

COMMISSION ON ELECTRIC UTILITY REGULATION

STAFF SUMMARY AND ANALYSIS OF THE ONE BIG BEAUTIFUL BILL ACT: TRUMP ADMINISTRATION 2025 RECONCILIATION TAX PACKAGE

On July 4, 2025, President Donald J. Trump signed into law the "One Big Beautiful Bill Act" which is a budget reconciliation law passed by the 119th US Congress¹. This bill contains various tax and spending policies that reflect the Trump Administration's second-term agenda, including but not limited to individual tax rates, Medicare program policies, military defense allocations, border security, student loan provisions, and phase-out of Biden-era Inflation Reduction Act ("IRA") clean energy tax credits and clean energy grant and loan programs.

This document represents a high-level overview of the energy-related provisions of the One Big Beautiful Bill Act ("OBBBA" or "the Act"). The final page shows economic modeling on the estimated impacts from the Act on Virginia's economy, workforce, and consumers (ratepayers). Economic impact estimates are presented from one modeling firm Energy Innovation which demonstrates expected economic and job losses the Act is expected to cost Virginia through 2035.

Following passage of the Act, President Trump issued an executive order ("EO") on July 7, 2025 that would strictly enforce the termination of the investment and production tax credits for wind and solar facilities. The EO is also briefly summarized in this document.

The OBBBA significantly limits incentives for solar and wind development of all forms. These industries now face compressive windows to secure tax credits before they are eliminated for these technologies. Incentives for battery storage, nuclear, geothermal, carbon capture, clean fuels, and hydrogen are substantially maintained, though additional restrictions regarding foreign entities were added. A shorter eligibility timeline for the hydrogen incentive is also now in place. The electric vehicles industry was among the hardest hit, with tax credits for EVs expiring in 2025.

¹ H.R.1 - One Big Beautiful Bill Act, July 4, 2025, https://www.congress.gov/bill/119th-congress/house-bill/1

The changes enacted in the OBBBA may have implications for economic development and the siting of new energy generation or manufacturing projects in Virginia. It also may have an impact on planned energy grant or loan programs previously applied for through the Inflation Reduction Act of 2022 if funds were not yet obligated under contract.

1. WIND (45Y and 48E): Wind facilities that begin construction after 1 year from bill enactment (July 2026) will be required to be placed in service by Dec. 31, 2027, to receive the tech-neutral production tax credit ("PTC," Section 45Y) and tech-neutral investment tax credits ("TTC," Section 48E). The proposed excise tax of up to 50% for wind projects for violation of the material assistance cost ratio with respect to materials obtained from prohibited foreign entities was omitted from the final bill.

In Virginia, Dominion Energy's Coastal Virginia Offshore Wind project ("CVOW") will likely not be affected by OBBBA. However, the development of new wind resources is unlikely in the foreseeable future due to high project development costs in the face of this less favorable tax regime, among other factors. Furthermore, the Hampton Roads region of Virginia has positioned itself to be the offshore wind development hub for the nation, in anticipation of the growth opportunity that offshore wind presents as a unique economic development strategy. Wind projects support construction and operations jobs, expand the tax base in communities, and generate new demand for regional manufacturing.

2. SOLAR (45Y and 48E): No form of solar fared well in the final bill. Commercial and utility-scale solar facilities that begin construction beyond one year from bill enactment (i.e. July 2026) are now required to be placed in service by Dec. 31, 2027, to receive the ITC or PTC. A steep excise tax provision on imported solar modules and other equipment was stripped from the final Senate version.

Utilities are expected to continue to honor Virginia's legal requirements per the Virginia Clean Economy Act ("VCEA"), such as clean energy build targets that contribute to the renewable portfolio standard ("RPS"). Solar energy, in particular utility-scale solar, is still the fastest resource to deploy and utility scale solar energy generation is very cost competitive. But local permitting and regional interconnection issues persist. Nationally, the industry may see support from certain state legislative bodies through new or continued incentives such as state tax credits, rebates or grants to not only bring down the costs for project owners but to ensure the addition of megawatt hours of electricity production onto the grid.

 RESIDENTIAL SOLAR (25D): In addition to this rapid drawdown on tax credits for large projects, a significant change with a much shorter timeline goes into effect for residential rooftop solar projects. The 30 percent residential clean energy credit (Section 25D) will now expire completely on December 31, 2025.

