

SCD - CLERK'S OFFICE  
DOCUMENT CONTROL CENTER

2024 JAN 30 A 10:01

1  
2  
3  
4  
5  
6  
7  
8  
9  
10  
11  
12  
13  
14  
15  
16  
17  
18  
19  
20  
21  
22

COMMONWEALTH OF VIRGINIA  
STATE CORPORATION COMMISSION  
Case No. PUR-2023-00162

-----  
Application of Virginia Electric and Power  
Company to participate in the pilot program  
for electric power storage batteries pursuant  
to § 56-585.1:6 of the Code of Virginia and  
for certification of a proposed battery energy  
storage system pursuant to § 56-580 D of the  
Code of Virginia  
-----

HEARING BEFORE HONORABLE A. ANN BERKEBILE  
SENIOR HEARING EXAMINER

JANUARY 24, 2024, 10:00 a.m. to 11:35 a.m.  
Job No. 513968  
Pages: 1-91  
Transcribed by: Cynthia Bauerle, CSR  
Notary Public/Court Reporter: Joshua Tubbs

1 Hearing held at:  
2 1300 East Main Street  
3 1st Floor  
4 Richmond, VA 23218  
5 Phone: 804-371-9946  
6 2nd Floor Courtrooms  
7 Courtroom C

8  
9 Pursuant to agreement, before Joshua Tubbs,  
10 Notary Public in and for Commonwealth of  
11 Virginia.

12  
13  
14  
15  
16  
17  
18  
19  
20  
21  
22

1 APPEARANCES:

2 ON BEHALF OF VIRGINIA ELECTRIC AND POWER COMPANY:

3 JONTILLE D. RAY, ESQUIRE

4 ETAHJAYNE J. HARRIS, ESQUIRE

5 LISA R. CRABTREE, ESQUIRE

6 MCGUIREWOODS

7 GATEWAY PLAZA

8 800 East Canal Street

9 Richmond, VA 23219

10 Phone: 804-775-1173

11 Email: Jray@mcguirewoods.com

12 Eharris@mcguirewoods.com

13

14 ON BEHALF OF OFFICE OF THE ATTORNEY GENERAL

15 JOHN E. FARMER, JR., ESQUIRE

16 OFFICE OF THE ATTORNEY GENERAL

17 DIVISION OF CONSUMER COUNSEL

18 202 N 9th Street, 8th Floor

19 Richmond, VA 23219

20 Phone: (804) 786-2071

21 Email: Jfarmer@oag.state.va.us

22

1 ON BEHALF OF THE STAFF:  
2           FREDERICK D. OCHSENHIRT, ESQUIRE  
3           SIMEON BROWN, ESQUIRE  
4           OFFICE OF GENERAL COUNSEL  
5           STATE CORPORATION COMMISSION  
6           1300 E. Main Street, Tyler Bldg., 10th Floor  
7           Richmond, VA 23219  
8           Phone: 804-371-9671  
9           Email: Ffederick.ochsenhirt@scc.virginia.gov

10  
11           BAILIFF:  
12           JABARI ROBINSON  
13           STATE CORPORATION COMMISSION  
14           (#SCC-20-037-CLK)  
15           1300 East Main Street, 1st Floor  
16           Richmond, VA 23218  
17           Phone: 804-371-9946  
18           Fax: 804-692-0681  
19           Email: Jabari.Robinson@scc.virginia.gov

20  
21  
22

1  
2  
3  
4  
5  
6  
7  
8  
9  
10  
11  
12  
13  
14  
15  
16  
17  
18  
19  
20  
21  
22

INDEX

WITNESS	PAGE
BRANDON E. MARTIN	
Direct Examination: Ms. Ray	30
Cross-Examination: Mr. Farmer	35
SEAN STEVENS	
Direct Examination: Ms. Ray	52
Cross-Examination: Mr. Farmer	58
JASON P. BRANNICK	
Direct Examination: Mr. Brown	68
Cross-Examination: Mr. Farmer	72

E X H I B I T S

EXHIBIT	DESCRIPTION	PAGE
Exhibit 1	Proof of Notice	29
Exhibit 2	Application	30
Exhibit 3	Direct Testimony of Brandon E. Martin	33

Transcript of Hearing - Day 1  
Conducted on January 24, 2024

6

240150076

1	Exhibit 3ES	Direct Testimony of Brandon E.	
2		Martin-Extraordinarily Sensitive	
3		Version	33
4	Exhibit 4	Portions of Application from PUR	
5		2019-00124	41
6	Exhibit 5	Company Response to Second Set	
7		of Staff Interrogatories	
8		Question Number 12	46
9	Exhibit 6	Direct Testimony of Sean Stevens	56
10	Exhibit 6ES	Direct Testimony of Sean	
11		Stevens-Extraordinarily	
12		Sensitive Version	56
13	Exhibit 7	Supplemental Direct Testimony	
14		of Sean Stevens	57
15	Exhibit 8	Direct Testimony of Amelia H.	
16		Boschen	67
17	Exhibit 9	Supplemental Testimony of Amelia	
18		H. Boschen	67
19	Exhibit 10	DEQ Report	68
20	Exhibit 11	Direct Testimony of Jason P.	
21		Brannick	71
22			

1	Exhibit 11C Direct Testimony of Jason P.	
2	Brannick-Confidential Version	72
3	Exhibit 12 Rebuttal Testimony of Sean	
4	Stevens	77
5	Exhibit 13 Rebuttal Testimony of Amelia H.	
6	Boschen	78

7

8

9

10

11

12

13

14

15

16

17

18

19

20

21

22

1 THE BAILIFF: The Virginia State  
2 Corporation Commission in session. The  
3 Commonwealth of Virginia. Please be seated.  
4 Today's document consists of case number  
5 BUR-2023-00162. Application of being  
6 Electrical Power Company to participate in the  
7 pilot program for Electric Power Storage  
8 Batteries pursuant to section 56-585.1:6 of  
9 the Code of Virginia and for certification of  
10 a proposed battery energy resources pursuant  
11 to section 56-580D of the Code of Virginia.  
12 Honorable A. Ann Berkebile, Senior Hearing  
13 Examiner presiding.

14 THE COURT: Good morning,  
15 everyone. Can we please start with the  
16 introduction of counsel? Let's start with the  
17 company.

18 MS. RAY: Good morning, Your  
19 Honor. Jontille Ray from McGuireWoods, along  
20 with Lisa Crabtree and Etahjayne J. Harris from  
21 the Company on behalf of the applicant, Virginia  
22 Electric and Power Company.



1 THE COURT: Good morning.

2 MR. FARMER: Good morning, Your  
3 Honor. John Farmer on behalf of the Office of  
4 the Attorney General.

5 THE COURT: Good to see you.

6 MR. OCHSENHIRT: Good morning,  
7 your Honor. Fred Ochsenhirt and Simeon Brown  
8 for the staff.

9 THE COURT: All right. I'm  
10 going to -- I'm happy everyone's here.  
11 Anxious to hear what everyone has to say. I'm  
12 going to note for the record that when the  
13 commission set the procedure for this case,  
14 public witnesses were given a certain time  
15 period to file the request to testify by  
16 telephone, and we did not receive any of those  
17 requests. I'm going to make sure that there's  
18 no one in the gallery who has any interest is  
19 testifying as a public witness and no one is  
20 raising their hands. So I will view that as a  
21 no. And with that in mind, I also recognize  
22 that I have got a proposed order of

1 proceedings that I'm going to use as sort of  
2 our roadmap here, and I'm going to start --  
3 well, one more thing. There was a notice of  
4 participation filed by the board of  
5 supervisors for Culpeper County in this case,  
6 and they have not appeared, at least thus far.  
7 With that in mind, I'm going to go ahead and  
8 start with openings and I will start with the  
9 company.

10 MS. RAY: May it please the  
11 commission, again, your Honor, my name is  
12 Jontille Ray on behalf of the applicant,  
13 Virginia Electric and Power Company. As part  
14 of the Grid Transformation and Security Act of  
15 2018, the general assembly directed the  
16 commission to establish a pilot program for  
17 electric power storage batteries. This  
18 legislation was codified at Virginia Code  
19 Section 56-585.1:6. The legislation  
20 established the permissible objectives with  
21 the pilot program, set a maximum size for and  
22 duration of the pilot program, and provided

1 that cost recovery for the pilot program would  
2 be to the company's base rates. The  
3 legislation also declared any pilot program  
4 proposed by a qualifying public utility that  
5 satisfies the legislative requirements to be  
6 in the public interest. The commission  
7 established guidelines for the administration  
8 of the pilot program in November of 2018,  
9 which, among other things, outlined the  
10 contents required for a pilot program  
11 application.

12 Before the Commission today is the  
13 company's second application to participate in  
14 the pilot program. Through its second  
15 application, the company seeks approval to  
16 deploy three battery energy storage systems,  
17 which we also refer to as BESS or BESS. The  
18 company refers to its three proposals in this  
19 proceeding as BESS-4, BESS-5, and BESS-6. The  
20 direct testimony and schedules of company  
21 witnesses Brandon E. Martin and Sean Stevens  
22 contain all the information required by the

1 guidelines for a proposal to deploy a BESS as  
2 a part of the pilot program. The commission  
3 has already approved three BESS facilities  
4 under the pilot program totaling 16 megawatts  
5 in case number PUR 201900124. This  
6 application will bring the aggregate capacity  
7 of all pilot program projects approved by the  
8 Commission for the company to 28.34 megawatts.  
9 No party has questioned the completeness of  
10 the company's application, and staff agrees  
11 that all three proposed pilot projects may  
12 achieve one or more of the statutory  
13 objectives.

