Sustainable Energy Advantage, LLC

Key Inflation Reduction Act (IRA) Changes Relevant to ABP and SFA-Eligible Projects

Investment Tax Credit (Existing §48 Authority)

- Credit Amount/Applicability to Eligible Resources
  - Increases maximum 2023 credit rate ***from 22% to 30%*** if project fulfills prevailing wage/apprenticeship requirements (with ***6% base credit***).
- Expansion to New Resources
  - Expands eligibility to include energy storage <=5 kWh (including resources paired with solar PV projects)
- Bonus Credit Eligibility:
  - Eligible for 10 percentage point ***domestic content, "energy communities" and ITC-specific low-income/disadvantaged community bonuses*** (10-20 percentage points) <u>only</u> for solar, wind and paired energy storage <5 MW
- Transmission/Distribution Interconnection Property for <=5 MW
  - Projects can now include interconnection property ***regardless of whether an electric utility owns it*** in the basis for calculating ITC's value

Investment Tax Credit (§ 48) Phase-Out

- Extension is available for projects starting construction by end of year (EOY) 2024.
- ***Statutory placed-in-service deadline (end of year (EOY) 2025) eliminated***, subjecting eligible resources to existing rules requiring ***4-6 years of "continuous construction"***.
- Base/full credit structure (and thus prevailing wage/apprenticeship) requirements effective date was in early 2023
- Ability to claim bonus credits (as well as interconnection property in ITC basis) open to projects <u>***placed in service***</u> ***in 2023 and thereafter***, but limited to those ***starting construction by EOY 2024***.

ITC (§ 48) Low Income/Disadv. Comm. Bonus Values (1)

- **Eligible Projects:** ITC-eligible solar and wind projects ***<5 MW*** (which appears to include ***both ITC-eligible solar and paired storage ILoPTC-eligible wind***
- **Bonus Credit Values:**
  - 10 percentage point additional ITC value, based upon the otherwise applicable credit value, ***for solar projects that are in a low-income community***, as defined in §45D (the New Markets Tax Credit program); or
  - 20 percentage point additional ITC value for solar projects that are 1) part of a ***low-income residential building project***; or 2) a l***ow-income economic benefit project*** where half the project's economic benefits go to recipients with income at 200% of the federal poverty line or below 80% of area median income

ITC (§ 48) Low Income/Disadv. Comm. Bonus Values (2)

- Available Capacity Limitations & Project Selection
  - Added credits would be limited to ***1.8 GW per year nationwide*** (with carry-over of unused capacity permitted).
- Capacity Allocation (for 2023 – approach for 2024 unclear):
  - **Category 1 (Located in Low-Income Community):** 700 MW (10 percentage point ITC bonus)
  - **Category 2 (Tribal Land):** 200 MW (10 percentage point ITC bonus)
  - **Category 3 (Low-Income Residential Building Projects):** 200 MW (20 percentage point ITC bonus)
  - **Category 4 (Low-Income Economic Benefit Projects):** 700 MW (20 percentage point ITC bonus)
- Application/Selection Timing
  - **Category 3 & 4 projects:** Applications accepted Q3 2023, selections TBD
  - **Category 1 & 2 projects:** Applications accepted TBD, selections TBD
- Phase-Out Approach/Effective Date: Same as core ITC (***placed in service* 2023 and after**, but *starting construction by EOY 2024*)

Successor Clean Energy Investment Credit (CEIC) (§48E) (1)

- **Eligible Resources & Minimum Emission Requirements:** Any new resource with an emission rate “at or below zero” (net of carbon capture) is eligible (which functionally includes all non-biomass renewable energy)
- **Credit Amount/Applicability:** Same base (6%) and full rate (30%) structure as § 48 ITC, and same 1 MW threshold for prevailing wage/apprenticeship requirements
- **Bonus Credit Eligibility:** CEIC/CEPC projects are eligible for same bonus credits, including energy communities, domestic content, and projects <=5 MW serving low-income/disadvantaged beneficiaries
- **Allowances for Transmission/Interconnection Property for Projects <=5 MW:** Same ability to count such property in CEIC basis as for § 48 ITC
- **Phase-Out:** Phases out in 2032 or later (based on national achievement of certain emission thresholds)

