

**BEFORE  
THE NORTH CAROLINA UTILITIES COMMISSION**

**DOCKET NO. E-7, SUB 1276**

In the Matter of:	)	
	)	<b>DIRECT TESTIMONY OF</b>
Application of Duke Energy Carolinas, LLC	)	<b>JOHN R. PANIZZA</b>
For Adjustment of Rates and Charges Applicable	)	<b>FOR DUKE ENERGY</b>
to Electric Service in North Carolina and	)	<b>CAROLINAS, LLC</b>
Performance-Based Regulation	)	

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**I. INTRODUCTION**

2     **Q.     PLEASE STATE YOUR NAME AND BUSINESS ADDRESS.**

3     A.     My name is John R. Panizza and my business address is 526 South Church  
4             Street, Charlotte, North Carolina 28202.

5     **Q.     BY WHOM ARE YOU EMPLOYED AND IN WHAT CAPACITY?**

6     A.     I am employed by Duke Energy Business Services LLC (“DEBS”) as Director,  
7             Tax Operations. DEBS provides various administrative and other services to  
8             Duke Energy Carolinas, LLC (“DEC” or “Company”) and other affiliated  
9             companies of Duke Energy Corporation (“Duke Energy”).

10    **Q.     PLEASE SUMMARIZE YOUR RESPONSIBILITIES AS DIRECTOR,**  
11        **TAX OPERATIONS.**

12    A.     As Director, Tax Operations, I have overall responsibility for corporate tax  
13             compliance, and accounting for Duke Energy. The Duke Energy Tax  
14             Operations Department, which I manage, is staffed by the public accounting  
15             firm Ernst & Young to provide efficient and technical tax services, and is  
16             responsible for all federal, state, and local income tax returns for Duke Energy,  
17             including various joint ventures if Duke Energy is the designated tax matters  
18             partner.

19             The Tax Department is responsible for maintaining and reconciling  
20             Duke Energy’s tax accounts and for the reporting and disclosure of tax-related  
21             matters, to the extent required.

1   **Q.   PLEASE BRIEFLY SUMMARIZE YOUR EDUCATIONAL**  
2   **BACKGROUND AND PROFESSIONAL EXPERIENCE.**

3   A.   I have a Bachelor of Science degree in Accounting from Montclair State  
4   University and a Master's degree in Taxation from Seton Hall University. I am  
5   a Certified Public Accountant in the state of New Jersey. My professional work  
6   experience began in 1989 as an auditor with KPMG. From 1993 to 2002, I held  
7   a number of financial positions, primarily in the telecommunications and  
8   automotive industries (AT&T Corp., and Collins & Aikman Inc.). In 2002, I  
9   joined Duke Energy and have held a number of financial positions of increasing  
10   responsibilities, including various accounting and tax related positions. In  
11   March 2018, after a three-year rotation primarily in Corporate Accounting, I  
12   moved back into the role of Director, Tax Operations, a position that I had  
13   previously held.

14   **Q.   HAVE YOU PREVIOUSLY TESTIFIED BEFORE THIS COMMISSION**  
15   **OR OTHER STATE PUBLIC UTILITY COMMISSIONS?**

16   A.   I submitted pre-filed testimony before this Commission in the Company's  
17   previous general rate case, Docket No. E-7, Sub 1213, as well as the general  
18   rate case previously filed by Duke Energy Progress, LLC (Docket No. E-2, Sub  
19   1219). In both of those cases, however, I was excused from testifying at the  
20   expert evidentiary hearings. I have also filed testimony on behalf of Duke  
21   Energy operating utilities in proceedings before the Florida, South Carolina,  
22   Indiana, and Kentucky utility commissions.

## **II. PURPOSE OF TESTIMONY**

**Q. WHAT IS THE PURPOSE OF YOUR TESTIMONY IN THIS PROCEEDING?**

A. My testimony addresses the recently enacted Inflation Reduction Act of 2022 (“IRA”). This legislation’s climate and energy-related provisions introduce new and expand existing federal tax benefits, so as to incentivize the development and use of renewable and alternative carbon-free energy sources. While my testimony summarizes the key tax-related components of the IRA, I concentrate on provisions that appear at this time to provide tax credits that may reduce the revenue requirement in the Company’s proposed multiyear rate plan (“MYRP”). My testimony also highlights the uncertainties surrounding the tax credits made available by the IRA and addresses certain of the assumptions DEC is making with regard to the various tax credits.

