



December 2, 2022

Comments regarding:

October 28, 2022 Request for Public Comment on Proposed Bee Better Electric Certification Program

Submitted by:

Energy and Wildlife Action Coalition

The Energy and Wildlife Action Coalition (“EWAC”)¹ submits these comments in response to the Electric Power Research Institute (“EPRI”) proposed Bee Better Certification (“Certification”) program announced on October 28, 2022. In the request for public comment on the Certification program, it was stated that intent is to create “a third-party verified, voluntary pollinator certification program for electric power companies.” Further, according to the announcement, the intent of this effort is to “establish a science-based certification for solar sites, transmission rights-of-way (ROWs), substations, and power plant sites to verify that vegetation is managed in a manner that supports pollinator conservation.” EWAC provides these comments on the proposed Certification program based on the knowledge and experience of its membership.

EWAC appreciates the efforts by EPRI and the Xerces Society (“Proponents”) to encourage private companies to invest in pollinator conservation and utilize energy lands (both generation sites and rights-of-way (“ROW”)) to achieve these conservation goals and recognizes the role the regulated utility and renewable energy industries (“Industries”) can play in environmental stewardship. To that end, EWAC members regularly implement meaningful voluntary conservation and risk minimization measures to reduce negative impacts that human development activity may have on sensitive species. Additionally, EWAC members often partner with conservation organizations, as well as federal, state, and local governments, to go beyond regulatory requirements to voluntarily promote the conservation and recovery of sensitive species.

¹ EWAC is a national coalition formed in 2014 whose members consist of electric utilities, electric transmission providers, and renewable energy entities operating throughout the United States, and related trade associations. The fundamental goals of EWAC are to evaluate, develop, and promote sound environmental policies for federally protected wildlife and closely related natural resources while ensuring the continued generation and transmission of reliable and affordable electricity. EWAC supports public policies, based on sound science, that protect wildlife and natural resources in a reasonable, consistent, and cost-effective manner. EWAC is a majority-rules organization and therefore specific decisions made by the EWAC Policy Committee may not always reflect the positions of every member.

This is particularly true with respect to pollinator species for which the Industries have expended significant resources to provide conservation for on energy lands they manage.

However, while many EWAC members are exploring the use of new and innovative ground covers within their solar project site design, installing pollinator habitat within solar facilities is still very new, particularly within utility-scale solar facilities. Also, it should be noted that, while solar energy as a technology has been around for a long time, there are many regions in the U.S. where the very first utility-scale solar facilities have recently been installed. As EPRI is well aware, technology is adopted on a curve, with early adoption being the most expensive due to the cost of the actual technology and the so-called “soft costs” of adoption. For utility-scale developers, even ones with habitat restoration experience, installing pollinator habitat is unique at each project and requires significant upstream work before a contractor can even be selected. To illustrate this challenge, we provide the following list of non-exhaustive examples:

- Procurement: since pollinator habitat at utility-scale solar facilities is new, there are very few Engineering, Procurement and Construction general contractors (EPCs) who have experience designing, installing, and assisting with the establishment of pollinator habitat. While also learning about large-scale deployment of pollinator habitat themselves, utility-scale solar developers, in particular, may need to:
 - Identify EPCs who have experience with pollinator habitat
 - Assess whether the EPC is capable of meeting pollinator goals (such as scorecard compliance) and is up to date on emerging research, trends, and best practices. To further complicate this situation, while some contractors say they have experience installing pollinator habitat, very few have experience doing it at scale within solar facilities.
- Insurance: utility-scale solar generators are expensive and require several different types of insurance and surety – with some types of insurance having vegetation standards to reduce fire risk. As a result, solar developers need to:
 - Find insurers comfortable with and willing to insure new types of ground cover within solar facilities.
 - Educate insurers, while also learning about it themselves, about the potential benefits and risks of pollinator habitat relative to insurance costs.
 - Understand how pollinator habitat may impact the cost of insurance if insurers perceive it to be higher risk than other types of groundcover and be able to compare to other insurers (if a company is able to find enough insurers with experience in underwriting pollinator habitat at solar facilities).
- Operations & Maintenance: utility-scale solar owners frequently hire non-EPC contractors to manage vegetation at their facilities:
 - See list above on hiring EPCs. Many of the same processes can be applied to finding and working with an operations vegetation manager – with even fewer companies

having experience with utility-scale solar pollinator habitat at the Operations & Maintenance (O&M) stage than during construction.

