

IL EE Stakeholder Advisory Group (SAG) Request for Comments on IL-TRM Policy Issue #2: Renewable / Solar Generation

Instructions:

- Using this template, send written comments on IL-TRM Policy Issue #2 to the SAG Facilitator, Celia Johnson: Celia@CeliaJohnsonConsulting.com by Friday, July 11.
- Include “TRM Policy Issue Feedback” in the subject line of the email.
- Following the July 11 written comment deadline:
 - All comments will be posted on the [SAG website](#), and circulated to SAG.
 - Next steps will be reviewed following the comment deadline, including whether a follow-up meeting is needed, or whether a non-consensus comparison exhibit should be prepared.
- Deadline Reminder:
 - The goal is to resolve IL-TRM policy issues before the August 1, 2025 IL-TRM deliverable.

Comments Submitted By:

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Policy Issue #2: New Measures Involving Renewable / Solar Generation

By way of introduction, Franklin Energy has been delivering turnkey energy efficiency and energy management programs across the U.S. and Canada for nearly three decades. Over these years, we have helped more than 100 utilities and government clients design and administer programs providing energy efficiency, water conservation, load management, electric vehicle infrastructure and workforce training services. Our programs reach end-use customers of all types including those in the market rate and low-to-moderate income single-family and multi-family sectors.

Policy Issue #2, Question 1: Does the statutory definition of “energy efficiency” allow a solar as energy efficiency measure (i.e. rooftop solar generation) in the Illinois TRM?

Yes, the statutory framework in Illinois allows for the inclusion of solar—specifically rooftop solar generation—as an energy efficiency (EE) measure within the Illinois TRM (IL-TRM), provided it meets the criteria for delivering measurable reductions in net energy consumption.

Statutory and Regulatory Basis

The Illinois Public Utilities Act (220 ILCS 5/8-103B and 220 ILCS 5/8-104) defines energy efficiency broadly as reductions in energy use achieved through measures or programs that reduce the amount of energy required to perform a function. The IL-TRM, which is filed with and approved by the Illinois Commerce

Commission (ICC), is designed to support this statutory mandate by providing a consistent basis for calculating energy and capacity savings from EE programs.

Additionally, under 220 ILCS 5/16-111.10, the term “energy project” explicitly includes “renewable energy generation systems, including solar projects,” alongside energy efficiency upgrades and demand response equipment. This statutory language supports the interpretation that solar generation, when deployed behind the meter to offset on-site load, can be treated as part of an integrated energy efficiency strategy.

This statutory language supports the interpretation that solar generation, when deployed behind the meter to offset on-site load, can be treated as part of an integrated energy efficiency strategy.

In accordance with 20 ILCS 3588/1-10, energy efficiency includes measures that reduce the total Btus of electricity, natural gas, and other fuels needed to meet the end use or uses. Through the stakeholder process, it has been acknowledged that Combined Heat and Power systems (CHPs) are a source of energy efficiency, because they reduce the total Btus of electricity needed to meet end uses.

CHPs are more efficient than the traditional model of separate electricity and heat generation, however, CHPs still consume fossil fuels. Even though they use that fuel more efficiently, they do not eliminate the need for fuel input. As such, they reduce—but do not eliminate—the total Btus required to meet end uses. Solar PV systems, by contrast, require no fuel-based Btus to generate electricity. This means that for every kilowatt-hour of electricity produced by solar, zero Btus of fossil fuel are consumed. In this sense, solar exceeds CHP in energy efficiency under the statutory definition. It not only reduces the Btus needed—it eliminates them entirely for the electricity it provides. We believe this logic point to the allowance of solar as EE because solar also reduces, to the point of elimination, the total Btus of electricity needed to meet end uses.

It’s also important to note that the inclusion of solar as an EE measure aligns with Illinois’ broader decarbonization and electrification goals, as outlined in the Climate and Equitable Jobs Act (CEJA) and supported by federal guidance. The TRM’s purpose, as stated in Volume 1, is to support the Total Resource Cost (TRC) test and other cost-effectiveness evaluations, which solar measures can meet when properly modeled.

Illinois is not alone in considering this evolution. Several states have already incorporated solar into their TRMs or equivalent frameworks:

- **Pennsylvania:** The PA TRM includes solar PV as a commercial and industrial EE measure as of 2024.
- **Texas:** The TX TRM recognizes PV systems that reduce purchased energy or peak demand.
- **Massachusetts:** Solar PV and solar water heating are included in limited offerings under the 2025–2027 Three-Year Plan.
- **Maryland:** Solar water heating is included in the MD TRM, and solar PV is supported through EmPOWER Maryland when paired with EE or storage.

