# U.S. Department of Energy Guidance for the Civil Nuclear Credit Program

# **April 19, 2022**

| Guidance Issue Date                      | April 19, 2022                     |
|------------------------------------------|------------------------------------|
| Deadline for submission of Certification | May 19, 2022                       |
| Application and Sealed Bids              | Thirty (30) days after issuance of |
|                                          | Guidance                           |

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## I. General Announcement

The U.S. Department of Energy (DOE) is publishing this Guidance for the Civil Nuclear Credit Program (CNC Program), enacted by Section 40323 of the Infrastructure Investment and Jobs Act (IIJA), Public Law 117-58, signed November 15, 2021, also known as the Bipartisan Infrastructure Law.

The IIJA is a once-in-a-generation investment in infrastructure, which will grow a more sustainable, resilient, and equitable economy through enhancing U.S. competitiveness in the world, creating good jobs, and ensuring stronger access to economic and other benefits for disadvantaged communities. The IIJA appropriates more than \$62 billion to DOE¹ to deliver a more equitable clean energy future for the American people.

As part of this effort, the IIJA authorizes and appropriates \$6 billion for Fiscal Years 2022 through 2026 to establish the CNC Program to prevent closures of nuclear power plants by providing financial support for existing Nuclear Reactors projected to cease operations due to economic factors.<sup>2</sup>

As implemented through this Guidance, the CNC Program will make meaningful progress towards a carbon pollution-free electricity sector by 2035, help "deliver an equitable, clean energy future, and put the United States on a path to achieve net-zero emissions, economy-wide, by no later than 2050" to the benefit of all Americans.

Nuclear power currently provides 52 percent of the nation's clean electricity, and the current fleet of reactors are a vital resource to achieve a 100 percent carbon pollution-free electricity sector by 2035 and net-zero emissions economy-wide by 2050. Shifting energy markets and other economic factors have already resulted in the closure of 12 commercial reactors across the United States since 2013.<sup>4</sup> These closures have led to an increase in carbon emissions, poorer air quality, and the loss of thousands of high-paying jobs.<sup>5</sup> The CNC Program is a critical element of meeting clean energy goals by helping to preserve the existing nuclear fleet and the clean energy it provides.

This Guidance describes the timelines, deliverables, and other requirements for Owners or Operators of Nuclear Reactors that are projected to cease operations due to economic factors to submit Certification Applications to be eligible to become Certified Nuclear Reactors, and instructions on formulating and submitting sealed Bids to be eligible to receive Credit allocations. This Guidance

<sup>3</sup> Exec. Order No. 14,008, 86 Fed. Reg. 7619 (Jan. 27, 2021) (Tackling the Climate Crisis at Home and Abroad).

<sup>&</sup>lt;sup>1</sup> U.S. Dep't of Energy, *DOE Fact Sheet: The Bipartisan Infrastructure Deal Will Deliver For American Workers, Families and Usher in the Clean Energy Future* (Nov. 9, 2021) <a href="https://www.energy.gov/articles/doe-fact-sheet-bipartisan-infrastructure-deal-will-deliver-american-workers-families-and-0">https://www.energy.gov/articles/doe-fact-sheet-bipartisan-infrastructure-deal-will-deliver-american-workers-families-and-0</a>.

<sup>&</sup>lt;sup>2</sup> See 42 U.S.C. § 18753.

<sup>&</sup>lt;sup>4</sup> Cong. Research Serv., R46820, *U.S. Nuclear Power Plant Shutdowns, State Interventions, and Policy Concerns* at 3 (June 10, 2021), <a href="https://crsreports.congress.gov/product/pdf/R/R46820/2">https://crsreports.congress.gov/product/pdf/R/R46820/2</a>.

<sup>&</sup>lt;sup>5</sup> U.S. Energy Information Administration, Fort Calhoun becomes fifth U.S. nuclear plant to retire in past five years, (Oct. 31, 2016), <a href="https://www.eia.gov/todayinenergy/detail.php?id=28572">https://www.eia.gov/todayinenergy/detail.php?id=28572</a>; The Nuclear Decommissioning Collaborative, Inc., Socioeconomic Impacts from Nuclear Power Plant Closure and Decommissioning: Host Community Experiences, Best Practices and Recommendations (Oct. 2020),

<sup>&</sup>lt;u>Socioeconomic-Impacts-from-Nuclear-Power-Plant-Closure-and-Decommissioning-15-October-2020-Final.pdf</u> (decommissioningcollaborative.org).

will clarify the certification criteria, application content requirements, evaluation process and methodologies, eligibility periods, and anticipated timeline of the CNC Program.

This Guidance is applicable to the first in a series of annual Award Periods that DOE will conduct to implement the CNC Program. The first Award Period is limited to Nuclear Reactors that are projected to cease operations imminently and with a high degree of certainty. Accordingly, this Award Period will be implemented on a more rapid timeline than future Award Periods and will be limited to Nuclear Reactors that have already publicly announced their intention to cease operations. Future Award Periods—including for Award Period 2, which is estimated to commence in the first quarter of FY 2023—will be executed over a longer timeline and will not be limited to Nuclear Reactors that have publicly announced their intentions to cease operations. Nuclear reactors that are eligible to apply for the first Award Period but nonetheless wish to wait until the second Award Period are free to do so.

For this Award Period, DOE is accepting Certification Applications and Bid submissions as a single submission from April 19, 2022 to May 19, 2022 Application information and Bid submissions must be submitted at https://proposalscnc.inl.gov by 23:59 MDT, May 19, 2022, or they will not be considered timely filed for the first Award Period and will not be evaluated.

A detailed Certification Application and Bid submission checklist for Award Period 1 is included in **APPENDIX A** to this Guidance. DOE may revise the information requested and other aspects of the application process for future Award Periods, including additional consideration of emissions impact, labor, and environmental justice considerations.

# II. Authority

The authorizing statute for the CNC Program is Section 40323 of the IIJA, codified at 42 U.S.C. § 18753.

The CNC Program is neither procurement nor financial assistance and will not be administered pursuant to those authorities. The CNC Program furthers a public purpose and DOE's determination under the program to certify Applicants and select bids does not constitute an acquisition process nor an acquisition of goods or services. DOE is implementing the CNC Program pursuant to authorities granted in 42 U.S.C. § 18753.

# III. Acronyms and Definitions

## A. Acronyms

CNC means Civil Nuclear Credit.

*DOE* means the U.S. Department of Energy.

eGRID means EPA's Emissions & Generation Resource Integrated Database.

EGU means Electric Generating Unit.

EIA means the U.S. Energy Information Administration.

*EPA* means the U.S. Environmental Protection Agency.

EUCG means the Electric Utility Cost Group.

FERC means the Federal Energy Regulatory Commission.

GAAP means Generally Accepted Accounting Principles.

IIJA means the Infrastructure Investment and Jobs Act.

ISO means an Independent System Operator.

NRC means the U.S. Nuclear Regulatory Commission.

RTO means Regional Transmission Organization.

SEC means the U.S. Securities and Exchange Commission.

#### B. Definitions

- Air Pollutants means the criteria air pollutants and greenhouse gases provided in EPA's eGRID. Air pollutants include carbon dioxide (CO<sub>2</sub>), nitrogen oxides (NO<sub>x</sub>—available both at annual resolution and only for ozone season), sulfur dioxide (SO<sub>2</sub>), methane (CH<sub>4</sub>), nitrous oxide (N<sub>2</sub>O), and fine particulate matter (PM2.5).
- Annual Payments mean the amount of Payments the Selected Nuclear Reactor submitted in a Payment Certificate to the DOE by the Selected Nuclear Reactor for the prior 12-month period.
- Applicant means an entity or collection of entities, at least one of which is an Owner or Operator of an NRC-licensed Nuclear Reactor that submits a Certification Application. Multiple Owners or Operators of one Nuclear Reactor are permitted to submit a joint Certification Application as an Applicant, but under no circumstances will multiple Certification Applications for the same Nuclear Reactor be accepted.
- Award Period means a period of four (4) consecutive Fiscal Years that begins with the first Fiscal Year in which Credits are allocated to the Certified Nuclear Reactor. Award Period 1 will be October 1, 2022, through September 30, 2026. Award Period 2 will be October 1, 2023, through September 30, 2027, and so on.
- Award Year means a Fiscal Year within the Award Period. Award Year 1 of Award Period 1 will be October 1, 2022, through September 30, 2023. Award Year 2 of Award Period 1 will be October 1, 2023, through September 30, 2024, and so on.

- Auction means the process outlined in Section X.B of this guidance.
- Average Domestic Fuel Content means the average percentage of known domestic content across the four fuel supply chain steps as outlined in Section VII.E of this guidance.
- *Bid* means the information Applicant provides in the bid sheet, as outlined in Appendix C of this guidance.
- Bid Cap means the estimated average operating loss in dollars per megawatt hour as calculated per Section VII.B and submitted with Applicant's Certification Application.
- Bidder means a Certified Nuclear Reactor that submits a valid bid.
- Certification Application means an application submitted to DOE by an Applicant for a Nuclear Reactor that is projected to cease operations due to economic factors to become a Certified Nuclear Reactor in accordance with this Guidance and 42 U.S.C. § 18753(c)(1).
- Certification Decision means the process as set out in Section XI.A.
- Certified Nuclear Reactor means a Nuclear Reactor for which the Applicant has been provided a Notice of Certification by the Secretary of Energy and is eligible to participate in the Auction.
- Committed Megawatt-hours (MWh) means the number of MWh identified in a Certified Nuclear Reactor's sealed Bid for which Credits may be allocated.
- Conditional Award Decision means the initial decision to award Credits to a Selected Nuclear Reactor, subject to the finalization and execution of the Credit Redemption Agreement review and other conditions that DOE may identify.
- Credits means credits allocated to an Owner or Operator pursuant to an Auction and represented by a voucher for the sum total of Payments the Selected Nuclear Reactor may receive over the Award Period, listed separately by the maximum amount of Payments the Selected Nuclear Reactor may redeem for each individual Award Year.
- eGRID Subregion means one of the 27 subregions in the United States used by the Emissions & Generation Resource Integrated Database (eGRID) as defined by the EPA. See <a href="https://www.epa.gov/system/files/images/2022-01/egrid2020">https://www.epa.gov/system/files/images/2022-01/egrid2020</a> subregion map.png.
- *Enhancements* means capital expenditures for life-extension, uprates, or for other purposes as defined by the EUCG.
- Final Award Selection means the date upon which the Selected Nuclear Reactor is awarded Credits.