**Q. IN ADDITION TO YOUR OWN TESTIMONY, WHAT IRA-RELATED TESTIMONY IS THE COMPANY PRESENTING?**

A. Detailed information about the projects included in DEC’s Performance-Based Regulation application as part of its MYRP, and which the Company believes should qualify for tax credits under the IRA, is provided by the following DEC witnesses:

- Witnesses Laurel Meeks and Evan Shearer discuss the IRA tax credits the Company at this time believes will be applicable to the energy storage projects proposed in this case; and

- 1           • Witness Justin LaRoche discusses the IRA tax credits the Company  
2           believes at this time will be applicable to the 2026 Solar Procurement  
3           Program Investment proposed in this case.

4           Their testimony is based upon the description of the IRA's provisions as set out  
5           in my testimony and indicates the manner in which the Company calculated the  
6           applicable tax credits for these projects so as to provide customers with the  
7           greatest tax credit option that provides the greatest overall customer benefit  
8           given the totality of considerations and factors relevant to each project. In  
9           addition, Witness Kathryn Taylor provides testimony and exhibits quantifying,  
10          as best as DEC is able to do at this time in light of the uncertainties attendant  
11          upon implementation of the IRA, as further described in my testimony, the  
12          expected tax credit impacts stemming from the IRA upon the Company's  
13          MYRP revenue requirement.

14                   **III.    SUMMARY OF TAX-RELATED CHANGES IN THE IRA**

15   **Q.    PLEASE BRIEFLY DESCRIBE THE IRA AND DISCUSS ITS**  
16   **APPLICATION TO THIS PROCEEDING.**

17   A.    On August 16, 2022, President Biden signed the IRA into law. As I note above,  
18          the IRA introduces new and expands existing federal tax credits that are  
19          intended to incentivize the development and use of renewable and alternative  
20          carbon-free energy sources. Most notably for this proceeding, the IRA includes  
21          changes to the production tax credit ("PTC") and the investment tax credit  
22          ("ITC") provided under Internal Revenue Code ("IRC") §§ 45 and 48,  
23          respectively. In particular, as detailed in my testimony, the IRA expands PTC  
24          eligibility to solar generation and ITC eligibility to stand-alone energy storage

1 projects, such as battery storage. As further described in my testimony and the  
2 testimony of the Company witnesses mentioned above, DEC expects that it will  
3 be eligible (in connection with the projects in the proposed MYRP, not the  
4 capital additions contained in the traditional base rate case) for an ITC for  
5 certain battery storage projects, and a PTC with respect to the 2026 Solar  
6 Procurement Program Investment.

7 In addition to these changes to the ITC now potentially available for  
8 certain energy storage projects and the PTC now potentially available for  
9 certain solar projects, the IRA also implements numerous other changes that the  
10 Company believes *may* impact its revenue requirement in future rate cases: a  
11 PTC for certain zero-emission nuclear power; a PTC for hydrogen production;  
12 new transferability provisions allowing eligible taxpayers to transfer credits to  
13 unrelated transferee taxpayers, which could accelerate monetization of these  
14 credits; and the corporate alternative minimum tax. My testimony will briefly  
15 discuss these changes, and indicate how they may, in the future, come into play  
16 with respect to DEC. In this case, however, none of these provisions of the IRA  
17 impact either the traditional base case or MYRP revenue requirement. They  
18 are, therefore, not addressed in Witness Taylor's testimony or exhibits  
19 calculating the Company's MYRP revenue requirement in light of the IRA tax  
20 benefits DEC anticipates will reduce customer costs.

1           **IV.    IRA TAX CREDITS LIKELY TO BE APPLICABLE TO DEC'S**  
2                           **MYRP REVENUE REQUIREMENT IN THIS CASE**

3   **Q.    TO RECAP, WHAT TAX CREDITS FROM THE IRA DOES THE**  
4           **COMPANY ANTICIPATE WILL IMPACT ITS MYRP REVENUE**  
5           **REQUIREMENT IN THIS CASE?**

6   A.    As I have indicated, and as further discussed in Witness Taylor's testimony,  
7           DEC expects that it will be eligible (in connection with the MYRP, not the  
8           traditional base rate case) for an ITC for certain battery storage projects, and a  
9           PTC with respect to the 2026 Solar Procurement Program Investment.

10           **Investment Tax Credit**

11   **Q.    PLEASE DESCRIBE AN INVESTMENT TAX CREDIT.**

12   A.    An ITC is a tax incentive for business investment. The credit allows eligible  
13           taxpayers to receive a tax credit for a certain percentage of eligible investment  
14           costs. The credit has the effect of reducing the taxpayer's federal income tax  
15           liability, thereby reducing costs for a regulated electric utility's customers.

