

part 3

220520151

Welsh

PART B

Summary of the Testimony of Sean M. Welsh

1 My testimony addresses the following topics and makes the following recommendations:

- 2 • Staff recommends a revenue requirement of \$79.700 million for Rider OSW for the Rate
3 Year of September 1, 2022, through August 31, 2023. This revenue requirement consists
4 of \$48.198 million for the Projected Cost Recovery Factor and \$31.502 million for the
5 AFUDC Cost Recovery Factor. There is no Actual Cost True-Up Factor in this proceeding
6 as this is the initial Rider OSW proceeding.
- 7 • Staff's revenue requirement is \$998,000 greater than requested by the Company and
8 included in the Commission's Order for Notice and Hearing. Staff notes the Commission
9 has historically limited the revenue requirement to the amounts that were originally
10 requested and noticed to the public. If the Commission chooses to limit the revenue
11 requirement to the noticed amount of \$78.702 million, the \$998,000 excess would be
12 included in a future True-Up Factor.
- 13 • The estimated lifetime revenue requirement of Rider OSW in nominal dollars on a Virginia
14 jurisdictional basis is approximately \$7.38 billion. For a residential customer using an
15 average of 1,000 kWh of electricity per month, this results in an average monthly bill of
16 \$4.72 and a peak monthly bill of \$14.22.
- 17 • Staff discusses the Rider OSW framework, including the costs and benefits to be included
18 in Rider OSW.

**PREFILED STAFF TESTIMONY
OF
SEAN M. WELSH**

**VIRGINIA ELECTRIC AND POWER COMPANY
CASE NO. PUR-2021-00142**

APRIL 8, 2022

INTRODUCTION

1 **Q. PLEASE STATE YOUR NAME AND THE POSITION YOU HOLD WITH THE**
2 **STATE CORPORATION COMMISSION ("COMMISSION").**

3 **A.** My name is Sean M. Welsh. I am a Manager with the Commission's Division of Utility
4 Accounting and Finance.

5 **Q. PLEASE PROVIDE A SUMMARY OF THE CURRENT PETITION.**

6 **A.** On November 5, 2021, Virginia Electric and Power Company d/b/a Dominion Energy
7 Virginia ("DEV" or "Company"), pursuant to § 56-585.1:11, § 56-46.1, and § 56-265.1 *et*
8 *seq.* of the Code of Virginia ("Code"), filed an application ("Application") requesting
9 review and approval of the Coastal Virginia Offshore Wind Commercial Project
10 ("CVOW") and approval and certification of electric interconnection and transmission
11 facilities ("Transmission Facilities") required to interconnect CVOW with the existing
12 transmission system (collectively, "Project"). Additionally, pursuant to Code § 56-
13 585.1:11 and § 56-585.1 A 6 ("Subsection A 6"), the Company requested approval of a rate
14 adjustment clause ("RAC"), designated Rider OSW, for the recovery of costs incurred to
15 construct, own, and operate the Project. As part of its Application, the Company requested
16 recovery of the costs of its Foreign Currency Risk Mitigation Plan. The initial Rider OSW

1 Application consists of a revenue requirement of \$78.702 million, to be recovered in the
2 rate year September 1, 2022, through August 31, 2023 ("Rate Year").

3 **Q. WHAT IS THE PURPOSE OF YOUR TESTIMONY?**

4 **A.** My testimony provides:

- 5 1) An overview of the Rider OSW framework.
- 6 2) A lifetime revenue requirement, for informational purposes, of \$7.38 billion. For
7 an average residential customer, this results in an average monthly bill of \$4.72 and
8 a peak monthly bill of \$14.22.
- 9 3) A Rate Year revenue requirement for the proposed Rider OSW of \$79.700 million.
- 10 4) A discussion of certain elements of the lifetime revenue requirement.

Rider OSW Framework

11 **Q. PLEASE PROVIDE A BRIEF BACKGROUND ON THE HISTORY OF THE**
12 **RIDER OSW RAC RECOVERY FRAMEWORK.**

13 **A.** The framework utilized for Rider OSW was approved by the Commission in Case No.
14 PUR-2020-00134 ("RPS Plan Proceeding").¹ In its Final Order in the RPS Plan Proceeding
15 ("RPS Final Order"), the Commission approved, in general, Staff's proposed rate recovery
16 design for costs of resources approved under the Virginia Clean Economy Act ("VCEA").
17 In the RPS Plan Proceeding, Staff witness Gregory L. Abbott proposed Rider OSW to
18 recover the costs of offshore wind facilities, net of benefits, through a separate stand-alone

¹ Commonwealth of Virginia, ex rel., State Corporation Commission, Ex Parte: Establishing 2020 RPS Proceeding for Virginia Electric and Power Company, Case No. PUR-2020-00134, Doc. Con. Cen. No. 210440236, Final Order (Apr. 30, 2021).

