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1 COMMONWEALTH OF VIRGINIA
2 STATE CORPORATION COMMISSION
3 CASE NUMBER: PUR-2020-00035
4 ----------X
5 In re: Virginia Electric and Power Company's
6 Integrated Resource Plan filing pursuant to
7 Va. Code § 56-597 et seq.
8 ----------X

ORIGINAL

9 TRANSCRIPT OF EVIDENTIARY HEARING HELD BEFORE:
10
11 Commissioner Mark C. Christie, Chairman
12 Commissioner Judith Williams Jagdmann
13 Commissioner Jehmal T. Hudson
14
15 The Honorable Judith William Jagdmann,
16 Commissioner, Presiding
17
18 VOLUME 5
19 October 30, 2020
20 10:00 a.m. to 1:09 p.m.
21 Conducted Remotely
22
23 Job No.: 310951
24 Pages 1114 - 1255
25 Reported by: Lisa M. Blair, RMR, CRR

2020 NOV 20 A 10 58

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1 A P P E A R A N C E S
2
3 Honorable Judith Williams Jagdmann, Commissioner,
4 Presiding
5 Honorable Mark C. Christie, Commissioner Chairman
6 Honorable Jehmal T. Hudson, Commissioner
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1 I N D E X

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1 P R O C E E D I N G S
2 BAILIFF: The Commission resumes this
3 session.
4 JUDGE JAGDMANN: Thank you. We're here
5 today for closing arguments in Virginia
6 Electric and Power Company's Integrated
7 Resource Planning filing.
8 Before closing arguments, I want to
9 go over just a few things. For clarification,
10 I want to go over all exhibits have been
11 admitted into the record, except for the
12 following: 17 was not admitted, 27 we're
13 taking judicial notice of, 32 is under
14 advisement, 33 we're taking judicial notice of,
15 40 judicial notice, 41 judicial notice, 46 is
16 under advisement, 71 was not admitted, 83 was
17 not admitted, 84 was not admitted, and 85 was
18 not admitted.
19 Like I said, we're here for closing
20 arguments today. Actually I've put out a
21 couple of dates for the issue matrix. We
22 wanted the issue matrix to also include cites
23 to the record supporting your position. Is
24 there -- at the end of closing arguments I will
25 address the specific date. It is my hope that

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1 the parties -- we'll address that after closing
2 arguments. So without further ado --
3 MS. LINK: Your Honor?
4 JUDGE JAGDMANN: Yes.
5 MS. LINK: Just briefly, on Exhibit 46,
6 the Company, we withdrew our objection to
7 Exhibit 46. I just wanted to advise you of
8 that.
9 JUDGE JAGDMANN: Hearing no objection,
10 46 is admitted.
11 If anyone has any other issues with
12 respect to any other exhibits that I mentioned,
13 now would be the time --
14 MR. CLEVELAND: Your Honor, this is Will
15 Cleveland. You said Exhibit 32 is under
16 advisement. I was going to refer to that a
17 little bit in my closing statement, if that's
18 okay.
19 JUDGE JAGDMANN: You may refer to it,
20 yes.
21 MR. CLEVELAND: Thank you, Your Honor.
22 JUDGE JAGDMANN: You were having a
23 little bit of an echo, just so you know.
24 MR. CLEVELAND: Yes, Your Honor. What I
25 was trying to do was speak through my webcam

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1 mic to make sure my video popped up.
2 JUDGE JAGDMANN: Now you're fine.
3 You're up first. So let's proceed with your
4 closing argument, Mr. Cleveland.
5 MR. CLEVELAND: Thank you, Your Honor.
6 And just to begin, I had an exchange with Judge
7 Christie yesterday about some of the provisions
8 of the Virginia Clean Economy Act. And I was
9 planning to refer to some very specific
10 language. If the Commission finds it helpful,
11 I will be using and referring to Exhibit 14,
12 which has line numbers in it, just to make it
13 easier for anyone to follow along with the
14 points that I'm trying to make.
15 JUDGE JAGDMANN: Okay. Thank you.
16
17 CLOSING ARGUMENT OF APPALACHIAN VOICES
18
19 MR. CLEVELAND: Thank you, Your Honor.
20 Again, Will Cleveland from the Southern
21 Environmental Law Center on behalf of the
22 Environmental Respondent.
23 Since we don't have the overhead
24 projector, instead I'll use Exhibit 14.
25 Your Honor, my phone just dropped,

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1 and I'm now back on the mic. Can you hear me?
2 JUDGE JAGDMANN: Yes, we can.
3 MR. CLEVELAND: So I apologize for that.
4 I would like to start with what I think has
5 become a central issue in this case, which is
6 what exactly the Clean Economy Act mandates and
7 what it does not mandate. Interpretation of
8 the Clean Economy Act is a legal question that
9 we believe the Commission should decide in this
10 IRP because it directly bears upon what
11 Dominion will model for future IRPs. And the
12 VCEA no doubt does mandate some things, but it
13 does not mandate everything. This IRP does not
14 in our view present a least cost implementation
15 of the Clean Economy Act. In fact, I believe
16 Dominion Witness Thomas described it as a worst
17 case scenario. Staff Witness Myers also
18 confirmed that Staff does not believe this IRP
19 represents a least cost implementation.
20 Now, let's talk about what it does
21 mandate. It mandates retirements of certain
22 assets under 56-585.5 B, as in boy. It
23 mandates energy efficiency savings targets in
24 56-596.2. It raises the net metering cap in
25 56-594 to 6 percent. And it mandates a

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1 renewable portfolio standard in 56.585.5.
2 Specifically, 56-585.5 C as in cat of the Clean
3 Economy Act mandates that Dominion procure
4 renewable energy credits -- or RECs -- in an
5 ever increasing percentage of its load,
6 eventually reaching 100 percent of the
7 non-nuclear load by 2045. As Staff Witness
8 Abbott has testified, the lower the future
9 loads are, the lower the cost of complying with
10 this RPS, which is yet another reason the load
11 forecast -- and specifically the energy
12 efficiency impacts on that load forecast -- are
13 so critical. And I will discuss those later.
14 But right now I want to talk about
15 the specific admissions of solar, offshore wind
16 and storage that this IRP models. We do not
17 believe the VCEA mandates that Dominion procure
18 all 16 gigawatts of solar, all 5 gigawatts of
19 offshore wind and all 2.7 gigawatts of storage.
20 Section 56-585.5 D, as in dog, mandates only
21 that Dominion propose that amount of generation
22 and storage. It does not mandate that the
23 Commission approve all of it. I know Judge
24 Christie has separate concerns about offshore
25 wind that we discussed briefly yesterday, and I

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1 will address that, but I want to start with
2 just subsection D of 56-585.5. And I will
3 refer now to Exhibit 14, Your Honor.
4 Starting on page 24 of that
5 exhibit, 56-585.5 D requires Dominion to,
6 quote, "Petition the Commission for necessary
7 approvals." This is on line 1450. We see this
8 on line 1408. We see it on line 1450, line
9 1461, line 1468, line 1476 and line 1482. Over
10 and over, Dominion must petition for necessary
11 approvals. Nothing in subsection D says the
12 Commission is required to approve those
13 petitions. Other language in the Clean Economy
14 Act confirms that. On page 26 of Exhibit 14,
15 starting on line 1525, we find 56-585.5 D, as
16 in dog, subsection 4 which sets up the annual
17 RPS compliance docket. And I believe that
18 Dominion will be filing theirs no later than
19 this coming Monday. On line 1525 it says, Such
20 petition, an RPS compliance petition, shall
21 contain any request for approval to construct
22 such facilities pursuant to subsection D of
23 56-580, which is the CPCN statute, and a
24 request for approval or update of rate
25 adjustment clause pursuant to subdivision A 6

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1 of 56-585.1. Lower down on line 1530, In
2 determining whether to approve the utility's
3 plan and any associated petition request, the
4 Commission shall determine whether they are
5 reasonable and prudent.
6 The statute is clear, Your Honor,
7 that these resources are certainly in the
8 public interest. And while Dominion is
9 required to propose them, subsection D of
10 56-585.5, the RPS section, does not
11 predetermine whether any specific cost is
12 reasonable and prudent. Only the Commission
13 may determine that. And if the Commission
14 finds a specific cost is not reasonable or is
15 not prudent, the Commission may -- and in fact
16 in the past has denied an application, even
17 when that application or a specific type of
18 resource is in the public interest. Just last
19 year in Case Number PUR-2018-00100, which was
20 Dominion's grid mod case, the Commission
21 largely rejected that application stating --
22 and this is a quote -- all parties and Staff
23 also agree the statutory requirement that the
24 cost of a grid transformation plan must be
25 reasonable and prudent is neither nullified by,