16   **Q.    PLEASE DESCRIBE THE EXTENSIONS AND MODIFICATIONS**  
17           **MADE TO THE IRC § 48 ITC AS A RESULT OF THE IRA.**

18   A.    Under prior law, the ITC was subject to a phase-down from 30% for certain  
19           projects. For example, for solar and certain other types of energy property that  
20           began construction after December 31, 2019, and that were placed in service  
21           prior to January 1, 2022, the ITC credit amount is 26%, down from 30%. This  
22           ITC credit amount was scheduled to be lowered further to 10% for eligible  
23           projects placed in service after December 31, 2021. The IRA extends the ITC  
24           for most eligible projects that begin construction before January 1, 2025 (except

1 for geothermal heat pumps, which is extended to before January 1, 2035).  
2 Under the IRA, for projects placed in service after December 31, 2021, the  
3 limited ITC amount/phase-out generally does not apply.

4 The IRC § 48 ITC under the IRA is subject to a two-tiered credit  
5 structure, with a base rate and a total bonus rate achieved if prevailing wage and  
6 apprenticeship requirements are met (which are discussed further below). The  
7 ITC's base and bonus credit amounts are as follows:

- 8 - 6% (base rate) / 30% (bonus rate) for (1) qualified fuel cell property;  
9 (2) solar energy used to produce electricity, heat or cool a structure,  
10 providing solar process heat; (3) equipment that uses solar energy  
11 for certain lighting applications; (4) qualified small wind energy  
12 property; (5) waste energy recovery property; (6) combined heat and  
13 power systems; and (7) geothermal.
- 14 - 2% (base rate) / 10% (bonus rate) for other energy property.

15 Additionally, the IRA expands the IRC § 48 ITC to include three new  
16 technologies — standalone energy storage, qualified biogas property and  
17 microgrid controllers — if construction begins by December 31, 2024 and if the  
18 project is placed into service after 2022. The 6% base credit rate and 30% bonus  
19 credit rate are also applicable to these new classes of energy property. The IRA  
20 also provides an election that allows regulated utilities to opt-out of the  
21 normalization rules with respect to ITCs for energy storage technology. This  
22 opt-out does not apply to other varieties of the ITC (e.g., solar). I address  
23 normalization further below.



1 Finally, taxpayers are eligible for an additional 2 percentage point  
2 increase to the base rate and a 10 percentage point increase to the bonus rate for  
3 meeting domestic content requirements or for eligible projects located in an  
4 energy community (as defined by the IRA) placed into service after 2022. If  
5 both the domestic content and energy community requirements (both are further  
6 described below) were met, this would increase the maximum potential ITC  
7 base rate to 10% and the maximum potential ITC bonus rate to 50%.

8 **Q. PLEASE EXPLAIN FURTHER THE BONUS AND ENHANCED BONUS**  
9 **RATES APPLICABLE TO THE IRC § 48 ITC.**

10 A. As I mentioned, the bonus rate is achieved by meeting prevailing wage and  
11 apprenticeship requirements. In general, under the prevailing wage  
12 requirements, the IRA requires all laborers, mechanics, and workers to be paid  
13 the prevailing wage during project construction (and, during the credit term, for  
14 repairs and alterations). Separately and subject to certain exceptions, to meet  
15 the apprenticeship requirements, qualified apprentices must perform at least an  
16 applicable percentage of total labor hours for project construction. A “qualified  
17 apprentice” includes an individual who is employed by the taxpayer or by any  
18 contractor or subcontractor who is participating in a registered apprenticeship  
19 program under the “National Apprenticeship Act.” For qualified facilities  
20 beginning construction prior to January 1, 2023, the applicable percentage is  
21 10%. However, under IRC § 48, as amended by the IRA, a facility is deemed  
22 to meet both the prevailing wage and apprenticeship requirements if  
23 construction of the facility begins prior to 60 days after the Treasury issues

1 guidance with respect to these rules. This guidance was issued by the Treasury  
2 on November 29, 2022, meaning that any qualified facility beginning  
3 construction prior to January 29, 2023 will be deemed to meet both the  
4 prevailing wage and apprenticeship requirements. The applicable percentage  
5 increases to 12.5% for qualified facilities beginning construction in calendar  
6 year 2023, and then to 15% for qualified facilities beginning construction after  
7 December 31, 2023.