1 RAC. This proposal satisfies the requirements of the VCEA that all costs, net of benefits,
2 of offshore wind facilities be allocated to all customers as a non-bypassable charge, except
3 for those identified as exempt customers under Code § 56-585.1:11 A 3.²

4 **Q. HOW DOES THE COMPANY'S RIDER OSW FRAMEWORK DIFFER FROM**
5 **ITS LEGACY SUBSECTION A 6 RACS?**

6 **A.** A traditional Subsection A 6 RAC recovers the costs of the generating facility and
7 transmission interconnection facilities through the RAC, just as with Rider OSW, but the
8 energy and capacity benefits of those facilities are recovered through the fuel factor and
9 base rates, respectively. In order to recover the entire cost of CVOW and the Transmission
10 Facilities, net of benefits, from non-exempt customers, the Rider OSW framework includes
11 adjustments for renewable energy credits ("RECs"), energy sales, and avoided capacity
12 charges that serve to reduce the lifetime revenue requirement.³

13 **Q. DOES THE COMPANY'S PROPOSED RIDER OSW FRAMEWORK SATISFY**
14 **THE COMMISSION'S RPS FINAL ORDER AND THE REQUIREMENTS OF**
15 **THE VCEA?**

16 **A.** Yes, it does.

² Exempt customers include those participating in the Percentage of Income Payment Plan, advanced clean energy buyers, and qualifying large general service customers. Electric cooperatives also may not be assigned any offshore wind or related transmission costs.

³ As the entirety of the Rate Year occurs before the commercial operations date of July 31, 2025, there are no REC, energy, or capacity benefits in the Projected Factor in this proceeding. I discuss the impact of these benefits on the lifetime revenue requirement below.

Lifetime Revenue Requirement

1 **Q. WHAT IS THE TOTAL LIFETIME REVENUE REQUIREMENT CALCULATED**
2 **BY THE COMPANY?**

3 **A.** The Company presented a lifetime revenue requirement of \$8.42 billion, on a total
4 Company basis, to be recovered from 2022 through 2057, inclusive of total costs of the
5 Project net of benefits. This represents a lifetime revenue requirement of \$7.23 billion on
6 a Virginia jurisdictional basis, reflecting total costs, including financing costs, of
7 approximately \$21.5 billion offset by energy, REC, and capacity benefits of \$14.4 billion.

8 The Company also presented the lifetime revenue requirement of its onshore
9 transmission components separately. The table below breaks down the Rider OSW lifetime
10 revenue requirement into its offshore and onshore components, according to the Company's
11 Application.

Table 1

Component	Va. Juris. Lifetime Revenue Requirement (in billions)
Offshore Generation and Transmission	\$5.45
Onshore Transmission and Network Upgrades	<u>\$1.78</u>
Lifetime Virginia Jurisdictional Revenue Requirement	\$7.23