- Fiscal Year means the period beginning October 1 and ending on September 30 of the following calendar year.
- Notice of Certification means the notice provided in accordance with Section XI.A.
- Nuclear Reactor means each individual nuclear power reactor unit seeking Credits, except where the Applicant attests that there are multiple reactor units at a given site with substantially identical or interdependent financial situations, ownership and operations structures, and costs in which case the Applicant may submit a single Certification Application for multiple units. In the latter circumstances, the Applicant should delineate in the single Certification Application the attributes of each individual reactor unit.
- Owner or Operator means an individual entity that is, or will be during the applicable Award Period, authorized to possess, use, or operate a reactor unit at the Nuclear Reactor under an NRC facility license.
- Payment Certificate means the form submitted by the Selected Nuclear Reactor to DOE at the completion of a Fiscal Year requesting redemption of the completed Fiscal Year's Credit.
- Payments means the U.S. dollar payments made to a Selected Nuclear Reactor over the Award Period upon the redemption of Credits.
- Post-Award Period means the four-year period immediately following the Award Period.
- Secretary means the Secretary of the U.S. Department of Energy or such officers or employees of the U.S. Department of Energy as designated by the Secretary of the U.S. Department of Energy.
- Selected Nuclear Reactor means a Certified Nuclear Reactor that is selected for allocation of Credits via Auction pursuant to the sealed bid process.
- State-Supported Reactor means a Nuclear Reactor that receives a payment from a State zeroemission credit, a State clean energy contract, or any other State program with respect to that Nuclear Reactor.
- Sustaining Capital Costs are costs for the replacement or refurbishment of major equipment, as defined by the EUCG survey.
- *Uprate* means any investment to increase the generating capacity of the Nuclear Reactor.

# IV. Program Timeline

DOE intends to conduct the first credit award cycle for Nuclear Reactors on the timeline set forth below in Table 1. The identified activities and dates are subject to revision but are intended to provide guidance on the sequence of program activities from the initial certification of Nuclear Reactors to payment of Credits through the first Award Period. For those Nuclear Reactors anticipating future

participation, the timeline for the second award cycle is included in Table 2 below.

Note that, over the life of the program, DOE has the authority to obligate up to \$6,000 million of Credits that were appropriated in IIJA. Of that amount, DOE has authority and appropriations sufficient to obligate \$1,200 million of Credits for the first Award Year of the first Award Period. Any Credits allocated in excess of \$1,200 million during the first Award Period would be conditioned on the availability of appropriations and availability of funds for future Award Years.

To be clear, however, DOE does not anticipate awarding the full available amount in the first award cycle. In deciding how much to award in the first award cycle, DOE will consider, among other factors, the following objectives: (a) allocating Credits to as many Certified Nuclear Reactors as possible, to the maximum extent practicable, (b) maximizing the cost effective use of available funding, and (c) ensuring that sufficient funding remains to provide a reasonable opportunity for Nuclear Reactors to be awarded Credits in future award cycles during the term of the CNC Program.

Table 1. Civil Nuclear Credit Program Timeline – First Award Cycle

| Action                                                    | Date                                  |
|-----------------------------------------------------------|---------------------------------------|
| DOE issues Guidance and requests Certification            | April 19, 2022                        |
| Applications and Sealed Bids                              | _                                     |
| Deadline for submission of Certification Applications and | May 19, 2022                          |
| Sealed Bids for Award Period 1                            | Thirty (30) days after issuance of    |
|                                                           | Request for Certification             |
|                                                           | Applications.                         |
| DOE notifies Selected Nuclear Reactors of Conditional     | As soon as thirty (30) days after     |
| Award Decision for Award Period 1                         | deadline for submission of            |
|                                                           | Certification Applications and Sealed |
|                                                           | Bids for Award Period 1               |
| DOE executes Credit Redemption Agreement, makes           | October 1, 2022                       |
| Final Award Selection and issues Credits for Award        |                                       |
| Period 1 to Selected Nuclear Reactors                     |                                       |
| Selected Nuclear Reactors submit Payment Certificates     | On or before December 30, 2023        |
| for Payments of Annual Credits for Award Year 1           | (90 days after close of Fiscal Year)  |
| Selected Nuclear Reactors submit Payment Certificates     | On or before December 30, 2024        |
| for Payments of Annual Credits for Award Year 2           | (90 days after close of Fiscal Year)  |
| Selected Nuclear Reactors submit Payment Certificates     | On or before December 30, 2025        |
| for Payments of Annual Credits for Award Year 3           | (90 days after close of Fiscal Year)  |
| Selected Nuclear Reactors submit Payment Certificates     | On or before December 30, 2026        |
| for Payments of Annual Credits for Award Year 4           | (90 days after close of Fiscal Year)  |

Table 2. Civil Nuclear Credit Program Timeline – Second Award Cycle

| Action                                         | Date                                   |
|------------------------------------------------|----------------------------------------|
| DOE issues Updated Guidance and Announces Open | Estimated publication first quarter of |
| Application Period for Award Period 2          | Fiscal Year 2023                       |

| Deadline for submission of Certification Applications     | Thirty (30) days after issuance of     |
|-----------------------------------------------------------|----------------------------------------|
|                                                           | Request for Certification              |
|                                                           | Applications.                          |
| Certified Nuclear Reactors submit sealed Bids for Credits | Thirty (30) days after notification to |
|                                                           | the Nuclear Reactors of certification  |
|                                                           | designation.                           |
| DOE notifies Selected Nuclear Reactors of Conditional     | Thirty (30) days after submission of   |
| Award Decision for Award Period 2                         | sealed bids.                           |
| DOE executes Credit Redemption Agreement, makes           | October 1, 2023                        |
| Final Award Decision and issues Credits for Award Period  |                                        |
| to Selected Nuclear Reactors                              |                                        |
| Selected Nuclear Reactors submit Payment Certificates for | On or before December 30, 2024         |
| Payments of Annual Credits for Award Year 1               | (90 days after close of Fiscal Year)   |
| Selected Nuclear Reactors submit Payment Certificates for | On or before December 30, 2025         |
| Payments of Annual Credits for Award Year 2               | (90 days after close of Fiscal Year)   |
| Selected Nuclear Reactors submit Payment Certificates for | On or before December 30, 2026         |
| Payments of Annual Credits for Award Year 3               | (90 days after close of Fiscal Year)   |
| Selected Nuclear Reactors submit Payment Certificates for | On or before December 30, 2027         |
| Payments of Annual Credits for Award Year 4               | (90 days after close of Fiscal Year)   |

# V. Who May Apply?

In addition to the Certification requirements described in Section Error! Reference source not found., an Applicant eligible to apply under this Guidance must establish that it (1) meets the imminence requirement described in this Section, and (2) that it will compete in a competitive electricity market during the Award Period.

1. In accordance with the discretion granted to the Secretary in 42 U.S.C. § 18753(c)(1)(A), the Secretary has determined that it is appropriate to require Applicants in the first award cycle to submit documentation demonstrating they have publicly announced their intention to cease operations. Specifically, to ensure the first award cycle of the CNC Program is directed toward Nuclear Reactors most at risk of imminent closure, the Applicant must demonstrate that it has made a public filing on or before November 15, 2021, the date of enactment of the IIJA, announcing its intention to permanently cease operations of the Nuclear Reactor on or before September 30, 2026. By limiting eligibility in the first award cycle as set forth in this Guidance, DOE will direct Credits to those Nuclear Reactors most at risk of imminent closure in the very near term, while retaining Credits for future award cycles to assist as many additional Nuclear Reactors as possible that are projected to cease operation due to economic factors in a future period. This approach is consistent with many of the public comments DOE received in response to the DOE's Request for Information.<sup>6</sup>

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<sup>&</sup>lt;sup>6</sup> Notice of Intent and Request for Information Regarding Establishment of a Civil Nuclear Credit Program, 87 Fed. Reg. 8570 (Feb. 15, 2022).

An Owner or Operator will be deemed to have announced an intention to cease operations if prior to November 15, 2021, it has (1) made a public filing (not later withdrawn or contradicted) that the Nuclear Reactor will cease operations prior to September 30, 2026, or (2) made a public filing (not later withdrawn or contradicted) that the Nuclear Reactor will cease operations prior to September 30, 2026 if specific and verifiable market conditions occur, and can establish through its Certification Application that such market conditions have occurred or will occur prior to September 30, 2026.

Public filings may include, but are not limited to, Certifications of Permanent Cessation of Power Operations filed with the NRC, SEC 10-K or 10-Q filings, or filings with state regulators.

The DOE wishes to emphasize that the requirement to submit a public filing noticing the Nuclear Reactor's premature retirement is limited to the first award cycle. Such public filings or statements will be neither necessary nor sufficient for subsequent award cycles.

- 2. The Applicant must demonstrate that the Nuclear Reactor competes in a competitive electricity market during the Award Period. An Applicant can do so by showing that the Nuclear Reactor will receive 50 percent or more of total revenue from sources that are exposed to electricity market competition. These sources include but are not limited to:
  - a. Sales of energy, capacity and/or ancillary services into organized wholesale markets;
  - b. bilateral agreements with non-affiliated purchasers on competitively negotiated terms.

Notwithstanding the amount of revenue a Nuclear Reactor receives as a result of clearing in energy, capacity or ancillary services markets, or through bilateral agreements, a Nuclear Reactor for which an Applicant recovers more than 50 percent of the Nuclear Reactor's cost from cost-of-service regulation or regulated contracts will not be deemed to compete in a competitive electricity market.

The Applicant should address this requirement by (1) providing the most recent completed year's revenue sources, percentage of total revenue represented by each source, and identification of which sources are derived from competitive electricity markets as described above, and (2) identifying what, if any, changes to its existing commercial arrangements affecting the sources of revenues it anticipates will occur between the most recent completed year and the conclusion of the Award Period.