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1 nor subordinated to, the statutory declaration
2 elsewhere that grid transformation projects in
3 general are in the public interest. We agree
4 with these conclusions, end quote. That same
5 reasoning applies here. Under the plain
6 language of the VCEA on line 1530 and 1531, the
7 Commission shall determine whether they are
8 reasonable and prudent. The language, Your
9 Honor, we believe is quite clear. The RPS
10 section does not legislatively predetermine the
11 reasonableness or prudence of any specific cost
12 in the RPS section. Only the Commission may do
13 so.
14 And this is where I get to Exhibit
15 32, Your Honor. If the Commission finds that
16 the plain language is ambiguous, the Supreme
17 Court of Virginia has found the legislative
18 history can be instructive. In Graves v.
19 Commonwealth, which is 805 S.E. 2nd 226 in 2017
20 the Supreme Court stated, quote, "Given the
21 ambiguity of the statute, we consult its
22 legislative history to ascertain its meaning.
23 Legislative history explains the anomalous
24 language," end quote.
25 The VCEA's legislative history

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1 makes clear that the General Assembly did not
2 at the final moment negate the Commission's
3 authority to determine whether any proposed
4 specific cost is reasonable and prudent. In
5 fact, the legislative history shows that the
6 General Assembly considered and ultimately
7 rejected the kind of mandatory language that
8 would impose unnecessary cost on customers. As
9 our witness Karl Rábago described, and as
10 Exhibit 32 makes clear, an earlier version of
11 the Clean Economy Act did, in fact, mandate all
12 of these resources. In that earlier draft,
13 Dominion was not required to petition; rather,
14 the language said that Dominion, quote, shall
15 construct. Even more tellingly, that earlier
16 version negated the Commission's cost oversight
17 function, because 56-585.5 subsection D in an
18 earlier draft began with an introductory clause
19 stating, quote, Notwithstanding the provisions
20 of subsections C or D of 56-585.1 or any other
21 provision of law, each phase 1 or phase 2
22 utility shall procure zero carbon electricity
23 generating capacity, as set forth in this
24 subdivision, end quote.
25 Subsection D of 56-585.1, as we

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1 know, is the savings clause that allows the
2 Commission to determine whether any specific
3 proposed cost is reasonable or prudent. The
4 earlier draft of the VCEA stripped the
5 Commission of this oversight power when
6 reviewing projects under 56-585.5 D. The final
7 bill as passed did not. At best, the Clean
8 Economy Act mandates that Dominion propose
9 projects. It does not mandate that the
10 Commission approve them. This is most akin,
11 Your Honor, to the $870 million energy
12 efficiency spending provision in the GTSA from
13 2018, which everyone, including Dominion,
14 agrees requires Dominion to propose that much
15 spending, but it does not require the
16 Commission to approve it. So that is the RPS
17 section of the Clean Economy Act.
18 I'd like now, Your Honor, to turn
19 to the offshore wind provisions contained in
20 56-585.1:11. I will concede that the role of
21 the Commission in that section is different
22 than in the RPS section, but that section --
23 the offshore wind section -- does not, contrary
24 to what some have argued, mandate approval of
25 the first tranche of offshore wind, no matter

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1 the cost. That section of the VCEA says -- and
2 this is on line 1193 of Exhibit 14, and I'll
3 tell you the page number. Page 20, Your Honor,
4 line 1193, it says, The Commission shall
5 determine -- sorry, it says, Cost shall be
6 presumed to be reasonably and prudently
7 incurred if the Commission determines that the
8 application meets three criteria, one of which
9 is the cost cap. And I went into this a little
10 bit with Judge Christie yesterday, but Your
11 Honor, we believe presumed is a very different
12 word than deemed. And there is Commission
13 precedent showing that sometimes the facts
14 overcome and rebut a legislative presumption.
15 In other words, Your Honor, even if Dominion
16 makes the showing that it has come under the
17 cost cap, the Commission can, on examination of
18 an entire record, find that the proposed costs
19 are still not reasonable and prudent.
20 This has happened before. On
21 September 1st, 2017 in the Rider U case, Case
22 Number PUE-2016-00136, the Commission denied
23 that application stating -- and this is a
24 quote -- The General Assembly, however, could
25 have, but did not, mandate approval of a

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1 strategic underground program at any cost, in
2 any manner of implementation, and no matter how
3 burdensome to customers in relation to the
4 benefits received; rather, the statute permits
5 the Commission to find, upon sufficient
6 evidence, that presumed facts have been
7 rebutted that we have done herein, end quote.
8 This is relevant, Your Honor,
9 because after the Commission properly denied
10 Rider U in 2017, the General Assembly did
11 exactly what the Commission found it had not
12 previously done, which was to mandate approval.
13 In 2018, the GTSA revised the code regarding
14 power line underground conversions. And what
15 was presumed reasonable and prudent came to be,
16 quote, deemed reasonable and prudent. And we
17 can actually see this, Your Honor. That
18 language is still in the code. And it's in
19 Exhibit 14 on page 12, lines 677 and 683 where
20 the GTSA said, quote, The conversion of any
21 such facilities on or after September 1st, 2016
22 is deemed to provide local and systemwide
23 benefits and to be cost beneficial, and the
24 costs associated with such underground
25 facilities are deemed to be reasonably and

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1 prudently incurred; and notwithstanding the
2 provisions of subsections C or D, shall be
3 approved for recovery, end quote.
4 Now, I will admit that both this
5 power line undergrounding section and the
6 offshore wind section contain a cost cap. But
7 in the GTSA if the cost caps were -- the costs
8 were under the cost cap, the law demands that
9 the underground conversion cost, quote, shall
10 be approved. There was no role for the
11 Commission to independently evaluate whether
12 the costs are reasonably and prudently
13 incurred. The statute makes that decision. In
14 fact, the Commission is expressly prohibited
15 from exercising its authority for power line
16 undergrounding under 56-585.1 D, which I would
17 again remind the Commission was a restriction
18 in an early version of the VCEA that is not in
19 the final bill.
20 The GTSA's provisions on
21 underground conversion is completely different
22 than what occurs in the offshore wind
23 rebuttable presumption in 56-585.1:11. In
24 fact, the VCEA expressly states on 1192 -- line
25 1192, which is on page 20, Your Honor. It

1 says, quote, The Commission shall determine the
2 reasonableness and prudence of any such costs.
3 And it further says on line 1202
4 that the Commission shall disallow costs, or
5 any portion thereof, only if they are otherwise
6 unreasonable and imprudently incurred.
7 Clearly the VCEA contemplates the
8 possibility that the Commission can, given the
9 right set of facts, deny that first tranche of
10 offshore wind under 56-585.1:11. I would
11 further note that none of this rebuttable
12 presumption applies to the second tranche.
13 Line 1189 says the presumption only applies to
14 between 2,500 and 3,000 megawatts of offshore
15 wind.
16 Now, I say all of this to talk
17 about what I believe the Commission's
18 responsibilities and authority is. We do
19 believe that offshore wind is an important
20 resource for Virginia's clean energy future,
21 and we think it is a necessary, complementary
22 load curve to solar; but we also believe the
23 Commission retains ultimate authority over
24 whether a specific proposed offshore wind
25 project costs are reasonable and prudent. We

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1 do want the offshore wind, but we want it as
2 competitively and low cost as possible. If
3 there is no ability for the Commission to
4 review the costs, then there is no incentive
5 for Dominion to get it in a least cost manner.
6 The same rationale actually applies
7 to energy storage, the same language, it is
8 required to propose. So I'm not going to go
9 through that all again line by line for the
10 sake of time.
11 But Your Honor, the reason I bring
12 all of this up is because in this IRP Dominion
13 has not modeled a scenario that contemplates
14 the possibility that the Commission might not
15 approve every single project proposed; and as a
16 result we do not have a scenario where Dominion
17 has selected and complied with the VCEA in a
18 least cost manner, where resources are only
19 built to the extent necessary to maintain
20 reliability or comply with the mandatory REC
21 buying portion of the RPS. Now, I am gratified
22 that Mr. Kelly yesterday on cross-examination
23 committed to actually doing that modeling
24 scenario in a future IRP. And I don't actually
25 believe that I have heard Dominion claim that