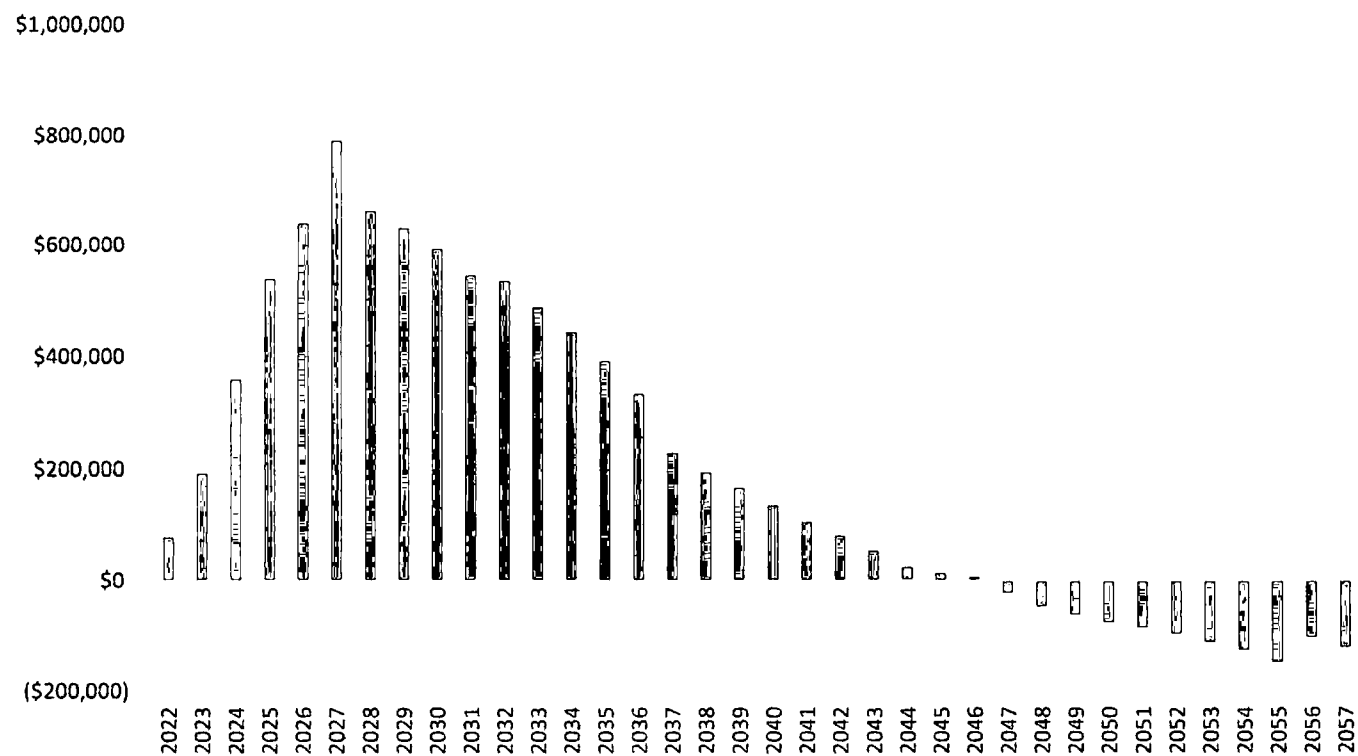
12 **Q. HOW DOES THE ANNUAL REVENUE REQUIREMENT CHANGE OVER**
13 **TIME?**

14 **A.** As shown in the chart below, the projected Rider OSW revenue requirement peaks in 2027
15 at approximately \$790 million, then begins to decline. The Company projects the annual

1 revenue requirement will be negative for the last ten years of the rider, representing a
2 customer credit from 2047 through 2057.

Chart 1

**Va. Juris. Revenue Requirement
In \$000s**



3 **Q. WHAT IS THE LIFETIME IMPACT OF RIDER OSW ON CUSTOMERS' BILLS?**

4 **A.** The Company did not prepare a bill impact analysis as part of its Application,⁴ but it did
5 present a limited residential customer bill impact analysis to its board of directors on
6 September 23, 2021,⁵ and updated this analysis in response to Staff Interrogatory 10-113.

⁴ The Company objected to Staff's interrogatory requesting a bill impact analysis. See Company response to Staff Interrogatory No. 7-87.

⁵ Included in the Application as Filing Schedule 46.b.1.v, Statement 1.

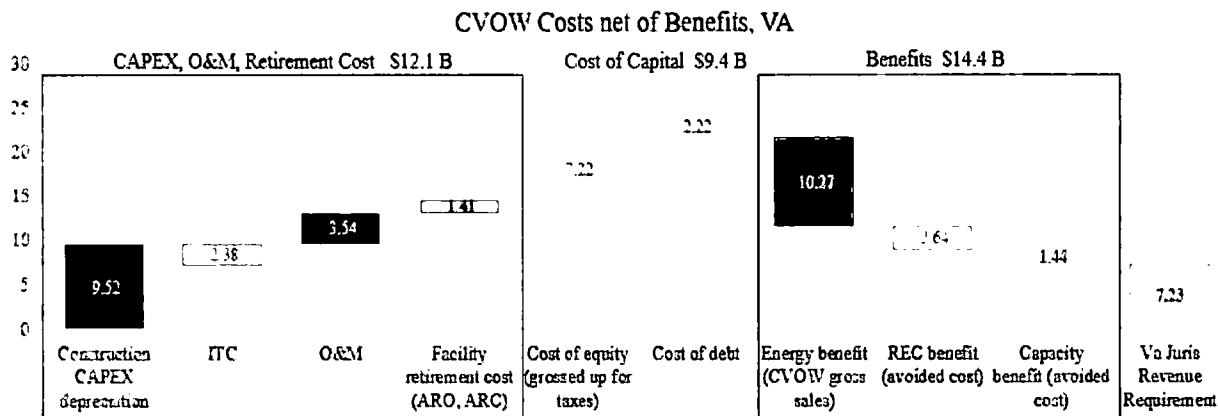
1 In its response, the Company calculates an average monthly bill impact of \$4.72 over the
2 life of the unit and a peak monthly bill impact of \$14.21 in 2027 for a residential customer
3 using 1,000 kWh per month.

