



Staff Briefing Papers

Meeting Date **May 22, 2025**

Agenda Item 5**

Company	Otter Tail Power Company
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Docket No. E017/M-23-338

In the Matter of Commission Consideration and Determination of Otter Tail Power Company's Plan to Meet the Small-Scale SES Compliance

Issues	Should the Commission approve Otter Tail's plan to achieve future SES compliance with the small-scale solar carve-out requirement?
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Staff	Nikki Brown-Huss	Nikki.brown-huss@state.mn.us	651-201-2255
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✓ Relevant Documents

Date

Otter Tail Power, Compliance Filing

December 18, 2024

Public Utilities Commission, Notice of Comment Period

January 23, 2025

Department of Commerce, Initial Comments

February 24, 2025

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The attached materials are work papers of the Commission Staff. They are intended for use by the Public Utilities Commission and are based upon information already in the record unless noted otherwise.

✓ **Relevant Documents**

Date

Otter Tail Power, Reply Comments

March 10, 2025

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BACKGROUND

On July 19, 2023, Otter Tail Power Company (OTP or Company) filed its plan to meet the Solar Energy Standard's (SES) Small-Scale Solar requirement (also known as the SES "small scale carve-out") in accordance with the Commission's April 3, 2023, Order¹ (Order) in Docket No. E999/PR-22-12, which required the Company to file a plan to achieve future compliance with the small-scale solar carve-out requirement. OTP's plan² to meet the SES small scale carve-out's requirements focused on maximizing community-owned solar projects by utilizing federal direct pay credits, Minnesota Solar for Schools and Public Building funding, Publicly Owned Property (POP) funding through the ECO program, Federal Inflation Reduction Act (IRA) funding, and a proposed Guaranteed Energy Production Program (GEPP). In addition to public buildings, OTP proposed to supplement the public projects with up to fifteen projects owned by the Company.

The SES, Minn. Stat. § 216B.1691, subd. 2f, requires public utilities to generate or procure sufficient electricity generated by solar energy to serve its retail electricity customers in Minnesota so that by the end of 2020, at least 1.5% of a public utility's total retail electric sales to customers in Minnesota is generated from solar energy. Public utilities with more than 200,000 retail customers are also subject to the SES small scale carve-out, which requires these utilities to meet at least ten percent of the 1.5 percent goal with solar energy generated by or procured from solar photovoltaic devices with a nameplate capacity of 40 kilowatts or less by 2020. In 2020, the first compliance year for the SES, Otter Tail complied with the small-scale requirements. In the 2021 compliance year, Otter Tail was only able to partially comply with its small-scale SES requirements, and it relied heavily on the purchase and retirement of solar renewable energy credits (SRECs) to do so. As a result, the Commission's April 2023 Order stated the Company did not reach the small-scale SES requirement for 2021 and ordered OTP to "file a plan to achieve future compliance with the small-scale solar carve-out requirement."

The Company filed a plan to achieve future compliance with the small-scale solar carve-out requirement on July 19, 2023. The Commission's January 26, 2024, Order resulting from the filing approved OTP's proposal to invest in up to fifteen OTP-owned small solar projects with a nameplate capacity of 40 kilowatts (kW) or less, authorized the Company to defer the Minnesota SES small-scale solar compliance and carry forward any outstanding obligation for up to three years, and allowed cost recovery for the Company-owned small solar projects through the Renewable Resource Cost Recovery (RRCR) rider, with a full allocation to Minnesota of the output and costs (with a resulting reduction of market energy purchases and

¹ Commission's April 3, 2023 Order *In the Matter of Commission Consideration and Determination of Compliance with Renewable Energy Standards for Year 2021*. Docket No. E999/PR-22-12.

² Otter Tail Power Company *Initial Filing – Solar Energy Standard (SES)*. Docket No. E017/M-23-338

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costs), subject to Commission review and approval of specific costs to be presented by Otter Tail in a future petition under Minn. Stat. §216B.1645, subd. 2a, or in a general rate case.³

The order also specified “OTP shall report on June 30, 2024, regarding its small-scale solar projects, including amounts spent in outreach for its Enhanced POP Solar projects, and the probability of meeting small scale solar compliance within the approved timeline. OTP shall continue reporting every six months until its next renewable energy compliance filing.”⁴

Otter Tail filed its compliance filing on December 18, 2024, with modifications to its plan to achieve future SES compliance with the small-scale solar carve-out requirement. On December 30, 2024, Otter Tail filed its SES Status Update with additional information about the planned modifications. OTP’s proposal included building 15 additional company-owned small-scale solar projects in 2025 and the creation of the Customer Hosted Solar Program which includes a proposed forty small-scale solar systems on customer properties from 2026 through 2035.

