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SUBMITTED ELECTRONICALLY

Internal Revenue Service
CC: PA: LPD:PR (Notice 2022-49)
Room 5203
P.O. Box 7604, Ben Franklin Station
Washington, D.C. 20044

RE: Heat is Power Association Comments on Notice 2022-51

Introduction

The Heat is Power Association appreciates the opportunity to submit comments in response to the request of the Treasury Department and Internal Revenue Service (IRS) Notice 2022-49. As the Treasury Department and IRS implement the Inflation Reduction Act, the Heat is Power Association (HiP) asks that it do so in a manner that is fair and equitable to employees and the employer.

HiP is the trade association for the waste heat to power (WHP) industry. One of HiP's missions is to educate policymakers about the value of technology that uses waste heat (excess heat) and pressure drop[1] from industrial and related processes to produce a clean electricity alternative which also supports energy resiliency.

[1] One common source of waste heat is the reduction in temperature (heat loss) that occurs when a gas expands through a pressure relief valve. Often referred to as "pressure drop", it is the release of heat that is the WHP energy resource. This reflects the thermodynamic principle, known in physics as the Joule-Thomson Effect, which states that there is a reduction in temperature (or release of heat) when a gas expands. The waste heat energy that is released when a gas expands and pressure drops, such as the heat energy released by a process pressure relief valve, requires no additional fuel and is a commonly used industrial WHP resource.

Congress granted an investment tax credit to WHP in the 2021 Consolidated Appropriations Act under 26 U.S.C. §48(c)(5) that recognizes waste heat alongside renewable energy technologies like wind and solar for emissions reduction benefits. Waste heat is excess thermal energy that is generated as a by-product of energy intensive industrial processes such as cement, steel, and glass. It can also be generated by micro grids, reciprocating gas engines, turbines, small power plants, boilers, furnaces, kilns, pipelines, and marine applications among others. WHP received the full 30% energy tax credit level because of its status as a zero incremental emissions resource.

This tax credit is intended to encourage deployment of WHP technologies that are co-located at the above-mentioned industry host sites to recover waste heat that would otherwise be lost to the atmosphere and convert it to usable energy—electricity. Such technologies vastly reduce industry carbon intensity and are a critical tool in the nation's transition in decarbonizing the U.S. economy (highly energy intensive industrial sector) for the duration of time it takes for industry to retrofit to meet net zero emission goals. Crucially, WHP technology offers short-term opportunities to reduce emissions while also remaining viable as these industrial processes shift over to carbon free fuels.

What is WHP?

WHP systems are proven technologies that produce electricity from existing sources of waste heat with no combustion and zero incremental carbon emissions. WHP systems function similarly to geothermal power plants, but with a different heat source (industrial vs. terrestrial). Both WHP systems and geothermal power plants produce electricity with existing heat energy.

WHP systems capture 250 - 2,000-degree Fahrenheit waste heat from exhaust stacks or pipes, which would otherwise be lost to the atmosphere, and convert the energy in the heat into electricity. The BTUs that emanate from any process waste heat stream are turned into useful zero-emission electricity. This heat energy that would otherwise be lost into the atmosphere, becomes useful electric power with baseload characteristics. All WHP projects have a predictable capacity factor and can schedule electricity into the waste heat industry host site, the local utility or ISO/RTO electric grid market.

WHP can be used with a wide range of large and small industries to offset the electricity used from the grid. It is especially useful for economy-driving industries like cement, glass, iron, steel and food processing, that rely on fossil fuels and do not have other cost effective and technical options, to lower the carbon intensity of their operations. Additionally, WHP can help corporations and utilities access voluntary Renewable

Energy Certificates (RECs). This helps the movement towards the use of clean electric power with baseload characteristics and decreases the need for coal and natural gas to generate electric power.

HiP Comments on Prevailing Wage Requirement

The Inflation Reduction Act has added credit enhancement provisions to encourage purchasing material made in the U.S; hiring registered apprentices, and paying prevailing wages based on U.S. Commerce labor rate charts.

Section 45(b)(7)(a) provides that a taxpayer must ensure that any "laborers and mechanics" employed by the taxpayer, or any contractor or subcontractor, are paid wages at rates not less than the prevailing wage rates for construction, alteration, or repair. Some clarity is requested in the following areas:

- **HiP Recommendation**: The prevailing wage requirement should be focused on the labor used for the installation and construction of the project, rather than the manufacture of the component parts of the system. Tracking labor used in the manufacture of any project's sub-components can be a time consuming and burdensome process, especially for small projects.

- **HiP Recommendation**: The prevailing wage requirements should be applied only to the types of workers described in the IRA. The IRA prevailing wage requirements for the ITC in sections 48 and 48E apply to "laborers and mechanics" employed in the construction of an energy project and employed to perform alterations and repairs during the 5-year period after the energy project is placed in service.