8 The enhanced 2 percent base rate and 10 percent bonus rate to the ITC  
9 is applicable for projects meeting domestic content requirements or which are  
10 located in an “energy community.” The domestic content requirements relate  
11 to the applicable percentage of the total cost of components that are mined,  
12 produced or manufactured in the US. An “energy community” generally  
13 includes certain brownfield sites, certain areas that historically had significant  
14 employment related to the extraction, processing, transport, or storage of coal,  
15 oil, or natural gas, or a census tract where certain coal mines or coal-fired power  
16 plants used to operate.

17 Because of the novelty of many of these provisions under IRC § 48, the  
18 IRS is currently planning to issue regulations to assist taxpayers in the proper  
19 application of the new ITC framework. As such, until the regulations are  
20 promulgated, there remains a lot of uncertainty around the credit qualification  
21 process and the amount of the ultimate credit is still not fully determinable.

1   **Q.     HOW DOES THE EXPANSION OF THE IRC § 48 ITC TO INCLUDE**  
2       **STANDALONE ENERGY STORAGE TECHNOLOGY IMPACT THE**  
3       **INVESTMENT LANDSCAPE FOR ENERGY STORAGE PROJECTS?**

4   **A.**   Prior to the IRA, standalone energy storage projects were not eligible for the  
5       IRC § 48 ITC. Only investment costs associated with energy storage projects  
6       that were co-sited with an eligible renewable energy project, such as the  
7       development of an eligible solar facility, were eligible for the ITC.

8           The IRA expands the definition of eligible ITC property to include  
9       property placed into service after 2022 that receives, stores and delivers energy  
10      for conversion to electricity (or, in the case of hydrogen, which stores energy)  
11      and has a nameplate capacity of not less than 5 kWh. This change allows  
12      standalone energy storage projects to qualify for the ITC, irrespective of the  
13      energy resources from which its charged. Additionally, regulated utilities  
14      claiming the standalone storage ITC can opt out of normalization of the credit  
15      for ratemaking purposes. Under IRS normalization rules, utilities previously  
16      were prohibited from flowing ITC benefits to customers more quickly than  
17      ratably over the book life of the asset. This included a prohibition from  
18      including any rate base benefits related to the ITCs. With the opt out provision  
19      for standalone storage ITC, utilities can include ITC rate base impacts more  
20      quickly than under otherwise applicable normalization rules. Witness Taylor  
21      has included these impacts in her calculations. This opt-out does not apply to  
22      other varieties of the ITC.

1   **Q.     WHEN DO THESE AMENDMENTS TO THE IRC § 48 ITC GO INTO**  
2       **EFFECT?**

3   A.    In general, the amendments to the IRC § 48 ITC are effective for property  
4       placed in service after December 31, 2021. The amendments that relate to  
5       standalone energy storage, qualified biogas property, and microgrid controllers,  
6       as well as increase in domestic content and energy community, are effective for  
7       property placed in service after December 31, 2022.

8       **Production Tax Credit**

9   **Q.     PLEASE DESCRIBE A PRODUCTION TAX CREDIT.**

10  A.    For electricity generation, a PTC provides the generator with a tax credit for the  
11       production of electricity, provided certain conditions – spelled out in the Tax  
12       Code – are met. The PTC is a per-kilowatt-hour (kWh) tax credit for electricity  
13       produced at a qualified facility over a certain period of time (normally 10 years,  
14       although, as indicated below, the applicable nuclear PTC period is 9 years). The  
15       credit has the effect of reducing the electricity producer's federal income tax  
16       liability, thereby reducing costs for a regulated utility's customers. The credit  
17       thus provides a federal subsidy for the construction of electricity generation  
18       facilities eligible for the credit.

19  **Q.     PLEASE DESCRIBE THE CHANGES MADE TO THE PTC IN IRC § 45**  
20       **AS A RESULT OF THE IRA.**

21  A.    Under prior law, solar did not qualify for the PTC; rather, the PTC was only  
22       available for wind, biomass, geothermal, landfill gas, trash, qualified  
23       hydropower, and marine and hydrokinetic renewable energy facilities, the

1 construction of which began prior to 2022. The IRA extends the beginning-of-  
2 construction deadline to facilities that begin construction before January 1,  
3 2025, and allows a PTC for solar facilities. Accordingly, the IRA now allows  
4 taxpayers owning solar facilities that begin construction prior to the start of  
5 2025 to take advantage of the PTC.