14 Turning to the specific proposals,  
15 through BESS-4, the company proposes to  
16 install an 8.94 megawatt BESS-4 pilot facility  
17 comprised of two non lithium ion technologies  
18 at the Darby Town Power Station on  
19 company-owned property. The form energy ion  
20 air BESS is a 4.94 megawatt or 494 megawatt  
21 hour alternating current or AC multiday  
22 system, and the eos energy zinc hybrid BESS is

1 a four megawatt, 16 megawatt hour AC system.  
2 BESS-4 seeks to accomplish the following  
3 statutory objectives. To improve integration  
4 of renewable resources and to reduce the need  
5 for additional generation during peak -- times  
6 of peak demand. The projected cost for BESS-4  
7 is approximately \$70.6 million. No party has  
8 disputed the technology, size or location of  
9 BESS-4. Staff agrees that BESS-4 could  
10 accomplish the two identified statutory  
11 objectives. One final note on BESS-4 is that  
12 the company also seeks Commission approval for  
13 a Certificate of Public Convenience and  
14 Necessity, or CPCN to construct and operate  
15 BESS-4 at the company's Darbytown Power  
16 Station to the extent necessary. Staff does  
17 not oppose the company's request for approval  
18 of the CPCN for BESS-4. Through BESS-5, the  
19 company proposes to install a 1.9 megawatt,  
20 3.8 megawatt hour AC coupled BESS at the  
21 company's electric distribution safety and  
22 training center, or DSTC in Chesterville

240150078

24015070

1 County. BESS-5 seeks to accomplish the  
2 following statutory objectives. Improved  
3 reliability of electrical transmission or  
4 distribution systems, deferred investment and  
5 generation transmission or distribution of  
6 electricity and reduce need for additional  
7 generation of electricity during times of peak  
8 demand. The projected cost for BESS-5 is  
9 approximately \$6 million. Staff does not  
10 dispute the value of this pilot project, but  
11 staff witness Brannick questions whether there  
12 is sufficient evidence to demonstrate that  
13 BESS-5 can accomplish the improved integration  
14 of different types of renewable resources and  
15 deferred investment and generation  
16 transmission for distribution of electricity.  
17 So I would like to briefly address those two  
18 statutory objectives.

19           Regarding the first objective, as the  
20 rebuttal testimony of company witness Stevens  
21 explains, the company agrees that the BESS-5  
22 pilot will not be integrating different types

1 of renewable resources at this time and will  
2 only integrate EV charging as a part of the  
3 current design. The company is however  
4 evaluating future projects to include a small  
5 solar array at the DSTC campus that would  
6 integrate into that micro grid. As to the  
7 second objective, company witness Stevens also  
8 explains in his rebuttal testimony that while  
9 the company is not proposed deferment of a  
10 specific investment and generation  
11 transmission or distribution of electricity as  
12 a BESS-5 objectives, both the demand response  
13 and voltage support applications will perform  
14 functions that reduce wear on traditional  
15 equipment and ultimately extend the  
16 operational life of equipment deferring  
17 potential upgrades. The BESS-5 pilot will  
18 evaluate the capability of the system to  
19 perform functions that reduce wear on  
20 traditional equipment and ultimately extend  
21 the operational life of equipment while also  
22 -- while also primarily supporting the DSTC

1 facility for backup power. The ability to  
2 manage both backup power and perform  
3 additional bridge services such as demand  
4 response and voltage support will be a  
5 critical factor in deploying future battery  
6 energy storage systems and the knowledge  
7 gained from BESS-5 will allow the company to  
8 explore this capability for future  
9 applications.

10           And finally, through BESS-6, the  
11 company proposes to install a 1.5 megawatt or  
12 15 megawatt AC coupled best at Virginia State  
13 University's multipurpose center. BESS-6  
14 seeks to accomplish the following statutory  
15 objectives. Improved reliability of  
16 electrical transmission or distribution  
17 systems, reduced need for additional  
18 generation of electricity during times of peak  
19 demand, and connection to the facilities of a  
20 customer receiving distribution service from  
21 the utility. The projected cost for BESS-6 is  
22 approximately \$14.4 million. Again, staff



1 does not question the technology size or  
2 location of BESS-6. Staff witness Brannick  
3 agrees that BESS-6 may accomplish the three  
4 identified objectives. For both BESS-5 and  
5 BESS-6, however, given the infrequent number  
6 of outages at both locations, staff witness  
7 Brannick recommends the company consider  
8 implementing annual artificial -- artificial  
9 or pseudo plan outages and the company does  
10 not oppose this recommendation.

11 A final topic that arose for all three  
12 projects is the annual reporting requirements  
13 and metrics. Staff does not oppose the  
14 company's proposed reporting metrics for the  
15 three proposed projects in this proceeding.  
16 However, staff witness Brannick recommends  
17 that the company incorporate two additional  
18 reporting metrics for all three projects.  
19 One, cost and benefit data and, two, energy to  
20 throughput. As a rebuttal testimony, the  
21 company witness Stevens explains, the company  
22 has no objection to recording these two

240150076

1 additional metrics for all the BESS pilot  
2 projects in its annual report. The company  
3 also commits to working with staff to identify  
4 and provide any additional metrics or  
5 information that will be useful for tracking  
6 performance of the pilot program.

7 So in conclusion, your Honor, the  
8 evidence will show that the pilot program  
9 provides the company with a valuable  
10 opportunity to test the functionality,  
11 capability, and operability of battery energy  
12 storage systems. The three proposed batteries  
13 here meet the requirements of Virginia Code  
14 Section 56-585.1:6 and, therefore, should be  
15 found by the Commission to be in the public  
16 interest. For these reasons, the three  
17 proposed BESS should be approved to  
18 participate in the pilot program and the  
19 company respectfully requested an order by  
20 March 31st. We thank your Honor for your  
21 attention to this case and look forward to the  
22 developing the record.

1 THE COURT: Thank you. Give you  
2 a second. Mr. Farmer.

3 MR. FARMER: Good morning, your  
4 Honor. May it please the Commission, John  
5 Farmer, on behalf of Consumer Counsel.

6 As your Honor is aware, Consumer  
7 Counsel has not filed testimony in this case,  
8 but has reviewed the application, testimony  
9 and discovery. Section 56-585.1:5, the  
10 statute governing battery storage pilot  
11 program states, quote, a proposal shall  
12 provide for the deployment of batteries  
13 pursuant to a pilot program that accomplishes  
14 at least one of the following, end quote.  
15 That goes on to identify five permissible  
16 goals, which I would paraphrase as  
17 reliability, integration of renewables,  
18 deferred investment and generation  
19 transmission or distribution assets, reduced  
20 need for generation during peak demand, and  
21 connection to facilities of a customer of the  
22 utility. If a proposed program meets the

24015076

1 requirements of the statute, which at a  
2 minimum include achieving at least one of the  
3 statutory goals I just mentioned, it is  
4 legislatively declared to be in the public  
5 interest and the project's reasonable and  
6 prudent costs can be recovered through the  
7 company's base rates. Consumer Counsel will  
8 not be taking a position in this case that any  
9 of BESS-4, BESS-5, or BESS-6 will not further  
10 at least one of the five enumerated goals of  
11 the statute, but we are going to have some  
12 questions today on the costs, which are  
13 substantially greater than what was in the  
14 company's previous slate of pilot program  
15 proposals considered in case number PUR  
16 201900124. Now, at the hearing in that case,  
17 a witness appearing on behalf of the company  
18 during some questioning about cost  
19 effectiveness of battery storage relative to  
20 traditional grade upgrades stated, quote, you  
21 can look over the years and see the decrease  
22 in costs associated with solar installations.

1 We expect the same with battery systems as the  
2 technology matures, end quote. And that was  
3 from the transcript, page 96, line 23 through  
4 page 98, line two, or that's what I quoted as  
5 an excerpt from that larger section of the  
6 transcript. The comparison of the cost  
7 presented for BESS one, BESS two, BESS three  
8 in that case to the cost presented in this  
9 case for BESS-4, five, and six raises some  
10 eyebrows. That is in 2019, the company  
11 presented three projects totaling 16 megawatts  
12 of capacity at a total cost of a little over  
13 \$33 million. In this case we have three  
14 projects totaling 12-and-a-half megawatts of  
15 capacity at a total cost of \$91 million. So  
16 that's more than two-and-a-half times the cost  
17 for three-and-a-half ear megawatts. Another  
18 way of looking at it is in this case, one  
19 project by itself, the \$70 million BESS-4  
20 project will cost more than double the  
21 combined cost of BESS one, BESS two and BESS  
22 three. Consumer Counsel acknowledges the

1 projects presented in this case are not apples  
2 to apples with BESS one, two and three in  
3 terms of what they seek to do. In the context  
4 of a pilot program, we would have concerns if  
5 there were duplicative projects, and I think  
6 we have a general awareness of developments in  
7 the economy generally and in the battery  
8 storage industry in particular since 2019 that  
9 may be affecting cost, but my hope for today  
10 is to explore these issues with the company  
11 and staff witnesses and see if we can better  
12 understand the very different cost picture  
13 presented by this application relative to the  
14 company's 2019 application and to ensure that  
15 the company is doing everything it can to  
16 protect rate payers in the face of this  
17 volatility.

18 I do have one additional comment before  
19 we proceed, and that is that staff witness  
20 Brannick made two recommendations for BESS-5  
21 and six related to using artificial outages to  
22 better utilize those projects, and he likewise

1 proposed additional metrics for evaluating all  
2 three projects. The company is not objecting  
3 to any of his recommendations, and we would  
4 just note for the record our support for those  
5 recommendations.

