

BCSE Comments on Proposed Regulations Related to the Section 48 Investment Tax Credit under the Inflation Reduction Act

January 22, 2024

Thank you for the opportunity for the Business Council for Sustainable Energy (BCSE) to provide its views in response to the request for comments on the proposed regulations related to the Inflation Reduction Act's (IRA) modification of the Section 48 Investment Tax Credit (ITC), REG-132569-17.

The Council appreciates the work of the staff at the Department of the Treasury (Treasury) and the Internal Revenue Service (IRS) to issue the proposed regulations and prioritize guidance that will update aspects this vital tax measure that has catalyzed significant clean energy investment and jobs in the United States.

Section 48 was originally enacted by Section 2 of the Revenue Act of 1962, Public Law 87–834, (76 Stat. 960, 963) to spur economic growth by encouraging investments in various capital projects across many industries including energy, transportation, and communications. Section 48 has been amended several times since its enactment, most recently by the IRA in August 2022.¹

The IRA amended Section 48 in several ways, including by making additional types of energy property eligible for the Section 48 credit, providing a special rule to allow certain lower-output energy properties to include qualified interconnection costs in the basis of associated energy property, and providing an increased credit amount for energy projects that satisfy prevailing wage and apprenticeship requirements, a domestic content bonus credit amount, and an increase in credit rate for energy communities.

The updates and expansion of the Section 48 ITC and its ten-year span, provide impactful market signals to invest in a variety of clean energy projects in the United States, providing communities with access to affordable, reliable and clean energy resources while expanding jobs and economic development. This is a historic opportunity to leverage private sector capital for public benefit. As such, the implementation rules are critical to delivering the results on the ground.

BCSE advocates for energy and environmental policies that promote markets for clean, efficient, and sustainable energy products and services. Since its founding in 1992, BCSE has been focused on policy adoption that will increase the deployment of energy efficiency, natural gas, renewable energy, as well as energy storage, sustainable transportation, and emerging decarbonization technologies. As a diverse coalition, not all BCSE members take a position or endorse the issues discussed in this submission.

¹ Section 13102 of Public Law 117–169, 136 Stat. 1818 (August 16, 2022), as part of the Inflation Reduction Act of 2022 (IRA).



BCSE would like to acknowledge the submissions made in response to this request for comment provided by the American Biogas Council, the American Gas Association, the Coalition for Renewable Natural Gas, the Fuel Cell and Hydrogen Energy Association, Geothermal Exchange Organization, the Offshore Wind Delivery Coalition and the Solar Energy Industries Association. BCSE encourages the thoughtful consideration of the issues and recommendations included in these submissions.

Revise the Definition of Hydrogen Energy Storage Property to Remove the Energy End-Use Requirement

BCSE urges Treasury to revise the definition of energy storage property by removing the energy only end-use requirement for hydrogen energy storage property.

Hydrogen's unique properties make it a critically important element of the emerging new energy economy and our national decarbonization plans. Different from electricity, which must be converted to chemical energy in order to be stored over time (such as a lithium-ion battery) or mechanical energy (such as pumped hydro), hydrogen itself is a form of energy storage.

As the Clean Hydrogen Roadmap states, "hydrogen [is] a versatile energy carrier and chemical feedstock [that] can couple high-capacity factor firm power with variable generation to offer resiliency and energy storage [and] then be used as a fuel or feedstock for applications that lack competitive and efficient clean alternatives."² The Clean Hydrogen Roadmap further observes that "hydrogen storage can decouple power generation from energy use and achieve lower costs compared to other technologies at scales of multiple days or weeks."³

Pursuant to IRC section 48(c)(6)(A)(i), the energy storage technology definition recognizes that hydrogen is inherently a form of energy itself and eligible for the ITC. As energy storage property, there is no need to require that the stored energy must, when withdrawn, be used in an energy application.

This proposed "energy only" limitation states that "hydrogen energy storage property must store hydrogen that is solely used as energy and not for other purposes such as for the production of end products such as fertilizer." The proposed definition allows hydrogen to be used to produce heat, to generate electricity, or to be used in a fuel cell vehicle to qualify.

As noted in the comments submitted by the Fuel Cell and Hydrogen Energy Association, the imposition of such an end-use limitation for hydrogen energy storage property would make the ITC unworkable for most of the hydrogen sector today as well as for the foreseeable future.