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² Hampton Roads Alliance, "Offshore Wind," from July 10, 2025, https://hamptonroadsalliance.com/offshore-wind/

For residential PV projects, payback periods are modeled to increase between 40-60% across the country per Ohm Analytics³. This is expected to result in negative fiscal impacts to smaller companies, for smaller projects, and developers solely focused on the residential solar market. It will additionally have implications for the state's \$156 million "Solar for All" grant program, awarded to Virginia Department of Energy through the EPA Greenhouse Gas Reduction Fund, and obligated under an active contract. The program will likely require an administrative amendment to decrease the overall number of beneficiaries and projects the program can serve given the changed tax credit landscape. Virginia's residential-serving solar contractor network and workforce will undoubtedly face challenges without increased support through state incentives, utility programs, or other financial investments.

- 4. STORAGE (45Y and 48E): Battery energy storage projects are treated better than expected in the final bill. Storage projects were excluded from the "placed in service" requirements for projects to earn the PTC and ITC tax credits. Similar to all other non-solar or wind projects, including storage, nuclear, geothermal, hydropower and hydrogen, the credit phases out after 2032 and remains on the original statutory timeline. Projects will receive 100% in 2033, 75% in 2034, 50% in 2035 and 0% in 2036 and beyond. Homeowners would not be allowed to claim the residential clean energy credit (Section 25D) for battery storage systems as it will now expire completely on December 31, 2025.
- 5. GEOTHERMAL (45Y, 48E): The OBBBA provides that, for all non-solar and non-wind clean energy technologies such as geothermal, the ITC and PTC will remain available at their full value through 2033, 75% of their value in 2034, and 50% of their value in 2035, with final phase-out in 2036. However, homeowners would not be allowed to claim the residential clean energy credit (Section 25D) or the energy efficient home improvement credit (Section 25C) for geothermal heat-pumps as they will now expire completely on December 31, 2025.
- 6. <u>CLEAN HYDROGEN PRODUCTION (45V)</u>: Clean hydrogen production facilities beginning construction before Jan. 1, 2028, would remain eligible for credits under Section 45V, with no applicable foreign entity of concern (FEOC) requirements. The 45V tax credit will expire on Jan. 1, 2028, five years earlier than originally provided under the IRA.
- 7. NUCLEAR (45U, 45Y, 48E): New nuclear projects can tap incentives under the zero-emission nuclear power production credit (Section 45U) if they start construction before 2033. The tax credit is set to expire on December 31, 2032, as initially established. Transferability would continue to be available for the duration of the credit period. FEOC restrictions were added as follows: after enactment the taxpayer cannot be a specified foreign entity, and 2 years after enactment the taxpayer cannot be a foreign-influenced entity. Additionally, the initial proposed

³ The New York Times, "Why Rooftop Solar Could Crash Under the G.O.P. Tax Bill," June 11, 2025, https://www.nytimes.com/2025/06/11/climate/rooftop-solar-republicans-congress.html

prohibition of use of imported nuclear fuel sourced from China, Russia, Iran or North Korea under Section 45U was removed in the final bill. Nuclear facilities can also tap into the ITC and PTC tax credits, following the existing post-2033 phase out schedule: phasing down after 2032, at 100% in 2033, 75% in 2034, 50% in 2035, and 0% in 2036.

Investors and utilities are not necessarily looking at deployment of nuclear energy projects solely due to tax credits. Advanced nuclear deployment is far enough out that these tax credit changes will not necessarily have an impact on their development, however it may change the anticipated capital structure needs to make projects financially viable, potentially resulting in longer lead-times for energy production from these emerging technologies. In the meantime, private and public sector announcements for advanced nuclear energy development continue to move forward in Virginia, most recently from Virginia Department of Energy's Clean Energy Innovation Bank awarding funding in SW Virginia to help prepare the region for advanced nuclear deployment⁴.

8. ELECTRIC VEHICLES (25E, 30D, 45W, 30C): EV tax credits such as the used clean vehicle credit, new clean vehicle credit, and the qualified commercial clean vehicles credit (respectively Section 25E, Section 30D, Section 45W) now have an end date of September 30, 2025. Tax credits for installing charging stations at a residence or business (Section 30C) will expire on June 30th, 2026. A proposed provision to force the U.S. Postal Service to scrap its new electric vehicles as well as a separate proposal to charge an annual fee on EV or hybrid vehicle registration was omitted in the final bill.

EV sales are expected to continue forward as the vehicles demonstrate market competitiveness in their appealing product to consumers (e.g. high performance and lower maintenance costs over time). However, there may be cost impacts to consumers, auto dealers and auto makers in the absence of the federal incentive. With OBBBA ending the \$7,500 federal tax credit for new EVs and the \$4,000 credit for used EVs, the vehicles will be more expensive for consumers unless makers, dealers or states can offer a similar incentive. Many states offer a state-level EV incentive program in the form of grants, rebates or state level tax credit, but many other states offer none. The patchwork of state level incentives may become more apparent to consumers in the absence of the federal tax credit.