6 I appreciate the opportunity to  
7 participate and look forward to develop the  
8 record

9 THE COURT: Before you walk away  
10 and if you, you know, I don't want to get  
11 ahead of myself. I'm sort of assuming we're  
12 going to have closing arguments at the end of  
13 this case absent something unforeseen that  
14 would require a quick brief. So you may want  
15 to wait and answer a question or two for me,  
16 but I have a couple of things I wanted to --  
17 on the cost issue and I understand we're going  
18 to delve into the differences between what was  
19 approved last time and the cost of the  
20 projects that are before the Commission this  
21 time. Does Consumer Counsel take any issue  
22 with the reasonableness of the cost to

1 accomplish these projects? Now, I may not --  
2 I'm not sure if I phrased that question as  
3 clearly as I would like to, but do you have  
4 any -- Consumer Counsel going to be contesting  
5 or taking any kind of position regarding  
6 whether or not this particular type of  
7 technology that they're proposing here that  
8 these costs look like with the market rate for  
9 these projects would be at this time?

10 MR. FARMER: I don't anticipate  
11 that we would be taking issue with the cost.

12 THE COURT: Okay.

13 MR. FARMER: In the sense of  
14 taking a position that they're --

15 THE COURT: Like, if this box is  
16 going to cost this much money, you're not  
17 saying, well, they could have gotten this box  
18 for a lot cheaper?

19 MR. FARMER: That's correct.

20 THE COURT: Okay. It's the  
21 first one, and the other question is on the  
22 CPCN issue, two of the projects, the company's



1 taking the position that they are ordinary  
2 improvements for purposes of 5ADD and staff  
3 ultimately, from what I understand and  
4 testimony, didn't oppose that conclusion.  
5 Does the Commission -- does Consumer Counsel  
6 have any opposition to that conclusion or take  
7 a position relative to that issue?

8 MR. FARMER: Yeah, Consumer  
9 Counsel does not oppose that conclusion.

10 THE COURT: Doesn't oppose that  
11 conclusion. Thank you, Mr. Farmer.

12 MR. FARMER: Thank you.

13 THE COURT: Commission Statwell,  
14 I'll give him a minute.

15 MR. BROWN: Good morning, your  
16 Honor, and may I please to Commission. My  
17 name is Simeon Brown here representing  
18 Commission staff, together with Fred  
19 Ochsenhirt. As you've heard, we're here today  
20 on Dominion's application to participate in  
21 the pilot program for electric power storage.

22 THE COURT: Is it flashing

1 lashing again?

2 MR. BROWN: Yeah. Sorry. As I  
3 said, as you've heard, we're here today on  
4 Dominion's application to participate in the  
5 pilot program for electric power battery  
6 storage batteries. For electric power storage  
7 batteries pursuant to section 56-585.1:6 of  
8 the Code of Virginia. Staff investigated the  
9 application and filed the testimony of one  
10 witness, Jason P. Brannick, on December 21,  
11 2023. Based on staff's review of the  
12 company's application, staff believes that the  
13 BESS-4, BESS-5 and BESS-6 achieve most of the  
14 identified objectives of code section  
15 56585.1:6A. Regarding BESS-4, staff is of the  
16 opinion that BESS-4 may accomplish two  
17 specified objectives. First, improve  
18 integration of renewable resources and second,  
19 reduce need for additional generation of  
20 electricity during times of peak demand.  
21 Regarding BESS-5, staff believes two of four  
22 identified objectives may be accomplished.

1 First, improve integration of renewable  
2 resources and second, reduce need for  
3 additional generation of electricity during  
4 times week demand. However, staff contends  
5 the company did not provide sufficient  
6 evidence to demonstrate that BESS-5 can  
7 accomplish the two other identified  
8 objectives, those being improved integration  
9 of different types of renewable resources and  
10 deferred investment in generation,  
11 transmission, or distribution of electricity.  
12 Regarding BESS-6, staff believes three  
13 identified objectives may be accomplished.  
14 Improved reliability of electric transmission  
15 of electric transition or distribution  
16 systems. Two, reduce need for additional  
17 generation of electricity during time peak  
18 demand, and three, connection to facilities of  
19 a customer receiving distribution service from  
20 the utility. Also, due to the infrequency of  
21 outages of the electric distribution, safety  
22 and training facility and multipurpose center,

1 staff recommends that the company implement  
2 artificial or pseudo planned outage exercises  
3 throughout the year to enhance the utilization  
4 of BESS-5 and BESS-6.

5           Lastly, if BESS-4 is approved part of  
6 the pilot program, staff does not oppose the  
7 company's request that the commission issued  
8 the certificate of public convenience a  
9 necessity for BESS-4 conditioned on the  
10 company's compliance with the recommendations  
11 provided in the Department of Environmental  
12 Qualities Environmental Review and the  
13 wetlands impact constitution. Thank you, your  
14 Honor.

15           THE COURT: Thank you. And  
16 they've agreed to that in their rebuttal,  
17 correct?

18           MR. BROWN: Yes.

19           THE COURT: All right. Thank  
20 you. All right. We will now start with  
21 building the records. So I'm going to come to  
22 the company and we'll start doing that, and

1 when we -- I know we had some supplemental  
2 testimony and we had some replacement  
3 testimony, so we're going to be clear for the  
4 bailiff so we know exactly what's coming in  
5 into the record. I'm sure you would do that  
6 anyway, but I know we need to be on the  
7 lookout for that under the circumstances.

8 MS. HARRIS: Good morning, your  
9 Honor. I would first ask the company's proof  
10 of notice and service filed on November 21,  
11 2023 be marked for identification and admitted  
12 into the record.

13 THE COURT: The proof of notice  
14 is marked and admitted as Exhibit 1.

15 (Exhibit 1, Proof of Notice  
16 marked in evidence.)

17 MS. HARRIS: Next, I would ask  
18 to have the company's application consisting  
19 of nine typed pages and one exhibit, which was  
20 filed in this proceeding on September 18, 2023  
21 and a public version only be marked for  
22 identification and admitted into the record.

1 THE COURT: All right. The  
2 application is marked and admitted. There was  
3 nothing attached, I guess, because the  
4 testimony was separate from the application.  
5 The application itself, all by itself is all  
6 public. Okay. The application is marked and  
7 admitted as Exhibit 2.

8 (Exhibit 2, application, marked  
9 in evidence.)

10 MS. RAY: Your Honor, at this  
11 time, the company would call Brandon E.  
12 Martin.

13 BRANDON E. MARTIN,  
14 after having been first duly sworn, was  
15 examined and testified as follows:

16 DIRECT EXAMINATION

17 BY MS. RAY:

18 Q. Mr. Martin, could you please  
19 state your name, position of employment, and  
20 business address?

21 A. Brandon E Martin. I'm the  
22 manager of business development. 600 East

1 Canal Street, Richmond, Virginia 23219.

2 Q. And do you have with you a  
3 document entitled Direct Testimony of Brandon  
4 E. Martin consisting of a one-page summary,  
5 five typed pages of questions and answers and  
6 Appendix A and one schedule, which was filed  
7 in public and extraordinarily sensitive  
8 versions in this proceeding on September 18,  
9 2023?

10 A. Yes.

11 Q. And was that document prepared  
12 by you or under your supervision?

13 A. Yes.

14 Q. And do you have any corrections  
15 or additions to that document?

16 A. Yes. Under schedule one, page  
17 four, I'd like to strike united and replace it  
18 with underwriters to read underwriters  
19 laboratory.

20 Q. Okay. Hold on one second.

21 Okay. Page four, schedule one?

22 A. Yes.

1 Q. Figure -- and can you repeat  
2 that for me, please?

3 A. There's a united --

4 Q. Gotcha.

5 A. That should be underwriters  
6 laboratory.

7 Q. Thank you. And Mr. Martin, with  
8 that correction, if you were asked the  
9 questions appearing there, would you provide  
10 the same with substantially similar answers?

11 A. Yes.

12 Q. And with that correction, do you  
13 wish to sponsor that document as your direct  
14 testimony in this proceeding?

15 A. Yes.

16 MS. RAY: Your Honor, I'd ask  
17 that Mr. Martin's direct testimony in public  
18 and extraordinarily sensitive versions be  
19 marked for identification and admitted into  
20 the record subject to cross-examination.

21 THE COURT: Mr. Martin's direct  
22 testimony is marked and admitted as exhibits 3



1 and 3ES subject to cross-examination.

2 (Exhibit 3, direct testimony of  
3 Brandon E. Martin, marked in evidence.)

4 (Exhibit 3ES, Direct Testimony  
5 of Brandon E. Martin-Extraordinarily Sensitive  
6 Version, marked in evidence.)

7 MS. RAY: And your Honor, the  
8 witness is available for cross-examination.

9 THE COURT: I normally -- I'm  
10 going to ask him just one clarifying question  
11 and that way, if that prompts any questions  
12 from you guys, you can take care of it now,  
13 and then you could deal with it on redirect.

14 In the application, Mr. Martin, the  
15 company -- their Exhibit 1 addresses various  
16 rules that the company has to comply with when  
17 filing applications with the Commission and  
18 one of them deals with reliability. Hold on.  
19 Let me get to it. If you go to Exhibit 1 of  
20 the application, page four, it talks about  
21 transmission reliability impacts for the  
22 proposed facility, and then it refers me to or

1 it refers the Commission to schedule one. Do  
2 you have that in front of you? Am I messing  
3 you up? Do you need a second?