1 they believe that the VCEA mandates approval at
2 every single resource. Maybe Ms. Link will
3 address it in her closing, but I think it is
4 important for the Commission, for the General
5 Assembly, and for the public to see what it
6 will cost to implement the VCEA in a least cost
7 way. And we simply cannot get least cost
8 implementation if the Commission is required to
9 approve all 16 GW of solar, all 5 GW of
10 offshore wind, and all 2.5 GW of storage,
11 regardless of cost. We just don't get a least
12 cost implementation, and I don't think that's
13 good for anybody. So we would respectfully
14 request that the Commission at a minimum
15 require Dominion to do that least cost modeling
16 in future IRPs.
17 I'd like to now turn, Your Honor,
18 to the load forecast.
19 JUDGE CHRISTIE: Can I ask you a
20 question on that point?
21 MR. CLEVELAND: Of course, Your Honor.
22 JUDGE CHRISTIE: Before you leave the
23 topic, I just want to say a couple of things.
24 The first question, let's assume everything you
25 say is true. Let's assume everything -- your

1 legal interpretation, which you've given us
2 very articulately, is absolutely true. I would
3 note I think it was Mr. Shepherd -- Walt
4 Shepherd who said the first tranche of wind is
5 hardwired for approval. He can speak for
6 himself, but let's say every word you said is
7 true from a legal interpretation standpoint.
8 My question is: Is this the vehicle, this IRP
9 proceeding, to make those legal determinations
10 in advance? I mean, as we noted and Mr. Kelly
11 mentioned yesterday, they're going to be filing
12 their RPS compliance document or application,
13 which I understand gets down to the actual
14 approval of CPCNs and RACs. There's going to
15 be a lot of CPCN and RAC proceedings in the
16 three years before the next IRP. The next IRP
17 is not until -- I think Mr. Kelly answered that
18 question to me -- 2023. So is this the vehicle
19 to be making the legal determinations that
20 you've just outlined very well, or do they have
21 to wait -- or more appropriately wait for the
22 actual RAC/CPCN proceedings -- and again, we're
23 going to get one maybe by the end of the day.
24 So answer if you would, please, is this the
25 vehicle -- and by the way, you laid it out

1 really well. I hope you're going to be present
2 in every one of those future CPCN/RAC
3 proceedings making that argument. And even if
4 you're not, somebody has the video recording,
5 so I hope they'll at least use it if you're not
6 here to make that very argument. But answer
7 the question, please, about the vehicle,
8 Mr. Cleveland. Is this the vehicle, versus
9 waiting more appropriately for the actual
10 RAC/CPCN proceedings?
11 MR. CLEVELAND: Your Honor, I'd be happy
12 to address that question. And to answer your
13 other question, I fully intend to be in every
14 single one of these CPCN proceedings. I think
15 I've heard many people refer to the Clean
16 Economy Act as the energy regulatory lawyer
17 employment security act, and I think it is very
18 much that.
19 Your Honor, here's why I think this
20 is important in the IRP context. We do not
21 know what the VCEA implementation pathway looks
22 like if I'm right. We don't know what the plan
23 would be. We don't know what the resource mix
24 would be. We don't know what the costs would
25 be. There is nothing in this IRP that shows

1 what the implementation looks like, and I'm not
2 asking the Commission to rule now on whether it
3 is going to approve or deny any specific
4 application. I do not think the IRP is the
5 appropriate vehicle for that. And I believe
6 the Commission has been more than abundantly
7 clear that an IRP is not the opportunity to
8 opine on whether to approve or deny a CPCN.
9 All I am asking right now is for the Commission
10 to clarify whether it is possible that the
11 Commission might not approve some of these
12 things.
13 I mean, Judge Christie, earlier in
14 opening statements you seemed to indicate that
15 you did not believe it was possible for the
16 Commission to deny. If that is true, future
17 IRPs will look one way. If I am correct and
18 the Commission has the authority inherent in
19 its oversight powers to deny a specific project
20 based on costs because they are not reasonable
21 and prudent, then I think the public and the
22 General Assembly and this Commission are
23 entitled to see what an IRP plan in that legal
24 world would look like.
25 Again, I am not asking you to rule

now on whether you're going to actually deny offshore wind. In fact, my dearest hope is that Dominion will do everything in its power under the competitive procurement provisions of the offshore wind section 56-585.1:11 to drive those costs down. I hope that they come in well below the EIA numbers, as published in 2019, because even the 2020 numbers are about $2 billion lower, I think. So I am hopeful that as the offshore wind industry in the United States develops, costs will drive down considerably; and by the time Dominion comes in for approval, the costs are so low that we all believe, based on the record, that it should be approved. I am not asking the Commission to say now it's going to deny offshore wind, but I do think it is important to ensure that we get the lowest cost project possible. The Commission clarified now for purposes of CPCNs and IRPs that it can review whether any specific project cost is reasonable and prudent.

I don't know if that answers your question sufficiently, but that's my belief, Your Honor.

JUDGE CHRISTIE: Okay. Well, that's what I was asking was your belief. That was a good articulate answer. Thank you.

MR. CLEVELAND: Turning now away from the legal issue of --

JUDGE CHRISTIE: And by the way, you mentioned a comment I made earlier. We haven't prejudged any future case about what we do or don't do, obviously, at this point. And that's the very point you're asking is effectively to make that determination, or at least to a certain extent. And so I was asking if this is the vehicle.

MR. CLEVELAND: Again, Your Honor, I don't believe -- I do not intend -- and if it comes across that I am, I need to correct myself -- I am not asking the Commission to determine now how you will rule in any specific case. This is not the appropriate vehicle for that.

JUDGE CHRISTIE: Right. I understand.

MR. CLEVELAND: Turning now, Your Honor, to the load forecast. If I'm right and the Commission has the authority to review specific projects, the load forecast and getting that

1 right is essential. In a world where Dominion
2 only builds what is necessary for energy and
3 capacity to the extent that self-builds are
4 lower cost in the market, it is imperative that
5 we use a credible load forecast. That load
6 forecast, as we have seen, lead to unnecessary
7 expense. As an example, Dominion Witness Kelly
8 testified that Dominion might need to incur
9 $8.4 billion in transmission expenses to comply
10 with the VCEA to meet winter peaks. He
11 admitted, however, that that number is
12 somewhere between low and high estimates, and
13 that those estimates are themselves very rough
14 and preliminary, but $8.4 billion is a lot of
15 money. Mr. Kelly also testified that the
16 transmission costs are for meeting winter
17 peaks. And he admitted that if the winter
18 peaks are lower than in this IRP forecast, just
19 that single line item of transmission cost
20 would be lower, or at least it could be lower.
21 That's just one example of how the load
22 forecast can change -- directly influence the
23 costs going forward.
24 The Company has been directed by
25 this Commission to use PJM's load forecast. So

1 I'm not criticizing the Company for having done
2 that. They have complied with the Commission's
3 orders as they were required to do. But as our
4 witness Mr. Wilson has made clear, PJM has made
5 some pretty significant changes in the past
6 year to its load forecasting methodology. In
7 fact, I think Company Witness Thomas said this
8 yesterday: PJM frequently makes changes -- and
9 he does not like the frequency with which they
10 make changes to that methodology, because I
11 believe he said there is no consistency to it.
12 There are, we believe -- and as Mr. Wilson has
13 made clear -- major flaws and discrepancies
14 with PJM's methodology. PJM may fix it. It
15 might. Currently many of the zones show
16 problematic changes in their forecast.
17 We believe that it is far better
18 for Dominion to implement Mr. Wilson's changes
19 to its methodology because the Commission has
20 control over that forecast, as he testified, in
21 a way that the Commission does not have control
22 over PJM's. Dominion has admitted that they
23 have, in fact, adopted some changes based on
24 their outside consultant which overlap with
25 some of Mr. Wilson's recommendations. We would