# VI. Certification Requirements

An eligible Applicant's Nuclear Reactor, as defined in Section V, must meet the following

<sup>&</sup>lt;sup>7</sup> 42 U.S.C. § 18753(a)(1)(A).

minimum criteria to be eligible for certification:

- 1. The Applicant has demonstrated that, at the time of the submission of the Certification Application, the Nuclear Reactor is projected to cease operations due to economic factors;
- 2. The Applicant has demonstrated that Air Pollutants would increase if the Nuclear Reactor were to cease operations and be replaced with other types of power generation;
- 3. The NRC has provided the Secretary with reasonable assurance that the Nuclear Reactor will continue to be operated in accordance with its current licensing basis (as defined in 10 C.F.R. § 54.3);
- 4. The NRC has provided the Secretary with reasonable assurance that the Nuclear Reactor poses no significant safety hazards; and
- 5. The Applicant has provided a timely, completed Certification Application, including:
  - a. A detailed plan to sustain operations at the conclusion of the Award Period. This plan must include a planning basis of either receiving additional Credits at a reduced level than anticipated for the Award Period or one where no additional Credits are received;
  - b. Information on the source of the Nuclear Reactor's uranium and the location of where it is or will be processed and manufactured into fuel, including information on the countries of origin of the uranium planned to be used in the Award Period to the extent known, where it was/will be converted and enriched, and where the fuel was/will be fabricated, to the extent this is known or can be reasonably estimated; and
  - c. Confirmation the Applicant will use best efforts to maximize the procurement of uranium that is produced in the United States and the procurement of conversion services, enrichment services, and fabrication into fuel assemblies in the United States as set out in Section 4.9 of the Credit Redemption Agreement in Appendix B.

# VII. Guidance on Certification Application and Criteria

# A. Basic Application Requirements

A Certification Application must be filed during the application period defined by DOE in this Guidance (Table 1) at https://proposalscnc.inl.gov.

Certification Applications must be properly completed and submitted to DOE, meaning:

o Each Certification Application must include all information set forth in each deliverables section of this Guidance, which are summarized in the checklist in

#### Appendix A;

- Applicants must respond to any request for supplemental information relating to their application within five (5) business days of receiving such a request from DOE.
   Failure to respond within the 5-day period will disqualify the Certification Application from further consideration;
- DOE will perform review of the Certification Applications to ensure all information is submitted as necessary. Incomplete Certification Applications will be disqualified from further consideration; and
- DOE's review of the Certification Application will include consideration of whether Applicant's economic factors, including operational and market risk, are reasonable and appropriate, including:
  - Whether it is the type of cost or risk generally recognized as ordinary and necessary for the conduct of the Applicant's business or the Nuclear Reactor's performance;
  - Generally accepted sound business practices, arm's-length bargaining, and Federal and State laws and regulations;
  - The requirements for the continued operation of the Nuclear Reactor both during the Award Period and in the Post-Award Period; and
  - Any significant deviation from Applicant's established practices or previously developed financial assessments.

In the event DOE finds one or more of an Applicant's economic factors unreasonable or inappropriate, DOE will request the Applicant to submit supplemental information or revised economic factors based on that finding.

Unless otherwise specified, Certification Applications should conform to the following general criteria:

- Calculate all requests for information past or future from the date of the Certification Application;
- Unless noted otherwise herein, information should be presented on an annual basis rather than averaged or aggregated over the time period indicated;
- o Represent all costs in nominal dollars;
- Provide sources of all data; and
- o Provide copies of all workbooks, with no locked content and all formulae intact,

which are used to generate the attachments provided in applications.

- Files should be named according to the following format. If a naming convention and format is not provided for a part of a deliverable, the information will be requested as part of the application submission form on the website.
  - File naming Format: UEI Number\_Reactor Name\_Section Name from Checklist Year if Required Workbook
  - Examples:
    - 742A11324601 Chicago Pile 1 Operating License.pdf
    - 742A11324601\_Chicago Pile 1\_Historic Expenditures\_1942.pdf
    - 742A11324601\_Chicago Pile 1\_Projected Operating Costs\_2023\_Workbook

#### Each Applicant is required to:

- o Be registered in the System for Award Management (SAM) at https://www.sam.gov before submitting its Certification Application;
- o Provide a Unique Entity Identifier (UEI) in its Certification Application; and
- Continue to maintain an active SAM registration with current information at all times during which it has an active Certification Application or Credit Redemption Agreement.

DOE may not certify a Nuclear Reactor or allocate Credits to an Applicant until the Applicant has complied with all applicable UEI and SAM requirements and, if an Applicant has not fully complied with the requirements by the time DOE is ready to make such an award, the DOE may determine the Applicant is not qualified to receive the award and use that determination as a basis for denying certification.

Finally, DOE anticipates that as it gains further experience with the certification process described herein, it may revise and refine the specific information and data requested and evaluated in future certification cycles.

#### **B.** Economic Factor Guidance

<u>Narrative Description</u>: The Certification Application must include a narrative description with references to supporting documentation and economic calculations that clearly and in detail identifies the basis for the claim that the Nuclear Reactor is projected to cease operations due to economic reasons. The narrative should:

O Describe key factors, assumptions, and inputs used in calculation of average annual operating loss, the sensitivity of the calculation to these key factors, and the relative certainty associated with the projection of each cost and revenue component;

- Describe the key factors, assumptions, and inputs used in allocation of any overhead costs, shared costs, transfer-pricing, or intercompany services charged between the entities in the chain of ownership of the Owners or Operators of the Nuclear Reactor, including parent companies, holding companies, subsidiaries, and affiliates;
- o Justify the assumptions and inputs used in the calculation of operating loss;
- If internal projections for electricity market prices are used, include a comparison and discussion of any significant deviation to any available and forwards or futures market prices relevant to the Nuclear Reactor, or other public or commercially available price projections may be used;
- o Describe and justify any substantial differences between historical financial trends and projections included in the average annual operating loss calculation;
- O Describe and justify any costs that would be avoidable if the Nuclear Reactor ceases operations but that would be necessary to sustain operations through the Award Period and after the Award Period consistent with the Post-Award Period Plan. Such costs may include but are not limited to maintenance and capital projects deferred in anticipation of retirement, retention of skilled labor, and any unavoidable outages associated with extending the operating life of the Nuclear Reactor;
- O Describe how the method or outcome of the estimation of projected average annual operating loss is consistent with that used for other decision-making or why there would be a difference in the method or outcome of calculation;
- Describe any contractual, tariff, or regulatory obligation that the Nuclear Reactor has undertaken to sell energy, capacity, ancillary services, or environmental attributes for future delivery, including the period of performance and the consequences of nonperformance due to cessation of operations;
- Clearly state the operational and market risks relevant to the Nuclear Reactor, present and justify the methodology used to monetize those risks, and describe any current hedging contracts; and
- o Identify and describe how the expenditures and risks included in the projected operating loss would be avoided or reduced by retirement of the Nuclear Reactor. Include a description and estimate of what costs the Nuclear Reactor's decommissioning trust fund would cover.

The Applicant must demonstrate that the Nuclear Reactor is projected to operate at an average annual operating loss during the Award Period. The application must include the details of the calculation, supporting information, and quantitative estimates for both the previous five (5) calendar years and the next four (4) fiscal years of the Award Period for the following categories:

o Revenue streams. All revenue from any market or out-of-market sales or service. This

should include:

- Electricity and related sales, including short-term power sales, long-term power contracts, capacity payments, and other power services (e.g., ancillary services) relevant to the Nuclear Reactor;
- Non-electricity market products or services (e.g., heat energy, desalinated water, hydrogen, environmental attributes sold on the voluntary market);
- Amounts collected through cost-of-service regulation or regulated contracts;
   and
- All payments and tax credits from State, regional, and Federal support programs. If such funds, or a portion of such funds, would cease if an award is made by the CNC Program, then this expected change should be reflected in an additional calculation along with supporting documentation identifying the relevant existing statute or regulation.
- o <u>Expenditures</u>. Any expenditure that would be avoided if the Nuclear Reactor were to retire. This may include expenditures in the categories listed below:
  - Operating & maintenance costs;
  - Fuel costs;
  - Going forward capital costs, depreciated according to Generally Accepted Accounting Principles (GAAP); and
  - Other costs not covered in categories above
- Operational and market risks. Monetization of operational and market risk faced over the Award Period that may result in early closure of a Nuclear Reactor may be calculated using reasonable and appropriate methods and included in the assessment of future operating loss. These risks include but are not limited to risk factors that would affect future costs and revenues, such as:
  - Market risk arising from volatility in energy and capacity market prices, resulting in lower than projected revenues; and
  - Operational risk arising from unplanned outages or equipment failures resulting in lost revenues, performance penalties, contractual obligations, in additional to the risk of new regulatory mandates or fuel supply challenges.

<u>Deliverables</u>: The Applicant must provide other supporting documentation as listed in the deliverables section below that indicates the Nuclear Reactor is at risk of closure due to economic factors or relevant to the decision to retire the Nuclear Reactor. This includes any other documents, presentations, or financial analyses developed for internal or external purposes from the preceding five (5) years used in decision-making (e.g., rate cases, tax filings, insurance statements, investor presentations, filings with the SEC, presentations to management).

#### (i) Economic Factor Deliverables

1. The narrative as described in Section VII.B above.

Name File: UEI Number Reactor Name Economic Narrative

Format: PDF

2. Historical annual costs, revenue, and operating loss or gain calculation. The cost categories, sub-categories, and methodology are intended to align with those used for the Electric Utility Cost Group (EUCG) survey. Include:

- a. A table of annual historical expenditures and revenues for the Nuclear Reactor for the previous five (5) calendar years. Include line items for the following categories and sub-categories:
  - i. Revenue:
    - 1. Electricity sales into organized markets;
    - 2. Electricity sales via out-of-market contracts such as power purchase agreements or hedges;
    - 3. Capacity revenues;
    - 4. Other electricity product revenues such as reserves or ancillary services:
    - 5. Non-electricity related revenues including sales of environmental attributes;
    - 6. Retail rates or amounts collected through cost-of-service rate recovery;
    - 7. Federal, state, or other governmental tax credits, grants, subsidies, or payments;
    - 8. Any other revenues, including a description of their sources.
  - ii. Fuel costs associated with procuring the uranium fuel, including conversion, enrichment, and fabrication, reported and allocated consistent with the Electric Utility Cost Group (EUCG) methodology.
  - iii. Operating Costs, reported by the following sub-categories:
    - 1. Engineering, costs for technical work associated with study, design, implementation of plant modifications and for monitoring and testing for standards compliance;
    - 2. Loss Prevention, costs for providing site security and access control, safety, emergency preparedness, and related costs;
    - 3. Materials and Services, costs arising from inventory planning, control, optimization, and procedures;
    - 4. Fuel Management, costs of managing fuel procurement, conversion, enrichment, and fabrication not captured in the Fuel costs reported in ii above;
    - 5. Operations costs from using equipment, chemistry and environmental monitoring and controls, radiation protection, and processing of low-level waste;
    - 6. Support Services, costs for business services such as human

- resources, pensions and benefits, payroll taxes, nuclear officers and executives, and employee incentives;
- 7. Training, costs arising for development and implementation of training programs; and
- 8. Work Management, costs for planned, periodic, preventative maintenance of structures, systems, and components.
- iv. Capital costs as spent, reported by the following sub-categories:
  - 1. Enhancements, as defined in Section III.B;
  - 2. Sustaining, as defined in Section III.B;
  - 3. Regulatory, costs required to meet current or new regulations;
  - 4. Infrastructure, costs to build or replace assets on site not associated with power generation
  - 5. Capital Spares, costs for spares of major equipment; and
  - 6. Information Technology, costs for software, computer equipment, telecommunications, and other related equipment.
- v. Other costs of ownership attributable to the Nuclear Reactor, not covered by the categories above:
  - 1. Non-dedicated costs, such as allocated overhead;
  - 2. Property taxes and payments in lieu of taxes (PILOTs);
  - 3. Legal costs, fines, penalties resulting from violations or failure to comply with Federal, State, local, and foreign laws;
  - 4. Lobbying and political activity costs;<sup>8</sup> and
  - 5. Any other cost not covered above, with a description of such costs.
- b. Annual net electricity generation for the previous five years, in units of MWh, as reported to the Energy Information Administration on form 923.
- c. The number of planned and unplanned outages over the previous five years including the duration of each outage.
- d. A calculation of historical annual net operating gain or loss over the previous five years in \$/MWh, using the revenue and cost data provided in point (a) and the generation from point (b).