4 MR. FARMER: I'll probably need  
5 a second.

6 THE COURT: Okay. I'll give you  
7 a second.

8 MS. RAY: Page four, did you  
9 say?

10 THE COURT: Page four and when  
11 it's talking about the transmission  
12 reliability impacts and it says we'll have no  
13 impact on transmission reliability. See  
14 schedule one to the direct testimony of you.  
15 Discussing the specific objectives and  
16 potential impacts of the proposed BESS-4, and  
17 I'm not trying to -- I just want you to -- if  
18 you could -- it's band upon that aspect or  
19 tell me where in your testimony it actually --

20 MR. FARMER: Yeah.

21 THE COURT: Addresses  
22 transmission reliability.

1 MR. FARMER: I think it's  
2 probably most likely because of the  
3 distribution connected nature of this project.  
4 It does not have a PJM specific  
5 interconnection que that will have an ISA at  
6 this time. So there's no known, you know,  
7 reliability impacts in the negative.

8 THE COURT: Okay. All right.  
9 Just keeping in mind there are lots of boxes  
10 that need to be checked in -- from my -- when  
11 I'm writing the report, which is part of the  
12 reason why I want this clarified. So I  
13 appreciate that response. Thank you. Turning  
14 up -- that's all I had for him. Coming to Mr.  
15 Farmer.

16 CROSS-EXAMINATION

17 BY MR. FARMER:

18 Q. Good morning, Mr. Martin.

19 A. Good morning.

20 Q. My name is John Farmer. I  
21 represent Consumer Counsel. I'd like to start  
22 on page two of your testimony.

1           A.       Okay.

2           Q.       And you'll see there is a large  
3 part just above the middle of the page.  
4 Please describe the proposed BESS-4 and you  
5 discuss a few things here and prompted some  
6 questions for me related to the lithium ion  
7 market or industry generally. So page two,  
8 line 14, you referenced the lower thermal  
9 runaway risks for non lithium ion technologies  
10 relative to lithium ion. Can you describe  
11 what happens when a battery experiences  
12 thermal runaway?

13          A.       When a battery experiences  
14 thermal runaway, it is the cause of a cell  
15 overheating and causing surrounding cells to  
16 then overheat.

17          Q.       Okay. And that results in --  
18 can result in fire?

19          A.       Yes.

20          Q.       And you don't sponsor BESS-5,  
21 but you are aware that BESS-5 is a lithium ion  
22 system, correct?

1 A. Yes.

2 Q. Okay. So in trying to  
3 understand the degree of the thermal runaway  
4 risk, I'm understanding from the application,  
5 it's a substantial risk, but it's not so  
6 substantial that we need to stop pursuing  
7 lithium ion altogether, correct?

8 A. Absolutely correct.

9 Q. Okay. And as you go on to state  
10 on this page, the electric vehicle industry is  
11 still locked onto lithium ion as kind of the  
12 standard.

13 A. Correct.

14 Q. And then on line 15 you  
15 reference pricing volatility and supply chain  
16 constraints related to the lithium ion market,  
17 and this testimony was filed in September of  
18 2023, correct?

19 A. Yes.

20 Q. Okay. Since September, what has  
21 the company scene with lithium ion pricing?

22 A. I don't have the numbers here

240150076

1 recently of what trends have been transpiring  
2 as it would be in the last four months. I  
3 don't have that available to me right now.

4 Q. Okay. Are you able to describe  
5 generally up, down or relatively consistent?

6 A. I think generally there have  
7 been some downward trends in lithium pricing  
8 specifically.

9 Q. Okay. And what about supply  
10 chain constraints? Are you able to say  
11 whether those have improved or gotten worse or  
12 stayed the same generally?

13 A. I can't speak to those at this  
14 time.

15 Q. Okay. Do you see anything in  
16 the lithium ion industry that gives you  
17 optimism for downward trending prices over the  
18 next, say, five years or so?

19 A. There is a fair amount of  
20 industry trade publications that are  
21 forecasting that there will be declines in  
22 pricing. We have seen those same publications

1 suggest that there would be downward declines  
2 in previous years when -- when we did hit  
3 supply chain issues and volatility actually  
4 went completely in the opposite direction.  
5 So, you know, with the IRA and other  
6 incentives that are encouraging domestic  
7 manufacturing and mining, certainly  
8 intriguing, but we'll need to see those come  
9 to fruition before we see, you know, more  
10 lithium supply by being produced to the market  
11 and not taking by the demand.

12 Q. Okay. Thank you. And then line  
13 18, we mentioned this already, but you  
14 referenced the EV market that's expected to  
15 primarily use lithium ion batteries, and the  
16 concern there is competing with that industry  
17 for the materials to build?

18 A. It is.

19 Q. Okay. And is that still the --  
20 that's still the company's expectation for the  
21 EV market?

22 A. It is.

240150376

1 Q. Okay. Are you aware of any  
2 experimentation in the ED market with non  
3 lithium technologies?

4 A. I can't speak to the EV market  
5 on non lithium alternatives.

6 Q. Okay. All right. Turning more  
7 specifically to the BESS-4, I'd like to --

8 MR. FARMER: Your Honor, I'd  
9 like to pass out an exhibit.

10 THE COURT: Okay.

11 MR. FARMER: And your Honor,  
12 I'll describe for the record this exhibit  
13 contains the cover page and first page of the  
14 2019 application in case number PR 2019/124,  
15 and then Exhibit 3 to that application, which  
16 is proposal summary for the BESS-3 project in  
17 the last case.

18 THE COURT: I'm going to go  
19 ahead and mark this, and I'm going to identify  
20 it as being portions of the application from  
21 PUR 219124, which includes the project  
22 description for I think you said it's BESS-3,



1 correct? Yes.

2 MR. FARMER: That's correct.

3 THE COURT: And it is marked as  
4 exhibit -- there's nothing confidential in  
5 this exhibit. It's marked as Exhibit 4. Any  
6 objection to its admission?

7 MS. RAY: No, your Honor.

8 THE COURT: All right. I'm  
9 going to go ahead and admit it, Mr. Farmer.

10 MR. FARMER: Thank you, your  
11 Honor.

12 (Exhibit 4, Portions of  
13 Application from PUR 2019-00124, marked in  
14 evidence.)

15 BY MR. FARMER:

16 Q. And Mr. Martin, are you familiar  
17 with the BESS-3 project that was approved in  
18 the prior cases?

19 A. Familiar, yes.

20 Q. Okay. If you would turn to page  
21 four and I think what I mean by page four is  
22 page six of nine. Page four of the exhibit.

1 Page four of the company's exhibit. Page six  
2 of nine at the top right.

3 A. Oh, okay.

4 Q. And -- are you there, sir?

5 A. I believe so.

6 Q. Okay. Do you see under  
7 objective, do you see where this exhibit  
8 identified BESS-3's objectives as to improve  
9 integration of renewable resources and, four,  
10 reduce the need for just additional generation  
11 during times of peak demand?

12 A. I do.

13 Q. Okay. And those are the same  
14 stature objectives you identify for BESS-4  
15 for, correct?

16 A. Correct.

17 Q. And are there other similarities  
18 between these two projects?

19 A. How do you mean?

20 Q. It's an open-ended question.

21 Are there similarities between the two  
22 projects that you could identify?

1           A.       Obviously both energy storage  
2 projects that would be classified as  
3 generation resources. A similarity in the Eos  
4 solution is that it, too, is a four hour  
5 duration battery like a battery similar to the  
6 BESS-3 project as a four hour duration.

7           Q.       Okay. And they both are  
8 colocated at one of the company's generating  
9 facilities, correct?

10          A.       Correct.

11          Q.       Okay. Would you agree with me  
12 that to justify undertaking a new pilot  
13 project that has similarities to an already  
14 operation project, there would need to be some  
15 distinguishing features of the new project?

16          A.       Yes.

17          Q.       Okay. And what would you say  
18 are those distinguishing features for BESS-4?

19          A.       So BESS-4 has a couple of very  
20 specifically unique distinguishing  
21 characteristics. Obviously, one of them being  
22 the Eos system, which is a non lithium

1 alternative. It is, you know, a nascent  
2 technology newer to market where it has  
3 benefit in the, you know, that it will compare  
4 well to lithium ion. There will be the  
5 ability to compare how it performs and  
6 operates compared to another four hour lithium  
7 system. What makes it very unique is the long  
8 duration component that is unlike anything  
9 that we have done in the past.

10 Q. Okay. And we mentioned this  
11 BESS-4 and BESS-3 both being colocated with a  
12 generating facility, and I believe BESS-3  
13 actually interacts with that generating  
14 facility. Where as, my understanding of  
15 BESS-4 is that it doesn't necessarily interact  
16 specifically with the Darbytown station; is  
17 that correct?

18 A. It is my understanding that a  
19 portion of BESS-3 does charge and discharge  
20 from the solar facility. The other portion is  
21 grid charging. BESS-4 will be grade charging.

22 Q. Okay.

1           A.       And to your point, not  
2 interacting with Darbytown Power Station?

3           Q.       Okay. All right. If you could  
4 turn to your schedule one, page one of your  
5 schedule one.

6           A.       I'm sorry. Which page?

7           Q.       Page one, and I'm under the  
8 proposal section there at the to and in the  
9 third paragraph there you say, quote, capital  
10 costs are expected to be much lower than  
11 lithium ion by using more commonly available  
12 materials, correct?

13          A.       That's correct.

14                   MR. FARMER: Your Honor, I have  
15 one more exhibit to distribute.

16                   THE COURT: Thank you.

17 BY MR. FARMER:

18          Q.       And, Mr. Martin, do you have  
19 that document in front of you?

20          A.       I do.

21          Q.       Okay. And this is the staff's  
22 second set question number 12 in this case.

1 MR. FARMER: And your Honor, can  
2 we have this exhibit marked for  
3 identification, please?

4 THE COURT: Sure. The company  
5 response to staff interrogatory 2-12 in this  
6 case, I'm going to go ahead and mark it as  
7 Exhibit 5. Any objection to its admission?

