



Nuclear Power Tax Credits

May 29, 2025

Congress is currently considering legislation that would modify the federal income tax code, including changes to tax policies affecting nuclear power generation. This *Insight* describes existing tax credits for nuclear power and briefly discusses proposed reforms in H.R. 1, the FY2025 budget reconciliation bill, as passed by the House on May 22, 2025.

The Section 45U Zero-Emission Nuclear Power Production Credit

The zero-emission nuclear power production credit in section 45U of the tax code subsidizes electricity generation from existing nuclear power facilities. This differs from tax credits for renewable energy, which are generally meant to encourage construction of new facilities (thereby adding to energy supply) rather than to preserve existing facilities (maintaining supply).

Facilities qualifying for the 45U credit must have begun supplying electricity to customers before August 16, 2022, and cannot have previously received a section 45J tax credit (discussed below). The 45U credit only applies to electricity produced and sold after 2023, and its value depends on the market price of electricity, state and local subsidy amounts, and compliance with the IRA's prevailing wage requirements.

When a qualified facility's gross receipts from electricity sales are at or below 2.5 cents per kilowatt-hour (kWh), the baseline credit is 0.3 cents per kWh. Gross receipts include revenues from the sale of electricity along with any state, local, or federal zero-emission credit programs or subsidies (excluding the 45U credit itself). When the taxpayer's gross receipts exceed 2.5 cents per kWh, the baseline credit is reduced by 16% of the difference between the gross receipts per kWh and 2.5 cents per kWh. For example, a taxpayer with gross receipts of 3.5 cents per kWh would have their baseline credit reduced by 0.16 cents, resulting in a baseline credit of 0.14 cents per kWh. The baseline credit falls to zero when gross receipts are at or above 4.375 cents per kWh.

If the facility owner complies with certain prevailing wage requirements, their total tax credit amount equals their baseline credit multiplied by five times the kWh of electricity produced, resulting in a baseline credit of 1.5 cents per kWh. **Figure 1** shows the value of the credit per kWh of electricity based on the taxpayer's gross receipts and their compliance with prevailing wage requirements.

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1.6¢ 1.5¢ Meeting Prevailing Wage 1.4¢ Requirements 1.3¢ Not Meeting Prevailing 1.2¢ Wage Requirements 1.1¢ 1.0¢ 0.9¢ 0.8¢ 0.7¢0.6¢ 0.5¢ 0.4c0.3¢ 0.2¢ 0.1¢ 0.0¢ 0.4¢1.2¢ 1.6¢ 4.40 Gross Receipts per Kilowatt-Hour of Electricity (Market Price + Other Subsidies)

Figure 1. The Zero-Emissions Nuclear Power Production Credit in 2024

Value per kilowatt-hour of electricity in 2024 dollars, by compliance with prevailing wage requirements

Source: 26 U.S.C. §45U.

Both the maximum baseline credit of 0.3 cents per kWh and the gross receipts cutoff of 2.5 cents per kWh are adjusted annually for inflation. The point at which the credit falls to zero also implicitly changes every year based on its linkages to the 0.3-cent and 2.5-cent values. The Joint Committee on Taxation (JCT) projects that the 45U credit will reduce federal revenues by \$13.1 billion between FY2024 and FY2028, an average cost of \$2.6 billion per year. The credit is scheduled to expire after 2032.

The Section 45J Credit for Production of Electricity from Qualifying Advanced Nuclear Power Facilities

The credit for production of electricity from qualifying advanced nuclear power facilities in section 45J of the tax code may be utilized by facilities placed in service between August 9, 2005, and December 31, 2020. The credit is equal to 1.8 cents per kWh of electricity produced and sold by a facility during its first eight years of operation. The credit is capped at 6,000 megawatts (MW) of total allocated electrical capacity, and taxpayers can claim no more than \$125 million in credits per 1,000 MW of a single year's allocated capacity.

As of June 2023, no taxpayers had ever received the 45J credit. This is unsurprising, given that the vast majority of nuclear power plants in the U.S. were built between 1970 and 1990. The JCT projects that the credit will have zero or near-zero expenditures through FY2028.

Nuclear Facility Eligibility for the Clean Electricity Tax Credits

Nuclear facilities placed in service after 2024 may qualify for the Clean Electricity Investment Tax Credit (CEITC) or the Clean Electricity Production Tax Credit (CEPTC) in sections 48E and 45Y of the tax code. The CEITC and CEPTC are *technology-neutral* tax credits that may be claimed by electricity facility owners using any energy source with zero greenhouse gas emissions, including but not limited to solar, wind, geothermal, and nuclear power.

The CEITC gives owners of energy storage facilities and zero-emissions electricity facilities a tax credit equal to 30% of their capital investment costs (6% for facilities not meeting certain labor requirements). The CEPTC gives owners of zero-emissions electricity facilities a tax credit of 2.5 cents per kWh (in 2021 dollars), with lower amounts for facilities not meeting applicable labor requirements. The CEITC may be claimed the year that a facility is first placed in service, while the CEPTC may be claimed for the first 10 years of a facility's commercial operations.

Many other statutory provisions affect the tax credit amounts ultimately received by taxpayers. These provisions are discussed in CRS Report R46865, *Energy Tax Provisions: Overview and Budgetary Cost.*

Reform Proposals in the Budget Reconciliation Bill

On May 22, the House of Representatives passed H.R. 1, the FY2025 budget reconciliation bill, which would substantially reform almost all clean energy tax credits. The legislation would not affect section 45J, but it would modify the other three tax credits for nuclear energy as follows:

- Restrict qualifying taxpayers' interactions with certain foreign entities, including companies with links to China, Russia, North Korea, or Iran. These changes would apply to the 45U credit, the CEITC, and the CEPTC;
- Change the 45U tax credit's final year of eligibility from 2032 to 2031; and
- Repeal the CEPTC and the CEITC, but with a slower repeal timeline for nuclear facilities
 than for renewable energy facilities. H.R. 1 would eliminate the CEITC and CEPTC for
 nonnuclear facilities which begin construction more than 60 days after enactment or
 which are placed in service after December 31, 2028. Certain nuclear facilities would
 remain eligible for credit if they begin construction or expansion on or before December
 31, 2028.

These reforms are discussed in greater detail in CRS Report R48550, *Tax Provisions in H.R. 1, the One Big Beautiful Bill Act: House-Passed Version*, coordinated by Anthony A. Cilluffo.

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