6 Additionally, like the IRC § 48 ITC, the PTC is now subject to a two-  
7 tiered credit structure for facilities placed in service after December 31, 2021,  
8 with a base credit amount and a total bonus credit amount. For example, for  
9 facilities placed in service during 2022, the base PTC rate is 0.55 cents per kWh,  
10 but a taxpayer can qualify for a total 2022 bonus credit rate of 2.75 cents per  
11 kWh if the taxpayer meets both the prevailing wage and apprenticeship  
12 requirements, described above. Beyond 2022, the credit is subject to  
13 adjustment for inflationary factors. Again like the IRC § 48 ITC, for projects  
14 placed in service after 2022, the IRA also introduces an additional domestic  
15 content bonus for the PTC, which allows taxpayers to increase their PTC by an  
16 additional 10%, so long as the applicable requirements are met (related to the  
17 applicable percentage of the total cost of components that are mined, produced  
18 or manufactured in the US), as well as an additional 10% PTC bonus for  
19 qualified facilities located in applicable “energy communities” (as defined  
20 above in connection with my discussion of the IRC § 48 ITC). Because of the  
21 novelty of many of these provisions under IRC § 45, the IRS is currently  
22 planning to issue regulations to assist taxpayers in the proper application of the  
23 new PTC framework. As such, until the regulations are promulgated, there

1 remains a lot of uncertainty around the credit qualification process, and the  
2 amount of the ultimate credit is still not fully determinable.

3 **Q. DOES DEC EXPECT TO OBTAIN THE 2022 BONUS CREDIT RATE**  
4 **OF 2.75 CENTS PER KWH FOR ITS IRC § 45 PTC ELIGIBLE**  
5 **PROJECTS?**

6 A. While there is currently still uncertainty surrounding the timing and application  
7 of the bonus credit as it relates to DEC's facts specifically, DEC does currently  
8 expect to qualify under IRC § 45 for the 2022 bonus credit rate of 2.75 cents  
9 per kWh.

10 **Q. WHEN DO THE AMENDMENTS TO IRC § 45 GO INTO EFFECT?**

11 A. The IRC § 45 PTC amendments generally apply to facilities that are placed in  
12 service after December 31, 2021, except for the domestic content and energy  
13 community provisions, which apply to facilities placed in service after  
14 December 31, 2022.

15 **Q. AS IT RELATES TO SOLAR PROJECTS SPECIFICALLY, CAN YOU**  
16 **PLEASE DESCRIBE THE DIFFERENCE BETWEEN THE ITC AND**  
17 **THE PTC?**

18 A. Under the IRA, solar projects are eligible for either a PTC tax credit or an ITC  
19 tax credit. The PTC grants a per kilowatt-hour tax credit based on the actual  
20 amount of renewable energy generated by the solar facility over a 10 year  
21 period. Conversely, the ITC is determined based on the level of qualified  
22 investment in the solar facility.

1   **Q.     FOR SOLAR FACILITIES, DOES DEC BELIEVE THE IRC § 45 PTC**  
2           **OR THE IRC § 48 ITC WOULD PROVIDE A GREATER BENEFIT TO**  
3           **BE PASSED ON TO CUSTOMERS?**

4   A.     Generally speaking, the PTC should provide a greater cash tax benefit to be  
5           passed on to customers. As mentioned above, the ITC is based on the  
6           investment in the eligible project and, as a result, its value is known upfront  
7           based on the qualified costs incurred by the taxpayer. Further, to take advantage  
8           of the ITC, taxpayers must reduce their depreciable tax basis in the property by  
9           50% of the ITC claimed. Conversely, the PTC is based on actual output of the  
10          facility over a 10-year period. As a result, there is more uncertainty with respect  
11          to PTC since it is contingent on the output of the facility rather than the cost.  
12          However, the ITC for solar projects is subject to the normalization rules.  
13          Accordingly, once monetized, the ITC serves as an offset to the revenue  
14          requirement over a longer period of time, namely, the book depreciable life of  
15          the property. The PTC is not subject to the normalization rules, and the credit  
16          is earned over a 10-year period, thereby generally providing income tax savings  
17          more quickly. With these considerations in mind, DEC will evaluate the  
18          selection of the ITC versus the PTC on a project-by-project basis so as to  
19          maximize the benefit to customers. Witness Taylor's testimony indicates that  
20          for purposes of the MYRP revenue requirement in this case DEC assumes that  
21          the solar PTC will be more advantageous for customers. Nevertheless, as  
22          further detailed in Witness Taylor's testimony, the Company is seeking in this  
23          case an accounting order to defer all IRA-related impacts, including any solar