4 **Q. WHAT ARE THE COMPONENTS OF THE RIDER OSW LIFETIME REVENUE**
5 **REQUIREMENT?**

6 **A.** Rider OSW costs include the recovery of and return on capital expenditures, less ITC
7 savings, plus O&M expense and decommissioning costs.⁶ Total Project costs, including
8 financing costs, less ITC, are \$21.5 billion. As discussed above, the design framework of
9 Rider OSW incorporates all costs, net of benefits of CVOW and the Transmission
10 Facilities. The Rider OSW lifetime revenue requirement incorporates energy benefits of
11 approximately \$10.3 billion, REC benefits of \$2.6 billion, and an avoided capacity benefit
12 of \$1.4 billion. These benefits offset the costs of the Project and serve to reduce the overall
13 lifetime revenue requirement. The following chart presents the elements of the Company's
14 lifetime revenue requirement.

⁶ Staff notes that operations and maintenance ("O&M") expense and any ongoing capital expenditures related to the Transmission Facilities from Harper's Substation to Fentress, after energization, will be recovered through Rider T1. Staff requested an estimate of these costs, but the Company objected to the interrogatory, as it does not consider them Project costs. See Company response to Staff Interrogatory No. 4-60.

Chart 2



1 **Q. PLEASE DISCUSS STAFF'S REVIEW OF THE COMPANY'S LIFETIME**
 2 **REVENUE REQUIREMENT PRESENTATION.**

3 **A.** Staff reviewed the Company's calculation of its lifetime revenue requirement. Staff notes
 4 the lifetime revenue requirement is presented for informational purposes only. Actual costs
 5 will be requested for recovery through updates to Rider OSW. Staff will continue to audit
 6 those actual costs as incurred.

7 **Q. DOES STAFF PRESENT AN UPDATED LIFETIME REVENUE**
 8 **REQUIREMENT?**

9 **A.** Yes, Staff calculates a Virginia jurisdictional lifetime revenue requirement of \$7.38 billion.
 10 This is based on the Company's capital expenditures and O&M schedules, as provided in
 11 its lifetime revenue requirement, updated for the cost of capital and 9.35% ROE approved
 12 in DEV's most recent triennial review proceeding ("Triennial Review").⁷ Staff also updates

⁷ Application of Virginia Electric and Power Company, For a 2021 triennial review of the rates, terms and conditions for the provision of generation, distribution and transmission services pursuant to § 56-585.1 A of the Code of Virginia, Case No. PUR-2021-00058, Doc. Con. Cen. No. 211160097, Final Order (Nov. 18, 2021).

1 the fuel, REC, and capacity benefits to reflect the assumptions presented in the Company's
 2 bill analysis provided in response to Staff Interrogatory 10-113. The following table
 3 presents a breakdown of the components of the lifetime revenue requirement as updated
 4 by Staff.⁸

Table 2

Component	Va. Juris. Lifetime Revenue Requirement (in billions)
Rate Base – Financing Costs	\$9.60
Depreciation and ARO Accretion	\$10.93
Investment Tax Credits	\$(2.38)
O&M and Other Expenses	\$3.54
Fuel Benefit	\$(10.28)
REC Benefit	\$(2.63)
Capacity Benefit	<u>\$(1.41)</u>
Lifetime Virginia Jurisdictional Revenue Requirement	\$7.38

5 Staff does not adjust any of the other assumptions used by the Company in
 6 calculating its lifetime revenue requirement. Staff notes that the lifetime revenue
 7 requirement necessarily relies on a series of assumptions that are subject to change during
 8 the lifetime of Rider OSW. I discuss sensitivities relating to the useful life of CVOW, the
 9 capacity factor, and the construction costs and timeline below.

⁸ See Statement VI for a breakdown of the annual revenue requirement by cost component.