In response, the Commission issued a notice of comment period requesting input on the following:

- Should the Commission approve Otter Tail’s plan to achieve future SES compliance with the small-scale solar carve-out requirement, including Otter Tail’s investment in up to fifteen Otter Tail-owned solar projects under 40 kilowatts?
- Should the Commission approve Otter Tail’s plan to create a customer program, called Customer Hosted Solar, which allows the Company to build, operate and own up to forty small-scale systems placed only on customer property constructed during a ten-year period from 2026 through 2035?
- Should the Commission approve Otter Tail’s request to authorize future cost recovery of the Company-owned small solar projects through the Renewable Resource Cost Recovery rider, as described in the plan?
- Are there other issues or concerns related to this matter?

The Department of Commerce (the Department) was the only party to submit comments in response to the Commission’s notice. As discussed below, the Department and Otter Tail do not agree on details of the compliance plan including cost recovery, cost caps, whether to approve the customer-sited proposal, and whether the additional 15 OTP-owned solar projects should be at OTP- or customer-owned sites.

³ Public Utilities Commission Order, January, 26, 2024.

⁴ Id. Order Point 5.

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SUMMARY OF OTTER TAIL POWER'S MODIFICATION TO COMPLIANCE PLAN

I. Progress Since 2024 Order

In 2024, OTP constructed fifteen small-solar projects, four of which are on customer-owned property, which are now fully functional and producing energy.⁵ OTP stressed they have been able to build the small-solar systems at a low cost while generating renewable energy credits (RECs) at an affordable price. Purchasing similar RECS from other small systems to the extent they are available, assuming Commission approval, would be considerably more expensive for OTP customers.⁶

In the original July 19, 2023, SES Compliance plan OTP was optimistic that between Minnesota Solar for Schools, Solar on Public Buildings, Otter Tail Power's Publicly Owned Property (POP) Solar program, Inflation Reduction Act Direct Pay, and other organic customer projects, the Company would meet small-solar compliance by 2027.⁷ However, the OTP reported that customer projects are taking much longer to materialize than previously anticipated. OTP explained the State of Minnesota Solar on Public Building grant program, which they previously believed applied to OTP's service area, is only for the Xcel Energy's service area. Also, the Made in Minnesota Solar, started in 2014, allows payment to customers for ten years. At the end of their ten-year contract the customer can decide whether to continue to sell their RECs to OTP or keep their RECs.⁸ Prior to the end of the contract, customers were contractually obligated to sell their RECs to OTP thus those RECs were guaranteed to OTP.

These factors, including the time it takes for programs such as Solar for Schools to advance from commencement to completion, factor into the uncertainty and delay in expected small-scale solar projects coming online over the years.

II. OTP's Modification to Small-Scale Solar Plan

A. Fifteen Additional Small-Scale Solar Projects

In the December 18, 2024, Compliance Filing, OTP proposed to build an additional fifteen small-scale solar projects (**Decision Option 1**). By building these systems itself, OTP contends they remove the risk of relying on customers to construct systems in a timely manner for SES

⁵ OTP Compliance Filing, page 4.

⁶ Id.

⁷ OTP SES Initial Filing, July 19, 2023, at pg 12.