8 MS. RAY: No, your Honor.

9 THE COURT: I'm going to go  
10 ahead and admit it, Mr. Farmer.

11 MR. FARMER: Thank you, your  
12 Honor.

13 (Exhibit 5, Company Response to  
14 Second Set of Staff Interrogatories Question  
15 Number 12, marked in evidence.)

16 BY MR. FARMER:

17 Q. And, Mr. Martin, I'm looking  
18 specifically at subpart A to staff's  
19 interrogatory here where they reference your  
20 schedule one and ask about the advantages of  
21 ion air and zinc hybrid chemistries, and if  
22 you look at the response, and I believe the

1 part I'm looking at is on the next page. It's  
2 the last sentence of the response to subpart  
3 A. It says, lastly, most of the raw materials  
4 used in the development of these products are  
5 not rare earth metals and are sourced  
6 domestic, which provides for greater  
7 accessibility, less competition and lower  
8 costs. Do you see that?

9 A. I do.

10 Q. And I know you did not prepare  
11 this discovery response, but do you agree with  
12 that?

13 A. I do.

14 Q. Okay. So with this project  
15 we're looking at a project with a total cost  
16 of over \$70 million, correct?

17 A. Correct.

18 Q. Okay. And would you agree with  
19 me that the most expensive project among  
20 BESS-1, 2 and 3 was BESS-3 at a \$26 million  
21 cost?

22 A. Yes.

1           Q.       Okay.  So I'm trying to  
2       reconcile these indications in this discovery  
3       response and your testimony about the lower  
4       cost we can expect from these technologies  
5       relative to lithium ion with the fact that the  
6       project is much more expensive than anything  
7       else the company has presented.  Can you  
8       explain that or help me understand why the  
9       costs are what they are for this project?

10          A.       Sure.  I --I think it ultimately  
11       is bound to the duration of the battery.  If  
12       you simply just look at the energy being 8.94  
13       megawatts, that doesn't take into account the  
14       duration of the battery.  So when you look at  
15       BESS-3, you're roughly 48 megawatt hours.  
16       It's a four hour system.  This is 510 megawatt  
17       hours.  So drastically different duration of a  
18       battery, and that's where your cost is  
19       drastically different.

20          Q.       Okay.  And how does that -- how  
21       does that influence the cost?  It's not --  
22       it's not related to the materials that go into



1 it, correct?

2 A. Well, certainly there are  
3 components of lower priced materials that do  
4 lower the cost of the equipment and the  
5 duration, the amount of equipment that would  
6 be needed for that long of a duration.

7 Q. Okay. Thank you, Mr. Martin.  
8 And just one last area and more of a general  
9 question. Is it your understanding that the  
10 legislation that created this pilot program  
11 ascribed to Dominion a 30 megawatt cap?

12 A. That is my understanding.

13 Q. Okay. And is it your  
14 understanding that between the 2019 case and  
15 if these projects that are proposed here are  
16 approved, we would be a little over 28  
17 megawatts out of that 30 megawatt cap?

18 A. That's correct.

19 Q. Okay. Are you able to comment  
20 on plans for any future proposals under the  
21 pilot program?

22 A. Not at this time.

1 Q. Okay. Thank you, Mr. Martin.  
2 That's all I have?

3 THE COURT: Mr. Farmer, before  
4 you leave, I want to follow up on another  
5 question you asked just to see -- want to make  
6 you sit down in case you have a follow-up  
7 question.

8 Going back to that discovery response  
9 where it says -- the sentence that starts with  
10 lastly, most of the raw materials used, I'll  
11 just read the whole thing again. Lastly, most  
12 of the raw materials used in the development  
13 of these products are not rare metals and are  
14 sourced domestically, which provides for  
15 greater accessibility, less competition and  
16 lower costs. When it says lower cost there,  
17 are you talking about for a battery that could  
18 achieve, like, a lithium based battery that  
19 could achieve the same duration as the battery  
20 that's being -- the BESS system being prepared  
21 being proposed here?

22 MR. MARTIN: I think that's a

1 fair way to put it. Yes, lower cost than  
2 lithium alternative.

3 THE COURT: All right. Thank  
4 you. Does that prompt anything additional,  
5 Mr. Farmer?

6 MR. FARMER: Nothing further,  
7 your Honor. Thank you.

8 MR. OCHSENHIRT: No questions.

9 THE COURT: Okay. And does the  
10 company have any redirect.

11 MS. RAY: No redirect, your  
12 Honor.

13 THE COURT: Well, Mr. Martin,  
14 thank you.

15 MR. MARTIN: Thank you.

16 THE COURT: We may see you  
17 shortly. You're excused for now. Although --

18 MR. OCHSENHIRT: He doesn't have  
19 --

20 THE COURT: He doesn't have any  
21 rebuttal, so you're excused for the day.

22 MS. RAY: Your Honor, before we

240150070

1 move to the next witness, I'm going to confirm  
2 that Exhibit 5 was actually admitted.

3 THE COURT: It was. Thank you  
4 for confirming, thought.

5 MS. RAY: And the company calls  
6 Sean Stevens.

7 SEAN STEVENS,  
8 after having been first duly sworn, was  
9 examined and testified as follows:

10 DIRECT EXAMINATION

11 BY MS. RAY:

12 Q. Could you please state your  
13 name, position of employment, and business  
14 address?

15 A. My name is Sean Stevens. I'm  
16 the director of Electric Distribution Group  
17 Solutions located at 600 East Canal Street in  
18 Richmond, Virginia 23219.

19 Q. And do you have with you a  
20 document entitled Direct Testimony of Sean  
21 Stevens consisting of a one-page summary, five  
22 typed pages of questions and answers and

240150075

1 appendix A and two schedules, which was filed  
2 in public confidential and extraordinarily  
3 sensitive versions of this proceeding on  
4 September 18, 2023 and updated on December 15,  
5 2023?

6 A. Yes.

7 MS. RAY: Your Honor, I would  
8 note for the record that witness William  
9 Steven's testimony was originally filed in  
10 public confidential and extraordinary  
11 sensitive versions on September 18, 2023. At  
12 the time of the filing, information pertaining  
13 to the proposed location of BESS-6 was  
14 designated confidential. Subsequent to the  
15 filing the proposed location of BESS-6 was  
16 publicly disclosed and, therefore, no longer  
17 confidential. So on December 15, 2023, the  
18 company filed updated versions of Mr. Stevens'  
19 direct testimony and his direct schedule two,  
20 specifically removing the confidentiality  
21 designations for information related to the  
22 location of BESS-6. So the versions of Mr.

1 Stevens' direct testimony on December 15th and  
2 direct schedule filed December 15 would  
3 replace versions filed on September 18th.

4 THE COURT: Okay.

5 MS. RAY: I just want to make  
6 that clear.

7 THE COURT: All right. So do  
8 you want me to go ahead and mark his  
9 testimony?

10 MS. RAY: In just one second,  
11 your Honor. I just have to make it clear.

12 THE COURT: Yeah, I've got it.  
13 Thank you. Keep going.

14 BY MS. RAY:

15 Q. Was that document prepared by  
16 you under your supervision?

17 A. Yes.

18 Q. And did you have any corrections  
19 or additions to that document?

20 A. Yes, I do. So on direct  
21 testimony, page two, line five, strike the  
22 confidentiality so that it reads,

1 extraordinarily sensitive schedule two.

2 THE COURT: Could you go back?  
3 I'm sorry. Hold the sheet that -- I see what  
4 you're saying. Thank you.

5 A. And then direct testimony, page  
6 two, line 22, delete located after facility  
7 and then finally direct testimony, page four,  
8 line one, delete the bracket before "the."

9 Q. And Mr. Stevens, with those  
10 corrections, if you were asked the questions  
11 appearing there, would you provide the same  
12 substantially similar answers?

13 A. Yes.

14 Q. And with those corrections do  
15 you wish to sponsor that document as your  
16 direct testimony in this proceeding?

17 A. Yes.

18 MS. RAY: Your Honor, I ask that  
19 Mr. Stevens' direct testimony and public and  
20 extraordinarily sensitive versions be marked  
21 for identification and admitted to the record.

22 THE COURT: Mr. Stevens'

240150076

1 testimony, his direct testimony is marked and  
2 admitted, subject cross as Exhibit 6 and 6 ES.

3 (Exhibit 6, Direct Testimony of  
4 Sean Stevens, marked in evidence.)

5 (Exhibit 6ES, Direct Testimony  
6 of Sean Stevens-Extraordinarily Sensitive  
7 Version marked in evidence.)

8 BY MS. RAY:

9 Q. And Mr. Stevens, do you also  
10 have with you a document titled Supplemental  
11 Direct Testimony of Sean Stevens consisting of  
12 a one-page summary and three typed pages of  
13 questions and answers, which is filed in  
14 public version only in this proceeding on  
15 October 24, 2023?

16 A. Yes.

17 Q. And was that document prepared  
18 by you or under your supervision?

19 A. Yes.

20 Q. And do you have any corrections  
21 or additions to that document?

22 A. No.



1 Q. If you were asked the questions  
2 appearing there, would you provide the same or  
3 substantially similar answers?

4 A. Yes.

5 Q. And with that correction, do you  
6 wish to -- excuse me. Do you wish to sponsor  
7 that document as your direct testimony in this  
8 proceeding?