With the forgoing in mind, while EWAC members share the Proponents' commitment to pollinator conservation and appreciate the intent of the proposed Certification program, there are concerns that, as structured, the proposal will be overly expensive and challenging to implement, potentially resulting in very few companies actually being able to qualify due to an unreasonably high standard being set – which in turn will result in little qualifying conservation for pollinators being realized. Additionally, the proposal could have the unintended consequence of potentially becoming a de facto requirement by investors, lenders, and power purchasers. In order to reduce the potential for the Certification program to have these negative effects and increase the likelihood of adoption, thereby increasing its conservation value, EWAC offers the following comments for consideration:

I. Differences between small-scale/distributed generation and utility-scale solar

The Scoping Document and proposed criteria for certified solar sites do not reflect the differences between small-scale/distributed generation solar facilities (“DG”) and larger, utility-scale solar facilities. Understanding the potential differences in impacts between utility-scale and distributed generation solar projects and resulting feasibility for implementing the proposed vegetation management criteria is critically important and, without addressing this element, the proposal erroneously assumes that what is cost-effective and feasible at the DG scale, is also practicable at larger, utility-scale facilities. Specifically, while it might be feasible for a smaller solar project (e.g., an approximately 5 MW solar project on a 40-acre parcel) to achieve established vegetative cover necessary to qualify as a Certified Site, the complexity and overall cost of achieving similar outcomes is considerably greater for larger, utility-scale (e.g., a 200 MW solar project sited on 2,000 acres or greater). Conversely, for typically smaller DG projects, the minimum certified habitat acreage requirement could preclude many solar sites from achieving Certified Site status that might otherwise meet all other criteria. It is unclear what information was used to support the minimum size of one acre of Certified Habitat as a requirement across all qualifying asset types.

II. Vegetation management requirements

1. Buffer requirements

One of the proposed criteria for Certified Habitat requires a 30-foot-wide spatial buffer between certified habitat and **any** [emphasis added by Proponents] adjacent lands). This 30-foot-wide buffer could be particularly problematic for solar sites and substations. Due to safety and security concerns, any vegetative cover potentially eligible under the proposed EPRI program would likely be limited to perimeters or marginal areas of electric substations where tall-growing vegetation is compatible with safely operating electrical equipment like solar panels or transformers. For example, buffers are typically required between electrical equipment and fencing where tall-growing vegetation is viewed as being incompatible with facility operations, and therefore precluded, due to potential fire risk. In the scoping document, the Proponents acknowledge that, “due to regulatory

requirements...opportunities for pollinator habitat on substation sites are likely limited to areas immediately outside of the fence that can be managed as low-height pollinator meadows.”

However, many electric substations and the vast majority of solar facilities are constructed on leased land where the landowner controls land management decisions in areas adjacent to the substation and “outside the fence.” Further, most solar and substation facility owner/operators typically do not have the authority to control adjacent landowners’ application of pesticides or herbicides.

In these instances, implementing the required 30-foot-wide buffer would be impractical and potentially infeasible at many substations, electric transmission rights-of-way, and solar facilities. For example, a 100’ transmission right-of-way would require two 30’ buffers from adjacent landowners, leaving only 40’ of the right-of-way potentially available for Certified Habitat. In this example, virtually all of the non-buffer space within the right-of-way would need to be dedicated to Certified Habitat to qualify under the proposed Plan. Due to the 35% minimum area requirement for transmission ROWs in the proposed Plan, this example also almost necessitates that the transmission line’s permanent maintenance access road, if required, be co-located with one of the buffers from adjacent lands, which might not always be practicable or feasible. Further, the premise of the 30-foot-wide buffer raises concerns about the feasibility of practically managing vegetation in the buffer area. Specifically, proposed criteria regarding herbicide application apply to both the Certified Habitat and spatial buffer areas. Managing compatible vegetation in the buffer areas could become unnecessarily complicated and inefficient if management tools like herbicides are limited in the buffer areas like along roads or within transmission rights-of-way, where it is important to maintain vegetation according to site accessibility and safety requirements. It is also unclear what information was used to support the proposed 30-foot-buffer and whether this is the appropriate distance to buffer against potential pesticides drifting into Certified Habitat.