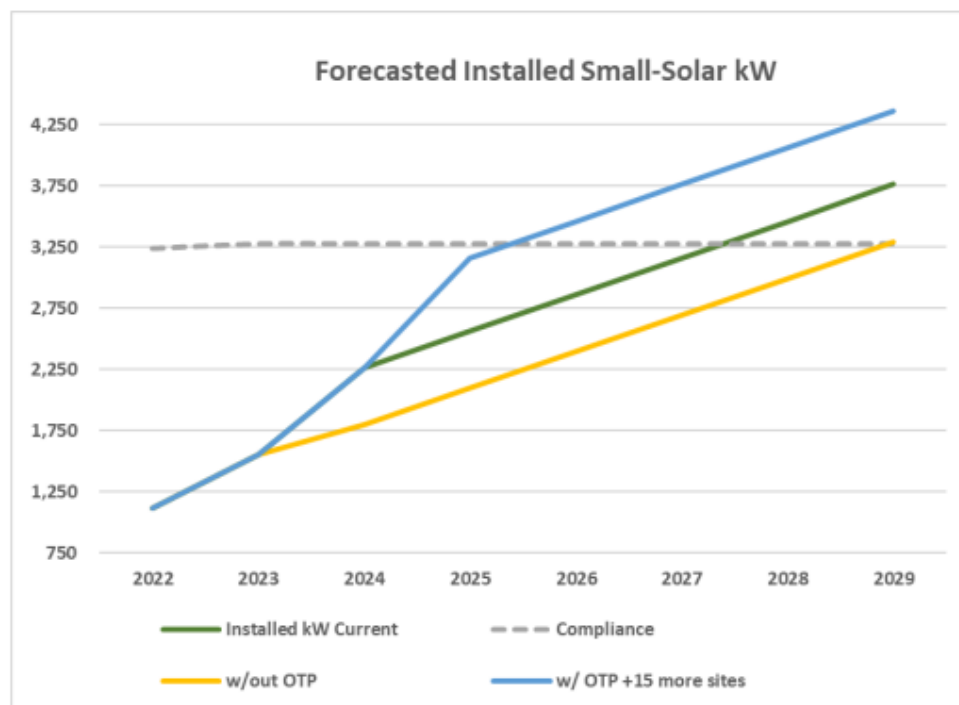
⁸ Id at 6.

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compliance. OTP stated “taking this accelerated approach will allow the Company to make up for any shortfall it has in meeting the small-scale solar compliance requirements for 2024 and its next several compliance filings for the Minnesota solar energy standard.”⁹

The proposed small-scale solar production to help achieve compliance with the June 1, 2027, SES. As shown in figure 1 below, the proposed additions would accelerate the Company’s compliance by approximately two years, with compliance projected by 2026¹⁰.

Figure 1: OTP’s Forecasted Generation:¹¹



B. Customer Hosted Solar Program

OTP proposed 40 small-scale solar systems on customer properties to be built from 2026 through 2035 (**Decision Option 3**). This is a new program OTP is proposing and was not part of

⁹ Id at 8.

¹⁰ Id at 7.

¹¹ Id at 8.

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the initial SES plan proposed in 2023. The Company has found that customers are reluctant to pursue solar projects, even at no cost, when utility is not closely involved. This model offers customers an approach where they can easily host a small-solar system with no hassle of planning, construction or on-going maintenance. OTP asserted the Customer Hosted Solar Program provides more an attractive option to many customers because OTP would procure the equipment, gather permits, complete interconnection agreements, construct, operate, and maintain the system at a low-cost.¹²

C. Cost Recovery

OTP proposed all costs and production, from the additional fifteen small-solar projects and up to forty customer-hosted small-solar projects, be allocated to Minnesota customers with recovery through Otter Tail Power's RRCR **(Decision Option 7 and Decision Option 9)**. For cost recovery purposes, Customer Hosted Solar projects will be in alignment with the Company's 2024 small-scale solar projects' cost per kilowatt, adjusted for inflation, possible discontinuation of the Investment Tax Credit (ITC), and allow for a fifteen percent contingency.¹³ **(Decision Option 10)**

DISCUSSION

I. OTP's proposal for an additional fifteen small-scale solar projects to be built.

The Department recommended approval of the additional 15 company-owned projects. The Department agreed that customer-led projects take more time to materialize and the company-owned projects would increase certainty and "remove the risk of relying on customers that face the volatility of the solar market and the hassles of interconnecting, maintaining and operating the system – tasks that a consumer is usually not familiar with."¹⁴ The Department proposed that the Commission require OTP to reserve at least two-thirds of the fifteen projects to be OTP owned on OTP land, and the remaining projects, in recognition of customer interest, may be used for OTP owned customer-sited projects **(Decision Option 2)**. In its reply comments, OTP stated it would prefer to have flexibility on the location of its projects and asked the Commission to allow the projects to be sited where it is the lowest cost.¹⁵

¹² Id at 9.

¹³ Id at 11.

¹⁴ Department Comments, at 4.

¹⁵ OTP Reply Comments, at 2.

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II. OTP's proposal for Customer Hosted Solar Program.