1 request that the Commission require Dominion to
2 at least prepare one load forecast that
3 incorporates all of Mr. Wilson's
4 recommendations as a sensitivity at the least.
5 The long-term data center forecast in
6 particular is a concern. It is flawed. The
7 Bass Diffusion Model is a bad method to use
8 here because it arbitrarily fits a curve to
9 historical data. Mr. Wilson shows that it's
10 even worse than that. The Company's
11 consultant, Itron, didn't even fit the curve
12 correctly. As Mr. Thomas testified, apparently
13 Itron then made the data center forecast even
14 more arbitrary. According to him Itron, quote,
15 eyeballed up the data center forecast based on
16 a separate forecast Dominion provided. Now, if
17 we're going to be using any of these forecasts
18 in CPCN proceedings, should we really be
19 spending millions of dollars of customer money
20 on new generation products based on curves that
21 have been, quote, eyeballed up? That doesn't
22 really seem like a sound methodology for us to
23 approve projects.
24 Environmental Respondent continues
25 to believe the Company should improve its load

1 forecast. I've got four specific
2 recommendations: Requiring the Company to use
3 a ten-year historical estimation period;
4 weather normalizing actual peaks; ordering the
5 Company to stop using the arbitrary Bass
6 Diffusion Model for data centers, since that is
7 the only sector showing real growth and it is
8 imperative we get that sector correct; provide
9 higher and lower long-term load forecast
10 scenarios to reflect uncertainties about the
11 pace of economic growth.
12 Speaking of load forecasts and how
13 imperative they are to get right, turning now
14 to energy efficiency. As Mr. Abbott testified,
15 energy efficiency can benefit customers in a
16 number of ways. It can lower consumption,
17 which means lower bills for them. It can
18 reduce fuel costs for the system. And it can,
19 when deployed properly, avoid or delay new
20 supply side investments.
21 But the Company in this IRP did not
22 model energy efficiency in a way to allow for
23 or maximize these benefits, as Staff Witness
24 Abbott makes clear. Dominion makes the
25 assumption that there are no mandatory energy

1 efficiency targets past 2025. They have said
2 that -- they've acknowledged the Commission has
3 the authority to set those targets. They
4 didn't know what those targets were going to
5 be, so they assumed zero. To assume a target
6 of zero here out of speculation is not
7 reasonable. Assuming zero distorts all of the
8 pieces of the IRP that follow from it. Future
9 IRPs should include, at least as a sensitivity
10 or an alternative scenario, reasonable non-zero
11 target assumptions for the post 2025 period. I
12 believe Mr. Abbott testified that this is the
13 exact sort of modeling that would be helpful
14 for the Commission to see, so as to avoid
15 unnecessary costs.
16 And speaking of avoiding
17 unnecessary costs, I'm going to turn now to the
18 combustion turbines in this IRP. This IRP
19 contains 970 megawatts of new natural gas
20 combustion turbines with the first one coming
21 online on January 1st, 2023, as Mr. Kelly
22 testified. He further testified that to meet
23 that online service date, Dominion would need a
24 CPCN from this Commission between April and
25 June of 2021, which is next year. Under the

1 Clean Economy Act, specifically enactment
2 clause 6, the Company cannot legally receive
3 that CPCN. Enactment clause 6 discusses a
4 report to the legislature prepared by the
5 Secretaries of Natural Resources and Commerce
6 and Trade that will advise on how best to
7 achieve zero carbon generation by 2045. That
8 report is due on January 1st, 2022. And
9 enactment clause 6 says that the Commission,
10 quote, Shall not issue a Certificate of Public
11 Convenience and Necessity for any
12 investor-owned utility to own, operate or
13 construct any electric generating unit that
14 emits carbon as a byproduct of combustion fuel
15 to generate electricity. That report is due
16 January 1st, 2022. So prior to that date, this
17 Commission may not issue a CPCN for the CTs,
18 and yet this IRP shows a CT for which Dominion
19 needs a CPCN next year, which it cannot legally
20 get. Even if a CT wasn't illegal to actually
21 apply for, there is nothing supporting it in
22 this IRP. They are included as a placeholder,
23 except there's nothing more than a, quote,
24 high-level very preliminary study supporting
25 the reliability claims. And Mr. Kelly on

1 direct and again on rebuttal testified that it
2 is possible -- and Judge Jagdmann, you weren't
3 here for this, but this was yesterday on
4 cross-examination. I think it was a question
5 you were trying to get at. Mr. Kelly conceded
6 that it might be lower cost for the ratepayers
7 for Dominion to operate its existing gas
8 combined cycles and combustion turbines more
9 rather than building a new CT. Mr. Kelly
10 conceded that is something they absolutely have
11 to study as they do this reliability analysis,
12 and we believe it's very likely operating an
13 existing unit more is cheaper for the ratepayer
14 than building a new unit, especially when that
15 new unit is almost guaranteed to be a stranded
16 asset under the provisions of the Clean Economy
17 Act.
18 I have been talking a long time.
19 I'm now going to turn to my prayer for relief.
20 And specifically, Judge Jagdmann, I'm going to
21 answer your question: What do we want you to
22 do? We do not want to relitigate another IRP
23 next year. That would not be good for anybody.
24 Dominion has a rate case. It will be the first
25 one since 2015. We are all going to be

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1 focusing on that. So we are not asking the
2 Commission to reject this IRP and require them
3 to refile next year. We are, however, asking
4 the Commission to enter an order in this case
5 clarifying that subsections D and E of 56-585.5
6 do not impose mandatory construction
7 obligations because the Commission retains
8 authority to approve or deny any particular
9 project on a case-by-case basis. This will, in
10 turn, produce at least one scenario -- and
11 again, Mr. Kelly has already conceded and
12 committed to doing it -- where we see a lower
13 cost implementation because they are only
14 building resources on an as-needed basis. We
15 would request an order requiring Dominion to
16 adjust the load forecasting methodology
17 consistent with Mr. Wilson's recommendations.
18 We would like the order to require Dominion in
19 at least one sensitivity to make reasonable,
20 non-zero assumptions about the EE targets post
21 2025 to reduce future supply side energy and
22 capacity needs, which would in turn, we hope,
23 assuming they were a cost effective resource,
24 energy efficiency programs drive down ratepayer
25 costs. In the order we would like to require

Dominion to include at least one model run -- and again, Mr. Kelly has already committed to this -- where the model only selects resources on an as-needed basis after maxing out energy efficiency.

Judge Christie has several times brought up the RPS docket, which may start today or on Monday. We believe that there are several issues in this case that we will also have to address there, the load forecast being one of them, and also the extent to which any particular resource is mandated versus optional for the Commission to approve on a reasonable and prudent analysis.

Thank you for your indulgence in the time that I have taken. I'll be happy to address any additional questions that the Commission may have.

JUDGE JAGDMANN: Thank you, Mr. Cleveland. Mr. Reisinger?

CLOSING ARGUMENT OF MR. GLEN BESA

MR. REISINGER: Good morning, Your Honor. May it please the Commission, again,

1 for the record, this is Will Reisinger, and I
2 am representing a Dominion residential customer
3 in this case, Mr. Glen Besa. Your Honor, I
4 would like to start, if I could, and follow up
5 on some of the comments that Mr. Cleveland just
6 made about the interpretation of the Clean
7 Economy Act.
8 JUDGE JAGDMANN: It's your closing. You
9 structure your closing the way you want to.
10 JUDGE CHRISTIE: Can you speak a little
11 louder, Mr. Reisinger? You're a little bit
12 lower volume than Mr. Cleveland. Can you ramp
13 it up a bit?
14 MR. REISINGER: You want me to talk
15 louder, Your Honor?
16 JUDGE CHRISTIE: Yes, please.
17 MR. REISINGER: Okay. I will.
18 First, let me say I agree with what
19 Mr. Cleveland said that the Clean Economy Act
20 does include mandates, but it does not mandate
21 everything. And I think that's true for
22 Chapter 23 as a whole. And the way I think
23 about it is that the code includes a hierarchy
24 of preferences. Mr. Cleveland referenced some
25 sections of the code that are mandates that do