9 A. Yes.

10 MS. RAY: And your Honor, I ask  
11 that Mr. Stevens' supplemental direct  
12 testimony and public version only be marked  
13 for identification and admitted to the record  
14 subject to cross-examination.

15 THE COURT: Mr. Stevens'  
16 prefiled supplemental direct testimony is  
17 marked and admitted as Exhibit 7, subject to  
18 cross.

19 (Exhibit 7, Supplemental Direct  
20 Testimony of Sean Stevens, marked in  
21 evidence.)

22 MS. RAY: Your Honor, the

1 witness is admitted for cross-examination.

2 CROSS-EXAMINATION

3 BY MR. FARMER:

4 Q. Good morning, Mr. Stevens.

5 A. Good morning.

6 Q. John Farmer for Consumer  
7 Counsel. You sponsor BESS-5 and BESS-6,  
8 correct?

9 A. Yes.

10 Q. And I just have some general  
11 questions about the BESS-5. BESS-5 will be a  
12 lithium ion project, correct?

13 A. Yes, that's correct.

14 Q. Okay. And that's just like the  
15 three projects that were presented in the 2019  
16 case, correct?

17 A. Yes.

18 Q. What, in your mind, are the  
19 unique functionalities or tests that BESS-5  
20 will seek to accomplish that BESS-1, 2, 3 did  
21 not?

22 A. So, I think for -- give me a

1 second here. So for us for BESS-5, I mean, we  
2 will focus on high mitigation, demand  
3 response, voltage support, and then appearing  
4 with the EP charging.

5 Q. Okay.

6 A. And those will be the BESS-1 and  
7 BESS-2 will be focused on solar overload and  
8 then peak shaping with those.

9 Q. Okay. And one of the concerns  
10 identified in the application with lithium ion  
11 technology, which I just discussed with Mr.  
12 Martin, was the thermal runaway concern,  
13 correct?

14 A. Correct.

15 Q. What safety precautions would be  
16 in place for BESS-5 that -- to guard against  
17 thermal runaway?

18 A. So we will have our standard  
19 safety that we did for BESS-1 and 2 from that  
20 perspective, but also we've developed  
21 stringent requirements around our safety. So  
22 we really go above and beyond from a safety

1 perspective with the lithium ion, so they have  
2 -- it's standard regulation that we require  
3 from that piece of it, and then we're only  
4 using approved lithium ion manufacturers that  
5 meet our safety requirement and they've also  
6 completed all the UL, the 95 BA testing in the  
7 US.

8 Q. Okay. Are there specific things  
9 that would be a BESS-5 monitoring system or  
10 anything like that you can specifically  
11 identify?

12 A. I couldn't go into every detail  
13 from a monitoring piece. I know we're using a  
14 similar test on battery pack. We have some  
15 infrared detection at our other site, so I  
16 assume it would be similar to that, but I  
17 would have to get back to you on the exact  
18 monitoring that we'll have in place.

19 Q. Okay. And then for BESS-6, I  
20 have a few questions. If you could turn to  
21 your schedule two, page one, page one of your  
22 -- and I'm looking at page one.

1 A. Page one?

2 Q. Page one, yes. And I'm looking  
3 at the corrected version. So there are things  
4 I'll be asking you about that have now been  
5 made public in your corrected version. So you  
6 -- are you there, sir?

7 A. Yes.

8 Q. Okay. And you identified the  
9 location as Virginia State University. In  
10 here it's multipurpose center, correct?

11 A. That's correct.

12 Q. And if you could turn to page  
13 six of your schedule two, and I'm looking at  
14 the second paragraph under the objective  
15 heading. You describe increasing community  
16 engagement by showcasing emerging technologies  
17 to the students at the University and doing  
18 that at the start of their career journey,  
19 correct?

20 A. That's correct.

21 Q. Okay. Is that going to entail  
22 something like hands-on academic coursework or

1 anything like that, or is it more just to  
2 increase awareness of it being present at the  
3 University?

4 A. I think our thought is it could  
5 potentially be both. We're working with  
6 Virginia State University to build a  
7 curriculum. I think they would like a very  
8 hands-on approach, but I think we just need to  
9 look at it from a safety perspective and how  
10 much they can be engaged, but we're trying to  
11 integrate them into each process as much as  
12 possible.

13 Q. Okay. And is there any  
14 arrangement with the University that would  
15 defray some of the costs of the project or are  
16 all the costs going to be recovered under --  
17 through the company's BESS rates?

18 A. There's no agreement, so that it  
19 will all be recovered through BESS rates.

20 Q. Okay. If you could turn to your  
21 page three of your schedule two, and under  
22 useful life and decommissioning, you identify

1 the projected useful life of the project as 30  
2 years, correct?

3 A. That's correct.

4 Q. That's quite a bit longer than  
5 the other BESS systems that the company's  
6 proposed, correct?

7 A. I believe so.

8 Q. Is that attributable to the  
9 nickel-hydrogen chemistry, or are there other  
10 factors that contribute to that?

11 A. I think it's -- some of it is  
12 directly related to that, just because of the  
13 -- its ability from a cycling. It's not as  
14 much wear and tear on the batteries,  
15 potentially for other batteries.

16 Q. Okay. And then if you could  
17 turn to page five of schedule two.

18 A. I'm there.

19 Q. And here you indicate that  
20 BESS-6 at the time of filing had been  
21 submitted for a Department of Energy funding  
22 opportunity under the IIJA, correct?

1 A. That's correct.

2 Q. And I think this was clarified  
3 during discovery, and I have the discovery  
4 response if we need it, but for simplicity,  
5 I'll just ask you, was that project selected  
6 or has the company been notified that the  
7 project was not selected for that opportunity?

8 A. We have been notified that it  
9 was not selected.

10 Q. Okay. I do have some questions  
11 for you still about this section of schedule  
12 two. If you look at the second paragraph, you  
13 note the Virginia State pilot would have been  
14 combined with a system at Hampton University  
15 and that would have included academic  
16 opportunities on both campuses, correct?

17 A. Yes.

18 Q. Okay. Can you describe in the  
19 next paragraph the combined -- combined cost  
20 as \$22.8 million, correct?

21 A. That's correct.

22 Q. And that compares to \$14.4



240150076

1 million for just the Virginia State project,  
2 correct?

3 A. So it was -- yes. That's the  
4 total of the two projects was 22.8.

5 Q. Okay. The project at Hampton  
6 University, was that dependent on receiving  
7 this funding or will the company still be  
8 pursuing that project?

9 A. We will not be pursuing it. It  
10 was -- it was dependent on receiving the  
11 funding.

12 Q. Okay. Thank you, Mr. Stevens.  
13 That's all I have for you today. Thank you.

14 MR. OCHSENHIRT: No questions  
15 from staff.

16 THE COURT: Does the company  
17 have any redirect?

18 MS. RAY: No redirect, your  
19 Honor.

20 THE COURT: All right. Well,  
21 you did file rebuttal, so I may see you again  
22 so you're excused for the time being.

1 MR. STEVENS: Thank you.

2 THE COURT: Thank you. That is  
3 the company's -- well, no. We have to get  
4 Miss Boschen's testimony. Several parts of  
5 her testimony admitted.

6 MS. HARRIS: Your Honor, company  
7 witness Boschen has been stipulated by the  
8 parties and excused from the hearing.  
9 Accordingly, I would ask that the document  
10 entitled Direct Testimony of Amelia H. Boschen  
11 consisting of one -- of a one-page witness  
12 direct testimony summary, two typed pages of  
13 questions and answers and appendix A and one  
14 schedule, which was filed in public version  
15 only in this proceeding on September 18, 2023,  
16 be marked for identification and admitted to  
17 the record.

18 THE COURT: Okay. Miss  
19 Boschen's prefiled direct testimony, the  
20 initial testimony filed with the application  
21 is marked and admitted as Exhibit 8.

22 (Exhibit 8, Direct Testimony of

1 Amelia H. Boschen, marked into evidence.)

2 MS. HARRIS: Your Honor, I would  
3 also ask that the document entitled  
4 Supplemental Direct Testimony of Amelia H.  
5 Boschen, consisting of a one-page witness  
6 supplemental direct testimony summary, two  
7 typed pages of questions and answers and two  
8 additional schedules, which was filed in  
9 public version only in this proceeding on  
10 October 24, 2023, be marked for identification  
11 and admitted to the record.

12 THE COURT: Miss Boschen's  
13 prefiled supplemental direct testimony is  
14 marked and admitted as Exhibit 9.

15 (Exhibit 9, Supplemental  
16 Testimony of Amelia H. Boschen, marked in  
17 evidence.)

18 MS. HARRIS: That completes the  
19 company's direct case.

20 THE COURT: Okay.

21 MR. OCHSENHIRT: Your Honor,  
22 before we hear the next witness, would it be

240150076

1 appropriate to mark the DEQ report?

2 THE COURT: That would be very  
3 good.

4 MR. OCHSENHIRT: For the record,  
5 that was filed on December 22, 2023 in the  
6 document.

7 THE COURT: DEQ report is marked  
8 and admitted as Exhibit 10.

9 (Exhibit 10, DEQ report, marked  
10 in evidence.)

11 THE COURT: Coming to staff.

12 Your Honor, at this time  
13 Commission staff calls Jason P. Brannick.

14 JASON P. BRANNICK,  
15 after having been first duly sworn was  
16 examined and testified as follows:

17 DIRECT EXAMINATION

18 BY MR. BROWN:

19 Q. Good morning, Mr. Brannick.

20 A. Good morning.

21 Q. Please state your name for the  
22 record.

240150078

1           A.       Jason Brannick, Commission's  
2 utility engineer.

3           Q.       Do you have a document with you  
4 entitled the Prefiled Staff Testimony of Jason  
5 P. Brannick filed on December 21, 2023,  
6 consisting of a one-page summary, 38 pages of  
7 questions and answers and five attachments?