The proposed criteria disallowing mowing and/or grazing during the ground bird nesting season within Certified Habitat areas could potentially be problematic for maintaining safe and reliable operating facilities. Individual energy facilities should determine mowing schedules based on local conditions, regulatory and insurance compliance requirements, and overall vegetation management objectives. The ground nesting bird season could be several months long in some areas of the United States, potentially constraining a facility’s ability to manage vegetation during the growing period. Additionally, mowing during the ground bird nesting season could be required during emergency or unique circumstances. and is a common and often necessary routine management practice at many solar facilities due to insurance and fire safety requirements to maintain low-growing vegetation. Some electric owner/operators obtain Special Purpose Utility Permits (SPUTs) from the U.S. Fish and Wildlife Service for the removal of avian nests. These permissible activities should not be precluded under the proposed Certification program.

2. Requirements for planting under an array

Qualifying solar facilities would need to maintain at least 35% (by area) of the Certified Site as Certified Habitat. Given the requirement for a 30-foot buffer between Certified Habitat and any adjacent lands, achieving this level of Certified Habitat could be challenging without the ability to include vegetation underneath and between solar panels as Certified Habitat. The most common lower panel height for photovoltaic facilities in the U.S. is currently 20” to 24”. Therefore, compatible vegetation would need to have a maximum growing height of 18” to 20”, and potentially as low as 6” in more arid areas of the U.S. where fire risk is an extremely important consideration for operating and insuring a facility. Further, for many ecoregions in the U.S., it is unlikely that seed mixes for locally native plant species, as defined in the proposed Certification, which do not exceed 20” in height, will have adequate commercial availability and be affordable. To ameliorate this situation, an alternative definition of “locally native,” which reflects ecoregions of the United States as defined by the U.S. EPA, would be more accurate and appropriate to use, if the objective is to revegetate a site with plants local to a specific facility.

Another important consideration, as noted above, is the availability of seeds for genotypes of local plant species and compatibility of many of these species with the lower panel height at solar facilities. Considering the inclusion of low-growing, naturalized species, such as white Dutch clover, as compatible vegetation within Certified Habitat would significantly help address the challenge associated with vegetative cover height and compatibility with solar panel heights. This would afford owner/operators the flexibility to participate in the Bee Better program and not unduly burden a facility with unachievable standards. The Scoping Document plainly states that low-growing vegetation under solar panel arrays is often compatible with pollinator habitat. However, for the stated reasons, low-growing vegetation for qualifying Certified Habitat would be incompatible with lower panel heights for the majority of solar facilities currently installed in the U.S.

3. Plant height and resulting impacts on NCF

Touching on a point made in the above section, an unintended consequence of establishing native vegetation at a project site is the potential for tall-growing species, to become established in these areas, and that this vegetation in turn can shade out solar panels, thereby impacting a facility’s generating efficiency, which impacts the facility’s overall ability to generate electricity reliably and economically.

4. Outsized focus on noxious weeds

In reviewing the Certification proposal, it was unclear as to whether the Proponents looked at the Federal Insecticide, Fungicide and Rodenticide Act (“FIFRA”) and potential conflicts their program requirements could have with herbicide application and general vegetation management efforts. To avoid any potential confusion with FIFRA requirements, EWAC recommends that the Proponents include a reference to FIFRA and ensure that any recommendations/requirements of the Certification do not conflict with legally mandated applicator licensing, application timing, rates, etc.

Further, it is unclear why the same requirements for noxious weed control and invasive plant species management are not applicable to the required 30-foot-wide buffer areas. This inconsistency in management objectives between Certified Habitat and the buffer areas can increase O&M costs and complicate facility vegetation management as well as the ability reach desired outcomes for either area.

III. How even “voluntary” standards can become de facto requirements for lenders, investors, C&I buyers, utility off-takers, and state, county, and local governments.

EWAC is concerned that if the proposed program is adopted by EPRI as currently contemplated, it will create an appearance of establishing minimum requirements for energy projects. Once published, it is reasonable to foresee that, even with the caveats included in the text of the proposal, the Certification criteria could be adopted in part or whole by local governments, or are required by the investor or lending communities to finance capital intensive infrastructure projects, or required by commercial & industrial (“C&I”) and utility off-takers themselves^{2, 3, 4, 5} – all of which would likely result in an increase in the cost of electricity. These types of outcomes could impede the necessary and immediate buildout of renewable energy infrastructure in the U.S. and/or lead to increased costs of electricity for the customers.