1 **Q. BASED ON STAFF'S LIFETIME REVENUE REQUIREMENT, WHAT IS THE**
2 **AVERAGE BILL IMPACT OF RIDER OSW ON RESIDENTIAL CUSTOMERS?**

3 **A.** Staff prepared a residential bill impact based on its updated lifetime revenue requirement
4 calculation and the bill analysis information provided by the Company in response to Staff
5 Interrogatory No. 10-113. Staff calculates an average monthly bill of \$4.72 over the life
6 of the Project and a peak bill of \$14.22 in 2027 for a residential customer using 1,000 kWh
7 of electricity per month.⁹

8 **Q. WHAT IS THE USEFUL LIFE OF THE PROJECT?**

9 **A.** The Company utilizes a 30-year life for CVOW in calculating its lifetime revenue
10 requirement. Staff notes this is longer than the 25-year life currently utilized for the
11 Company's offshore wind pilot project. The Company provides a list of supporting
12 evidence for a 30-year life in response to the Office of the Attorney General Interrogatory
13 No. 3-38. The Company also states the offshore wind assets currently in service are
14 included in its depreciation study effective January 1, 2022, which is currently being
15 finalized.¹⁰

16 Staff uses a 30-year life in its lifetime revenue requirement, but notes a 25-year life
17 would impact the lifetime revenue requirement by reducing financing costs, reducing
18 annual O&M expense, and reducing the energy, REC, and capacity benefits of the Project.
19 It would also impact annual revenue requirements and bill impacts by shortening the period

⁹ See Statement VII.

¹⁰ See Company Response to Staff Interrogatory No. 3-30.

1 over which capital expenditures are recovered. Staff witness Kuleshova discusses the
2 impact of a 25-year life on the net present value and LCOE of the Project.

3 **Q. WHAT CAPACITY FACTOR DOES STAFF USE IN ITS LIFETIME REVENUE**
4 **REQUIREMENT CALCULATION?**

5 **A.** Staff uses the 42% capacity factor utilized by the Company in its Application. Staff witness
6 Kuleshova discusses various considerations around the capacity factor, including an
7 alternate scenario utilizing a 39% capacity factor, which is based on 0.5% per year
8 cumulative degradation factor. Staff notes a change in capacity factor would impact the
9 energy and REC benefits outlined in the Company's Application.¹¹ For example, a 39%
10 capacity factor could reduce the energy and REC benefits by approximately \$1.0 billion
11 and \$263 million respectively, which would increase the lifetime revenue requirement by
12 approximately \$1.29 billion.¹²

13 Staff also notes the Company used a preliminary effective load carrying capability
14 ("ELCC") study from PJM Interconnection, L.L.C. ("PJM"), based on information as of
15 February 2021, in developing the avoided capacity benefit component of its lifetime
16 revenue requirement.¹³ Elsewhere in the Application, DEV used updated July 2021
17 information from PJM, which, among other things, increased the ELCC for offshore
18 wind.¹⁴ Updating the capacity benefit calculation with the higher ELCC would reduce the

¹¹ Staff notes that a change in the capacity factor could also potentially impact other costs, such as variable O&M expense.

¹² See Statement VI, Workpapers A-C.

¹³ See Company response to Staff Interrogatory Nos. 1-9, 8-94, and 8-95.

¹⁴ See Appendix D, page 25 for PJM's June 2021 offshore wind ELCC Class Ratings.

lifetime revenue requirement by approximately [BEGIN EXTRAORDINARILY SENSITIVE] ██████████ [END EXTRAORDINARILY SENSITIVE].¹⁵

Q. HOW DO TOTAL PROJECTED CAPITAL EXPENDITURES IMPACT THE LIFETIME REVENUE REQUIREMENT?

A. The Company asserts that the total estimated Project capital expenditures amount to \$9.8 billion. The following table shows the components that make up the total Project capital expenditures.

Table 3

Component	Capital Expenditures (in billions)
Offshore Generation and Transmission	\$7.8
Onshore Transmission and Network Upgrades	\$1.5
Contingency and Hedging Allowance	<u>\$0.5</u>
Total Capital Expenditures	\$9.8

This represents an increase of approximately \$1.8 billion over DEV's 2019 construction forecast, primarily due to increases in projected transmission expenditures of approximately \$1 billion.¹⁶

The recovery and return on capital expenditures represent the largest cost component of the revenue requirement. Any potential cost overruns could have a significant impact on the Rider OSW lifetime revenue requirement. Per the Company's

¹⁵ See Statement VI, Workpaper D.