9. ENERGY EFFICIENCY (179D, 45L, 25C): The energy efficient commercial building deduction (Section 179D) and the new energy efficient home credit (Section 45L) are scheduled to expire after will be terminated after June 30, 2026. The home energy efficiency credit (Section 25C) will expire after December 31, 2025.

⁴ Virginia Clean Energy Innovation Bank, "Virginia Moves Forward on Advanced Nuclear Deployment in Southwest Virginia," July 8, 2025, https://energy.virginia.gov/public/documents/newsroom/2025/Virginia%20Move Press .pdf

Despite the elimination of certain efficiency provisions, the IRA residential energy efficiency rebate programs have been awarded and contracted ("obligated") to Virginia Department of Energy, with over \$94.3 million under program administration for the Comprehensive Home Energy Rebates ("HOMES") program, and \$93.9 million under program administration for the High Efficiency and Appliance Rebates ("HEAR") program. Only "unobligated" IRA funds are retracted through OBBBA, so this IRA-funded program should move forward in Virginia, with expected program rollout in early 2026.

10. ADVANCED MANUFACTURING (45X): The advanced manufacturing production tax credit (Section 45X) for most eligible components remains the same: 75% by 2030, 50% by 2031, 25% by 2032, and 0% after December 31, 2032. The credit for wind energy components is terminated after December 31, 2027. Critical minerals (excluding metallurgical coal) would be subject to a new, accelerated phase-out schedule, departing from the current timeline: 75% in 2031, 50% in 2032, 25% in 2033, and 0% after 2033. Metallurgical coal produced after December 31, 2029, is no longer eligible to claim the tax credit. Additional requirements for battery modules were established, and no credits for integrated components will be allowed after December 31, 2026. FEOC restrictions have been added.

In Virginia's Southside region, last November Governor Youngkin announced that Microporous LLC, a leading manufacturer of battery separators, will invest \$1.35 billion to establish a new manufacturing facility in Pittsylvania County.⁵ Investments of advanced manufacturing projects such as this may be impacted in the future with this new scheduled decline in federal tax credits.

- 11. <u>CARBON CAPTURE (45Q)</u>: The credit for carbon oxide sequestration (Section 45Q) retains its current structure and full eligibility through 2032. FEOC restrictions have been added.
- 12. <u>CLEAN FUELS (45Z)</u>: The clean fuel production credit (Section 45Z) is extended through 2029 but limited to U.S.-Mexico-Canada feedstocks and restricted by foreign entity bans.
- 13. <u>FOREIGN ENTITY OF CONCERN (FEOC) RESTRICTIONS:</u> Starting in 2026, taxpayers will be unable to claim the 45Y, 48E, and 45X tax credits if they are a prohibited foreign entity (specified or foreign-influenced entity). The Secretary of the Treasury must issue guidance on "effective control" by December 31, 2026.
- 14. <u>TRANSFERABILITY:</u> There is no deadline on the transfer of credits (Section 6418); however, transfers of credits under 45Q, 45U, 45X, 45Y, 45Z, or 48E to a "specified foreign entity" would be prohibited. Additional FEOC requirements would apply to credits under

⁵ Virginia Business Magazine, "Pittsylvania megasite wins \$1.3B battery separator project," November 13, 2024, https://virginiabusiness.com/pittsylvania-co-megasite-wins-1-3b-lithium-ion-battery-project/

sections 45Y,48E, and 45X, but do not apply to credits under sections 45U, 45Q, 45Z, and 48.

- 15. <u>DIRECT PAY:</u> Similar to transferability, direct pay (Section 6417) is preserved in the OBBBA. However, the recipients will be subject to clawbacks if underlying credits are disallowed as a result of a failure to comply with material assistance provisions.
- 16. <u>NATURAL GAS</u>: While the OBBBA does not explicitly change tax treatment for natural gas facilities, it is important to note that there are significant supply chain delays for constructing new natural gas plants. According to S&P Global, wait times for new natural gas turbines are up to seven (7) years⁶.
- 17. <u>IRA GRANTS</u>: Many IRA programs such as the Greenhouse Gas Reduction Fund are being repealed IF UNOBLIGATED. Many of these programs from the IRA such as Solar for All and Home Energy Rebates have been officially contracted with state agencies such as Virginia Department of Energy. However, if funds were awarded but not contracted, it is not clear how federal agencies will treat the term "unobligated." They are likely at risk of being pulled back if not under a signed contract agreement.
- 18. <u>ENERGY ASSISTANCE</u>: From CEUR staff analysis it appears that the Low-Income Heating and Energy Assistance Program ("LIHEAP") will remain funded in the foreseeable future, however it is unclear if federal administrative staff will be reinstated to support program needs while states implement the program and deploy federal funds.
- 19. <u>PJM INTERCONNECTION QUEUE</u>: Impacts on projects in the queue will only be truly understood when and if projects withdraw. Despite tax credit changes, projects could proceed with commencing construction to begin operations, depending on financial stability. However, inquiries are being made to industry trade associations and their developer member companies to assess the viability of projects under the new tax regime.