IV. Precludes the use of lands enrolled in CCAA/SHA

The current proposal requires that “if recent new project siting and construction activities on the site a [sic] applying for certification required state and/or federal mitigation for species or habitat in the past 3 years, it is not eligible for certification (e.g., mitigation required under the Endangered Species Act (“ESA”) and their state-level equivalents).” This stipulation needs to be clarified given the various potential ways that sites can mitigate for impacts to species or habitat under ESA or state-level equivalents. For example, it is unclear whether a solar project complying with ESA permit conditions via off-site compensatory mitigation, would be ineligible to qualify appropriate on-site habitat areas through the Certification program. It is also unclear whether a facility complying with ESA permit conditions for a non-pollinating insect species via on-site compensatory mitigation would be ineligible to qualify appropriate on-site habitat through the Certification program. EWAC is concerned that participating in the monarch butterfly Candidate Conservation Agreement with Assurances (CCAA) currently administered by USFWS, for instance, could preclude a transmission ROW manager from qualifying these same areas as Certified Habitat under the proposed Certification program. This potential for confusion or conflicting objectives is unlikely to result in the most effective conservation outcomes for critical pollinating insect species. Generally speaking, it is EWAC’s belief that any

² <https://www.utilitydive.com/news/in-bid-to-help-bees-xcel-to-require-vegetation-disclosure-in-solar-rfps/539521/>

³ https://www.nipsco-rfp.com/Portals/0/Documents/RFPDocuments/Appendix_F_2022_Evaluation_Criteria_FINAL.pdf

⁴ <https://www.alliantenergy.com/alliantenergynews/illuminate/1-solarpollinators>

⁵ <https://www.xcelenergy.com/staticfiles/xcel-responsive/Working%20With%20Us/Renewable%20Developers/2022%20RFP/NSP%202022%20Request%20for%20Proposals.pdf>

voluntary pollinator conservation uplift provided by facility vegetation management practices should be encouraged and rewarded, and not just those who can meet an exceedingly high “gold” standard.

V. Unreasonably high standard of the proposed Certification program

Furthering the point made in the previous section, while EWAC understands that the Proponents are attempting to establish a high bar for qualifying sites, by creating a “gold standard” Certification program that does not allow for multiple levels of certification (e.g., something akin to the U.S. Green Building Council’s LEED standards), the proposed Certification program could actually disincentivize or, worse, negatively impact otherwise well-sited facilities trying to incorporate some level of pollinator-friendly plantings at their sites. Additional levels of certification (and/or including other energy facility types, like wind energy facilities or electric distribution lines) would remove barriers to entry to the Certification program and allow more facilities to achieve recognition for voluntarily trying to incorporate more pollinator-friendly vegetation at energy facilities.

VI. Conflicts with or other challenges related to state scorecards and EPRI’s own scorecard assessment document

EWAC is concerned that the proposed Program would complicate an already confusing and dynamic landscape of state-led pollinator scorecards that are recommended or required for solar projects in some states. It is unclear what attempts were made by the Program’s authors to conform the proposed Program to these existing scorecards so as not to create additional confusion or contradictory objectives when project proponents are considering whether to implementing pollinator friendly vegetation and determining how their respective site scores for a relevant pollinator scorecard. Additionally, the proposed Program is contradictory to EPRI’s own research into pollinator scorecards in 2021, which “uncovered a general lack of rigor, consistency, and oversight for scorecard design methodology, version control, and use.” In its assessment of pollinator scorecards at the time, EPRI found that “field-based research is necessary to determine if there is a correlation between the points received on a pollinator-friendly scorecard and the actual solar PV site habitat conditions.” EWAC believes this is as true today as when it was written in 2021, and it is unclear how these lessons learned were applied to development of the proposed Certification program.

Another important finding from the 2021 EPRI pollinator scorecard research was the relative indifference of sampled pollinator scorecards to the size of the solar project/facility. Notably, EPRI found: “Regarding property size, solar site design scale varies widely; however, in neither the scorecards nor in the laws is there mention of the applicability of the scorecards on a 5-acre property vs. a 5,000-acre property (community-scale vs. utility-scale). Based on the interviews, the confirmed examples of existing scorecard use have been on community-scale sites, raising the question of whether the scorecards are designed for smaller projects and not grid-scale solar.” This oversight is also inherent in the Certification program, as proposed and should be addressed in the final version.

VII. Wind energy facility and electric distribution line ROW eligibility

As previously noted, wind energy facilities and electric distribution lines are not considered as eligible facilities in the proposed Certification program and therefore any pollinator conservation-focused vegetation management efforts undertaken by those facility owner-operators cannot receive any credit in this program for these efforts. The Certification documents provide no reasonable justification for why these facilities would be excluded from the program. It stands to reason that if a wind energy or distribution line owner/operator could achieve some or all of the vegetation management practices outlined in the Certification program, that the Proponents would want to encourage and reward those entities for doing so. Therefore, it is our recommendation that the final Certification include these facilities along with the others already included in the eligibility criteria.