Further, recordkeeping and documentation of stored hydrogen's end-use will cause an undue burden on taxpayers and the IRS due to the fungibility of hydrogen. Therefore, if the end-use

² See page 13 at Energy.gov; U.S. National Clean Hydrogen Strategy Roadmap; <https://www.hydrogen.energy.gov/docs/hydrogenprogramlibraries/pdfs/us-national-clean-hydrogen-strategy-roadmap.pdf> (accessed January 8, 2024).

³ *Id.* at page 54.



limitation requirement is not removed, then Treasury should clarify that the end-use limitation requirement is not in perpetuity and concludes with the five-year recapture period. Finally, if the end-use limitation requirement is not removed, a dual use safe harbor should be established that permits a taxpayer to claim a reduced ITC when a portion of stored hydrogen is used for any other purpose than the currently limited use as energy.

Confirm that the Definition of Qualified Biogas Property Includes the Upgrading Equipment Required to Produce Renewable Natural Gas

The IRA added "qualified biogas property" to the list of property eligible for the Section 48 ITC, and defined "qualified biogas property" as property comprising a system which (i) converts biomass into a gas which (I) consists of not less than 52 percent methane by volume, or (II) is concentrated by such system into a gas which consists of not less than 52 percent methane, and (ii) captures such gas for sale or productive use, and not for disposal via combustion. Importantly, it also specifically includes eligibility of cleaning and conditioning property.

The biogas provisions added to Section 48 in the IRA were formerly part of a stand-alone bill—the Agriculture Environmental Stewardship Act (AESA). The bipartisan legislation was first introduced in 2016, and it was most recently co-sponsored by Senators Sherrod Brown (D-OH) and John Thune (R-SD). The bill was designed to “encourage investment in biodigester systems” and included “cleaning and conditioning equipment” as part of the “biodigester system” recognized in the ITC.

The proposed regulation adopts the statutory definition of qualified biogas property.⁴ The regulation provides examples of qualified biogas property that are functionally interdependent components. However, gas upgrading equipment to bring the gas mixture to pipeline quality is not included in the definition of qualified biogas property under the proposed regulations.

The rules as proposed runs counter IRA and the intent of Congress and severely limits the benefit of the ITC to this this important sector.

Raw biogas cannot be transported, stored, or sold for productive use as renewable natural gas (RNG) without upgrading equipment that cleans and conditions gas. Raw biogas may only be flared or consumed on-site for low-efficiency heat or power generation. RNG is biogas-derived, high-BTU fuel that is cleaned and conditioned to be interchangeable with fossil natural gas and can be used in the same infrastructure and applications, making it more valuable and more marketable. Biogas cleaning and conditioning equipment can be the most expensive subsystem in a biogas project. It allows a raw biogas stream to be converted to fuels like RNG that can be safely transported via the national pipeline network.

Further, because cleaning and conditioning equipment is necessary to produce biogas of at least 52 percent methane that can be sold or put to productive use without combustion, the equipment that facilitates this process is “qualified biogas property.”

⁴ § 1.48-9(e)(11)(i)



Without clarifying that cleaning and conditioning equipment is eligible under the Section 48 ITC, farmers, wastewater treatment facilities, and landfills will be unable to utilize IRA funding and ITC benefits as intended for the equipment and infrastructure needed to clean biogas to pipeline-quality specifications.

It is critical to ensure that implementation of the qualified biogas property ITC is consistent with the statute enacted by Congress and signed into law by President Biden and fulfills Congressional intent: To maximize the use and commercial deployment of biogas from landfills, U.S. farms, and other organic waste sites.

Modify the Interpretation of the 80/20 Rule as it Applies to ITC Projects

Under the 80/20 Rule, retrofitted energy property is considered originally placed in service even if it contains some used components, if the fair market value of the used components of the energy property is not more than 20 percent of the total value of the energy property, taking into account the cost of the new components of property plus the value of the used components of the energy property.

Under the proposed regulations, the 80/20 test is applied in ITC projects to each "unit of energy property," meaning all functionally interdependent components owned by the same taxpayer (or affiliates with more than 50% overlapping ownership) that are operated together and can operate apart from other energy properties within a larger energy project. Thus, if an ITC is claimed on an energy project, the 80/20 test would be applied to the entire project rather than to each component separately. This interpretation conflicts with the historical understanding of the 80/20 Rule as it applies to ITC property, which is based on each component as the unit of energy property.