At Franklin, we have deep renewable energy expertise and energy resiliency consulting and project development experience. For more than 20 years, Franklin Energy’s California team has supported the

California Investor-Owned Utilities (IOUs) with the California Self-Generation Incentive Program (SGIP), and subsequently the California Solar Initiative (CSI) program, with program design, technical and policy leadership, and technical implementation services including processing tens of thousands of incentive applications and system inspections, supporting over 150 MW of solar installations. Since 2021, we have supported numerous public sector agencies with renewables and resiliency support, including member jurisdictions of Silicon Valley Clean Energy, large California state agencies, and higher education campuses. Solar PV also provides benefits to the broader electric grid and utility operations. These include avoided energy and capacity costs, deferred infrastructure upgrades, and improved grid resilience. Solar PV can reduce the need for generation during peak hours, which helps utilities avoid costly infrastructure upgrades. Solar PV can also reduce stress on the grid, especially when generation is close to load centers. At the same time, customers reduce their electricity bills by generating their own power. This is often the most tangible benefit. Customers gain more control over their energy use and may benefit from backup power during outages if paired with storage.

Moreover, as traditional lighting measures are phased out due to market transformation and federal standards, it is critical that the IL-TRM evolve to include proven, scalable EE alternatives. Solar PV and solar thermal technologies offer a reliable pathway to maintain portfolio savings and meet statutory goals. Without the inclusion of new measures like solar, utilities may face challenges in sustaining cost-effective EE portfolios. Solar's proven performance, long-term savings, and alignment with decarbonization goals make it an ideal candidate to fill the gap left by sunset lighting measures.

Policy Issue #2, Question 2: Does the statutory definition of “energy efficiency” allow a solar thermal measure (i.e. solar hot water and solar air heaters) in the Illinois TRM?

Yes: See above response to Question 1.

In addition, we'd add that solar technologies directly reduce the amount of energy a customer must purchase from the grid. This aligns with the core objective of energy efficiency: reducing net energy consumption. When solar is deployed behind the meter and sized to serve on-site load, it functions similarly to traditional EE measures by offsetting demand and reducing peak load contributions. This is especially true when paired with demand-side management strategies or storage.

Several other states already include solar thermal in their TRMs as energy efficiency measures:

- **Pennsylvania:** Solar water heaters are included in the residential section of the PA TRM
- **Texas:** ENERGY STAR® solar water heaters are listed in the PY2025 TRM
- **Massachusetts:** Solar water heaters are included for low-income customers in the 2025–2027 Three-Year Plan
- **New York:** Solar pool heaters are included in the NY Standard Approach for Estimating Energy Savings

When properly sized and installed, solar technologies can deliver long-term energy savings that rival or surpass traditional EE measures. Incorporating avoided transmission and distribution costs, capacity value, and long-term energy price stability further enhances the cost-effectiveness profile of solar.

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Background Information

See the statutory definition of "energy efficiency"- excerpted from Illinois Power Agency Act (20 ILCS 3855/1-10) and Public Utilities Act (220 ILCS 5/8-104(b)):

"Energy efficiency" means measures that reduce the amount of electricity or natural gas consumed in order to achieve a given end use. "Energy efficiency" includes voltage optimization measures that optimize the voltage at points on the electric distribution voltage system and thereby reduce electricity consumption by electric customers' end use devices. "Energy efficiency" also includes measures that reduce the total Btus of electricity, natural gas, and other fuels needed to meet the end use or uses.

June 23 Large Group SAG meeting materials:

- [Facilitator Introduction to June 23 SAG Meeting](#)
- [ComEd Presentation](#)
- [Discussion Slides for June 23 SAG Meeting](#)

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Additional SAG meeting materials related to the "Solar as EE" policy issue:

- [ComEd Presentation \(June 9 SAG meeting\): Solar as Energy Efficiency](#)
- [ComEd Follow-up: Solar as EE in Other States](#)
- [ComEd Follow-up: Position on the grouping of solar PV and solar thermal technologies/measures](#)
- [Solar as Energy Efficiency – Residential New Measure \(ComEd – updated following June 9 meeting\)](#)
- [Solar as Energy Efficiency – Commercial & Industrial New Measure \(ComEd – updated following June 9 meeting\)](#)
- Spreadsheets that support the solar as EE workpapers:
 - [EE Residential Solar](#)
 - [PV Watts ETDF Calculations](#)
 - [Simultaneous Adjustment Factor Analysis – Residential](#)

Additional IL-TRM workpaper related to renewable policy issue:

- [Residential Solar Water Heater New Measure \(Ameren Illinois\)](#)