Key IRA Changes for DG Projects: Direct Pay

- Full direct pay eligibility ***only permitted for use by tax-exempt, governmental or tribal entities*** for claiming the § 48 ITC (through 2024) and the § 48E CEIC (from 2025 until GHG targets reached and credit phased out)
- Projects electing direct payments must either 1) meet minimum domestic content thresholds, ***or*** 2) seek a waiver from Treasury/IRS by demonstrating that domestic sourcing would increase costs by at least 25%

Key IRA Changes for DG Projects: Domestic Content Requirements (for Bonus Credit/Direct Pay)

- Minimum Thresholds for Non-Offshore Wind Projects:
  - Project claiming bonus credit must utilize steel and iron manufactured domestically, and meet the following minimum shares of project cost for materials manufactured domestically:
    - **40%** for non-OSW projects starting construction 2022-2024;
    - **45%** for non-OSW projects starting construction in 2025;
    - **50%** for non-OSW projects starting construction in 2026; and
    - **55%** for non-OSW projects starting construction in 2027 and thereafter (or until the expiration of the Clean Energy Investment/Production Credits described later);
- Effective Date
  - Applies to projects ***<u>placed in service</u> in 2023 and thereafter***

Methodology for Consideration of IRA Impacts

Sustainable Energy Advantage, LLC

Description of SEA Methodology Regarding IRA Incorporation

- For cost-based programs to be effective, the compensation provided **must reflect cost, performance, and financing conditions for the most common/typical projects (and employing typical project ownership structures)** observed in the market in question to date
- However, in the case of a program (or the market) undergoing significant change, there is also scope for the program administrator to **not just utilize the most typical projects, but to also signal to the market regarding which projects (of the projects that can be feasibly developed) that they reasonably want to participate**
- Therefore, SEA has segmented its analysis and recommendations regarding how to incorporate the IRA's changes for projects less than or equal to 5 MW into:
  - Changes that reflect **impacts on projects <u>already typical</u> to the Illinois market**; and
  - **Policy questions** regarding changes that might require more substantial changes to program design

Inflation Reduction Act (IRA) Modeling Implications for ABP Program Categories

Sustainable Energy Advantage, LLC

Small Distributed Generation

- Increase Investment Credit to 30%?
  - **Modeling Implication (M.I.): Yes, would be applicable to both host-owned and third-party owned (TPO) systems**
    - **Both the § 25D credit applicable to projects owned by individual (non-business) taxpayers and the § 48 or § 48E credits claimed by business taxpayers have the same 30% upfront credit value**
- Prevailing Wage for Installation Labor?
  - **M.I.: No incremental impact**
    - **IRA prevailing wage requirements for 30% credits only apply to systems >1 MW, and projects on single-family or multifamily residential units already exempt from state prevailing wage requirements**
    - **Unclear at this time if apprenticeship requirements increase project costs**
- Interconnection Costs in ITC/CEIC Basis?
  - **M.I.: Unclear**
    - **Typically, projects <=25 kW are not "cost causers" in a distribution group study triggering substantial system modifications (and if in theory they were, the project would likely not proceed)**
    - **However, if the owner(s) of the proxy project for setting the price (be it 1-10 kW or 10-25 kW) receives the §48 or §48E credit as a business taxpayer but if the <u>typical</u> project is found to need to pay for certain specific "interconnection property" for their project, such property must be included in ITC/CEIC basis**

Small Distributed Generation

- Assume Direct Pay Eligibility?
  - **M.I.: Not recommended**
    - **Typical ABP project in category is not expected to be owned by a tax-exempt, governmental or tribal entity**
- Assume Impact from New Transferability Regime?
  - **M.I.: Not recommended <u>at this time</u>**
    - **Transferability rules are not yet known, and thus unclear to SEA at this time what impact transferability might have on cost of tax equity, or whether bonus depreciation should be assumed (or what the typical "placed in service" date should be for assuming bonus depreciation)**
    - **SEA notes that per ICC LTRRPP order, bonus depreciation was rejected as an assumption, given that this would create preference for TPO project types**