¹⁶ See Direct Testimony of Mark D. Mitchell at 6-7.

1 analysis, a 10% increase in capital expenditures would increase the peak monthly
2 residential bill to \$15.62.¹⁷ Staff witness Kuleshova discusses the risks of potential capital
3 expenditure overruns and Staff's recommended customer protections related thereto.

4 **Q. PLEASE DISCUSS THE REVENUE REQUIREMENT IMPACT OF ANY DELAYS**
5 **TO THE CONSTRUCTION OF THE CVOW PROJECT.**

6 **A.** The Company anticipates beginning onshore construction in the third quarter of 2023 and
7 offshore construction is scheduled to begin in the fourth quarter of 2024. The Company
8 anticipates completing construction by the end of 2026, with an initial commercial
9 operations date of July 31, 2025. A delay in construction could increase the lifetime
10 revenue requirement by extending the amount of time the Company earns a return on its
11 construction work in process before it begins recovering its rate base. It may also impact
12 the total capital expenditures and O&M expense projections included in the lifetime
13 revenue requirement.

14 **Q. HAS STAFF RAISED CONCERNS ABOUT THE CVOW CONSTRUCTION**
15 **TIMELINE IN ANY OTHER PROCEEDINGS?**

16 **A.** Yes. The Commission recently issued its Order Granting Approval of the affiliate
17 agreement by which DEV will charter from Blue Ocean Energy Marine, LLC, the use of
18 the *Charybdis*, a Jones Act compliant wind turbine installation vessel ("Charter
19 Agreement").¹⁸ The *Charybdis* will support construction of CVOW, and DEV proposes to

¹⁷ See the response to Staff Int. 10-113.

¹⁸ *Application of Virginia Electric and Power Company and Blue Ocean Energy Marine, LLC, For approval of an affiliate agreement under Chapter 4 of Title 56 of the Code of Virginia, Case No. PUR-2021-00292, Doc. Con. Cen. No. 220320231, Order Granting Approval (Mar. 18, 2022).*

1 recover the costs to charter the *Charybdis* through Rider OSW. The Charter Agreement
2 will commence in the third quarter of 2025, after completion of an initial charter to North
3 East Offshore, LLC ("North East Charter Party").

4 In its action brief in Case No. PUR-2021-00292, Staff expressed concern over the
5 ramifications of any delays in either the construction of the *Charybdis* or its initial charter
6 to the North East Charter Party. Any delays could increase costs to be recovered through
7 Rider OSW.¹⁹ In its Order Granting Approval, the Commission directed DEV to keep the
8 Commission apprised of the following information: (1) the *Charybdis* construction
9 timetable; (2) the North East Charter Party timetable; and (3) the DEV Charter Party
10 timetable, through semi-annual notifications submitted to the Commission's UAF Director
11 that report on (a) whether the construction and charters are on schedule; (b) any delays that
12 have occurred; and (c) the effect, in time and dollars, that the delays may have on the DEV
13 Charter Party and the Project. Staff recommends this information be provided as part of
14 the Company's Rider OSW update filings as well. Staff will continue to review the
15 *Charybdis* construction and North East Charter Party timetables as they are updated.

16 **Q. HOW ARE INVESTMENT TAX CREDITS ("ITCs") TREATED IN THE**
17 **COMPANY'S APPLICATION?**

18 **A.** The Company projects ITCs for the Project totaling \$2.45 billion, to be utilized between
19 2031 and 2037. This is based on a 30% ITC that the Company projects to apply to
20 approximately 83% of the Project's capital expenditures. When grossed up for its tax
21 effect, the ITC benefit reduces the lifetime revenue requirement by approximately \$2.72
22 billion. Per Internal Revenue Service guidelines, ITCs are subject to normalization

¹⁹ See Company response to Staff Interrogatory No. 15-138.

1 requirements and therefore amortized over the life of the asset. ITCs also generate a tax
2 basis difference for depreciation purposes that produces a permanent book-to-tax
3 difference that serves to increase the jurisdictional lifetime revenue requirement by
4 approximately \$420 million.²⁰ When netted together, ITCs are projected to reduce the
5 lifetime revenue requirement of Rider OSW by \$2.38 billion.