Name File: UEI Number\_Reactor Name\_Historic Annual Operating Conditions\_Year Format: Excel

3. Projected annual average operating loss for each Fiscal Year of the Award Period. If the Nuclear Reactor is scheduled to retire before or during the Award Period, assume the Nuclear

<sup>&</sup>lt;sup>8</sup> The Credit Redemption Agreement prohibits the use of proceeds of the Credits for costs related to lobbying or political activity.

Reactor stays operational during the Award Period and include estimates of costs necessary to maintain operations. Include:

Name File: UEI Number Reactor Name Projected Operating Conditions Year

Format: Excel

- a. Projected annual generation in MWh for the Award Period.
- b. Assumptions about the projected planned and unplanned outages over the four-year Award Period.
- c. Projected annual revenues in total dollars for the Award Period, with line items for the categories and subcategories as defined in deliverable 2 above.
- d. Projected annual costs in total dollars, with line-items for the categories and subcategories and using the same methodology as defined in in deliverable 2 above.
- e. Projected annual going-forward capital costs for the Award Period reported in point (c.) above, by the amount annually depreciated or amortized and recorded in accordance with GAAP and consistent with the Owner or Operator's financial accounting. Include only going-forward capital costs projected to be incurred after date of submission of Certification Application.
- f. Identification of which costs projected above are avoidable costs of retirement. If a cost is partially avoidable by retiring, estimate the fraction that is avoidable. To the extent a cost would be covered by the Nuclear Reactor's Decommissioning Trust Fund it may be identified as such and considered an avoidable cost of retirement.
- g. Projected monetized annual operating and market risk in dollars. This may include but is not limited to:
  - i. Energy and capacity price volatility
  - ii. Fuel cost uncertainty
  - iii. Energy performance risk
  - iv. Capacity performance penalty or buyback risk
  - v. New regulatory requirement risk
- h. A detailed explanation, including supporting workbooks and calculations, of how the costs of operational risks and market risks were calculated for each Award Year of the Award Period.

Name File: UEI Number Reactor Name Risk Explanation Year

Format: PDF

Name File: UEI Number Reactor Name Risk Explanation Year Workbook

Format: Excel

i. Projected operating loss over the Award Period. Use only the portion of costs identified as avoidable by retiring in point (c) above. Use the annual amount of going-forward capital costs depreciated or amortized according to GAAP in point (d) above.

Calculate in terms of:

- i. Annual dollars;
- ii. Total dollars for the Award Period; and
- iii. Average \$/MWh (total dollars divided by total projected generation over the Award Period). This amount will be the Nuclear Reactor's Bid Cap.<sup>9</sup>

Name File: UEI Number Reactor Name Projected Annual Operating Loss

Format: Excel

- 4. Supporting documentation and descriptions:
  - a. An attestation from the Owner or Operator that the submitted forecasts are consistent with market analysis, operations cost assessments, risk monetization and analyses, and other standards used by the Owner or Operator in their standard business process associated with the Nuclear Reactor.

Name File: UEI Number Reactor Name Appendix E

Format: PDF

b. Any analyses, presentations, or assessments of past or projected financial performance of the Nuclear Reactor by the Applicant from the previous five (5) years. These include but are not limited to information made by the Applicant for investors, equity analysts, rating agencies, internal management, or to the SEC.

Name File: UEI Number Reactor Name Financial Performance

Format: PDF

c. Identify and describe any obligations/commitments under which the Nuclear Reactor has operated in the past five (5) years and/or currently operates in any relevant RTO/ISO markets, the duration of such obligations and/or commitments, and supporting documentation and calculations.

Name File: UEI Number Reactor Name Obligations

Format: PDF

d. Provide a list of all active and anticipated contracts for capacity, energy, ancillary services, or environmental attributes and/or energy supply by the Nuclear Reactor. Include a description of the product provided, counterparty, type of market, period of performance, and any provisions addressing termination or non-performance by the seller. Be prepared to provide documentation upon request.

Name File: UEI Number Reactor Name List of Contracts

Format: PDF

e. Provide the annual average Nuclear Reactor bid price in the annual capacity auctions over the past five (5) years in \$/MW, including all capacity auction bids by year, as well as any cost data submitted to relevant RTO/ISO and the relevant RTO/ISO Independent Market Monitor as part of a unit-specific review process.

Name File: UEI Number Reactor Name Capacity Auctions

Format: PDF

20

<sup>&</sup>lt;sup>9</sup> See 42 U.S.C. § 18753(d)(1)(A).

Name File: UEI Number Reactor Name Capacity Auctions Workbook

Format: Excel

f. A list of all data provided by the Applicant and related to the Nuclear Reactor to the FERC and NRC, as well as State utility and environmental regulators, over the past five (5) years. Be prepared to provide documentation upon request.

Name File: UEI Number Reactor Name Data Provided to FERC - NRC

Format: PDF

g. A list of all audits performed by internal employees, commissioned, or performed by any governmental agency on the Nuclear Reactor over the past five (5) years. Be prepared to provide documents upon request.

Name File: UEI Number Reactor Name Audits Completed

Format: PDF

h. A statement of all the assumptions used in the revenue and cost projections. Include projected annual average bulk power market prices including electricity and capacity prices used in the calculation projected annual revenues for the relevant ISO/RTO markets. If internal projections are used, provide a comparison to any relevant forward or futures market prices, or other public or commercially available projections and describe any substantive differences.

Name File: UEI Number Reactor Name Assumptions Statement

Format: PDF

- 5. Additional calculations and documentation for State-Supported Reactors:
  - a. A description of and citation to the state statute, regulation, or public contract that describes how payments from state programs would be reduced or replaced entirely if the Nuclear Reactor is allocated Credits.

Name File: UEI Number Reactor Name State Program Information

Format: PDF

b. A recalculation of the average annual operating loss as described in deliverable 3.i with the payments from state programs appropriately reduced or removed as defined by the applicable state statute, regulation, or public contract.

Name File: UEI Number Reactor Name State Funding Operating Loss

Format: Excel

- 6. Other economic factors relevant to Nuclear Reactor retirement, including:
  - a. The remaining useful life of the generating Nuclear Reactor.
  - b. Information on any planned license extension requests for the Nuclear Reactor, including any financial modeling done in association with such planning.

Name File: UEI Number Reactor Name License Extension Requests

Format: PDF

Name File: UEI Number\_Reactor Name\_License Extension Requests\_Workbook

Format: Excel

c. Estimates of the costs that would be incurred by the Applicant to shut down the Nuclear Reactor, including identifying the portion of costs that would be funded by the Nuclear Reactor's decommissioning trust funds and the costs would be funded by the Applicant.

Name File: UEI Number\_Reactor Name\_Costs for Shut Down

Format: Excel

d. Demonstrate the impact on ownership and Applicant's earnings during each of the next four (4) years, assuming the Nuclear Reactor shuts down. Include any financial impact(s) to the parent organization.

Name File: UEI Number Reactor Name Shut Down Impacts Year

Format: PDF

e. Describe the status of decommissioning trust funds for the Nuclear Reactor as of the date of the application, include decommissioning status reports filed with the NRC, and identify any shortfall of decommissioning trust funds resulting from early retirement of the Nuclear Reactor.

Name File: UEI Number Reactor Name Decommissioning Fund

Format: PDF

f. Identify and describe all of the Applicant's commitments and obligations to the NRC that would be required in advance of a unit shutdown.

Name File: UEI Number\_Reactor Name\_Decommissioning Reports

Format: PDF

- g. Indicate the earliest date the Applicant could access decommissioning trust funds in excess of three (3) percent for the Nuclear Reactor.
- h. Indicate the earliest date the Applicant could realistically shut down the Nuclear Reactor per NRC, relevant RTO/ISO, or other commitments and obligations.

# C. Emissions Impact Guidance

The Applicant must demonstrate via calculation that if the Nuclear Reactor were to cease operations, emissions of air pollutants would increase over the Award Period. The Certification Application must include the details of the calculation, supporting information, and quantitative estimates using public information available in EPA's eGRID for each air pollutant:<sup>10</sup>

 Historical annual emissions. The Certification Application must include both information available in eGRID regarding historical emissions for the eGRID subregion where the Nuclear Reactor is located and historical emissions at the plant

<sup>&</sup>lt;sup>10</sup> The eGRID data file is regularly updated. *See* EPA, *eGRID Download Data*, <a href="https://www.epa.gov/egrid/download-data">https://www.epa.gov/egrid/download-data</a> (last visited Apr. 17, 2022). The eGRID data explorer can be found here: EPA, *eGRID Data Explorer*, <a href="https://www.epa.gov/egrid/data-explorer">https://www.epa.gov/egrid/data-explorer</a> (last visited Apr. 17, 2022). At the time of publication, CO<sub>2</sub>, NO<sub>x</sub> (annual), NO<sub>x</sub> (ozone season), SO<sub>2</sub>, CH<sub>4</sub>, and N<sub>2</sub>O information can be found in the main data links.

level for the Nuclear Reactor as well as a calculation of historical emissions if the Nuclear Reactor were to have ceased operation as specified in Section VII.C.1 below.