Large Distributed Generation & Traditional Community Solar

- Increase Investment Credit to 30%?
  - **M.I.: Yes, would be applicable to both host-owned and third-party owned (TPO) systems**
    - **See reasons related to this change re: Small DG**
- Prevailing Wage for Installation Labor?
  - **M.I.: No incremental impact**
    - **See reasons related to this change re: Small DG**
- Interconnection Costs in ITC/CEIC Basis?
  - **M.I.: Yes, SEA recommends this be specifically accounted for**
    - **Regardless of whether the owner is the host or a third party, SEA is confident that the typical owner(s) of the proxy project for setting the price will claim the § 48 or § 48E credit as a business taxpayer, particularly for projects >25 kW**
    - **SEA recommends that IPAensure the full cost of the project's generation equipment and other upfront capital costs (rather than any reduced amount that excludes transmission or distribution interconnection property) should be used as the project's ITC/CEIC basis**

Large Distributed Generation & Traditional Community Solar

- Assume Direct Pay Eligibility?
  - **M.I.: Not recommended (See reasons related to this change re: Small DG)**
- Assume Impact from New Transferability Regime?
  - **M.I.: Not recommended <u>at this time</u> (See reasons related to this change re: Small DG)**

Community-Driven Community Solar

- Increase Investment Credit to 30%?
  - **M.I.: Yes, would be applicable to both host-owned and third-party owned (TPO) systems (See reasons related to this change re: Small DG, Large DG and Traditional Community Solar)**
- Prevailing Wage for Installation Labor?
  - **M.I.: No incremental impact (See reasons related to this change re: Small DG, Large DG and Traditional Community Solar)**
- Interconnection Costs in ITC/CEIC Basis?
  - **M.I.: Yes, SEA recommends this be specifically accounted for (See reasons related to Large DG and Traditional Community Solar)**

Community-Driven Community Solar

- Assume Direct Pay Eligibility?
  - **M.I.: Yes, but only if the project is assumed to be owned by a tax-exempt entity**
- Assume Impact from New Transferability Regime?
  - **M.I.: Not recommended at this time. Pending the finalization of rules, can only be considered if the typical project is owned by a taxable entity (See reasons related to this change re: Small DG, Large DG and Traditional Community Solar)**

Public Schools

- Increase Investment Credit to 30%?
  - **M.I.: Yes, but only if certain costs included for certain projects**
    - **Costs for domestic sourcing would need to be included for tax-exempt, government-owned or tribal school-owned projects, or assumed waived if costs can be shown to exceed 25% above typical projects**
    - **However, if minimum requirements met, project could notionally (pending federal rules) be eligible for a 40% tax credit (given 10% bonus assumption for domestic sourcing)**
- Prevailing Wage for Installation Labor?
  - **M.I.: No incremental impact**
    - **See reasons related to this change re: Small DG, Large DG and Traditional Community Solar**
- Interconnection Costs in ITC/CEIC Basis?
  - **M.I.: Yes**
    - **See reasons related to Large DG, Traditional Community Solar and Community-Driven Community Solar**

Public Schools

- Assume Direct Pay Eligibility?
  - **M.I.: Yes, but only if the project is assumed to be owned by a tax-exempt entity (e.g., the school district or related financing entity)**
- Assume Impact from New Transferability Regime?
  - **M.I.: Not recommended at this time**
    - **Only appears to be workable (pending federal rules) if the typical project owned by a taxable entity**
    - **See reasons related to this change re: Small DG, Large DG, Traditional Community Solar, and Community-Driven Community Solar**

Inflation Reduction Act (IRA) Modeling Implications for Solar For All Program Categories

Sustainable Energy Advantage, LLC

Low-Income Distributed Generation (1- to 4-Unit Buildings)