⁶ S&P Global "US gas-fired turbine wait times as much as seven years; costs up sharply," May 20, 2025, https://www.spglobal.com/commodity-insights/en/news-research/latest-news/electric-power/052025-us-gas-fired-turbine-wait-times-as-much-as-seven-years-costs-up-sharply

⁷ Virginia Department of Energy "Grant Tracker," July 10, 2025, https://energy.virginia.gov/grants-and-programs/grants-tracker.shtml

Executive Order "Ending Market Distorting Subsidies for Unreliable, Foreign Controlled Energy Sources":

On July 7, 2025, President Trump issued an EO directing the Secretary of the Treasury to publish guidance within 45 days following enactment of the One Big Beautiful Bill Act to strictly enforce the termination of 45Y and 48E tax credits for wind and solar facilities. Specifically, it seeks to "ensure that policies concerning the beginning of construction' are not circumvented," "revise any identified regulations, guidance, policies, and practices [...] to eliminate any such preferences for wind and solar facilities" and "implement the enhanced Foreign Entity of Concern restrictions in the law."

Modeling from Energy Innovation: Economic Impacts of OBBBA on Virginia

Energy Innovation is a non-partisan energy policy think tank that provides science-based research to decision-makers to support policy design. Energy Innovation developed the Energy Policy Simulator (EPS) model, an open-source, peer-reviewed tool that uses government data to model the combined effects of different policies. The numbers below reflect the most current economic modeling, using inputs based on the final passed "One Big Beautiful Bill Act." These figures were updated and presented by Energy Innovation on July 7, 2025.

OVERALL ECONOMIC IMPACTS IN VIRGINIA:

Cumulative GDP loss in Virginia (2025-2034) \$17 billion

ENERGY GENERATION CAPACITY LOSSES IN VIRGINIA:

Generation capacity lost by 2035: 17 Gigawatts (GW)

Solar capacity lost by 2035: 15 GW

Battery capacity lost by 2035: 1.1 GW

⁸ The White House "Ending Market Distorting Subsidies for Unreliable, Foreign Controlled Energy Sources," July 7, 2025, https://www.whitehouse.gov/presidential-actions/2025/07/ending-market-distorting-subsidies-for-unreliable-foreign%e2%80%91controlled-energy-sources/

⁹ Energy Innovation, "Economic Impacts of the "One Big Beautiful Bill Act" Energy Provisions on Virginia," July 8, 2025, https://energyinnovation.org/wp-content/uploads/OBBBA-impacts-on-Virginia.pdf

Natural gas capacity lost by 2035: .05 GW

ELECTRICITY COST INCREASES IN VIRGINIA:

Wholesale electricity costs in 2035 with One Big Beautiful Bill Act: \$6.2 billion USD

Comparison of previous policy landscape for wholesale electricity costs in 2035: \$3.3 billion USD

Range in 2035 electricity rate increases (across residential, commercial, and industrial): 9-14%

Increase in annual energy costs per household by 2030: \$110

Increase in annual energy costs per household by 2035: \$250

LOST JOBS IN VIRGINIA:

Lost jobs in Virginia by 2030 (cumulative): 11,000

Lost jobs in Virginia by 2035 (cumulative): 17,000

The above data set reflects outputs and estimated economic impacts from one model. All models are future-oriented and known to have limitations on certainty. Staff of the Commission on Electric Utility Regulation (CEUR) will continue to review other models and sources of information to develop an informed perspective on the impacts from this federal policy. CEUR welcomes input on alternative sources.

Questions or comments may be sent to CEUR Executive Director Carrie Hearne via email: chearne@ceur.virginia.gov. Learn more about the Commission on Electric Utility Regulation online at ceur.virginia.gov.

Disclaimer: this memorandum has been developed by the Commission on Electric Utility Regulation to help inform decision-makers and the general public on the potential economic and energy system impacts in Virginia. This information is not meant to be comprehensive, but rather a summary for general informational purposes only. It should not be used as a substitute for advice from a qualified legal attorney.