Comments from CAC and SUN on Proposed IURC Interconnection Rule Updates

Citizens Action Coalition and Solar United Neighbors thank the Indiana Utility Regulatory Commission (IURC or Commission) for providing this opportunity for stakeholders to offer feedback on the strawman draft proposed interconnection rule updates[1] as part of the ongoing process of implementing Federal Energy Regulatory Commission (FERC) Order 2222 in Indiana.

We support the primary intent of the proposed changes as we understand them to update the existing interconnection rule to incorporate IEEE 1547-2018 and recognize the broader application of these rules to energy storage systems that inject energy into the grid.

However, we believe that additional changes would further strengthen the rule and ensure that it is better able to meet the needs of Hoosiers in the changing energy technology landscape.

In general, our comments are meant to further align Indiana's interconnection rules with the recommendations provided by Freeing the Grid,[2] Interstate Renewable Energy Council (IREC)'s Model Interconnection Procedures 2023 Edition,[3] and the Building A Technically Reliable Interconnection Evolution for Storage (BATRIES) project's Toolkit & Guidance for the Interconnection of Energy Storage & Solar-Plus-Storage.[4]

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[1] IURC RM #24-01, "Strawman draft proposed rule," April 23, 2024, available at https://www.in.gov/iurc/rulemakings/rulemakings-pending-and-effective/rm-24-01-regarding-170-iac-4-4.3/iurc-rm-24-01-notices-and-documents/

[2] Freeing the Grid is "a joint initiative of the Interstate Renewable Energy Council (IREC) and Vote Solar that grades states on specific policies that help to increase clean energy adoption and access to the grid." More information, including state interconnection score cards, a toolkit and guidance for interconnection rules including energy storage, and model interconnection procedures, can be found at https://freeingthegrid.org/.

[3] Interstate Renewable Energy Council, Model Interconnection Procedures (2023), (https://irecusa.org/resources/irec-model-interconnection-procedures-2023).

[4] More information about the BATRIES project and Toolkit can be found at https://energystorageinterconnection.org/.

Please consider the following comments:

Replace reference to battery storage with energy storage in definition of "customer facility"

The strawman draft proposed rule would amend 170 IAC 4-4.3-1(d) to replace the term "customer generator" with "customer facility," which appropriately recognizes the wider array of energy technologies included under the interconnection standards beyond generators that are capable of injecting energy onto the grid. It would also amend the definition of customer facility to add the phrase "including batteries." However, "batteries" is not a defined term in Indiana statute or administrative code, and the strawman draft rule does not provide a definition. Furthermore, batteries are only one type of energy storage technology, which could unnecessarily limit the application of the interconnection rule to exclude non-battery energy storage technologies. We recommend replacing the term "batteries" with "energy storage systems or technologies," to align the code with the nomenclature used in IC 8-1-37-4.

Adjust Level 1 and Level 2 review criteria to better align with updated customer facility definition

The addition of batteries or energy storage systems to the definition of customer facility should be paired with certain additional modifications to the interconnection rule to avoid unintended consequences. Among the most important necessary changes needed is to 170 IAC 4-4.3-6(a)(2), which currently limits Level 1 interconnection review to customer facilities that have "a nameplate capacity of ten (10) kilowatts or less."

Level 1 interconnection review is a simplified review process for small, inverter-based systems unlikely to trigger adverse system impacts. This is the process that nearly all residential rooftop solar systems go through to interconnect to the grid. As distributed solar prices have declined over the past decade, residential rooftop solar systems have gotten larger in size, with many approaching or exceeding the 10 kW nameplate capacity size. Technological advances and utility familiarity with safely

interconnecting DG systems has advanced significantly since the IURC adopted this modest threshold, leading many states and utilities to increase the nameplate capacity of systems eligible for Level 1 interconnection review. Indiana's 10 kW threshold is now anachronistic and inconsistent with industry standards.

Furthermore, an increasing proportion of residential rooftop solar systems are now being paired with energy storage systems due to recent technological and policy changes. Most of these residential energy storage systems do not ever export power to the grid, but rather store electricity generated by the customer for future self-consumption. The 10 kW nameplate capacity threshold does not make sense, particularly in this context, if capacity that is part of a battery storage system that never exports to the grid is included in the calculation of nameplate capacity. The combined capacity of even a small residential rooftop solar system with a single lithium-ion battery would likely exceed the 10 kW threshold if the nameplate capacity is the determining factor.

Systems that do not qualify for Level 1 interconnection review could be subjected to lengthier, more expensive interconnection review processes that could discourage consumers from pairing rooftop solar with beneficial energy storage systems that can contribute to both customer and grid reliability and resiliency. It could also discourage larger distributed generation facilities at a time when Indiana utilities are in need of new generating capacity.

Accordingly, we recommend modifying the Level 1 interconnection criteria based on IREC's Model Interconnection Procedures. Specifically, we recommend increasing the Level 1 interconnection threshold in 170 IAC 4-4.3-6(a)(2) from 10 kW to 50 kW, with the caveat that the export capacity of the customer facility does not exceed 25 kW. For example, this would allow a customer facility that consists of a 20 kW solar PV system paired with a 20 kW battery system that adopts controls to ensure that no more than 25 kW can be exported to the grid. The IREC Model Interconnection Procedures provides detailed guidance on defining terms like "export capacity" and

identifying specific acceptable methods a customer facility can employ to limit exports to 25 kW or less.[5]

Broader interconnection review criteria discussion

In addition to the narrowly tailored recommendations above, SUN and CAC recommend the IURC consider a broader, more holistic update of the interconnection rules to incorporate the best practices and lessons learned in the industry since these regulations were last updated. For example, the Level 1 (170 IAC 4-4.3-6) and Level 2 (170 IAC 4-4.3-7) interconnection review criteria are ripe for updating to better reflect the needs of customers and industry while maintaining standards of reliability and safety.

We recommend the IURC consider amendments to the current interconnection rules to align them with IREC's Model Interconnection Procedures, to the extent applicable in the Indiana context.

Thank you again for the opportunity to provide comments at this time. We look forward to continued participation in the Commission's rulemaking process going forward.

Sincerely,

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[5] See pp. 3 and 39-42.