The proposed regulations' interpretation of the 80/20 Rule in the context of ITC property would create barriers to ITC qualification, especially in the context of addressing maintenance and upgrades. Under the proposed rule, the ITC eligible equipment that needs to be replaced will not meet the 80/20 Rule because of the unit of energy property definition. Further, even a significant upgrade to a project (e.g., expanding its capacity) would not meet the 80/20 Rule unless the retained original components associated with the base project have a fair market value of not more than 20 percent of the expanded project.

The 80/20 Rule typically applies when there is a fundamental need to determine whether new activity has commenced. For the ITC, the credit already requires original use of property, which has historically been interpreted by reference to existing regulations distinguishing between new and used Section 38 property. The 80/20 Rule should not create false barriers to qualification because the proposed regulations still would expressly permit the ITC only for applicable new property.

For example, subjecting new-use RNG projects to the 80/20 Rule creates an unwarranted regulatory hurdle to ITC qualification that is not supported by the statutory language and will



disincentivize the construction of environmentally beneficial and technologically advanced projects that provide for material emission reduction and other environmental benefits.

Additionally, as proposed, the regulations will render the ITC for qualified biogas property significantly less valuable because the ITC will not be available for most capital expenditure that is typically made related to biogas production equipment. The RNG industry has, in the aggregate, planned multi-billion-dollar investments in 2024 and beyond which will offer significant methane abatement potential, as well as economic and other environmental benefits to geographically diverse rural and urban communities. These investments are at risk if the proposed regulations are not revised.

Clarify Regulations to Ensure that Separate Owners of Integral or Functionally Interdependent Equipment Are Eligible for the ITC

BCSE is also concerned with the proposed rule's requirement by distinguishing between "functionally interdependent" components and "integral parts" of energy property. The proposal's use of this distinction deviates from the statute and would prevent different owners of "energy property" from claiming the ITC.

The text of Code Section 48 permits the ITC to be claimed by an owner of energy property when the original use of that energy property began with such owner. In other words, different components that the proposed rule would currently treat as "integral parts" (e.g., battery storage) would still be energy property and, thus, should still qualify for the ITC when separately owned. This flexibility is essential for many projects, because it may be impractical (if not impossible) to cause one taxpayer to own all components of a larger system of ITC eligible property.

Such limitation is not found in the statutory text and could have an unnecessary chilling effect on investment and deployment. Additionally, individual items of energy property may qualify for the ITC, even when placed into service after other related energy property is placed into service. BCSE provides examples of the implications of this proposed rule for several sectors below.

Implications for Offshore Wind Facilities

The proposed regulations provide critical clarity that power conditioning and transfer equipment qualify as an "integral part" of qualified energy property under Section 48. In the case of offshore wind, this specifically includes the power conditioning and transfer equipment from the offshore wind farm to the point of the onshore interconnection. This clarity is vital to enabling the development of offshore wind – a critical resource in meeting our nation's clean energy goals.

However, the proposed regulations appear to preclude an owner of offshore wind power conditioning and transfer equipment from eligibility for the ITC unless that owner is also an owner of the offshore wind turbine. This is unsupported by the statute and IRS precedent and is not aligned with comments the Treasury Department received. It also interferes with the policy



goals of the IRA, U.S. coastal states, and the Biden Administration. Please see the submission of the Offshore Wind Delivery Coalition for more information on these points.

Implications for RNG Projects

RNG projects are often located with existing operations (e.g., landfill, wastewater treatment plant, agricultural operations) but are owned by different entities. A landfill may already have a gas collection system, but not the funds or ability to invest in cleaning and conditioning equipment. Such equipment is often owned by a different entity. Not recognizing these different ownership structures could stifle innovation and negatively impact needed investments to address existing sources of greenhouse gas emissions. IRS should remove these restrictions for the ITC in the final rule.

Implications for Geothermal Heat Pumps Projects

The IRA includes provisions to expand the deployment of Geothermal Heat Pumps (GHPs). GHPs are among the most energy-efficient heating and cooling systems available for buildings. Currently, GHPs are less than two percent of the HVAC market, and increasing their use can play a central role in meeting climate goals while providing reliable, affordable energy.

The proposed regulations states that if different taxpayers own different components of a GHP that are functionally interdependent, then none of the taxpayers can claim an ITC. We believe that this proposed rule misapplies the statute and creates difficulties for the taxpayers that will prevent them from benefiting from the credit as intended by Congress and deploying GHPs.

GHP systems consist of one or more “ground loops” that connect to one or more heat pumps in the building. The ability to split ownership of the heat pumps from the ground loops for tax purposes is a core aspect of current and future business models. This is critical because often times the owner of the ground loop is not in the business of owning and servicing heat pumps and piping inside a customer’s home. Ground loop installation and ownership is a heavy infrastructure business.