  The construction of a WHP facility involves onsite and offsite work performed by individuals which should be considered outside the scope of the duties of "laborers and mechanics." This includes (1) supervisory and quality control work to oversee and inspect the installation of the equipment, structural support, wiring and piping; (2) preliminary work that is not construction, alteration, or repair such as design and engineering activities should not be included under this requirement, and (3) onsite inspections performed by WHP equipment distributors to ensure that equipment has been properly installed.

- **HiP Recommendation**: Currently, federal prevailing wages are based upon the wage determination tools available at: https://sam.gov/content/wage-determinations. When using such classifications, it is important to note that different occupations and

tasks are often assigned across multiple occupational Department of Labor classifications. Consequently, no penalties or recapture events should apply in situations where the employer has classified a worker or the job they perform with a reasonable basis for such classification.

Routine Maintenance, Alterations or Repairs

Clarity is required regarding making a distinction between "construction, alteration, and repair" activities from routine maintenance activities and minor repairs.

- **HiP recommendation:** Major equipment for WHP systems, like engines and turbines, have regular maintenance schedules. This routine maintenance activity and minor repair work should not be considered construction, alteration, or repair for purposes of meeting the requirements of the tax credit.

  Scheduled and unscheduled maintenance that is less than 50% of a new replacement facility should be classified as routine maintenance thereby allowing the user of the WHP system to utilize normal and customary site manpower and contracting strategies independent from prevailing wage requirements that were required to construct the original facility for purposes of utilizing the ITC and PTC.

Documenting Labor Requirements

- **HiP Recommendation**: Excessive reporting and labor requirements while maintaining regular operations can increase costs substantially, minimize ongoing operating margins and threaten the overall viability of WHP projects.

Good-Faith Disagreements About Worker Classifications Under Davis-Bacon

Compliance with Davis-Bacon rules requires more guidance, specifically how clerical errors and or disagreements about worker classifications will be managed.

- **HiP recommendation:** Federal and State governments should provide clear, simple, easy to use, consolidated and centrally located requirements for prevailing wage rate requirements. Taxpayers can then document compliance and show good faith in attempting to cure any deficiency during the project construction and commissioning period**.** From time to time, inadvertent errors, deficiencies, or other challenges will occur that may force non-compliance with prevailing wage requirements during construction, repair, or alteration.

To minimize the risk of recapture for such instances, the taxpayer should be allowed a reasonable time (during the construction period) to cure the source of non-compliance. If, after that cure period, good faith efforts have failed and documentation suggests a particular aberration is non-curable, the taxpayer should be granted an exception to the circumstance that is non-compliant.

- **HiP recommendation:** WHP projects are by definition "small projects" (under 50MW) and are easily impacted by additional administrative cost. Administrative requirements need to be simple and easy to follow, as laborious reporting requirements can overwhelm an essential project with burdensome administrative tasks which result in costs that cause a project to become uneconomic even with the ITC and PTC.

HiP Comments to Apprenticeship Requirement

Section 45(b)(8)(c) provides that each taxpayer, contractor, or subcontractor who employs four or more individuals to perform construction, alteration, or repair work with respect to a qualified facility must employ one or more qualified apprentices from a registered apprenticeship program to perform that work.

The Act sets forth that apprentices should be registered. The Act does not specify where to obtain registered apprentices or how to substantiate good faith efforts to obtain registered apprentices, what the geographic radius should be for hiring an apprentice, or what to do in the event an apprenticeship agreement falls apart (e.g., apprentice provider cannot provide the apprentice(s) or apprentice(s) quit).

- **HiP recommendation:** The government could streamline the process by providing a centralized site for taxpayer consultation. It is sensible that this could be accomplished through an already established federal/state apprentice program at the U.S. Department of Labor **Equal Employment Opportunity (EEO) Registered Apprenticeship Programs** where each state has its own respective Office of Apprenticeships. In the event federal and state program reporting requirements conflict, state agency criteria shall govern. Taxpayers should be able to consult with the State Office of Registered Apprenticeship and they should help:

  (1) source appropriate registered apprentice(s);

  (2) establish standard **reporting requirements** and enable their Registered Apprenticeship Partners Information Database System (RAPIDS database) to intake proof of compliance. Incorporating reporting requirements into the RAPIDS

database intake system will allow standardization of reporting and minimize transaction costs. Taxpayers who show good faith by attempting to cure any deficiency of compliance during the commissioning and construction period shall not be deemed out of compliance.

(3) approved apprentice(s) should only travel a reasonable distance—local driving distance – less than 50 miles or 1 hour, whichever is less. Taxpayers should be allowed an exemption if no apprentices are able to be sourced within a reasonable geographic driving distance to the project location. Apprentices residing a substantial distance from the project location are likely to be less reliable and subject to greater turnover, thereby adding to project costs.

(4) If a qualified registered apprentice has been sourced and the apprentice quits and the project developer is working towards seeking a replacement apprentice, then the good faith exception should apply and not count against the taxpayer's ability to obtain a tax credit, and not to jeopardize the project's progress.