Rider OSW Initial Revenue Requirement

6 **Q. WHAT IS THE COMPANY'S PROPOSED REVENUE REQUIREMENT FOR**
7 **THE INITIAL RIDER OSW?**

8 **A.** The Company proposes an initial Rate Year revenue requirement of \$78.702 million,
9 consisting of a Projected Cost Recovery Factor ("Projected Factor") of \$47.51 million and
10 an Allowance for Funds Used During Construction ("AFUDC") Cost Recovery Factor of
11 \$31.192 million.²¹

12 **Q. WHAT IS STAFF'S CALCULATED REVENUE REQUIREMENT FOR RIDER**
13 **OSW?**

14 **A.** Staff calculates a Rate Year revenue requirement of \$79.7 million, consisting of a Projected
15 Factor of \$48.198 million and an AFUDC Cost Recovery Factor of \$31.502 million. Staff's
16 revenue requirement is \$998,000 greater than the Company's proposed revenue
17 requirement. Staff notes the Commission has historically limited the revenue requirement
18 to the amounts that were originally requested and noticed to the public. If the Commission

²⁰ Staff notes the Company's levelized cost of energy ("LCOE") calculation incorporates the 30% ITC benefit but does not appear to include the impact of the tax basis reduction. As discussed by Staff witness Kuleshova, including the \$420 million effect of the tax basis reduction would increase the LCOE by approximately \$3/MWh.

²¹ The Company proposes to amortize AFUDC costs over the twelve-month Rate Year.

1 chooses to limit the revenue requirement to the noticed amount of \$78.702 million, the
2 \$998,000 excess would be included in a future True-Up Factor.

3 **Q. WHAT IS THE PRIMARY DIFFERENCE BETWEEN THE STAFF AND**
4 **COMPANY REVENUE REQUIREMENTS?**

5 **A.** The only material difference between the Staff and Company revenue requirements is that
6 Staff incorporates the capital structure and weighted average cost of capital, including the
7 9.35% ROE, approved in the Company's Triennial Review, effective November 2021.

8 **Q. PLEASE DISCUSS STAFF'S AUDIT OF RIDER OSW COSTS.**

9 **A.** Staff reviewed the Company's projected capital expenditures, and sampled actual costs
10 incurred to date and requested for recovery through the AFUDC Cost Recovery Factor.
11 Based on its audit, Staff does not take issue with the costs requested for recovery in the
12 instant proceeding. Staff will continue to audit Rider OSW costs as they are incurred.

Conclusion

13 **Q. WHAT ARE YOUR FINDINGS AND RECOMMENDATIONS IN THIS**
14 **PROCEEDING?**

15 **A.** I have the following findings and recommendations:

- 16 1) Staff calculates a revenue requirement of \$79.700 million for Rider OSW for the Rate
17 Year of September 1, 2022, through August 31, 2023. This revenue requirement
18 consists of \$48.198 million for the Projected Factor and \$31.502 million for the
19 AFUDC Cost Recovery Factor. Staff notes the Commission has historically limited
20 the revenue requirement to the amounts that were originally requested and noticed to
21 the public. If the Commission chooses to limit the revenue requirement to the noticed

1 amount of \$78.702 million, the \$998,000 excess would be included in a future True-
2 Up Factor.

3 2) Staff presents, for informational purposes, a Rider OSW lifetime revenue requirement
4 of \$7.38 billion, based on the Company's current capital and O&M plan and its most
5 recently approved capital structure, including a 9.35% ROE.

6 3) The Company should include the information directed in the Order Granting Approval
7 for Case No. PUR-2021-00292 in future Rider OSW filings.

8 **Q. DOES THIS CONCLUDE YOUR TESTIMONY?**

9 **A.** Yes, it does.

Lifetime Revenue Requirement

1 **Q. WHAT IS THE TOTAL LIFETIME REVENUE REQUIREMENT CALCULATED**
2 **BY THE COMPANY?**

3 **A.** The Company presented a lifetime revenue requirement of \$8.42 billion, on a total
4 Company basis, to be recovered from 2022 through 2057, inclusive of total costs of the
5 Project net of benefits. This represents a lifetime revenue requirement of \$7.23 billion on
6 a Virginia jurisdictional basis, reflecting total costs, including financing costs, of
7 approximately ~~{BEGIN EXTRAORDINARILY SENSITIVE}~~ \$21.75 billion ~~{END~~
8 ~~EXTRAORDINARILY SENSITIVE}~~ offset by energy, REC, and capacity benefits of
9 ~~{BEGIN EXTRAORDINARILY SENSITIVE}~~ \$14.4 billion ~~{END~~
10 ~~EXTRAORDINARILY SENSITIVE}~~.