- O Annual regional estimates of electric generating unit (EGU) emissions for each Air Pollutant should the Nuclear Reactor cease operation in the next four (4) years. For purposes of the Certification Application for this award period, Applicants should calculate future emissions should the Nuclear Reactor cease operation as the product of current average emissions per megawatt hour generated by all generation sources in an eGRID region multiplied by the annual megawatt hours projected to be generated by the Nuclear Reactor if it continued to operate. The Applicant should provide this calculation for pollutants that EPA has available in eGRID as specified in Section VII.C(i) below:
- ODE is not requiring the Applicant to provide air quality modeling results. If the Applicant has easily accessible information, e.g., completed internal or public reports or data with information that would be useful for estimating the potential incremental air pollutants that would result if the Nuclear Reactor were to cease operations, the Applicant is encouraged to submit this information. This information would be in addition to the information required to be submitted from eGRID and cannot substitute for the other data requirements in this section.

## (i) Emissions Impact Deliverables

1. Applicants must provide a spreadsheet that includes the following information:

Name File: UEI Number Reactor Name Emissions Spreadsheet

Format: Excel

For the requested data for  $CO_2$ ,  $NO_x$  (annual),  $NO_x$  (ozone season),  $SO_2$ ,  $CH_4$ , and  $N_2O$  in this section, the Applicant must use the eGRID2020 data file for the year 2020 data, the eGRID2019 data file for the year 2019 data, and the eGRID 2018v2 data file for the year 2018 data. For the requested data for  $PM_{2.5}$  in this section, the Applicant must use the eGRID2018  $PM_{2.5}$  data file.

- a. A quantitative estimate using EPA's eGRID of total emissions (in tons) of each Air Pollutant in the eGRID subregion where the Nuclear Reactor is located. Three (3) years of annual estimates must be provided for the years 2018–2020 for CO<sub>2</sub>, NO<sub>x</sub> (annual), NO<sub>x</sub> (ozone season), SO<sub>2</sub>, CH<sub>4</sub>, and N<sub>2</sub>O and one year of annual estimates for the year 2018 must be provided for PM2.5.
- b. A quantitative estimate using EPA's eGRID of total emissions (in tons) of each Air Pollutant at the plant level for the Nuclear Reactor.

<sup>&</sup>lt;sup>11</sup> See EPA, eGRID Download Data, https://www.epa.gov/egrid/download-data (last visited Apr. 17, 2022).

<sup>&</sup>lt;sup>12</sup> See EPA, eGRID Related Materials, <a href="https://www.epa.gov/egrid/egrid-related-materials#eGRID%20PM2">https://www.epa.gov/egrid/egrid-related-materials#eGRID%20PM2</a> (last visited Apr. 17, 2022) (PM<sub>2.5</sub> data can be found in the eGRID2018 PM2.5 data file).

- c. A quantitative estimate using EPA's eGRID of output emission rates (in lb/MWh) for CO<sub>2</sub>, NO<sub>x</sub> (annual), NO<sub>x</sub> (ozone season), SO<sub>2</sub>, CH<sub>4</sub>, and N<sub>2</sub>O for all fuels<sup>13</sup> for the eGRID subregion where the Nuclear Reactor is located for the years 2018, 2019, and 2020.
- d. A quantitative estimate using EPA's eGRID of output emission rates (in lb/MWh) in eGRID for PM<sub>2.5</sub> for all fuels<sup>14</sup> for the eGRID subregion where the Nuclear Reactor is located for the year 2018.
- e. The Facility ID, Plant State, eGRID subregion, and Total Generation (in MWh) at the plant level for the Nuclear Reactor for the years 2018, 2019, and 2020.
- f. A quantitative estimate of historical annual emissions of each Air Pollutant should the Nuclear Reactor have ceased operation, calculated by multiplying the output emission rates in (c) or (d) by total generation in (e) for the Nuclear Reactor for each year of requested data in (a) - (e) for the specific Air Pollutant.
- g. A quantitative estimate for each Air Pollutant of future emissions should the Nuclear Reactor cease operation defined as the product of the annual emission rate for each Air Pollutant either averaged across three (3) years from (c) or for PM<sub>2.5</sub> the 2018 annual emission rate from (d) multiplied by annual projected generation for the next four (4) years (i.e., four annual estimates for each Air Pollutant) of the Nuclear Reactor.
- 2. Provide a narrative, with supporting data if available, discussing which generation assets would be likely to fulfill the capacity and energy requirements currently served by the Nuclear Reactor if the Nuclear Reactor were to shut down. Compare and describe any differences between the expected replacement generation emissions rates with the historical emissions rates reported in 1c above. Include consideration of known or expected future capacity additions in the relevant eGRID region, Federal and applicable regional, state, and local energy policies, as well as anticipated market trends, that may result in increased clean energy supply, energy efficiency, and electrification. Include assumptions, supporting data, and source information.

Name File: UEI Number Reactor Name Shutdown Emissions Narrative

Format: PDF

3. Provide a list of submissions of data and documentation provided by the Applicant and related to the Nuclear Reactor and its surrounding property to state and Federal regulators, including

<sup>&</sup>lt;sup>13</sup> The term "all fuels" is a term used in EPA's eGRID Data Explorer. See EPA, eGRID Data Explorer, https://www.epa.gov/egrid/data-explorer (last visited Apr. 17, 2022). If viewing an eGRID data file (eGRID Data.xls), the correct unit is found in the eGRID subregion sheet (e.g., SRL20, SRL19, SRL18, etc.) and entitled "eGRID subregion annual [air pollutant] total output emission rate (lb/MWh)." Per EPA's 2020 Technical guidance, the output emission rates are calculated as total annual adjusted emissions divided by annual net generation. See EPA, The Emissions & Generation Resource Integrated Database: eGRID Technical Guide with Year 2020 Data at 27 (2022), https://www.epa.gov/system/files/documents/2022-01/egrid2020 technical guide.pdf.

permits, permit violations, enforcement actions, outstanding environmental compliance requirements, and remedial actions planned, ongoing, and completed over the past five (5) years to demonstrate that all standards and requirements are being met. DOE may require additional documentation of the Applicant.

Name File: UEI Number Reactor Name List of Regulatory Submissions

Format: PDF

#### D. NRC Assurance

Upon request from the DOE, the NRC will indicate to the DOE whether they have reasonable assurance that the Nuclear Reactor will continue to operate in accordance with their current licensing basis (as defined in 10 C.F.R. § 54.3) and pose no significant safety hazards.

#### E. Uranium and Fuel Source Guidance

The Applicant must provide known information on the source of produced uranium, and the location where the uranium is converted, enriched, and fabricated into fuel assemblies, for the Nuclear Reactor for the four-year period for which Credits are sought. The IIJA requires the Secretary to give priority in certification to a Nuclear Reactor that uses, to the maximum extent available, uranium that is produced, converted, enriched, and fabricated into fuel assemblies in the United States. The information provided here will inform the Bid ranking and Auction as described in Section X.

Information provided by the Applicant with respect to the U.S. supply chain content of uranium loaded or under contract for the Nuclear Reactor should be based on the actual knowledge of the responsible officer(s) of the Applicant or any knowledge that should have been obtained by such person(s) upon reasonable investigation and inquiry.

The Applicant will be required to report actual U.S. supply chain content by fuel component in its annual filing made with DOE, compared to the information submitted in its application, for any Nuclear Reactor for which DOE has awarded Credits to the Applicant, and DOE will audit such information.

#### (i) Uranium and Fuel Source Deliverables

- 1. Information on the known source of the fuel to be used in the Nuclear Reactor during the Award Period.
  - a. Provide to the extent known, information on the location of:
    - i. the source of procured uranium;
    - ii. where the uranium was converted:
    - iii. where the uranium was enriched;
    - iv. where the uranium was fabricated into fuel assemblies;
  - b. Provide separate information as appropriate for fuel currently loaded in the reactor and will be used during the Award Period, and fuel under contract as of the date of the bid and planned to be loaded in the reactor and used during the Award Period.

Name File: UEI Number Reactor Name Uranium Sources

#### Format: PDF

c. Provide any supporting documentation for the information reported above.

Name File: UEI Number Reactor Name Uranium Sources Supporting

Format: PDF, Excel

- 2. A calculation of the domestic content for produced uranium, conversion, enrichment, and fabrication services related to the nuclear fuel that would be used in the Nuclear Reactor during the Award Period.
  - a. Provide the percentage of:
    - i. uranium that was produced in the United States
    - ii. uranium converted at a facility located in the United States
    - iii. uranium enriched at a facility located in the United States
    - iv. uranium fabricated into fuel assemblies at a facility located in the United States
  - b. Include separate calculations as appropriate for produced uranium, conversion, enrichment, and fabrication for nuclear fuel currently loaded in the Nuclear Reactor that would be used during the Award Period and produced uranium, conversion, enrichment, and fabrication for nuclear fuel that is under contract as of the date of the bid and planned to be loaded in the Nuclear Reactor during the Award Period.
  - c. Estimate the percentage of total fuel consumed in the Nuclear Reactor during the Award Period that is currently loaded in the Nuclear Reactor and that is under contract and planned to be loaded in the Nuclear Reactor.
  - d. If the Applicant does not have sufficient knowledge to determine the U.S. supply chain content for any element of the uranium supply chain in above, report that element as zero percent domestic content.
  - e. If the Applicant owns or operates more than one Nuclear Reactor for which it is submitting a bid, the Applicant must submit in its Certification Application the U.S. supply chain content attributable specifically to the Nuclear Reactor for which it is seeking Credits.
- 3. A calculation of the Average Domestic Fuel Content.

Name File: UEI Number Reactor Name Uranium Content

Format: Excel

a. Separately calculate the average of the four percentages provided in deliverable (1) for fuel currently loaded in the Nuclear Reactor and used in the Award Period and fuel under contract that would be consumed in the Nuclear Reactor during the Award Period.

b. Calculate the weighted average of the two averages calculated in point (a) above, weighting by the percentages of each fuel represents of the total amount of fuel consumed in the Nuclear Reactor during the award period as calculated in deliverable 1(c) above. This is the Average Domestic Fuel Content.

## F. Post-Award Period Operations Plan

Applicants must submit a detailed plan with references to supporting documentation and calculations describing how the Nuclear Reactor would sustain operations in the Post-Award Period (I) without receiving additional Credits; or (II) with the receipt of additional Credits of a lower amount than the Credits allocated during the Award Period.

