based off of the comments of one of the co-op groups who mentioned interest in energy management and demand management. And since we had discussed it as one of the potential enablers to reduce carbon emissions from the system, I felt it was appropriate to address it.

But we haven't had any specific negotiations that I'm aware of on them adopting our EE/DSM programs. If there is interest, that's definitely something we will continue discussions on.

Q. And would those discussions occur with your group, given that it's the wholesale customers, or would they occur elsewhere in the Company?

A. They would occur elsewhere in the Company with probably some input from my team, yes.

Q. Okay. All right.

CHAIR MITCHELL: Questions on my question? My two questions.

(No response.)

CHAIR MITCHELL: Okay. All right. With that, we will be done for the day. Before we go off the record, just a couple of housekeeping matters. I'll take motions on exhibits used on this panel.

MS. CRESS: Yes. Thank you, Chair Mitchell, I guess I will kick us off here.

If I could, I'd like to be entered into the record CIGFUR II and III Grid Edge Panel Cross Exhibits 1, 2, and 3.

CHAIR MITCHELL: All right. I heard no objection, so your motion will be allowed.

MS. CRESS: Thank you.

(CIGFUR II and III Grid Edge Panel Cross Exhibits 1, 2, and 3 were admitted into evidence.)

MR. QUINN: Chair Mitchell, this is Matthew Quinn for NC WARN and Charlotte-Mecklenburg NAACP. We would ask that NC WARN, et al. Grid Edge Panel Direct Cross Examination Exhibit 1 be admitted into the record.

CHAIR MITCHELL: All right. Motion is allowed.

(NC WARN, et al. Grid Edge Panel Direct Cross Examination Exhibit 1 was admitted into evidence.)

MS. CRALLE JONES: Cathy Cralle Jones for Appalachian Voices. We would move that Appalachian Voices Grid Edge Panel Direct Cross Examination Exhibits 1, 2, 3, and 4 be moved into the record at this time.

CHAIR MITCHELL: All right. Hearing no objection, your motion is allowed.

(Appalachian Voices Grid Edge Panel Direct Cross Examination Exhibits 1, 2, 3, and 4 were admitted into evidence.)

MS. FENTRESS: Madam Chair, we would move our evidence into the record as well, and as well we would also move into record the prefiled summaries of Mr. -- of the Grid Edge Panel.

CHAIR MITCHELL: All right. Prefiled summaries are -- I'll accept into evidence, but I don't believe, correct me, I don't believe this testimony had exhibits to it.

MS. FENTRESS: It did not.

CHAIR MITCHELL: All right. So their testimony has been copied into the record, so we are set there.

(Whereupon, the prefiled summary testimony of the Grid Edge Panel was copied into the record as if given orally from the stand in Volume 13 at the time their prefiled direct testimony was entered.)

CHAIR MITCHELL: Just a quick note on --

oh, Public Staff, go ahead.

MS. KEYWORTH: Sorry. Public Staff also moves to enter into the record its Public Staff Grid Edge Panel Direct Cross Examination Exhibits 1 and 2.

CHAIR MITCHELL: All right. Hearing no objection, that motion will be allowed.

(Public Staff Grid Edge Panel Direct Cross Examination Exhibits 1 and 2 were admitted into evidence.)

CHAIR MITCHELL: All right. On Monday, September 19 --

MR. BURNS: Chair, one more housekeeping matter. It's John Burns for CCEBA. There's a number of witnesses the parties have discussed that potentially be an opportunity to excuse those witnesses since no one wishes to pose cross examination, understanding that the Commission would need to consider who those witnesses are. How would you like us to present that to you? Because we kind of like to let them know not to buy plane tickets.

CHAIR MITCHELL: Yeah. Understood. For the purposes of the record, I was hoping to wait for you-all to make the motions to excuse the witnesses and have their testimony entered into the record subsequent to the completion of Duke's direct case.

MR. BURNS: Okay.

CHAIR MITCHELL: Does that pose a problem? I don't anticipate not allowing for any of the witnesses to be excused, but do you need an order from the Commission?

MR. BURNS: I don't think I do. I just wanted to tell the witness -- Dr. Gonatas in particular, you don't need to buy a plane ticket from Philly. But I also didn't want to assume that the Commissioners had no questions.

CHAIR MITCHELL: All right. Well, we will wait until Duke finishes its direct case, and then I'll take motions from the intervenors on that evidence.

MR. BURNS: Okay. Thank you.

CHAIR MITCHELL: Do y'all need to be heard?

MR. JIRAK: No, nothing.

CHAIR MITCHELL: Okay. All right. Monday we will begin at 11:00, we will go to 5:00.

And then Tuesday, Wednesday, Thursday, and Friday we will begin at 9:30. So that's different from what I indicated earlier in this week. So Monday, 11:00, Tuesday through Friday, 9:30. We will go to 5:00 every day, except Friday we will end early.

All right. With that, any questions, Counsel?

(No response.)

CHAIR MITCHELL: All right. We're adjourned, thank you -- or we're off the record. Thank you.

(The hearing was adjourned at 3:03 p.m. and set to reconvene at 11:00 a.m. on Monday, September 19, 2022.)

CERTIFICATE OF REPORTER

STATE OF NORTH CAROLINA)
COUNTY OF WAKE)

I, Joann Bunze, RPR, the officer before whom the foregoing hearing was conducted, do hereby certify that any witnesses whose testimony may appear in the foregoing hearing were duly sworn; that the foregoing proceedings were taken by me to the best of my ability and thereafter reduced to typewritten format under my direction; that I am neither counsel for, related to, nor employed by any of the parties to the action in which this hearing was taken, and further that I am not a relative or employee of any attorney or counsel employed by the parties thereto, nor financially or otherwise interested in the outcome of the action.

This the 19th day of September, 2022.

JOANN BUNZE, RPR
Notary Public #200707300112