(5) There should be guardrails to prevent monopoly or oligopoly situations that could be used to increase costs (internal and external) to the project to source apprentices. Under such situations the taxpayer should be allowed to document the situation and remain eligible for the ITC and PTC.

HiP Comments on Energy Community

Tax credits are increased by 10% for qualifying facilities that are sited in an "Energy Community". Energy communities in the IRA have a broad definition. Many criteria for these communities can change over time. Some areas may become future Energy Communities while others may fall out of being an Energy Community.

There are three pathways to prove energy community in the Act.

a. A brownfield site;
b. An area which has at least 0.17% employment or 25% local tax revenue from coal, oil, or natural gas, and has a below average unemployment rate, and
c. a census tract or any directly adjoining census tract in which—
   ''(i) after December 31, 1999, a coal mine has closed, or
   ''(ii) after December 31, 2009, a coal-fired electric generating unit has been retired.

- **HiP recommendation: For b**) It is not practical to identify and tabulate fossil fuel-related business activities from local tax revenues. As an alternative, we suggest using EIA and Homeland Infrastructure Foundation-Level Data (HIFLD) data files listing locations of coal, oil and natural gas infrastructure as a proxy for local business activities associated with fossil fuel, per methodology detailed by Vibrant Clean Energy and detailed at the following website: https://www.vibrantcleanenergy.com/wp-content/uploads/2022/09/IRA_EC+LIC_VCE-Analysis.pdf.

  Also, the period for determining the ITC / PTC qualification should be consistent with the project Final Investment Decision (FID), or at a minimum, the beginning of construction and safe harbor timing period. If one or more of these criteria change by the time the project becomes commercial, any such change should not impact eligibility of the ITC or PTC.

- **HiP recommendation: For c)** US Census tracts should be defined based on the 2020 census with mapping and local boundaries provide here: https://www.census.gov/geographies/reference-maps/2020/geo/2020pl-maps/2020-census-tract.html. Standardized definitions will facilitate the determination of qualification for the energy community credit and will ensure IRS auditing and review is streamlined and efficient.

HiP Comments on Domestic Content Requirement

The IRA seeks domestic content but does not define or fully describe how that should be attained. Guidelines like the "Buy America" regulations under 49 C.F.R, 661.3,661.5(b) and (c) could be used to separate the test for structural steel products and manufactured components, where requirements do not apply to steel or iron used as components or sub-components of other manufactured products.

- **HiP recommendation:** All structural iron and steel products that are primarily iron and steel to some high percentage would be required to be US domestic. HiP believes it would be helpful for the Treasury Department and IRS to provide guidance on the definitions of "end product" as defined in 49 C.F.R. 661.3 in ways that apply to the types of facilities and energy property, since the examples of end products in Appendix A to section 661.3 are related to transit projects rather than energy projects. Under this definition, domestic content is determined through identification of end products, components, and subcomponents.

For WHP systems, the “end product” is the qualifying WHP facility. In some cases, this could include a packaged organic rankine cycle system (ORC), thermal electric systems, microturbine and some engines which are delivered with the major components like heat recovery systems, batteries (for island-capable systems), and pre-assembled control systems. In other cases, there are components, which are directly incorporated into the “end product” at the construction site these could include the engine or turbine, battery (for island capable systems), heat recovery systems, and controller systems. The subcomponents would include articles used to produce the components, as well as articles that integrate the components into the qualified facility.

Exception to Domestic Content Requirements

Section 45(b)(10)(D) provides an exception to the domestic content requirement if the inclusion of steel, iron or manufactured products which are produced in the United States Increases the overall costs of construction of qualified facilities by more than 25 percent, or relevant steel, iron or manufactured products are not produced in the United States in sufficient and reasonably available quantities or of a satisfactory quality.

- **HiP recommendation**: Any simplification to the Buy America process for smaller projects would be desired.

- **HiP recommendation**: Treasury should be aware that The TAA (Trade Agreement Act of 1979) can restrict procurement of goods and services for federal contracts, if the program management office decides to check TAA compliance. In many ways the TAA supersedes the Buy American Act, because the TAA allows the President to waive the Buy American Act under certain conditions. Federal Acquisition Regulations (FAR) Subpart 25.4 includes guidance for TAA compliance. In general, a product is TAA compliant if it is made in the United States or a "Designated Country: which include:

  - Those with a free trade agreement with the United States;
  - Countries that participate in the World Trade Organization Government Procurement Agreement (WTO GPA),
  - Least developed countries such as Afghanistan, Bangladesh, Laos, and Ethiopia, and
  - Caribbean Basin countries.

- **HiP recommendation**: The taxpayer shall provide documented evidence highlighting the deficiency in US manufacturing capability or cost for the manufactured products in question that are more than 25% higher than comparable sourced products if they exist. This evidence should describe the qualitative or costing limitations of domestic supply for the parts for which an exception is used.

Conclusion

HiP appreciates the opportunity to submit these comments to Notice 2022-49. Please reach out to anyone listed below with questions or concerns.

Sincerely,

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