8           A.       Yes.

9           Q.       Was this document prepared by  
10 you or under your supervision?

11          A.       Yes.

12          Q.       Do you have any corrections to  
13 your testimony?

14          A.       I do. The first correction is  
15 on page 17 of your staff testimony on line  
16 two. On line two, BESS-4 should be BESS-5,  
17 and next on the table in attachment five of my  
18 testimony, there should be two more rows.  
19 These two metrics were included on BESS-3, and  
20 staff recommends that these two metrics should  
21 be also included on BESS-4. We have the  
22 documents and distributed.

240150076

1 THE COURT: Can you --

2 MR. OCHSENHIRT: These documents  
3 have already been submitted.

4 THE COURT: Okay.

5 BY MR. BROWN:

6 Q. Could you please restate for the  
7 record one more time what this additional  
8 correction would be?

9 A. Yes. On attachment five of my  
10 testimony, there should be two more rows.  
11 These two metrics added were included on  
12 BESS-3 and staff recommends that these two  
13 metrics shall be included on BESS-4, as well.

14 THE COURT: So you want to  
15 substitute this as attachment five is prefiled  
16 testimony?

17 MR. BROWN: Correct, your Honor.  
18 And what you're seeing now is the original  
19 prefiled Exhibit 5 and this is a corrected  
20 version with thee two --

21 THE COURT: Extra rows.

22 MR. BROWN: Rows here.

1 BY MR. BROWN:

2 Q. Mr. Brannick, do you have any  
3 other corrections to your testimony?

4 A. I do not.

5 Q. If I were to ask you the same  
6 questions, would your answers be the same or  
7 substantially the same?

8 A. Yes.

9 MR. BROWN: Your Honor, may we  
10 have Mr. Brannick's direct testimony marked  
11 and admitted into the record, subject to  
12 cross-examination? This testimony was filed  
13 in public and confidential accordance.

14 THE COURT: Mr. Brannick's  
15 prefiled testimony with the corrections  
16 identified today, and in particular with the  
17 substitution of a new attachment five, is  
18 marked and admitted subject to cross in this  
19 proceeding as Exhibit 11 and 11C.

20 (Exhibit 11, Direct Testimony of  
21 Jason P. Brannick, marked in evidence.)

22 (Exhibit 11C, Direct Testimony

240150070

1 of Jason P. Brannick-Confidential Version,  
2 marked in evidence.)

3 MR. BROWN: Thank you, your  
4 Honor. The witness is available for  
5 cross-examination.

6 THE COURT: Mr. Farmer, do you  
7 have any questions?

8 MR. FARMER: Yes. Just briefly,  
9 your Honor.

10 CROSS-EXAMINATION

11 BY MR. FARMER:

12 Q. Mr. Brannick, my name is John  
13 Farmer. How are you?

14 A. Doing fine. Thank you.

15 Q. As just a general question, were  
16 you in the courtroom earlier when Mr. Martin  
17 examined Mr. Stevens?

18 A. Yes.

19 Q. Did you have any comments --  
20 comments they may have authored about the  
21 storage industry generally?

22 A. I do not.



249150076

1 Q. And if you could turn to page 15  
2 of your direct testimony.

3 THE COURT: I'm sorry.  
4 Exhibit 1 what, Mr. Farmer?

5 MR. FARMER: Page 15.

6 THE COURT: Page 15. Thank you.

7 THE COURT REPORTER: This is the  
8 Court Reporter. I'm sorry, Mr. Farmer, if you  
9 could speak up a little bit.

10 BY MR. FARMER:

11 Q. Mr. Brannick, are you on page  
12 15?

13 A. Yes.

14 Q. Okay. Here you provide staff's  
15 assessment of the BESS-4 project and as I  
16 understand your testimony, you conclude BESS-4  
17 may accomplish the two identified goals that  
18 the company identified, correct?

19 A. Yes.

20 Q. Okay, but staff did not make a  
21 specific recommendation in that regard,  
22 correct?

1           A.       Correct.

2           Q.       Okay.  And you provided a  
3 similar assessment of BESS-5 and BESS-6,  
4 correct?

5           A.       Yes.

6           Q.       And I did not see any discussion  
7 in your testimony about the costs of BESS-4;  
8 is that right?

9           A.       Correct.

10          Q.       Okay.  How did staff analyze the  
11 projected costs of the BESS-4 project?

12          A.       A cost was not analyzed for this  
13 project as it is under the pilot -- under the  
14 statute.  So is not a target of acceptance or  
15 moving forward with them.

16          Q.       Okay.  Would your answer be the  
17 same for BESS-5 and BESS-6?

18          A.       Yes.

19          Q.       Okay.  Thank you, Mr. Brannick.  
20 That's all the questions I have.

21                   THE COURT:  I'm going to follow  
22 up with a similar question that I had for Mr.

240150076

1 Farmer.

2 Did staff not look at cost at all here,  
3 or does staff have any view about whether or  
4 not, again, not picking and choosing what  
5 would be the BESS project here or there, but  
6 any -- does staff have any -- does staff  
7 oppose or contest that the cost for the parts  
8 essentially or the costs for installing these  
9 types of technologies are reasonable?

10 MR. BRANNICK: Cost did not come  
11 into our --

12 THE COURT: At all. At all.  
13 You don't have an opinion one way or another  
14 and didn't look to see whether or not this  
15 type of technology, this is normally what it  
16 would cost?

17 MR. BRANNICK: We did not  
18 analyze cost.

19 THE COURT: Okay. Sorry I've  
20 made you answer that question about, like,  
21 five times. All right. Does the company have  
22 any questions for Mr. Brannick?

1 MS. RAY: Your Honor, we do not  
2 have any questions for Mr. Brannick. We would  
3 note for the record that the company does not  
4 object to that additional metric for the  
5 BESS-4 that was included on his attached file.

6 THE COURT: Okay. Thank you.  
7 Did this prompt any redirect?

8 MR. BROWN: No, your Honor.

9 THE COURT: Thank you, Mr.  
10 Brannick.

11 MR. BRANNICK: Thank you.

12 THE COURT: This brings us back  
13 to the company.

14 MS. RAY: Yes, your Honor, and I  
15 will check with Mr. Farmer.

16 MR. FARMER: Your Honor, my  
17 understanding is I don't have any questions  
18 for Mr. Stevens on rebuttal, and it's my  
19 understanding the staff does not either, so  
20 unless your Honor has questions.

21 THE COURT: I do not, and  
22 there's no surrebuttal that needs to be

1 offered?

2 MS. RAY: No, your Honor.

3 THE COURT: Okay. So I guess  
4 we'll just go ahead and put it in the  
5 rebuttal.

6 MS. RAY: Yes, ma'am. So we  
7 would ask that the rebuttal testimony of Sean  
8 Stevens, consisting of a one-page summary, six  
9 typed pages of questions and answers, which  
10 was filed in public version only on this  
11 proceeding on January 10, 2024 be marked and  
12 admitted into the record.

13 THE COURT: Mr. Stevens'  
14 rebuttal is marked and admitted as Exhibit 12.

15 (Exhibit 12, Rebuttal Testimony  
16 of Sean Stevens, marked in evidence.)

17 MS. HARRIS: Your Honor, company  
18 witness Boschen has also been stipulated by  
19 the parties in rebuttal. Accordingly, I would  
20 ask that the document entitled Rebuttal  
21 Testimony of Amelia H. Boschen, consisting of  
22 a one-page witness rebuttal testimony summary

1 and three typed pages of questions and  
2 answers, which was filed in the public version  
3 only in this proceeding on January 10, 2024 be  
4 marked for identification and admitted to the  
5 record.

6 THE COURT: Boschen's rebuttal  
7 testimony is marked and admitted as Exhibit  
8 13.

9 (Exhibit 13, Rebuttal Testimony  
10 of Amelia H. Boschen, marked in evidence.)

11 MS. HARRIS: That concludes the  
12 Company's rebuttal case.

13 THE COURT: All right. Well, I  
14 guess that is -- is there any other evidence  
15 that needs to come into the record of this  
16 case?

17 MR. OCHSENHIRT: No, your Honor.

18 THE COURT: So it looks like  
19 we've come to the conclusion. Does anyone  
20 need a few minutes -- well, first of all,  
21 anyone have a request for post hearing briefs?

22 MR. OCHSENHIRT: No, your Honor.

1 The staff is willing to stand on our own at  
2 this point. I don't think anything has  
3 changed in the last hour and 11 minutes.

4 THE COURT: Okay. I have one  
5 question for everybody, so just for fun.

6 MR. OCHSENHIRT: Okay.

7 THE COURT: But is everybody --  
8 no one wanted post hearing briefs, correct?

9 MS. RAY: That is correct, your  
10 Honor, for the Company.

11 THE COURT: Okay. All right.  
12 So if we can just -- if you don't need to do a  
13 closing, but if I could have everyone respond  
14 to a question that I have. You can do a  
15 closing, also. I'm not trying to keep you  
16 from doing that. So that in mind, we would  
17 start with Consumer Counsel. Do you want to  
18 do a closing, or do you have anything to add  
19 from your opening, Mr. Farmer?

20 MR. FARMER: No. Your Honor. I  
21 think we can stand on what was stated earlier.

22 THE COURT: Okay. My question

1 is the application of 5646.1 in this case.  
2 Does anyone -- I know the company has asked  
3 for, as necessary, a CPCN in connection with  
4 BESS-4 pursuant to 580D? Does Consumer  
5 Counsel have any position as to whether or not  
6 46.1 applies in this case at all?