1 require the Commission to approve certain
2 costs. An example of that was undergrounding
3 costs that are, quote, deemed to be reasonable
4 and prudent. And the code provides that these
5 costs, quote, shall be approved for recovery by
6 the Commission. That is obviously mandatory
7 language, and the Commission has little or no
8 discretion to deny those types of projects,
9 provided they fit within the statutory
10 parameters.
11 There is also a middle level of
12 preference which Mr. Cleveland cited, the
13 offshore wind language, where there is a
14 presumption that certain offshore wind costs
15 will be prudently incurred. Code section
16 56-585.1 provides that certain offshore wind
17 costs, quote, Shall be presumed to be
18 reasonably and prudently incurred. This is
19 also a situation where the presumption could be
20 overcome by evidence presented by a party to a
21 case. And this is a situation where the
22 Commission still retains some discretion over
23 costs. The lowest level of preference in the
24 code are for projects that are declared to be,
25 quote, in the public interest. And Chapter 23

1 provides that a lot of type of -- a lot of
2 types of projects are, quote, in the public
3 interest. And that includes solar projects,
4 onshore wind projects, offshore wind projects,
5 undergrounding projects. For purposes of my
6 client's concern, pumped hydro projects located
7 in southwest Virginia are also declared to be,
8 quote, in the public interest.
9 This language is a clear preference
10 from the General Assembly. It's an expression
11 of the General Assembly that they support this
12 type of generation technology, but it's not a
13 mandate for the Commission to approve any
14 particular project or approve cost recovery
15 associated with any particular project.
16 Mr. Cleveland cited a couple of
17 examples in his opening statement, including
18 grid transformation costs which were denied by
19 the Commission.
20 I'll also point out for the record
21 that the Commission rejected a certificate of
22 public convenience request filed by Dominion in
23 Case Number PUE-2015-0006. This was a request
24 to construct a small solar facility. And at
25 that time the statute provided that small solar

1 facilities were, quote, in the public interest.
2 The Code of Virginia has also for a
3 long time provided that nuclear development
4 costs are, quote, in the public interest. That
5 language was struck by the General Assembly
6 this year, but it was in place between 2007 and
7 this year. And throughout that time I believe
8 this Commission and Dominion and the
9 stakeholders agreed that the Commission
10 retained jurisdiction to evaluate the
11 reasonableness and prudence of nuclear
12 development expenses that were declared to be
13 in the public interest. There are several
14 other places within Title 56 where I believe
15 the Commission clearly has the jurisdiction and
16 the authority to review the reasonableness and
17 prudence of costs that are declared to be,
18 quote, in the public interest.
19 And one final point on this.
20 Mr. Cleveland cited several rules of statutory
21 construction. Another foundational rule of
22 construction is that statutes should not be
23 interpreted in a manner that would result in an
24 absurd result. And if the Commission were to
25 take the view that all projects that are

1 declared to be public interest have to be
2 approved and all those costs have to be passed
3 on to the customers, I think that would result
4 in an absurd situation. With regard to pumped
5 hydro facilities in southwest Virginia, for
6 example, the statute says that one or more
7 pumped hydro facilities located in southwest
8 Virginia are, quote, in the public interest.
9 Certainly it would not be reasonable to expect
10 Dominion or Appalachian Power Company to come
11 forward with multiple requests to construct
12 large, expensive, multibillion-dollar pumped
13 storage facilities; and it would not be
14 reasonable to expect that the Commission would
15 have no authority to deny cost recovery for
16 those proposals.
17 Your Honor, I'll move on to the
18 merits of this case and the evidence that you
19 heard this week. There has been a lot of
20 discussion about the Clean Economy Act which
21 was passed this year. I think we can all agree
22 that this was historic legislation that is
23 going to require the decarbonization of
24 Dominion's generation system. This is an
25 important public policy, but it's also going to

1 require significant investments and significant
2 costs. That heightens the importance of the
3 planning process, and it makes it more critical
4 to ensure that Dominion only invests in
5 reasonable projects that are required to comply
6 with the Clean Economy Act or are required for
7 the Company to provide quality and reliable
8 service.
9 My client intervened in this case
10 to evaluate one particular aspect of the
11 Company's 2020 plan, and that was the Company's
12 decision to include a very expensive pumped
13 hydro resource in each of its modeling
14 scenarios. And that resource is a proposed 300
15 megawatt pumped storage facility that would be
16 located in southwest Virginia. The Company
17 projects that the capital costs for this 300
18 megawatt project would be $2.9 billion. At the
19 same time, the Company testified this week that
20 it is also considering pursuing an even larger
21 project, potentially as large as 800 megawatts,
22 in which case the costs to customers would be
23 orders of magnitude larger.
24 The evidence in this case showed
25 that this resource was not included in the IRP

1 because it was needed to comply with any of the
2 Clean Economy Act requirements. The Clean
3 Economy Act did not say anything about pumped
4 storage resources, except to explicitly state
5 that this type of generation does not qualify
6 as renewable energy and cannot be used for
7 compliance with the renewable portfolio
8 standard. The Act does require Dominion to
9 propose a significant amount of new storage
10 resources, but it does not call out this
11 particular technology.
12 The evidence also showed that this
13 project was not included in the IRP based on
14 economic merit. The Company admitted that it
15 forced its model to select this resource.
16 Ms. Cusick testified for Mr. Besa, explained
17 that based on the Company's own data, pumped
18 storage is not cost competitive with batteries.
19 On an overnight construction cost basis, pumped
20 storage is over three times the cost of battery
21 systems. And on an LCOE basis -- or a
22 levelized cost of energy basis -- pumped
23 storage is over 77 percent more expensive than
24 battery storage.
25 You also heard testimony from

1 Dominion Witness Kelly this week that pumped
2 storage is a, quote, mature technology, meaning
3 the costs are stacked; whereas batteries are an
4 emerging technology, and the technology costs
5 are expected to continue to decline. This
6 means that the delta between battery storage
7 costs and pumped storage costs will continue to
8 increase throughout the planning period.
9 The evidence also showed that 300
10 megawatt pumped storage facility was not
11 included in the plan for reliability reasons.
12 This facility would be located outside of
13 Dominion's service territory within the
14 transmission zone of American Electric Power.
15 Ms. Cusick testified that the Company did not
16 cite any transmission constraints or any other
17 need that couldn't be satisfied by the
18 Company's existing storage resources. And on
19 this point you also heard testimony that the
20 Company already has in its generation portfolio
21 today the world's largest pumped storage
22 facility. The Company calls its Bath County
23 pumped storage facility the world's
24 largest battery. The evidence showed this
25 facility, if it was needed, could run at a

1 capacity factor in excess of 40 percent, but
2 the evidence shows that it has not been needed
3 in recent years. In 2019 this facility ran at
4 a capacity factor of only 12 percent, and it is
5 forecasted to run even less throughout the IRP
6 planning period. In 2030, for example, which
7 is the same year that Dominion proposes to add
8 300 megawatts of new pumped storage to its
9 system, it projects that its Bath County
10 facility will run at a capacity factor of only
11 6.3 percent.
12 So Your Honor, I think there's a
13 lot of evidence in this case to show that the
14 decision to include this resource in all of the
15 IRP planning scenarios was not reasonable.
16 And that brings me to the statute.
17 We talked about the IRP statute a lot this
18 week, and this requires the Company to review
19 an Integrated Resource Plan and make a
20 determination as to whether it is reasonable.
21 We submit that the Company's decision to force
22 its model to include an uneconomic resource
23 that is not needed to comply with the Virginia
24 Clean Economy Act was not reasonable. And that
25 is the finding that we will request the

1 Commission make in its final order.
2 I'll talk a minute about why it's
3 important for the Commission to address this
4 issue now and not in the next IRP case three
5 years from now, and not in a certificate case
6 sometime down the road. The Company testified
7 in this case that it is spending money on this
8 facility now. Staff Witness Myers, in Exhibit
9 B to her testimony, shows the projected capital
10 spending on this project over the next several
11 years before the Company would come to the
12 Commission for a certificate.
13 You also heard testimony from
14 Attorney General Witness Scott Norwood, who
15 said that it's important to address the
16 Company's capital spending now, instead of
17 waiting for some future proceeding.
18 Mr. Norwood was speaking about capital spending
19 in general. But he said that, quote, if we
20 come back in a few years and the Company has
21 already spent millions of dollars, it's hard to
22 stop that. There's support in the record for
23 Mr. Norwood's concern. In its 2020 Integrated
24 Resource Plan, Dominion states that it has
25 stopped development work on a third nuclear