1 PTC impacts, so as to ensure that customers ultimately receive the benefits that  
2 may flow from the IRA.

3 **V. ADDITIONAL TAX-RELATED CHANGES IN THE IRA**

4 **Q. PLEASE BRIEFLY RECAP THE ADDITIONAL IRA TAX-RELATED**  
5 **CHANGES DISCUSSED IN YOUR TESTIMONY.**

6 A. As I noted earlier, the IRA makes a number of additional changes that may  
7 impact DEC in the future. These include: a PTC for certain zero-emission  
8 nuclear power; a PTC for hydrogen production; new transferability provisions  
9 allowing eligible taxpayers to transfer credits to unrelated transferee taxpayers;  
10 and the corporate alternative minimum tax.

11 **Nuclear PTC**

12 **Q. PLEASE PROVIDE AN OVERVIEW OF THE NEW § 45U NUCLEAR**  
13 **POWER PRODUCTION CREDIT.**

14 A. The IRA also creates a new, zero-emission nuclear power production credit  
15 under new IRC § 45U for producing electricity at a qualified nuclear power  
16 facility that is sold by the taxpayer to an unrelated person. A qualified nuclear  
17 power facility means any nuclear facility that: (1) is owned by the taxpayer and  
18 uses nuclear energy to produce electricity, (2) is not an advanced nuclear power  
19 facility as defined in IRC § 45J(d)(1); and (3) is placed in service before the  
20 enactment of IRC § 45U.

21 Similar to the other credits, the new IRC § 45U tax credit is subject to a  
22 two-tiered credit regime, with a base credit amount of \$0.3 cents per kWh, and  
23 a top, total bonus amount of up to 1.5 cents per kWh (assuming the prevailing



1 wage requirements are met). The credit will also be reduced by 16% of the  
2 excess of gross receipts from electricity produced and sold over \$0.025  
3 multiplied by the amount of electricity sold, as calculated annually during the  
4 period of credit eligibility. Additionally, the new IRC § 45U tax credit, which  
5 is generally effective for electricity produced and sold after December 31, 2023  
6 (in tax years beginning after such date), does not apply to tax years beginning  
7 after December 31, 2032. As is the case with many of the new credit structures  
8 under the IRA, uncertainty exists related to the application of § 45U,  
9 specifically, the proper application of the gross receipts test. DEC is awaiting  
10 guidance and interpretations from Treasury in order to be able to determine the  
11 level of PTC for which DEC's nuclear generating units could be eligible.

12 **Q. DOES DEC ANTICIPATE THAT IT WILL BE ABLE TO TAKE**  
13 **ADVANTAGE OF THE § 45U PTC PROVISIONS RELATED TO ITS**  
14 **NUCLEAR FLEET?**

15 A. While DEC is currently evaluating the application of this credit in connection  
16 with its nuclear fleet and believes that at least some of its plants will qualify,  
17 there is still uncertainty as to the proper application of this credit under the IRA  
18 and interpretative guidance is pending from Treasury. Accordingly, in the  
19 absence of clarifying guidance from Treasury as to the parameters of the new  
20 credit (which guidance is not anticipated to be provided until sometime in 2023  
21 at the earliest) and uncertainty as to when the Company will be able to monetize  
22 the credits and what discount may be applied, DEC has not included any  
23 impacts of the nuclear PTC upon its traditional base case revenue requirement

1 in this case. In addition, since there are no MYRP projects anticipated that  
2 increase nuclear output during the 3-year MYRP period, and therefore, there  
3 are no expected PTCs related to MYRP projects, no impacts for the nuclear PTC  
4 have been included in the projected MYRP revenue requirements.  
5 Nevertheless, as further detailed in Witness Taylor's testimony, the Company is  
6 seeking in this case an accounting order to defer all IRA-related impacts,  
7 including any nuclear PTC impacts, so as to ensure that customers ultimately  
8 receive the benefits that may flow from the IRA.

9 **Hydrogen**

10 **Q. PLEASE PROVIDE AN OVERVIEW OF THE NEW § 45V CREDIT FOR**  
11 **THE PRODUCTION OF CLEAN HYDROGEN.**

12 A. The IRA creates a new PTC for hydrogen production under new IRC § 45V (for  
13 hydrogen produced in the US). The hydrogen PTC applies to hydrogen  
14 produced after December 31, 2022 and has a 10-year term beginning on the date  
15 a qualified clean hydrogen production facility is placed in service. To qualify,  
16 the qualified facility must begin construction before January 1, 2033. For a  
17 taxpayer to be eligible for the hydrogen PTC, its lifecycle greenhouse gas  
18 emissions rate cannot exceed 4 kilograms of carbon dioxide equivalent (CO<sub>2</sub>e)  
19 per kilogram of hydrogen produced.