7 MR. FARMER: No, Consumer  
8 Counsel does not.

9 THE COURT: Okay. How about  
10 staff?

11 MR. OCHSENHIRT: I don't think  
12 staff has it.

13 THE COURT: You don't have a  
14 position or you don't --

15 MR. OCHSENHIRT: I mean, it's  
16 not something that staff has assessed. If you  
17 want to take a quick break for us to think  
18 about it, I can put something on the record.

19 THE COURT: Why don't we take a  
20 quick break?

21 MR. OCHSENHIRT: Okay.

22 THE COURT: And I'll go ahead.



1 and give the Company a quick heads-up. That  
2 was one question, but then I also wanted to  
3 talk to you about the DEQ report with respect  
4 to BESS-5 and BESS-6. This was not a factual  
5 question, so I didn't need to ask Miss Boschen  
6 a question about it, but in rebuttal, she said  
7 that the, you know, the Company would comply  
8 with those recommendations.

9 My question is, not that I don't want  
10 the Company to comply with the recommendations  
11 or anything they need to comply with, but is  
12 the Company required to comply with those  
13 things if the Commission were to conclude that  
14 they don't need a CPCN for those projects?  
15 How does that interact? Does the Commission  
16 need to condition its approval of those  
17 projects on compliance with DEQ and analyzing  
18 using the environmental factors and all the  
19 normal things, if those projects do not  
20 require CPCN's and how long would you guys  
21 like?

22 MR. OCHSENHIRT: Five minutes is

240150076

1 adequate. I don't really need a lot of time.

2 THE COURT: Okay. How about,  
3 I'm going to give you 15. Okay?

4 MR. OCHSENHIRT: Okay.

5 THE COURT: So we're going to  
6 stand adjourned for 15 minutes. Thank you.

7 (Off the record.)

8 THE COURT: We're back on the  
9 record.

10 MR. OCHSENHIRT: Your Honor,  
11 before I say anything, I'll defer to Mr.  
12 Farmer because he's first with the order. Did  
13 you have anything more to add?

14 MR. FARMER: Nothing further.

15 MR. OCHSENHIRT: Okay.

16 THE COURT: Well, okay.

17 MR. OCHSENHIRT: If you have  
18 questions for Consumer Counsel.

19 THE COURT: I'm doing a bait and  
20 switch on everyone, too, because I have one  
21 extra question that you don't have to answer,  
22 but I'm going to give you the opportunity to

1 do so.

2 Mr. Farmer, when it comes to the pilot  
3 code section that we're dealing with, it says  
4 the pilot program shall provide for the  
5 recovery of all reasonable and prudent costs  
6 incurred under the pilot program through the  
7 electric utilities BESS rates on a  
8 nondiscriminatory basis. Does the Commission  
9 have to decide whether or not the cost of  
10 these programs are reasonable and prudent in  
11 this case, or do we -- are we given another  
12 opportunity to address that issue when we --  
13 the next time they come in for a BESS rate  
14 case?

15 MR. FARMER: It would seem to  
16 come within the scope of the BESS rate case  
17 and the issue.

18 THE COURT: Okay. You want to  
19 start with that.

20 MR. OCHSENHIRT: I'll start with  
21 that question. Yeah, I don't think staff  
22 views this as a cost recovery proceeding.

1 THE COURT: Right.

2 MR. OCHSENHIRT: And, therefore,  
3 it would be an issue for the biennial. I will  
4 say in the 2019 case, the Commission did, in  
5 fact, make a finding that the costs were  
6 reasonable and prudent. The staff doesn't  
7 have any reason in this case to suggest  
8 otherwise that the costs are not reasonable.  
9 You know, it's based on the line of inquiry  
10 you had earlier, which is for this -- for a  
11 project that is like BESS-4, say, the cost the  
12 Company has said don't seem to be out of  
13 balance to staff.

14 THE COURT: Okay.

15 MR. OCHSENHIRT: The staff did  
16 not assess the costs specifically given that  
17 really is an issue for the proceeding in which  
18 the company seeks to recover those costs,  
19 which is not this case.

20 THE COURT: Okay.

21 MR. OCHSENHIRT: That would be  
22 the biannual.

1 THE COURT: However, if they  
2 were to seek these costs, the Commission  
3 couldn't say at that point, well, you can't  
4 recover those costs because that was -- that  
5 was a bad project. He should have never done  
6 that project.

7 MR. OCHSENHIRT: No. I don't  
8 think the Commission could say that.

9 THE COURT: Because we're  
10 essentially approving the project in this  
11 case.

12 MR. OCHSENHIRT: Yes.

13 THE COURT: Okay.

14 MR. OCHSENHIRT: Correct.

15 THE COURT: All right. So going  
16 back to --

17 MR. OCHSENHIRT: The 46.1. So  
18 the hook to 46.1 is whether the commission,  
19 quoting the code section, is required to  
20 approve the construction of any electrical  
21 utility facility. Staff, until the Commission  
22 says something to the contrary, views that as,

1 does the Commission have to grant a  
2 certificate.

3 THE COURT: Gotcha.

4 MR. OCHSENHIRT: So in this  
5 case, if the Commission were to find that a  
6 CPCN for BESS-4 was required, then staff would  
7 say that 46.1 applies. We don't have any  
8 reason to believe that any of the requirements  
9 of that code section have not been -- that's a  
10 lot of negatives. Staff would not say 46.1  
11 says that the Commission could -- should not  
12 proceed with these three pilot programs.

13 THE COURT: Right. And you  
14 would also, for the most part, 580D and 46.1  
15 in terms of requirements are very similar,  
16 correct?

17 MR. OCHSENHIRT: Yes. The  
18 Commission routinely quotes both of them at  
19 its CPC headquarters.

20 THE COURT: Okay. Thank you  
21 very much, Mr. Ochsenhirt. That was very  
22 helpful.

240150076

1 MR. OCHSENHIRT: Okay.

2 THE COURT: And turning to the  
3 Company.

4 MS. RAY: Okay. Your Honor, as  
5 to the applicability of Virginia code section  
6 56-46.1, I don't think our position is too  
7 different from WorkCom. Mr. Ochsenhirt just  
8 said that the Company's position is that it  
9 does not apply to BESS-4 and 5 as the Company  
10 considers them ordinary --

11 THE COURT: You mean five and  
12 six.

13 MS. RAY: Excuse me. Thank you.  
14 That's five and six, because the Company  
15 considers them ordinary extensions and  
16 improvements in the usual course of business  
17 that would not require a CPCN or otherwise any  
18 sort of Commission approval. I would note  
19 that the Commission did not address the  
20 applicability of section 56-46.1 in the prior  
21 case, but it did find that a CPCN was  
22 appropriate for the BESS facility that was the

240150076

1 generation asset, so as to BESS-4, the Company  
2 would state that the requirements of section  
3 56-46.1 have been satisfied in this case with  
4 the DEQ report and the fact that the company  
5 has no objections to those recommendations.

6 THE COURT: Okay. And do you  
7 have a position about cost? The question --  
8 the last question that I threw on Mr. Farmer  
9 to start with here.

10 MS. RAY: As Counsel has  
11 previously noted, the Commission did find  
12 those costs to be reasonable and prudent in  
13 the prior case.

14 THE COURT: Right.

15 MS. RAY: And improving the  
16 projects, we do think that is appropriate  
17 here. However, we would note that those could  
18 also be addressed in a rate proceeding, as  
19 well.

20 THE COURT: Okay. All right.  
21 Thank you very much. Is there anything else  
22 that needs to be brought to the Commission's



1 attention today?

2 MR. OCHSENHIRT: No. Your  
3 Honor.

4 THE COURT: All right. Thank  
5 you. It's very interesting. I hope everyone  
6 has a great remainder of the day, their day  
7 and we stand adjourned.

8 (Concluded at 11:35 a.m.)

9

10

11

12

13

14

15

16

17

18

19

20

21

22

1  
2  
3  
4  
5  
6  
7  
8  
9  
10  
11  
12  
13  
14  
15  
16  
17  
18  
19  
20  
21  
22

CERTIFICATE OF TRANSCRIBER

I, Cynthia Bauerle, do hereby certify that this transcript was prepared from the digital audio recording of the foregoing proceeding; that said transcript is a true and accurate record of the proceedings to the best of my knowledge, skills, and ability; and that I am neither counsel for, related to, nor employed by any of the parties to the case and have no interest, financial or otherwise, in its outcome.

*Cynthia Bauerle*

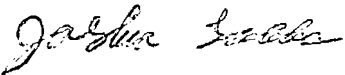
---

CYNTHIA BAUERLE, CSR

1/26/24

1 CERTIFICATE OF COURT REPORTER-NOTARY PUBLIC  
2 I, Joshua Tubbs, the officer before  
3 whom the foregoing proceedings were taken, do  
4 hereby certify that any witness(es) in the  
5 foregoing proceedings were fully sworn; that  
6 the proceedings were recorded by me and  
7 thereafter reduced to typewriting by a  
8 qualified transcriptionist; that said digital  
9 audio recording of said proceedings are a true  
10 and accurate record to the best of my  
11 knowledge, skills, and ability; and that I am  
12 neither counsel for, related to, nor employed  
13 by any of the parties to this case and have no  
14 interest, financial or otherwise, in its  
15 outcome.

16  
17 Notary Registration No.: 7905736  
18 My Commission Expires: 4/30/25

19   
20 \_\_\_\_\_

21 Joshua Tubbs,  
22 NOTARY PUBLIC FOR THE COMMONWEALTH OF VIRGINIA