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1 reactor at the North Anna Power Station. This
2 is a project on which the Company spent
3 hundreds of millions of dollars without
4 Commission approval. Mr. Kelly this week said
5 the Company may have spent about $600 million
6 on this project. And he admitted that
7 customers have been charged $300 million for
8 this project, which is unlikely to ever produce
9 a kilowatt hour of electricity. So I think
10 that's an example of why it's important for the
11 Commission to address major areas of concern,
12 including major capital spending proposals, in
13 IRP cases.
14 Just to conclude, Your Honor, in my
15 opening statement I said that there were some
16 red flags associated with this aspect of the
17 Company's planning, and I think the evidence
18 this week has borne that out. Based on the
19 evidence presented in this case, Dominion's
20 decision to include a very large and very
21 expensive pumped storage facility in its 2020
22 IRP was not reasonable. We request that the
23 Commission make that finding in its final
24 order. I appreciate your attention, Your
25 Honor, and I have enjoyed participating in this

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1 case.
2 JUDGE JAGDMANN: Thank you,
3 Mr. Reisinger. Mr. Burcat?
4
5 CLOSING ARGUMENT OF MAREC ACTION
6
7 MR. BURCAT: Yes, Your Honor. Your
8 Honors, I appreciate the opportunity to make
9 this closing statement on behalf of my
10 organization, MAREC Action. We support the
11 development of utility scale solar and utility
12 scale onshore and offshore wind here in
13 Virginia and in the region. We are very
14 encouraged with the opportunities presented by
15 the passage of the Virginia Clean Economy Act,
16 VCEA. Our members are already working
17 diligently to help meet the requirements of
18 this important piece of legislation.
19 I'd first like to address the issue
20 of solar capacity factors utilized in this IRP,
21 specifically in plans B and C. I do realize
22 that this was also an issue in the previous
23 Dominion IRP. Recognizing that this is a
24 forward-looking IRP, the Company used a 25
25 percent capacity factor for these plans, which

1 is -- which are the capacity factors associated
2 with the solar technology of the projects being
3 developed by Dominion. We agree with the
4 Company in this regard. As you have heard,
5 Staff disagrees with the use of forward-looking
6 capacity factors, and believes that the Company
7 should be bound to a three-year historic
8 average of 19 percent for the solar capacity
9 factors in plans B and C, similar to what the
10 Commission had determined in the previous IRP.
11 Since the last case, Dominion has taken major
12 steps to improve its existing solar fleet and
13 has utilized solar technology that indicates
14 that a 25 percent capacity factor is
15 appropriate. At pages 6 and 7 of his rebuttal
16 testimony, Company Witness Mitchell
17 specifically addressed this issue. He
18 testified that the Company's use of historical
19 capacity factors is not representative of the
20 longer term expected capacity factors in this
21 case. Specifically, he testified -- and I
22 quote from page 6, line 18 of his testimony,
23 his rebuttal testimony -- I quote, The Company
24 has seen significant improvement in the
25 performance of the affected facilities. As an

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1 example, for nine months -- nine projects
2 retrofitted with fiber, the transfer trips went
3 from a high of 411 in 2018 to only three trips
4 to date in 2020. And he filed his testimony I
5 believe in September of this year. Similarly
6 the lost megawatt hours in 2018 were 8,700
7 compared to 23 megawatt hours to date in 2020.
8 The historical capacity factor does not account
9 for these improvements, end of quote.
10 What this shows is that in addition
11 to relying on newer technology to improve its
12 solar capacity factors, it has also retrofitted
13 some older communication technology that has
14 dramatically improved the efficiency of its
15 existing solar fleet, and consequently will and
16 has shown substantial improvement in its
17 capacity factors. We recommend that the
18 Commission recognize these significant upgrades
19 and improvements and accept the forward-looking
20 capacity factors as supported by Dominion in
21 this case.
22 I would next like to address a
23 concern that Dominion raised in the IRP that
24 relates to having sufficient reliability in the
25 winter months, given that it will have a

1 substantial and growing solar fleet as the VCEA
2 renewable energy requirements ramp up over the
3 next ten to 15 years. The Company's concern is
4 that solar energy provides less capacity in the
5 winter than the summer, and there would be a
6 shortfall in necessary resources with the sole
7 reliance on these resources, especially given
8 that Dominion is a winter-peaking utility in
9 Virginia. The current concern seems to be
10 driving Dominion's plan to preserve 9,700
11 megawatts of natural gas powered generation and
12 adding 970 megawatts of natural gas powered
13 combustion turbines as a placeholder, as it
14 says, to address probable reliability problems
15 resulting from retirements and the buildup of
16 renewable energy in each of its plants.
17 We certainly do not minimize any
18 reliability concerns, and recognize that this
19 is the most important function of a utility;
20 however, we believe it is important for
21 Dominion to keep investigating alternatives to
22 maintaining and potentially expanding its --
23 alternatives to maintaining and potentially
24 expanding its natural gas fleet, when it has
25 responsibility under the VCEA to begin a

1 replacement program for its fossil fuel
2 generation. We have heard testimony, and it is
3 addressed in the IRP, that energy storage is no
4 longer an emerging technology. There are
5 constant improvements to this technology and
6 the price is dropping markedly, making this a
7 more feasible and cleaner alternative over
8 time. This technology will be implemented as a
9 result of the VCEA, but it should also be
10 closely examined as to how it may help meet
11 energy and capacity requirements on Dominion's
12 system, especially in the winter months.
13 We have heard from Company Witness
14 Robert Thomas on cross-examination of his
15 testimony and in his support of Section 1.8 of
16 the IRP on page 17 of the IRP, that clean
17 hydrogen formed as a result of generation of
18 wind and solar generation can be stored and
19 utilized to generate electricity when the wind
20 is not blowing or the sun is not shining.
21 While we realize that technologies like these
22 are still emerging, they should be considered
23 and investigated as potential reliability
24 agents. Hydrogen produced from renewable
25 energy has shown great promise, and is part of

1 the system planning process in some European
2 countries.
3 Other elements of a reliable system
4 include transmission build-out to the system to
5 ensure the ability to import and export
6 electricity supply as needed; transmission and
7 distribution upgrades to reduce congestion on
8 the system; and working closely with PJM to
9 ensure that Dominion can take full advantage of
10 PJM's balancing system, as well as the other
11 ancillary services needed for a reliable
12 system.
13 Wind and solar energy are in their
14 infancy in Virginia, but the VCEA mandates
15 significantly increasing amounts of these
16 technologies to be part of Dominion's resource
17 mix, approximately 30 percent by 2030. The
18 August 2020 California rolling blackout serve
19 as a prime example as far as the need to
20 appropriately plan a system not just for the
21 addition of renewables, but for overall system
22 reliability. We have heard the concerns raised
23 by some Company witnesses over the California
24 rolling blackouts event this past August,
25 suggesting renewables were a primary concern,

1 but there were -- but, in fact, there were
2 multiple factors at play there. Two of the
3 major culprits were an undue amount of thermal
4 energy generation being offline during the heat
5 wave and a lack of available -- of the
6 availability of outside electricity supply
7 imports that California relies on.
8 MAREC action believes that a
9 holistic approach to planning is needed going
10 forward. We recommend that the Company write a
11 scenario in its next IRP that takes into
12 account all of these means to develop a more
13 reliable system in order to get a sense of the
14 cost and the benefits of these technologies and
15 other potential technologies that are showing
16 promise today and in the future.
17 One element -- other element of
18 reliability that's important to address, as
19 indicated, Dominion has stressed it is a
20 winter-peaking utility. It claims in Section
21 5.6.1 of the IRP, page 96, that it supports a
22 build-out of solar energy, but notes that this
23 energy resource is not necessarily sufficiently
24 available during winter peaks. Company Witness
25 Kelly at page 19 of his rebuttal testimony