Moreover, in some instances the state utilities regulators have forbidden utility ownership of indoor heating and cooling equipment. The proposed rule would prevent the separate ownership of ground loops and heat pumps and, as a result, would jeopardize GHP projects that are currently underway and inhibit investment in future projects. We urge Treasury to modify the proposed rule to allow different taxpayers to own separate components of a GHP and claim ITC on the portion of the system they own.

Preserve the Existing Facts and Circumstances Approach to Delineate Separate Energy Properties

The proposed definition of “energy project” and its implications for bonus credits diverge from existing IRS practice and severely limits flexibility for taxpayers and works against the policy



goals of the IRA. The final rule should preserve the existing facts and circumstances approach to delineating separate energy properties. Specifically, the proposed rule imposes a rigid single taxpayer ownership (at any time during construction) plus any two other factors approach, regardless of how relevant any given factor is with respect to the project-like nature of a given development.

The definition also appears to impede the workability of certain bonus credits at the expense of others. For example, while an energy project consisting of multiple energy properties may have a larger physical footprint to potentially stand a greater chance of qualifying for the energy communities bonus credit, the same project may have more difficulty qualifying for the domestic content bonus credit by aggregating the adjusted percentage calculation for manufactured products across many more diverse technologies and components. Please see the comments submitted by the Solar Energy Industries Association for specific examples of the implications of the proposed rule.

If IRS does not retain the existing facts and circumstances approach, then it should include a rebuttable presumption approach to the definition of energy project to provide flexibility for taxpayers to properly treat portions of an energy project as a single energy property if multiple technologies, taxpayers, tax years, or interconnection agreements are implicated.

Include System Upgrade Equipment Eligibility in Interconnection Property Definition

Prior to the enactment of the IRA, interconnection costs for new or upgraded generation facilities were generally thought of as transmission or distribution costs rather than generation costs and thus not eligible for the Section 48 ITC. The IRA enacted a special rule for projects up to 5 MW, as measured in alternating current, under which the costs of the project's ITC-eligible energy property are deemed to include costs attributable to qualified interconnection property, enabling a taxpayer to claim the Section 48 ITC on qualifying interconnection costs. As such, while qualified transmission property is not considered energy property after IRA enactment, some of its costs are attributed and reallocated to the project's basis in energy property.

Section 48(a)(8)(B), proposed § 1.48-14(g)(2), and Example 1 indicate that qualified interconnection property includes upgrades to a transmission or distribution system that are required at or beyond the point at which an energy project interconnects to such transmission or distribution system. Therefore, the final rules should confirm that equipment required to modify and upgrade transmission or distribution systems beyond the point of interconnection would be considered qualified interconnection property.

BCSE appreciates the opportunity to share its views in response to the request for comments on the proposed regulations to modify the Section 48 ITC. We urge Treasury to revise the proposed regulations in accordance with the above recommendations and finalize the rules as soon as possible to avoid further delay or potential cancellation of industry investments.



Incorporate Proposed Rules on Functionally Interdependent Property as it Related to Microgrid Controller

BCSE appreciates the Treasury Department's clarification in the proposed regulations as to what constitutes a "qualified microgrid" and urge the finalization of the language that "an eligible microgrid includes an electrical system that is capable of operating in connection with the larger electrical grid whether or not the microgrid is physically connected to the electrical grid."

In addition, the Treasury Department and the IRS have requested feedback on whether the rules for functionally interdependent property provided in proposed §1.48-9(f)(2)(ii) would be sufficient to determine the components that should be included as part of a microgrid controller, or whether another test is needed due to the specific role of microgrid controllers and their components.

The proposed regulations note that in the case of microgrid controllers, "components of such energy property are functionally interdependent if the placing in service of each component is dependent upon the placing in service of each of the other components in order to perform the intended function of the energy property."

As discussed in the comments submitted by Schneider Electric, leveraging the functional interdependence test for microgrid controllers as described above provides important flexibility and no additional tests are recommended. Microgrids are highly customizable, and the functional interdependence test as proposed would allow accommodation of the different hardware and software requirements of qualified microgrids and future-proof the tax credit to accommodate for technological advances. There are other issues in the proposed rules related to microgrid projects, including the One-Megawatt Exception and the dual-use provisions. Please see Schneider Electric's comment submission for feedback on these topics.

Please do not hesitate to contact BCSE President, [Lisa Jacobson](#) with any questions. Thank you for your consideration.