20 As with other credits, the new IRC § 45V PTC is subject to a two-tiered  
21 credit regime, with a base credit rate and a higher, top rate. The base credit rate  
22 is \$0.60 per kilogram of qualified clean hydrogen, which (like the IRC § 45  
23 PTC) will be adjusted for inflation, multiplied by an applicable percentage

1 (which varies based on the lifecycle greenhouse gas emissions rate). The  
2 applicable percentages are as follows:

- 3 - 20% if the lifecycle greenhouse gas emissions rate is at least 2.5  
4 kilograms of CO<sub>2</sub>e per kilogram of hydrogen, but not greater than 4  
5 kilograms of CO<sub>2</sub>e per kilogram of hydrogen
- 6 - 25% if the lifecycle greenhouse gas emissions rate is at least 1.5  
7 kilograms of CO<sub>2</sub>e per kilogram of hydrogen, but less than 2.5  
8 kilograms of CO<sub>2</sub>e per kilogram of hydrogen
- 9 - 33.4% if the lifecycle greenhouse gas emissions rate is at least 0.45  
10 kilograms of CO<sub>2</sub>e per kilogram of hydrogen, but less than 1.5  
11 kilograms of CO<sub>2</sub>e per kilogram of hydrogen
- 12 - 100% if the lifecycle greenhouse gas emissions rate is less than 0.45  
13 kilograms of CO<sub>2</sub>e per kilogram of hydrogen

14 The top rate is five times the amount of the base credit, which tops out  
15 at \$3.00 per kilogram of qualified clean hydrogen produced. To achieve the top  
16 rate, similar rules related to prevailing wage and apprenticeship, which are  
17 discussed above, apply.

18 A taxpayer may not claim the clean hydrogen PTC in conjunction with  
19 a § 45Q carbon dioxide sequestration tax credit. Additionally, taxpayers have  
20 the option to elect the ITC instead of the new IRC § 45V PTC for clean  
21 hydrogen production facilities.

22 Company Witness Bryan Walsh testifies that the Clemson Hydrogen  
23 Project discussed in his testimony may ultimately qualify for an IRC § 45V

1 PTC, but that it is premature to include any such PTC in the MYRP revenue  
2 requirement as Treasury guidance regarding the hydrogen PTC is still in the  
3 process of being developed. I agree with this assessment. The IRS issued on  
4 November 3, 2022 a notice (Notice 2022-58) seeking comments on the  
5 application of certain provisions under IRC § 45V related to the credit for the  
6 production of clean hydrogen. The IRS anticipates that the comments, which  
7 were due to be submitted on or before December 3, 2022, will aid the agency  
8 in drafting guidance needed for eligible taxpayers to claim the PTC credits, but  
9 until that guidance is issued it will not be possible to accurately estimate those  
10 credits.

11 **Credit Transferability**

12 **Q. PLEASE PROVIDE AN OVERVIEW OF THE CREDIT**  
13 **TRANSFERABILITY PROVISIONS CONTAINED IN THE IRA.**

14 A. The IRA contains provisions that allow both PTC and ITC credits to be  
15 transferred. Under new IRC § 6418, an eligible taxpayer can elect to transfer  
16 all (or any portion specified in the election) of an eligible credit to an unrelated  
17 transferee taxpayer. The transfer may have the effect of accelerating  
18 monetization of these credits. The transfer, however, must be paid in cash, not  
19 be included in the income of the recipient taxpayer, and not be deducted by the  
20 paying taxpayer. Further, the transfer must be a one-time transfer (i.e., the  
21 transferee cannot make a subsequent election to further transfer any portion of  
22 the transferred credit). The taxpayer must elect to transfer the credits no later

1 than the due date (including extensions) for the tax return for the tax year for  
2 which the credit is determined, and any election, once made, is irrevocable.

3 While a discount on the total credit value is expected upon the sale and  
4 transfer of the credit, the economics for these credit transfers is still uncertain  
5 as a market will need to develop. DEC believes that availing itself of the market  
6 for transferable credits may ultimately be beneficial to customers in that it  
7 would provide DEC with the opportunity to monetize the cash benefit of the  
8 credit more rapidly. However, until a stable market for transfer credits  
9 materializes the potential benefits of transfer (should they ultimately  
10 materialize) are too uncertain and speculative at this point to permit DEC to  
11 include potential impacts of transferability upon its revenue requirement in this  
12 case.