1 testified as to the complementary nature of
2 wind and solar resources planned to be on the
3 Dominion system. The context of this portion
4 of the testimony was responding to Staff
5 Witness David Dalton's testimony that the
6 Company should have developed at least one plan
7 that substitutes additional solar for the
8 second offshore wind tranche of 2,556
9 megawatts. We contend that such a plan is
10 unnecessary, as that would further exacerbate
11 Dominion's claimed winter peaking issue. This
12 could potentially create a much more
13 significant planning challenge for Dominion.
14 Offshore wind energy will help balance the
15 winter peak system whereby wind and solar work
16 together in a complementary manner due to their
17 varying seasonal characteristics.
18 Finally, MAREC Action would just
19 recommend that before the Commission makes a
20 decision on moving forward with the FERC
21 minimum offer price rule decision like electing
22 the -- potentially electing the fixed resource
23 requirement alternative, which is commonly
24 called an FRR, the Company should have some
25 type of proceeding -- the Commission should

1 have some type of proceeding to determine the
2 pros and cons of moving forward in this regime.
3 Such a decision could have long-term
4 ramifications for the cost of capacity and tie
5 Dominion's customer to a five-year mandatory
6 period under this alternative. We're not
7 advocating against the FRR, but we suggest a
8 review of this construct and other alternatives
9 before any major decision is made.
10 And just to list out a couple of
11 our asks in this case. First, as we mentioned,
12 we would recommend that the Company be allowed
13 to utilize the 25 percent capacity factor used
14 in plans B and C. We think that future
15 planning should include scenarios involving
16 storage -- and this is planning for
17 reliability -- storage, transmission, emerging
18 technologies, and other alternatives to
19 existing natural gas and new CTs; that the
20 Commission should not accept Staff's
21 recommendation for solar to replace offshore
22 wind in this scenario; and finally, again,
23 having some kind of proceeding to address the
24 FERC MOPR and any alternatives the Company may
25 be interested in selecting under that order.

We appreciate the opportunity, again, to make this closing statement, to participate in this case. And we look forward to your order in this matter. Thank you very much.

JUDGE JAGDMANN: Thank you. Mr. Shepherd for NRDC?

CLOSING ARGUMENT OF NRDC

MR. SHEPHERD: Thank you, Your Honor, and may it please the Commission. I first want to acknowledge the Company's hard work in producing a voluminous IRP, and doing so under unique time constraints. And NRDC's statements here and our request for relief do not go to those efforts or to the good faith under which they were clearly undertaken.

That said, the 2020 IRP is unreasonable due not to the Company's gargantuan efforts, but due to three key unjustified decisions the Company made, which directly result in an IRP which is unreasonable for the Commonwealth to live with until 2023. As a result of those three Company decisions,

1 the IRP is not only not useful as a planning
2 document, it also does not comply with two
3 statutory provisions in the IRP statute and at
4 least one prior Commission order which I will
5 delineate in a moment. Just as important to
6 this finding of unreasonableness is that the
7 Company has provided no compelling reason for
8 making these three decisions. And unjustified
9 decisions resulting in an unuseful IRP is
10 unreasonable, and it should be declared so by
11 the Commission and be remedied with a simple
12 non-litigated refiling that certifies the
13 Company made the three easy fixes to these
14 three core deficiencies, which fixes I will
15 discuss in my conclusion.
16 The first key unjustified decision
17 the Company made was not allowing PLEXOS to
18 select optimized resources, which had they done
19 so, would have provided some semblance of a
20 reasonable cost plan or at least provided some
21 range of potential costs we can expect. That
22 violates the IRP statutory requirement to
23 include, quote, compliance options to minimize
24 effects on customer rates of environmental
25 regulations. This decision also resulted in

1 what, as Staff succinctly put, not four plans
2 but one Company-directed plan, which contains
3 excess builds, excess costs, and therefore
4 little real-world planning value. The Company
5 provided no rationale for this sweeping
6 decision, other than a vague notion of time
7 constraints. That is not valid on its face.
8 Allowing the model to choose would have
9 literally taken less time than handpicking
10 resources, not more. Even the Company has
11 agreed that a non-forced plan would be useful,
12 but prefers to wait three years to provide one
13 in a full IRP proceeding. But this year is
14 2020, and it would be unreasonable to deprive
15 the Commission and the Commonwealth of a
16 non-Company-chosen, lower-cost full IRP plan
17 until 2023 when one could have easily been
18 provided this year.
19 The second key decision the Company
20 made that unjustifiably, and therefore
21 unreasonably, deprives the 2020 IRP of any
22 planning value is the Company decision to not
23 model the VCEA's carbon limits. We've been
24 speculating over carbon limits since the 2013
25 IRP. And waiting until the 2023 IRP to finally

1 include certain known carbon limits would mean
2 a full decade of uncertainty, a decade that
3 included a rate and refund freeze that Virginia
4 ratepayers still labor under based on that
5 supposed uncertainty. This continued
6 uncertainty is also wholly unjustified by the
7 Company's decision. The Company states that it
8 relies on the ICF commodity forecast of carbon
9 cost to reflect carbon limits within the IRP
10 plan. That is all well and good as a modeling
11 approach; however, ICF did not include the zero
12 carbon limit of the VCEA or any VCEA carbon
13 constraint in any study period year leading up
14 to carbon zero. Therefore, the central
15 environmental constraint of the VCEA does not
16 exist in the 2020 IRP.
17 This has real impact on the IRP's
18 legal sufficiency and its validity as a
19 planning document, because it doesn't comport
20 with reality both in terms of environmental
21 compliance and the expected operation of the
22 Company's carbon based generators, primarily
23 it's extensive NGCC fleet. Indeed, the Company
24 acknowledged in this proceeding that the
25 outdated carbon emission limit they did model

1 is well over twice as high as a reasonably
2 expected carbon limit that the Company could
3 have, but did not include in the IRP. The
4 Company does model RGGI limits; but as also
5 acknowledged by the Company in this proceeding,
6 those limits are not only erroneous and thus do
7 not comport with what is now Virginia's RGGI
8 law, they are also well below VCEA carbon
9 limits. As a result in the 2020 IRP we see
10 carbon emissions within the study period that
11 are double the expected statewide limit -- what
12 the statewide limit will likely be, and gas
13 plant capacity factors at a level virtually
14 guaranteed to be impossible under the VCEA's
15 environmental carbon constraints.
16 For these errors and omissions the
17 Company offers no rationale, other than, again,
18 a vague notion of time constraints and a stated
19 preference to rely on to-be-corrected ICF
20 forecasts at some point in the future. This is
21 not compelling. On so many fronts the Company
22 made what it repeatedly refers to as, quote,
23 simplifying assumptions. And they could have
24 easily taken that very same approach to
25 include, rather than exclude, VCEA carbon

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1 limits; to wit, the Company acknowledges that
2 PLEXOS is capable of modeling VCEA carbon
3 limits. And that is the simplifying assumption
4 the Company could have easily included to
5 reflect the VCEA until such time as the ICF can
6 provide an updated and correct carbon price
7 forecast.
8 Those are the limits that NRDC
9 included in its illustrative modeling of the
10 VCEA; and as a result, that modeling showed
11 Virginia actually going to zero carbon in the
12 power sector and Dominion gas plants going to a
13 zero percent capacity factor. And that's the
14 kind of baseline system operations and
15 environmental compliance insight that
16 Dominion's unjustified decision deprived the
17 Commission of.
18 In sum, those two unjustified
19 decisions to force the model and to not include
20 the VCEA carbon limits violate two statutory
21 requirements, which is to systematically
22 evaluate both, one, quote, The effect of
23 current state environmental regulations upon
24 the continued operation of existing electric
25 facilities, end quote; and to systematically

1 evaluate, quote, The most cost effective means
2 of complying with current state environmental
3 regulations, including compliance options to
4 minimize effects on customer rates of such
5 regulations, end quote.
6 Lastly, the Company's load forecast
7 fails to comply with the Commission's order
8 from the 2018 IRP that requires the Company to
9 adjust its load forecast by including GTSA
10 energy efficiency savings. Some assumption is
11 necessary to do that reliably, but the Company
12 failed to establish how, why, and in some cases
13 even what, it concluded. What the record shows
14 is an artificially inflated $200 megawatt hour
15 cost of energy efficiency. That directly
16 resulted in a load forecast whose accuracy is
17 therefore unexplained and cannot be relied
18 upon.
19 All of which brings us to the
20 remedy. NRDC requests the Commission to
21 declare the IRP to be unreasonable based on the
22 three foregoing defects, and simply require the
23 Company file a non-litigated but updated
24 compliance filing which includes, at a minimum,
25 these three straightforward corrections to the