The Post-Award Period Operations Plan must provide sufficient detail to enable DOE to assess how changes to the Nuclear Reactor's business model translate to lower costs and/or higher revenue sufficient to sustain operations beyond the Award Period. In particular, the Applicant must describe any changes to its business model that result in a lower operating loss than that estimated in Section VII.B. All information requested in this section refers to the four-year period immediately following the Award Period.

### (i) Post-Award Period Operations Plan Deliverables

1. A narrative description of the Applicant's plan to sustain operations in the Post-Award Period (I) without receiving additional Credits; or (II) with the receipt of additional Credits of a lower amount than the Credits allocated during the Award Period. Applicant's analysis should be consistent with the economic factor calculations submitted in accordance with Section VII.B.

Name File: UEI Number Reactor Name Post-Award Sustainability Plan

Format: PDF

- 2. Estimate of revenue in \$/MWh that the Nuclear Reactor must achieve to sustain operations in the Post-Award Period given forecasts of future market conditions in the absence of additional Credits.
- 3. Any existing policy barriers that prevent the Applicant from making changes to its business model or operations that would otherwise contribute to the Nuclear Reactor's ability to sustain operations after the Award Period.

Name File: UEI Number Reactor Name Policy Barriers

Format: PDF

#### **G.** Workforce and Labor Considerations

In alignment with the policy set forth in Sections XV and XVI, Applicants must submit a brief description of their plan with clear milestones that align to the award period to provide their workforce with high quality jobs, the free and fair opportunity to join a union, and family supporting

wages. Additionally, Applicants should submit a Diversity, Equity, Inclusion, and Accessibility plan with clear milestones that align to the Award Period.

## (i) Workforce and Labor Considerations Deliverables

- 1. A written narrative describing workforce development and retainment efforts and plans, as well as labor standards and practices, along with clear milestones that align with the Award Period. Please include information on any of the following, as applicable:
  - a. Please include the following baseline data:
    - i. Jobs that would be created and/or protected by CNC Program support;
    - ii. Workforce demographics including average wage by job category; and
    - iii. For each of the past three years, the number of employees who were eligible to join a union and the number of employees who are union members.
  - b. Union neutrality agreements;
  - c. Project labor agreements (PLAs) and community workforce agreements (CWAs);
  - d. Local hire practices;
  - e. Utilization of registered apprenticeship programs or other joint labor-management training programs;
  - f. Assurances to prevent worker misclassification as independent contractors rather than employees;
  - g. Professional certifications and licenses;
  - h. Responsible contractor screen to ensure compliance with labor laws and labor standards; and
  - i. Improved access to employment opportunities for underrepresented and disadvantaged communities by:
    - i. community workforce agreements with specified targets for local hire of priority populations; and
    - ii. first-source hiring from supported community-based pre-apprenticeship programs.

Name File: UEI Number Reactor Name Workforce Narrative

Format: PDF

2. Diversity, Equity, Inclusion, and Accessibility (DEIA) Plan that describes the actions the Nuclear Reactor is currently taking or will take to foster a welcoming and inclusive environment, support people from underrepresented groups, advance equity, encourage the inclusion of individuals from these groups, and to ensure equal access to employment and participation in activities for people with disabilities. DEIA plan should also describe the extent to which the Nuclear Reactor benefits underserved communities.

Name File: UEI Number Reactor Name DEIA Plan

Format: PDF

# H. Community Engagement and Impact

In alignment with the policies set forth in Section XVI, Applicants must submit a brief description of existing community engagement plans along with clear milestones that align with the Award Period and identify additional community engagement activities related to the continued operation of the facility, including any targeted outreach to environmental justice communities or other underserved populations. At a minimum, the community engagement plan should identify communities in the vicinity, describe specific outreach to these communities, explain engagement opportunities, summarize feedback received, and outline steps to address such feedback.

## (i) Community Engagement and Impact Deliverables

- 1. A written narrative describing existing and proposed community engagement efforts related to the ongoing operation of the facility, along with clear milestones that align with the Award Period including the following information:
  - a. Communities in the vicinity of the facility;
  - b. Financial support to communities and community organizations in the vicinity of the facility, including local taxes, PILOTs, and other contributions;
  - c. Description of outreach to external non-project partners/stakeholders including Community Based Organizations (CBO), Disadvantaged Communities (DAC),<sup>14</sup> federally recognized Indian Tribes, state and local governments, economic development organizations, and labor representatives;
  - d. Current and future engagement opportunities;
  - e. Feedback received from stakeholders and federally recognized Indian Tribes
  - f. Steps to address feedback where necessary

Name File: UEI Number\_Reactor Name\_Community Engagement Narrative

Format: PDF

2. Worker and community transition plans to prepare for the eventual closure of the plant.

Name File: UEI Number\_Reactor Name\_Closure Transition Plans

Format: PDF

# I. Credit Redemption Agreement

Applicants that are selected for a Conditional Award of Credits will be required to enter into a Credit Redemption Agreement in order for DOE to make a Final Award. The Credit Redemption Agreement will govern the relationship of DOE and the Selected Nuclear Reactor following final redemption of Credits in exchange for Payments. A draft copy of the Credit Redemption Agreement is attached as Appendix B.

DOE will not execute any Credit Redemption Agreement or make any Final Award until it has

<sup>&</sup>lt;sup>14</sup> The Justice40 initiative, created by Executive Order 14008, establishes a goal that 40% of the overall benefits of certain federal investments flow to (DACs). The Justice40 Interim Guidance provides a broad definition of DACs. *See Memorandum on Interim Implementation of Guidance for the Justice40 Initiative*, M-21-28 (Jul 20, 2021), <a href="https://www.whitehouse.gov/wp-content/uploads/2021/07/M-21-">https://www.whitehouse.gov/wp-content/uploads/2021/07/M-21-</a>

<sup>28.</sup>pdf#:~:text=The%20following%20Interim%20Implementation%20Guidance%20for%20the%20Justice40,existing %20authorities%20in%20order%20achieve%20the%2040-percent%20goal. Additional J40 guidance is forthcoming and will be reflected in the CNC Program.

completed its obligations pursuant to the National Environmental Policy Act (NEPA),<sup>15</sup> Section 106 of the National Historic Preservation Act,<sup>16</sup> and any other obligations pursuant to relevant environmental laws (e.g., Endangered Species Act).<sup>17</sup>

Each Applicant is directed to include with its Certification Application a redline draft showing any requested changes to the Credit Redemption Agreement with margin notations explaining the basis for its requested changes, or to affirmatively state that it has no requested changes to the Credit Redemption Agreement. Any Applicant comments should be directed at improving the clarity of the Credit Redemption Agreement and promoting the effective administration of the Credits. Applicants are expressly directed not to request a change that alters the commercial terms set forth in this Guidance or in the Credit Redemption Agreement. DOE at its discretion may accept or reject the requested changes to the Credit Redemption Agreement, or determine to conduct negotiation of any requested changes. DOE's decision to extend a Conditional Award to an Applicant does <u>not</u> mean that DOE has accepted or will accept any of the redline edits that the Applicant has included with its Application.

Name File: UEI Number\_Reactor Name\_CRA Redline

Format: MS Word

# VIII. Review of Applications for Certification

Certification Applications will be evaluated using the certification criteria set forth in Section VII of this Guidance. The evaluation is an assessment of the Applicant against the criteria.

DOE uses independent judgment to certify Applicants whose applications meet the criteria. The evaluation of the Certification Applications together with the recommendations of any external reviewers DOE deems appropriate to consult will be considered by DOE in performing an integrated assessment of the Certification Applications to determine which meet the certification criteria. The certification designation will be documented in the Certification Decision.

## IX. Guidance on Bid Submissions

While both the Certification Application and Bid for Award Period 1 are due on or before May 19, 2022, only those Nuclear Reactors that are certified will be eligible to participate in the Bid process and Auction. The Bids of Applicants who are not certified shall remain sealed and will not be returned by DOE. Moreover, certification does not guarantee that DOE will allocate Credits to a Certified Nuclear Reactor.

The Applicant shall submit its sealed Bid for Award Years 1-4 via the bid sheet provided in

<sup>&</sup>lt;sup>15</sup> 42 U.S.C. § 4321 et seq.

<sup>&</sup>lt;sup>16</sup> 54 U.S.C. § 306108.

<sup>&</sup>lt;sup>17</sup> 16 U.S.C. § 1531 et seq.

Appendix C, including, for each Award Year, the Credits desired, committed generation, and the average Credit price per megawatt-hour. As specified in 42 U.S.C. § 18753(d)(1)(A), the Applicant's average price per megawatt-hour of the Credits desired shall not exceed the average projected annual operating loss in dollars per megawatt-hour the Applicant submitted in its Certification Application.

The Applicant will also submit its Average Domestic Fuel Content calculated as directed in Section VII.E. This will be used to adjust the bid ranking during the auction as described in Section X below.

An Applicant that submits a Certification Application for multiple reactor units located at the same site may choose to submit a single bid covering all reactor units contained in the Certification Application or individual bids for each reactor unit. If the Applicant chooses to submit individual bids for each reactor unit, the Applicant assumes the risk that not all units at the site will clear the auction.

The Applicant must submit a letter certifying that they did not share bid amounts, strategies, or other bidding information with other potential Applicants using the certification in Appendix D.

## X. Review of Bids, Auction, and Allocation of Credits

### A. Overview

Note that, over the life of the program, DOE has the authority to obligate up to \$6,000 million of Credits that were appropriated in IIJA. Of that amount, DOE has authority and appropriations sufficient to obligate \$1,200 million of Credits for the first Award Year of the first Award Period. Any Credits allocated in excess of \$1,200 million during the first Award Period would be conditioned, in the Credit Redemption Agreement, on the availability of appropriations and availability of funds for future Award Years.

To be clear, however, DOE does not anticipate awarding the full available amount in the first award cycle. In deciding how much funding to award in the first award cycle, DOE will consider, among other factors, the following objectives: (a) allocating Credits to as many Certified Nuclear Reactors as possible, to the maximum extent practicable, (b) maximizing the cost effective use of available funding, and (c) ensuring that sufficient funding remains to provide a reasonable opportunity for Nuclear Reactors to be awarded credits in future award cycles during the term of the CNC Program.

Further, the value of those Credits that are issued but not paid out in accordance with the adjustment mechanisms specified in Section XI.B will remain available for use in future award cycles.