- Increase Investment Credit to 30%?
  - **M.I.: Yes**
    - **Would be applicable to both host-owned and third-party owned (TPO) systems (as well as tax exempt/governmental/tribal and taxable entities)**
- Prevailing Wage for Installation Labor?
  - **M.I.: Yes, for some, but not others**
    - **Only projects greater than 1 MW (all projects in block exempted by CEJA and <=1 MW not required under IRA if seeking full credit value)**
    - **Unclear at this time if apprenticeship requirements increase project costs**
- Interconnection Costs in ITC/CEIC Basis?
  - **M.I.: Yes, except for one project type**
    - **Host-owned projects less than 10 kW would not have this apply (since such projects would receive § 25D credit for individuals, to which the interconnection-in-the-basis allowance does not apply)**

Low-Income Distributed Generation (1- to 4-Unit Buildings)

- Assume Direct Pay Eligibility?
  - **M.I.: No (typical projects appear not to be owned by a tax-exempt entity)**
- Assume Impact from New Transferability Regime?
  - **M.I.: Unclear at this time (projects are notionally eligible, but federal rules have not yet been issued, and thus the potential impact on tax equity financing or ability to claim bonus depreciation is unknown)**

Low-Income Distributed Generation (5+ Unit Buildings)

- Increase Investment Credit to 30%?
  - **M.I.: Yes, would be applicable to both host-owned and third-party owned (TPO) systems (as well as tax exempt and taxable entities)**
- Prevailing Wage for Installation Labor?
  - **M.I.: Yes, for some, but not others**
    - **Only projects greater than 1 MW (all projects in block exempted by CEJA and <=1 MW not required under IRA if seeking full credit value)**
    - **Unclear at this time if apprenticeship requirements increase project costs**
- Interconnection Costs in ITC/CEIC Basis?
  - **M.I.: Yes, except for host-owned projects less than 10 kW (since such projects would receive § 25D credit for individuals, to which this allowance does not apply)**

Low-Income Distributed Generation (5+ Unit Buildings)

- Assume Direct Pay Eligibility?
  - **M.I.: No (typical projects appear not to be owned by a tax-exempt entity)**
- Assume Impact from New Transferability Regime?
  - **M.I.: Unclear at this time (projects are notionally eligible, but federal rules have not yet been issued, and thus the potential impact on tax equity financing or ability to claim bonus depreciation is unknown)**

Non-Profit/Public Facilities

- Increase Investment Credit to 30%?
  - **M.I.: Yes (assuming access via Direct Pay), but if owned by Non-Profit/Public facility, certain costs must be explicitly included (or assumed waived) for certain projects**
    - **If the project is assumed to be directly owned by a tax-exempt, governmental or tribal entity, costs for domestic sourcing would need to be included for, or assumed waived if costs can be shown to exceed 25% above typical projects**
    - **However, if minimum requirements met, project could notionally (pending federal rules) be eligible for a 40% tax credit (given 10% bonus assumption for domestic sourcing)**
- Prevailing Wage for Installation Labor?
  - **M.I.: Yes, except for one project type**
    - **Projects serving houses of worship <=100 kW_{AC} exempted under CEJA**
    - **Unclear at this time if apprenticeship requirements increase project costs**
- Interconnection Costs in ITC/CEIC Basis?
  - **M.I.: Unclear/not fully clarified by Treasury/IRS at this time**
    - **If the project is eligible for direct pay treatment, it is currently unclear to SEA if it is treated as a taxpayer for the purposes of "interconnection-in-the-basis" treatment under the § 48 ITC and § 48E CEIC**

Non-Profit/Public Facilities

- Assume Direct Pay Eligibility?
  - **M.I.: Yes, but only for tax-exempt, governmental and tribal entity-owned projects, and subject to domestic sourcing requirements (as previously discussed)**
    - **Projects owned by a private entity should be assumed to benefit from the § 48 ITC and § 48E CEIC without domestic sourcing requirements**
- Assume Impact from New Transferability Regime?
  - **M.I.: Unclear at this time (see reasons related to Low-Income Distributed Generation projects)**