1 Company's three unjustified errors: One, a
2 simplifying assumption of VCEA carbon limits
3 within PLEXOS that goes to zero in 2050 and
4 interim targets before simply as a placeholder
5 for future updated ICF carbon cost forecasts
6 that will presumably actually reflect such
7 limits in the future; two, no forced Company
8 builds in an optimized plan E for environmental
9 compliance that reflects what builds would look
10 like under VCEA carbon constraints in a way
11 that minimizes ratepayer impacts; and finally,
12 three, an adjusted load forecast that is based
13 on a transparently-derived and explainable cost
14 of energy efficiency, one that may well be $200
15 a megawatt hour, but it at least can be
16 explained, and one that also, as the
17 Environmental Respondents noted, include some
18 simplifying assumption -- to use the Company's
19 phrase -- of some conservative minimal post
20 2025 VCEA required energy efficiency target.
21 That concludes my remarks on the
22 IRP itself, and if I may briefly ask the court
23 to suffer me an indulgence on another note, I
24 would hope that the Commission might also
25 consider in its order providing some direction

on making IRP proceedings in the future less adversarial and less litigious. I believe the Commission is aware of the volume of interrogatories and disputes in the lead-up to this proceeding. And, you know, an adversarial proceeding certainly makes sense for something like a CPCN, but I almost think an adversarial plan is almost a contradiction in terms, and I think a plan might be better arrived at with some form of stakeholder engagement in advance of the plan being filed, as is recommended by RAP, which is now within the record.

So with that, I would conclude my remarks and thank all the Commissioners for such close attention to this long proceeding.

JUDGE JAGDMANN: Thank you, Mr. Shepherd. Sierra Club?

CLOSING ARGUMENT OF SIERRA CLUB

MS. JAFFE: Yes, good morning. Thank you, Madam Chair, and Commissioners. My name is Dorothy Jaffe on behalf of the Sierra Club.

And there is no doubt that we are in uncharted territory, and we acknowledge the

1 difficult task that the Company had with
2 respect to putting together this IRP, since it
3 is the first one modeling compliance with the
4 VCEA. And the VCEA requires the Commission to
5 basically change the way it's thinking and how
6 it's doing business and move away from fossil
7 fuels, but still doing what is in the
8 ratepayers' best interests.
9 Now, there's been a lot of
10 discussion already surrounding the statutory
11 interpretation of VCEA, and I won't repeat what
12 the other attorneys have already said, but we
13 do agree with their conclusions about the
14 Commission maintaining its authority to assess
15 the reasonable and prudence of the costs.
16 So as you heard over the last few
17 days, you know, every party to this case has
18 pointed out in Dominion's IRP that there are
19 significant errors to the inputs, to the model.
20 There is modeling transparency issues, problems
21 with the conclusions regarding the economic
22 analysis. And, you know, Dominion's response
23 to all of this has been: But it's mandated by
24 the VCEA, and we met the requirements of the
25 Commission's order, and we need to maintain a

1 reliable system. And I guess what I'm getting
2 at is, you know, simply checking off the box
3 that you complied with the statute and you
4 complied with the Commission's order is not the
5 standard. The IRP needs to be reasonable and
6 it needs to be in the public interest; and in
7 this case, it's not. It's not helpful. It's
8 not useful. And to use Dominion Witness
9 Thomas's own words, the 2020 plan is the worst
10 case scenario.
11 But what about the best case
12 scenario under the VCEA? What about a least
13 cost VCEA compliant scenario? That's what was
14 missing from this IRP. Their plan A, the least
15 cost plan, is not useful. A least cost plan
16 needs to begin from the legal requirements in
17 place as of the date of the filing of the IRP,
18 not from an unacceptable, do-nothing starting
19 point. Dominion needs to restructure plan A to
20 be a least cost VCEA compliant plan. That is
21 the law of Virginia. That is what must be
22 complied with, and anything less than that is
23 not helpful.
24 I'd like to also draw the
25 Commission's attention to at least five other

1 aspects of the IRP that were neither useful nor
2 helpful: The forcing of supply side resources
3 into the model; the outcome of the economic
4 analysis; the continued reliance on gas; the
5 failure to plan for the retirement of its gas
6 plants; and the failure to do even a
7 preliminary analysis on the impacts of the
8 minimum offer price rule, or MOPR.
9 So first off, multiple parties have
10 concerns with Dominion's hard coding or forcing
11 supply side resources into PLEXOS. And you
12 heard this from Appalachian Voices Witness
13 Rábago, NRDC Witness Levin, Consumer Counsel
14 Witness Norwood, Sierra Club's Witness Rachel
15 Wilson, ratepayer Glenn Besa's Witness Cusick
16 and Staff Witnesses Dalton and Abbott.
17 Forcing resources into the model is
18 not helpful. You can't identify a least cost
19 plan if you are forcing the model to select
20 every single megawatt of solar, wind and
21 storage. And as Staff Witness Dalton and
22 Sierra Club Witness Wilson testified, forcing
23 the model to include these resources results in
24 Dominion's so-called compliant plans, which
25 were plans C and D, being over capacity. When

1 you remove those hard limits and let the model
2 choose, you could see results similar to what
3 Sierra Club Witness Wilson modeled, a plan that
4 is $3.3 billion cheaper over the next 15 years.
5 And as you heard from Staff Witness Dalton, the
6 Company wasn't even consistent in applying its
7 various modeling constraints. For whatever
8 reason -- and Dominion Witness Mitchell failed
9 to give a clear answer on this -- Dominion
10 constrained plan A to only build 480 megawatts
11 of solar in each year. Now, plans B through D
12 did not have such a constraint; and if they
13 had, they wouldn't have even come close to
14 meeting the VCEA's solar target.
15 Second, all intervening parties,
16 witnesses and Staff seem to have concerns with
17 the Company ignoring the results of the unit
18 economic analysis, an analysis that only
19 spanned ten years, not the full planning
20 period, and only looked at the immediate cash
21 flow of the units, not replacement costs or
22 costs beyond the ten-year time frame. VCHEC is
23 operating at a tremendous loss, $472 million to
24 be precise, and yet the Company doesn't seem to
25 think this is a problem. Company Witness Kelly

1 tries to refocus the conversation instead on
2 how VCHEC is great for the environment; it's
3 only eight years old; it contributes to the
4 local economy; and maybe, one day in the
5 future, they could implement carbon capture,
6 but that's not happening currently. And
7 unfortunately they still owe $1.3 billion in
8 remaining depreciation on that asset, but
9 unfortunately the Company's ratepayers, they're
10 already on the hook for that money, regardless
11 of whether it's retired today, tomorrow or in
12 2040. And keeping VCHEC running into the 2040s
13 will only add to that remaining balance, since
14 there will be ongoing O&M costs and additional
15 capital expenditures to keep the plant running.
16 The point being is, how do we stop this cycle
17 of investing more capital in uneconomic plants,
18 adding to the undepreciated plant balance, and
19 then using the amount of that plant balance as
20 justification -- as Mr. Kelly said in his
21 rebuttal -- for keeping the uneconomic plant
22 online? It's time for Dominion to break this
23 cycle. They can start by letting the model --
24 PLEXOS in their case -- do its job, which is
25 exactly what Sierra Club Witness Ms. Wilson did

1 when she recreated the Company's plan using
2 Dominion's inputs in order to make the models
3 directly comparable. And she came up with a
4 better solution simply by letting the model do
5 what it was designed to do: Create an optimal
6 generation portfolio constrained only by the
7 statutory requirements and Dominion's other
8 inputs.
9 And while the two modeling runs do
10 overlap, Ms. Wilson discussed three very
11 important differences in the modeling results.
12 First, there is evidence that there is a path
13 to VCEA compliance that is cheaper for
14 ratepayers and cleaner for the Commonwealth,
15 saving ratepayers $3 billion and cutting carbon
16 emissions in half by 2035.
17 Second, to achieve those benefits,
18 the Company must retire Mount Storm eight years
19 earlier and VCHEC 13 years earlier. The
20 modeling already wants to retire what coal it
21 can immediately in the form of Chesterfield and
22 Clover, and then VCHEC and Mount Storm not long
23 thereafter as it becomes even more expensive to
24 operate those units. And this happens under
25 Dominion's assumptions using Dominion's own