13 **Corporate Alternative Minimum Tax**

14 **Q. PLEASE DESCRIBE THE CORPORATE ALTERNATIVE MINIMUM**  
15 **TAX INCLUDED IN THE IRA.**

16 A. The IRA includes a 15% CAMT<sup>1</sup> on adjusted financial statement income  
17 (“AFSI”) for corporations with average annual AFSI over \$1 billion. The  
18 CAMT applies to any corporation (other than an S corporation, regulated  
19 investment company, or real estate investment trust) whose average annual  
20 AFSI exceeds \$1 billion for any three consecutive tax years preceding the tax  
21 year. When determining AFSI for the \$1 billion qualification test, the IRA

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<sup>1</sup> The tax credits discussed earlier in my testimony may ultimately reduce the Company’s revenue requirement. The CAMT, by contrast, may have the impact of increasing the Company’s revenue requirement. In either event, the request for accounting order described in Witness Taylor’s testimony will defer all IRA-related impacts to the revenue requirement.

1 generally treats AFSI of all persons considered a single taxpayer with a  
2 corporation under IRC §§ 52(a) or (b) as AFSI of the corporation. Additionally,  
3 AFSI under the CAMT framework is adjusted for certain items, including the  
4 difference between the depreciation expense used for financial reporting  
5 purposes and depreciation expense used for income tax purposes.

6 The three-tax-year period means any three consecutive tax years  
7 preceding the tax year in which the tax applies (beginning with three-tax-year  
8 periods in which the third year of the period ends after December 31, 2021).  
9 For example, the three-tax-year period for a calendar-year corporation possibly  
10 subject to the CAMT for 2023 includes calendar years ending December 31,  
11 2020, December 31, 2021, and December 31, 2022.

12 Corporations exceeding the \$1 billion AFSI qualification test outlined  
13 above will be required to compute two separate calculations for federal income  
14 tax purposes and pay the greater of the CAMT or their regular tax liability.  
15 Additionally, the IRA adjusts the rules in IRC § 53 to provide a minimum tax  
16 credit for applicable corporations. Under modified IRC § 53, the net minimum  
17 tax (i.e., the tax imposed by IRC § 55) for all prior tax years beginning after  
18 2022 can generally be carried forward and utilized as a credit against the  
19 taxpayer's regular tax liability.

20 The CAMT provisions of the IRA are effective for tax years beginning  
21 after December 31, 2022. On December 27, 2022, the Department of Treasury  
22 and the IRS issued a notice (the "Notice") outlining initial guidance regarding  
23 the application of the CAMT. The initial guidance is by no means "final," but

rather outlines a set of principles intended to guide Treasury and the IRS in the development of detailed rules implementing the CAMT at some point in the future. For example, Treasury and the IRS have in the Notice requested that taxpayers submit comments on (1) the Notice itself, (2) a number of specific questions raised by the Notice, and (3) suggestions for additional topics for which guidance may be necessary. Accordingly, pending the completion of the rule making process, uncertainty remains as to the proper application of the CAMT-related provisions included in the IRA.

## VI. CONCLUSION

**Q. WHICH OF THE IRA PROVISIONS DO YOU ANTICIPATE WILL IMPACT DEC THROUGH DECEMBER 31, 2026?**

A. The IRA tax credits for which DEC expects to qualify – and whose impact on the revenue requirement is at this time capable of estimation, albeit estimation that is still subject to substantial uncertainty as outlined above – are the IRC § 48 ITC credit related to its standalone energy storage projects and IRC § 45 PTC related to solar projects, unless further evaluation demonstrates that the ITC will in fact be better for customers for those projects than the PTC. In addition, DEC anticipates, subject to further study, that it will qualify for the IRC § 45 PTC related to its existing nuclear facilities, but it is unable at this time to estimate the potential impact on its revenue requirement, due to continued uncertainty regarding the application of this credit. It is also possible that DEC may qualify for the hydrogen PTC in connection with the Clemson Hydrogen Project, but due to lack of definitive guidance from the IRS is not at this time able to accurately estimate the credits for which it may ultimately

1           qualify. Finally, DEC also anticipates that transferability of credits may  
2           ultimately benefit customers, but again, is not in a position to quantify that  
3           benefit at this time.

4                     In addition, DEC could incur tax liability related to the CAMT  
5           provisions during certain tax years. However, as outlined above, the application  
6           of the CAMT framework also is uncertain at this time.

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

8   **A.     Yes. It does.**