VIII. Certification program proposal was not developed through an inclusive process

In reading the proposed Certification program documents, it is clear that the development of the proposal did not involve many substantive utility-scale solar developer and transmission and distribution line owner-operator input (e.g., only one DG developer and no utility-scale developers seem to have participated throughout the process).

EWAC is concerned by the lack of transparency and coordination industry-wide, leading up to and during the development of the Certification program. This proposal has the potential to provide incentives to the electric power sector for providing pollinator conservation within energy lands managed by the utilities and independent power producers. However, as structured, EWAC is concerned that it will result in unnecessary costs and complications for companies looking to undertake these voluntary measures and could potentially serve as either a disincentive or negatively impact companies. It is EWAC's belief that a more transparent and inclusive process could have avoided this outcome and led to the development of a more robust and universally acceptable proposal. For instance, as noted above and recognized in EPRI's previous research on pollinator scorecards, what is cost-effective and practicable at the DG-scale is not necessarily the case for utility-scale solar facilities, and this difference could have been worked out in advance through engagement with the utility-scale solar community. Therefore, it is suggested that any revisions made to the Certification proposal prior to its finalization involve a more robust stakeholder engagement process beyond the current public comment period and be based on broader industry input. Further, it is suggested that a pilot program be designed to assess viability of implementation before the Certification program is adopted industry-wide.

IX. Comparison to other certification efforts is inappropriate

While EWAC appreciates the attempt to compare this effort to other industry certifications, we would be remiss if we did not note that most of these (e.g., certified lumber, sustainable seafood, etc.) had very different origins (often industry group spearheading) and motivations (e.g., PR/marketing tool) in order to address a concern or impact related to their product. Therefore, it is not a valid comparison between these certifications and what is being proposed here. Again, if the desire is to encourage the voluntary management of

energy lands for pollinator conservation, then the focus should be on how to incentivize companies to do as much as possible given the restraints of their particular facility, and not penalize them for not doing more.

X. Conclusion

With corporate climate commitments and federal climate policies driving the need for rapid renewable energy deployment and expansion and modernization of transmission and distribution infrastructure, we need tools to incentivize and reward companies for implementing voluntary conservation measures on energy lands they manage. However, any such efforts must also come secondary to and not negatively impact the primary purpose of these lands, which is to generate and transmit safe, reliable, and affordable electricity. Further, EWAC again notes, that any final Certification program acknowledge and attempt to reward facility owners for varying degrees of pollinator conservation management that can be achieved on a site-by-site basis – as any additive conservation effort, in our opinion, will necessarily improve overall conservation for these critical species above the current baseline.

EWAC appreciates the Proponents' consideration of these comments and, in particular, ensuring that any proposed certification program does not unduly impact the electric power sector by increasing the complexity of generation site and ROW vegetation management, which, in turn, could increase operational costs associated with these lands, thereby reducing already slim profit margins or increasing the cost of electricity for customers. This is particularly true with respect to solar generating sites, where improperly sized vegetation can reduce the generation capabilities of these facilities – thereby negatively impacting their efficiency and reliability. EWAC encourages the Proponents to take a hard look at how this proposed Certification program is structured and take steps to ensure that any final published document does not negatively impact the deployment and operation of renewable energy and electric transmission and distribution infrastructure. Many of EWAC's members are, at present, voluntarily planting native species within ROWs and solar sites and, with respect to solar facilities in particular, are experiencing the challenges of integrating native seed mixes with stormwater management, site stabilization, managing vegetative cover transition from construction to operations, and achieving desirable vegetative conditions for the long-term, efficient, and safe operations of our solar generating and transmissions systems.

Additionally, EWAC believes that providing the Industries with guidance on how to incorporate pollinator habitat around and near energy facilities, particularly utility-scale solar, would lead to more habitat creation than a standard that, by design, is not appropriate for widespread use. EWAC strongly encourages the Proponents to look for ways to support the Industries' understanding and implementation of different types of groundcover, such as pollinator habitat.

To the extent it is useful, EWAC would welcome the opportunity to discuss these comments in greater detail with EPRI, and how to arrange for earlier stakeholder engagement to ensure that future efforts, such as this proposal, provide a value add to the industry and avoid any unintended consequences that could negatively impact the clean energy transition.

Please feel free to contact the following EWAC representatives should you have any questions on these comments or need any clarification:

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