Low-Income Community Solar Project Initiative

- Increase Investment Credit to 30%?
  - **M.I.: Yes**
    - **Would be applicable to both host-owned and third-party owned (TPO) systems (as well as tax exempt/governmental/tribal and taxable entities)**
- Prevailing Wage for Installation Labor?
  - **M.I.: Yes, except for one project type**
    - **Projects serving houses of worship <=100 kW_{AC} exempted under CEJA**
    - **Unclear at this time if apprenticeship requirements increase project costs**
- Interconnection Costs in ITC/CEIC Basis?
  - **M.I.: Yes, except for one project type**
    - **Host-owned projects less than 10 kW would not have this apply (since such projects would receive § 25D credit for individuals, to which the interconnection-in-the-basis allowance does not apply)**

Low-Income Community Solar Project Initiative

- Assume Direct Pay Eligibility?
  - **M.I.: No (typical projects appear not to be owned by a tax-exempt entity)**
- Assume Impact from New Transferability Regime?
  - **M.I.: Unclear at this time (projects are notionally eligible, but federal rules have not yet been issued, and thus the potential impact on tax equity financing or ability to claim bonus depreciation is unknown)**

Policy Questions Related to ABP/SFA RE: IRA Implementation

Sustainable Energy Advantage, LLC

Bonus Credit Policy Questions (1)

- **Treatment of Bonus Credit-Eligible Projects With Higher Costs than Non-Bonus-Eligible Projects:** Should the IPA establish REC adders for IRA bonus credit-eligible projects that may or may not align with certain public policy priorities, if claiming such bonus credits costs more than not claiming the credit
  - For example:
    - Should the IPA provide project REC adders to projects that qualify for the "energy communities" bonus credit, once rules are finalized?
    - Should the IPA provide project REC adders to projects that comply with IRA domestic content requirements when rules are finalized, including those eligible for direct pay?

Bonus Credit Policy Questions (2)

- **Treatment of Bonus Credit-Eligible Projects With Lower Incremental Costs than Non-Bonus-Eligible Projects:** Should the IPA adjust compensation <u>downward</u> for IRA bonus credit-eligible projects, if claiming such bonus credits costs less than a project that is not eligible for such credits?
  - For example:
    - Should ABP or SFA REC compensation to projects located in an eligible “energy community” that may not require incremental development costs (e.g., a “community” with fossil fuel employment over the IRA-defined minimum threshold or a closed coal-fired power plant) be adjusted <u>downward</u> in order to capture the ratepayer benefit of projects located in a low-income community?
    - Should ABP or SFA REC compensation to projects located in a low income or disadvantaged community (as defined by the IRA) be adjusted <u>downward</u> in order to capture the ratepayer benefit of projects located in a low-income community?
    - Should SFA REC compensation to projects as benefitting a low income or disadvantaged community (as defined by the IRA) be adjusted <u>downward</u> in order to capture the ratepayer benefit of such projects?
    - Should SFA REC compensation to projects as benefitting a low income or disadvantaged community (as defined by the IRA) be adjusted <u>downward</u> in order to capture the ratepayer benefit of such projects?

Direct Pay Policy Questions

- Does the cost of claiming direct pay increase prices by more than 25% (the statutory threshold for a Treasury waiver)? If so, how should the IPA and its planning consultant approach the task of quantitatively benchmarking the differential for differing project blocks?
- Is it reasonable to assume that direct pay recipients could also claim the cost of interconnection property in the basis for receiving Investment Tax Credit (ITC) or the Clean Energy Investment Credit (CEIC)?
- Should there be a separate REC price (or REC adder) for direct pay eligible ABP Community-Driven Community Solar projects?
- Should there be a separate REC price for SFA Non-Profit projects owned by host customers vs. Public Facilities projects owned by host customers (since public entities can get municipal bond financing, and nonprofits cannot)?
- Are there other REC prices that you believe should change to account for the expected approval of rules allowing direct pay?

Sustainable Energy Advantage, LLC
161 Worcester Road, Suite 503
Framingham, MA 01701
http://www.seadvantage.com

Contacts:

Jason Gifford
☎ 508-665-5856
✉ jgifford@seadvantage.com

Jim Kennerly
☎ 508-665-5862
✉ jkennerly@seadvantage.com