11 The Company also presented the lifetime revenue requirement of its onshore
12 transmission components separately. The table below breaks down the Rider OSW lifetime
13 revenue requirement into its offshore and onshore components, according to the Company's
14 Application.

Table 1

Component	Va. Juris. Lifetime Revenue Requirement (in billions)
Offshore Generation and Transmission	\$5.45
Onshore Transmission and Network Upgrades	\$1.78
Lifetime Virginia Jurisdictional Revenue Requirement	\$7.23

1 **Q. WHAT IS THE LIFETIME IMPACT OF RIDER OSW ON CUSTOMERS' BILLS?**

2 **A.** The Company did not prepare a bill impact analysis as part of its Application,¹ but it did
3 present a limited residential customer bill impact analysis to its board of directors on
4 September 23, 2021,² and updated this analysis in response to Staff Interrogatory 10-113.
5 In its response, the Company calculates an average monthly bill impact of \$4.72 over the
6 life of the unit and a peak monthly bill impact of \$14.21 in 2027 for a residential customer
7 using 1,000 kWh per month.

8 **Q. WHAT ARE THE COMPONENTS OF THE RIDER OSW LIFETIME REVENUE**
9 **REQUIREMENT?**

10 **A.** Rider OSW costs include the recovery of and return on capital expenditures, less ITC
11 savings, plus O&M expense and decommissioning costs.³ Total Project costs, including
12 financing costs, less ITC, are ~~{BEGIN EXTRAORDINARILY SENSITIVE}~~ \$21.75 billion
13 ~~{END EXTRAORDINARILY SENSITIVE}~~. As discussed above, the design framework
14 of Rider OSW incorporates all costs, net of benefits of CVOW and the Transmission
15 Facilities. The Rider OSW lifetime revenue requirement incorporates energy benefits of
16 approximately ~~{BEGIN EXTRAORDINARILY SENSITIVE}~~ \$10.3 billion ~~{END~~
17 ~~EXTRAORDINARILY SENSITIVE}~~, REC benefits of ~~{BEGIN EXTRAORDINARILY~~
18 ~~SENSITIVE}~~ \$2.56 billion ~~{END EXTRAORDINARILY SENSITIVE}~~, and an avoided

¹ The Company objected to Staff's interrogatory requesting a bill impact analysis. See Company response to Staff Interrogatory No. 7-87.

² Included in the Application as Filing Schedule 46.b.1.v, Statement 1.

³ Staff notes that operations and maintenance ("O&M") expense and any ongoing capital expenditures related to the Transmission Facilities from Harper's Substation to Fentress, after energization, will be recovered through Rider T1. Staff requested an estimate of these costs, but the Company objected to the interrogatory, as it does not consider them Project costs. See Company response to Staff Interrogatory No. 4-60.

1 The recovery and return on capital expenditures represent the largest cost
2 component of the revenue requirement. Any potential cost overruns could have a
3 significant impact on the Rider OSW lifetime revenue requirement. Per the Company's
4 analysis, a 10% increase in capital expenditures would increase the peak monthly
5 residential bill to \$15.62.⁴ Staff witness Kuleshova discusses the risks of potential capital
6 expenditure overruns and Staff's recommended customer protections related thereto.

7 **Q. PLEASE DISCUSS THE REVENUE REQUIREMENT IMPACT OF ANY DELAYS**
8 **TO THE CONSTRUCTION OF THE CVOW PROJECT.**

9 **A.** The Company anticipates beginning onshore construction in the third quarter of 2023 and
10 offshore construction is scheduled to begin in the fourth quarter of 2024. The Company
11 anticipates completing construction by the end of 2026, with an initial commercial
12 operations date of July 31, 2026⁵. A delay in construction could increase the lifetime
13 revenue requirement by extending the amount of time the Company earns a return on its
14 construction work in process before it begins recovering its rate base. It may also impact
15 the total capital expenditures and O&M expense projections included in the lifetime
16 revenue requirement.

17 **Q. HAS STAFF RAISED CONCERNS ABOUT THE CVOW CONSTRUCTION**
18 **TIMELINE IN ANY OTHER PROCEEDINGS?**

19 **A.** Yes. The Commission recently issued its Order Granting Approval of the affiliate
20 agreement by which DEV will charter from Blue Ocean Energy Marine, LLC, the use of
21 the *Charybdis*, a Jones Act compliant wind turbine installation vessel ("Charter

⁴ See the response to Staff Int. 10-113.