#### **B.** Auction Process

Credits will be allocated via a pay-as-bid auction as described here, to allocate Credits to as many Certified Nuclear Reactors as possible as directed by the statute.

The Average Desired Credit Price over the Award Period in dollars per megawatt-hour included in Bids from Certified Reactors will be adjusted downwards to preference Certified Reactors with higher domestic fuel content. This Adjusted Bid Credit Price will only be used to determine the ranking of bids and will be calculated as defined by the formula below.

Adjustment Factor =  $1 - (Average Domestic Fuel Content \times 0.05)$ 

Adjusted Bid Credit Price = Adjustment Factor × Average Desired Credit Price

Bids will be ranked according to their Adjusted Bid Credit Price in dollars per megawatt-hour from lowest to highest. In the situation that two Bids have the same Adjusted Bid Credit Price, the one with the larger amount of committed generation will be ranked lower. Starting with the lowest ranked Bid, the total Desired Credits in dollars over the Award Period for each Bid will be subtracted from the total Credits available in the auction. This will be repeated for each subsequent Bid until either all Bids are fully allocated or there are insufficient Credits remaining in the auction to fully allocate to the next ranked bid. Subsequent higher ranked bids may be allocated Credits if there are sufficient credits remaining available in the auction to fully allocate to a Bid. Any unused Credits that remain after the first auction and allocation of Credits will be retained by DOE and may be allocated in future auctions.

Nuclear Reactors that are issued Conditional Award Decisions will be publicly announced along with the number of credits allocated and the average \$/MWh credit price. Nuclear Reactors that submitted a Bid but were not allocated Credits will not be publicly announced. If a Certified Nuclear Reactor is not allocated any Credits, it may reapply for certification in subsequent award periods.

DOE reserves the right, without qualification, to reject any or all Bids. In the event that (1) fewer than three Nuclear Reactors are Certified in the award cycle, or (2) all Certified Nuclear Reactors in an award cycle share an Owner, Operator, or parent company of an Owner or Operator, DOE reserves the right to select any submitted Bid as a basis for negotiation and award if it determines that acceptance of one or more Bids is not in the public interest.

DOE may modify this auction process described here for future Award Periods and would explain such modifications in updated Guidance published in advance of those Award Periods.

# XI. Award Administration Information

#### A. Award Notices

- 1. <u>Certification Decision:</u> In accordance with 42 U.S.C. § 18753(c)(2)(B), DOE shall issue a written notice of the Certification Decision to each Applicant with the following content:
  - a. a Notice of Certification that the Applicant's Nuclear Reactor is a Certified Nuclear Reactor; or

- b. if the Applicant does not meet the certification requirements of this program, a written notice denying the Certification Application with an explanation of the basis for denial.
- 2. <u>Conditional Award Decision:</u> The initial announcement of award after DOE has conducted the Auction but prior to Credit Redemption Agreement review and signature by the Selected Nuclear Reactor, is a conditional award decision. Execution of the Credit Redemption Agreement by the Selected Nuclear Reactor and DOE is a necessary precondition of a Final Award Selection.
- 3. <u>Final Award Selection:</u> The date upon which the Selected Nuclear Reactor's Credit Redemption Agreement becomes effective, and it would be awarded Credits.

## B. Payments

- 1. <u>Credit Voucher</u>. A Selected Nuclear Reactor shall receive Credits in the form of a voucher for Payment. The amount of the Credits will be no more than the product of (a) the price per megawatt-hour and (b) the committed megawatt-hours of generation for Award Years 1–4, each as set forth in the Selected Nuclear Reactor's Bid. The Award Period covered by the Credits will begin on the date that DOE issues the Final Award Selection.
- 2. <u>Adjustment of Annual Payments</u>. Payments of Credits will be adjusted downwards if, at the end of an Award Year, either the:
  - a. Total actual revenue for the Award Year exceeds the amount of revenue projected for that Award Year in the Nuclear Reactor's Certification Application and Bid; or
  - b. Total actual capital expenditures categorized as Enhancements or Sustaining for the Award Year do not exceed the projected expenditures for those two categories for that Award Year as projected in the Nuclear Reactor's Certification and Bid.

If either one or both of the above cases occur, then the Payments for the Award Year will be reduced according to the formulas below. Capital costs should be reported as the amount annually depreciated or amortized and recorded according to GAAP and not as spent.

Revenue Adjustment = Actual Revenue – Projected Revenue

Capital Adjustment = (Projected Enhancement and Sustaining Capital Costs) – (Actual Enhancement and Sustaining Capital Costs)

Annual Payment

= Annual Credits – Revenue Adjustment – Capital Adjustment

The Selected Nuclear Reactor may request adjustment of current and future year Payments, not to exceed the maximum value of the award. DOE may decide whether or not to approve such

requests.

- 3. Request for Payments. A Selected Nuclear Reactor shall submit a Payment Certificate to make a request for Payments. The Payment Certificate shall be submitted to DOE within ninety (90) days after the completion of the applicable Award Year. The Payment Certificate shall include:
  - a. The actual generation, costs, revenues for the applicable Award Year, itemized according to the same categories Section VII.B(i);
  - b. The amount of Credits in dollars for which payment is requested, adjusted as appropriate according to the equations listed in (2) above;
  - c. An attestation from a responsible representative of the Selected Nuclear Reactor that (1) the Selected Nuclear Reactor did not terminate operations during the Award Year that is the subject of the Payment Certificate, together with supporting data that sets forth the capacity factor, availability factor, and megawatt-hours of the Selected Nuclear Reactor for the Award Year, and (2) the Selected Nuclear Reactor would have operated at an annual loss, including risk as used in the Nuclear Reactor's Certification Application, during the Award Year that is the subject of the Payment Certificate in the absence of the allocation of Credits included in the Payment Certificate; and
  - d. Supporting calculations demonstrating that the Selected Nuclear Reactor would have operated at a loss for the Award Year, prepared in a manner in all material respects consistent with the information and calculations included in the Selected Nuclear Reactor's Certification Application as defined in Section VII.B(i).
- 4. <u>Payments</u>. DOE shall pay to the Selected Nuclear Reactor, within thirty (30) days of submission by the Selected Nuclear Reactor of a complete Payment Certificate, the amount of Payments supported by the Payment Certificate less any adjustments as described above. Payments for any Award Year is subject to the availability of appropriations for such purpose.
- 5. Credit Adjustment Requests by the Nuclear Reactor. Section 2.4.3 of the Credit Redemption Agreement identifies limited circumstances under which the Selected Nuclear Reactor may request a shift of Credits allocated between fiscal years. Section 2.5 of the Credit Redemption Agreement describes the process whereby the Selected Nuclear Reactor may request that increased revenues attributable to a project that increases its production of electricity not be factored into the payment adjustment for the applicable fiscal year. The decision whether to accommodate any such request is at the sole discretion of DOE, and in no event will any increase in the total amount of Credits awarded to the Selected Nuclear Reactor be considered.

# C. Oversight

1. <u>Annual Reporting Requirements</u>. Not later than thirty (90) days following the completion of an Award Year for which the Nuclear Reactor has been allocated Credits, the Owner or Operator

- shall provide to DOE an annual report containing the information as set out in Article 3 of the Credit Redemption Agreement.
- 2. <u>Audit</u>. DOE will audit the Selected Nuclear Reactor as part of DOE's review of the Payment Certificates submitted for Annual Payments as provided in the Credit Redemption Agreement. Such audit may include the operation of the Nuclear Reactor, the financial condition of the Selected Nuclear Reactor, and such other areas of inquiry as determined by DOE. The Selected Nuclear Reactor shall be obligated to cooperate with any such audit as a condition to continued Payments.

## D. Recapture

- 1. Recapture. DOE may recapture the allocation of Credits by canceling all or any portion of the unpaid Credits, if during the Award Period the Selected Nuclear Reactor (a) terminates operations; or (b) does not operate at an annual loss in the absence of the allocation of Credits awarded by DOE. DOE may determine to recapture Credits on the basis of a Payment Certificate submitted by a Selected Nuclear Reactor, information developed in an audit, or such other information as may become available to DOE from time to time. In addition to canceling all or any portion of the unpaid Credits, DOE may require the Selected Nuclear Reactor to disgorge any Payments previously received if DOE determines that the Payment Certificate contained a material misrepresentation of the status of operations or economic condition of the Selected Nuclear Reactor. DOE shall provide to the Selected Nuclear Reactor written notice of a determination to recapture Credits or Payments. The Credit Redemption Agreement contains further detail regarding recapture.
- 2. <u>Duration of Credit Awards</u>. A Selected Nuclear Reactor will be allocated Credits for the Award Period, which may be subject to appropriations sufficient to fund such Credits. A Selected Nuclear Reactor may seek to be recertified and receive an award of Credits for one or more subsequent Award Periods following the completion of any applicable Award Period for which it has been awarded Credits. In no event may DOE allocate any Credits after September 30, 2031, but any Credits that have been allocated to a Selected Nuclear Reactor on or before September 30, 2031, pursuant to an Auction completed under the CNC Program and for which appropriated funds are available will be paid out pursuant to the terms of the selected Bid and in accordance with the terms of the CNC Program.

## E. Assignment

Assignment. A Selected Nuclear Reactor may not assign or otherwise transfer any of its rights
or obligations under a Credit Redemption Agreement without the prior written consent of DOE.
DOE reserves the right to request all requisite information to make this determination including
eligibility information as defined in this Guidance. Consent to assign or transfer is at DOE's
sole discretion.

# XII. Appeals

Applicants who are not certified or whose bids were not selected may appeal these determinations to the Contract Management Division Director, Department of Energy Office of Nuclear Energy, within ten (10) business days of the Applicant receiving the Certification Determination or bid rejection. These appeals must be in writing and shall contain:

- A concise statement of the ground(s) upon which the Applicant contests the written notice of DOE;
- A copy of the DOE notice; and
- Any data, documentation, or other relevant information supporting a showing by the Applicant that the denial of certification or rejection of bid was inappropriate, incorrect, or otherwise unwarranted.

The Contract Management Division Director shall make a final decision upon this appeal within ten (10) business days and notify the Applicant in writing of the final decision.

# XIII. Confidentiality

Security of Certification Applications and Bid submissions are primary considerations. Computer security measures in the evaluation process have been taken. DOE is committed to keeping the number of Certification Applications received and the identities of Applicants and Bidders confidential unless and until a Conditional Award Decision is made. Any external reviewers employed by DOE will execute conflict of interest (COI)/non-disclosure agreements (NDA) to ensure privacy of business practices, trade secrets, or other details that, if revealed, may cause competitive injury. DOE is committed to keeping the number of Certification Applications received and the identities of Applicants and Bidders confidential unless and until a Conditional Award Decision is made.

If a Certification Application includes trade secrets or information that is commercial or financial, or information that is confidential or privileged, it is furnished to the DOE in confidence with the understanding that the information shall be used or disclosed only for evaluation of the Certification Application. Such information will be withheld from public disclosure to the extent permitted by law, including the Freedom of Information Act. Without assuming any liability for inadvertent disclosure, DOE will seek to limit disclosure of such information to its employees and to outside reviewers when necessary for review of the Certification Application or as otherwise authorized by law. This restriction does not limit the DOE's right to use the information if it is obtained from another source.

Full Certification Applications, and other submissions containing confidential, proprietary, or privileged information must be marked as described below. Failure to comply with these marking requirements may result in the disclosure of the unmarked information under the Freedom of

Information Act or otherwise. The U.S. Government is not liable for the disclosure or use of unmarked information and may use or disclose such information for any purpose.

The Certification Application and any attachments must be marked as follows and identify the specific pages containing trade secrets, confidential, proprietary, or privileged information:

#### Notice of Restriction on Disclosure and Use of Data:

Pages [list applicable pages] of this document may contain trade secrets, confidential, proprietary, or privileged information that is exempt from public disclosure. Such information shall be used or disclosed only for evaluation purposes or in accordance with a financial assistance or loan agreement between the submitter and the DOE. The DOE may use or disclose any information that is not appropriately marked or otherwise restricted, regardless of source. [End of Notice]

The header and footer of every page that contains confidential, proprietary, or privileged information must be marked as follows: "Contains Trade Secrets, Confidential, Proprietary, or Privileged Information Exempt from Public Disclosure." In addition, each line or paragraph containing proprietary, privileged, or trade secret information must be clearly marked with double brackets or highlighting.

## XIV. Infrastructure Investment and Jobs Act

The IIJA helps DOE deliver a more equitable clean energy future for the American people by:

- Investing in American manufacturing and workers;
- Expanding access to energy efficiency and clean energy for families, communities, and businesses;
- Delivering reliable, clean, and affordable power to more Americans;
- Building the technologies of tomorrow through clean energy demonstrations; and
- Ensuring that all communities receive the benefits of the transition to a clean energy economy.

Be advised that special terms and conditions may apply to projects funded by the IIJA relating to:

- Reporting, tracking and segregation of incurred costs;
- Reporting on job creation and preservation;
- Publication of non-confidential information on the Internet;
- Access to records by Inspectors General and the Government Accountability Office;
- Protecting whistleblowers and requiring prompt referral of evidence of a false claim to an appropriate inspector general; and
- Certification and Registration.

Recipients of funding appropriated by the IIJA must comply with requirements of applicable Federal, State, and local laws, regulations, DOE policy and guidance, and instructions in this Guidance, unless relief has been granted by DOE.

# XV. Job Growth and Quality

Strengthening prosperity—by expanding good, safe jobs and supporting job growth through investments in domestic manufacturing—are key goals set by the President, discussed in depth in his Executive Orders on Ensuring the Future Is Made in All of America by All of America's Workers (E.O. 14005), Tackling the Climate Crisis at Home and Abroad (E.O. 14008), Worker Organizing and Empowerment (E.O. 14025), Boosting Quality of Federal Construction Contracts (E.O. 14063), and Promoting Competition in the American Economy (E.O. 14036).

In keeping with the Administration's goals, and as an agency whose mission includes strengthening our country's energy prosperity, the Department of Energy strongly supports investments that improve job quality through the adoption of strong labor standards, support responsible employers, improve job access, foster safe, healthy, and inclusive workplaces and communities, and develop a diverse workforce well-qualified to build and maintain the country's energy infrastructure and grow domestic manufacturing.

As part of the Annual Reporting Requirements, Selected Nuclear Reactors will be required to provide information about how their project will support these goals, specifically:

- The number of individuals employed by the Nuclear Reactor and information on those employee's job classifications, wages, benefits, demographics, veteran status, union representation, and residence; and
- Information on training programs provided to employees, or options for inclusion in employee ownership systems.

# XVI. Diversity, Equity, Inclusion and Accessibility and Justice 40 Initiative

It is the policy of the Administration that:

[T]he Federal Government should pursue a comprehensive approach to advancing equity<sup>18</sup> for all, including people of color and others who have been historically

<sup>&</sup>lt;sup>18</sup> The term "equity" means the consistent and systematic fair, just, and impartial treatment of all individuals, including individuals who belong to underserved communities that have been denied such treatment, such as Black, Latino, and Indigenous and Native American persons, Asian Americans and Pacific Islanders and other persons of color; members of religious minorities; lesbian, gay, bisexual, transgender, and queer (LGBTQ+) persons; persons with disabilities; persons who live in rural areas; and persons otherwise adversely affected by persistent poverty or inequality. *See* Exec. Order No. 13,985, 86 Fed. Reg. 7009 (Jan. 20, 2021).

underserved, marginalized, and adversely affected by persistent poverty and inequality. Affirmatively advancing equity, civil rights, racial justice, and equal opportunity is the responsibility of the whole of our Government. Because advancing equity requires a systematic approach to embedding fairness in decision-making processes, executive departments and agencies must recognize and work to redress inequities in their policies and programs that serve as barriers to equal opportunity.

By advancing equity across the Federal Government, we can create opportunities for the improvement of communities that have been historically underserved, which benefits everyone.<sup>19</sup>

As part of this whole of government approach, this Guidance seeks to encourage the participation of underserved communities<sup>20</sup> and underrepresented groups. As part of the Annual Reporting Requirements, Selected Nuclear Reactors will be required to submit a DEIA Plan that describes the actions the Selected Nuclear Reactor is currently taking or will take to foster a welcoming and inclusive environment, support people from underrepresented groups, advance equity, encourage the inclusion of individuals from these groups, and to ensure equal access to employment and participation in activities for people with disabilities. DEIA plan should also describe the extent to which the Nuclear Reactor benefits underserved communities.

Related to the DEI Plan, the Justice40 Initiative<sup>21</sup> aims to provide 40 percent of the overall benefits of certain Federal investments—including investments in clean energy and energy efficiency— to Disadvantaged Communities (DAC)<sup>22</sup> to support DOE's commitment to the Justice40 Initiative, and the projects should have minimal negative impacts on communities with environmental justice concerns.

DOE identified the following eight policy priorities to guide DOE's implementation of Justice40 in DACs: (1) decrease energy burden; (2) decrease environmental exposure and burdens; (3) increase access to low-cost capital; (4) increase the clean energy job pipeline and job training for individuals; (5) increase clean energy enterprise creation (e.g., minority-owned or diverse business enterprises); (6) increase energy democracy, including community ownership; (7) increase parity in clean energy technology access and adoption; and (8) increase energy resilience.

As part of the Annual Reporting Requirements, Selected Nuclear Reactors will be required to report how project benefits flow to applicable DACs for a subset of the eight policy priorities above, as

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<sup>&</sup>lt;sup>19</sup> Exec. Order No. 13,985, 86 Fed. Reg. 7009 (Jan. 20, 2021) (Advancing Racial Equity and Support for Underserved Communities Through the Federal Government).

<sup>&</sup>lt;sup>20</sup> The term "underserved communities" refers to populations sharing a particular characteristic, as well as geographic communities, that have been systematically denied a full opportunity to participate in aspects of economic, social, and civic life, as exemplified by the list of in the definition of "equity." *Id.* For purposes of this Guidance, as applicable to geographic communities, Applicants can refer to economically distressed communities identified by the Internal Revenue Service as Qualified Opportunity Zones; communities identified as disadvantaged or underserved communities by their respective States; communities identified on the Index of Deep Disadvantage referenced at <a href="https://news.umich.edu/newindex-ranks-americas-100-most-disadvantagedcommunities/">https://news.umich.edu/newindex-ranks-americas-100-most-disadvantagedcommunities/</a>, and communities that otherwise meet the definition of "underserved communities" stated above.

<sup>&</sup>lt;sup>21</sup> The Justice40 initiative, created by Executive Order 14008, establishes a goal that 40% of the overall benefits of certain federal investments flow to DACs. *See supra* note 14. Additional J40 guidance is forthcoming and will be reflected in the CNC Program.

<sup>&</sup>lt;sup>22</sup> Supra note 14.

## **XVII.** Other Information

- 1. Evaluation and Administration by Non-Federal Personnel. In conducting the review of the Certification Application, the DOE may seek the advice of qualified non-federal personnel as reviewers. The DOE may also use non-federal personnel to conduct routine, nondiscretionary administrative activities, including DOE contractors. The Applicant, by submitting its Certification Application, consents to the use of non-federal reviewers/administrators. Non-federal reviewers must sign an COI/NDA prior to reviewing an application. Non-federal personnel conducting administrative activities must sign an NDA.
- 2. <u>Requirement for Full and Complete Disclosure</u>. Applicants are required to make a full and complete disclosure of all information requested. Any failure to make a full and complete disclosure of the requested information may result in:
  - Nullification of certification;
  - The modification, suspension, and/or termination of Credits;
  - The initiation of debarment proceedings, debarment, and/or a declaration of ineligibility for receipt of federal contracts, subcontracts, and financial assistance and benefits; and
  - Civil and/or criminal penalties.
- 3. <u>Retention of Submissions</u>. DOE expects to retain copies of all Certification Applications and other submissions. No submissions will be returned. By submitting a Certification Application, the Applicant consents to DOE's retention of its submissions.
- 4. Personally Identifiable Information (PII). All information provided by the Applicant must to the greatest extent possible exclude PII. The term "PII" refers to information which can be used to distinguish or trace an individual's identity, such as their name, social security number, biometric records, alone, or when combined with other personal or identifying information which is linked or linkable to a specific individual, such as date and place of birth, mother's maiden name.
- 5. Environmental Data. In order to meet its NEPA obligations, DOE anticipates adopting, or adopting and supplementing, the Final Environmental Impact Statement prepared for the Selected Nuclear Reactor by the NRC. DOE may request, and the Nuclear Reactor may not unreasonably refuse to provide, information necessary to complete this process, as well as any information necessary to satisfy DOE's obligations under Section 106 of the National Historic Preservation Act or other environmental laws (e.g., Endangered Species Act).