The Department expressed concerns with the Customer Hosted Solar Program. The Department noted that in OTP's July 23, 2023, Petition the Company provided data that cited POP Solar as the scoring the highest on OTP's comparison of project types and its self-scoring of project quality and a higher NPV. Given the Customer Hosted Solar Program has a projected lifespan of 10 years, the Department believes it would be reasonable to invest in higher quality projects such as POP Solar rather than Customer Hosted Solar.¹⁶ The Department recommended denying OTP Hosted Solar proposal for an additional forty potential solar projects (**Decision Option 5**) and instead the reserving a portion of the fifteen company-owned projects, if approved, to be sited on customer property (**Decision Option 2**).¹⁷

As shown in Figure 2, the Company will far exceed its compliance requirements if it develops the additional forty Customer Hosted Program solar projects over its anticipated 10-year timeline.

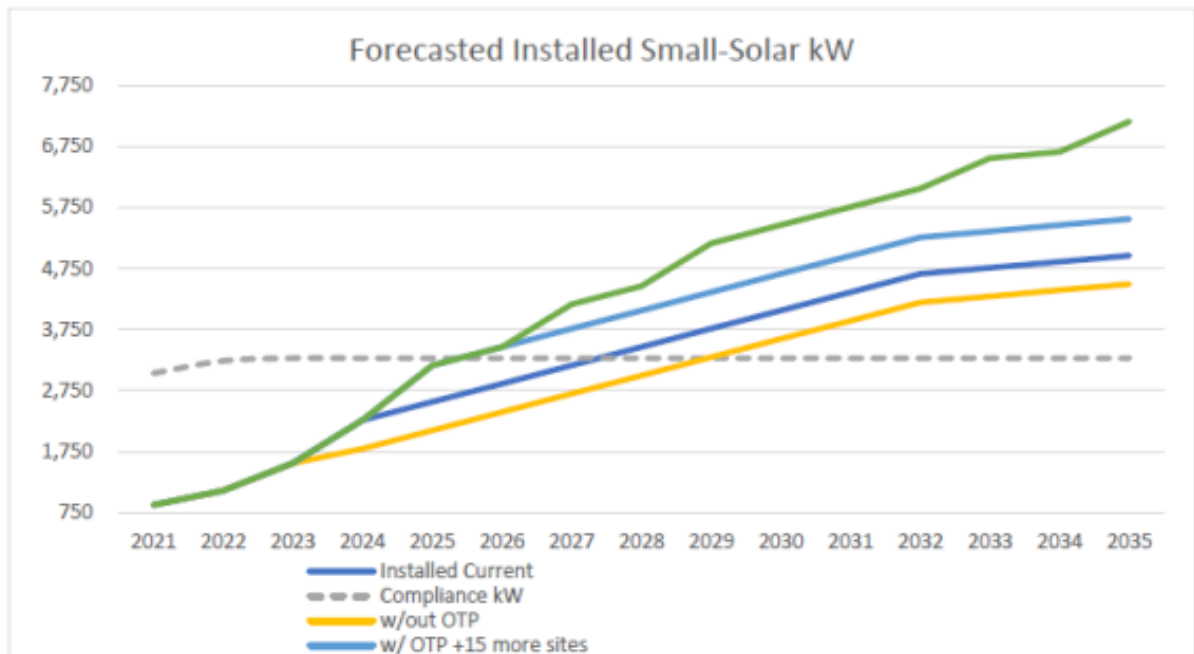
Figure 2: OTP's Forecasted Generation with the Additional Customer Hosted Solar Projects¹⁸

¹⁶ Department Comments, at 10.

¹⁷ Department Comments, at 5.

¹⁸ Department Comments, at 6.

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In its reply comments, OTP changed its Customer Hosted Solar Program – reducing the number of projects from forty to thirty (**Decision Option 4**). OTP explained the program supports its customers with solutions and supports Minnesota’s Solar goals and the State’s carbon free goal.¹⁹ OTP concedes that if substantial tariffs, elimination of the ITC, or other government actions significantly increase costs for the Customer Hosted Solar projects, it will not pursue these projects if it is in compliance with the small-solar SES standard.²⁰

III. OTP’s Cost Recovery for SES Projects

The Department recommends the Commission authorize future cost recovery through OTP’s Renewable Resource Cost Recovery Rider (**Decision Option 6**). The Department further recommends the Commission deny OTP’s request for cost recovery of future inflationary costs, discontinuation of the Investment Tax Credit (ITC), and a fifteen percent contingency for all proposed small-solar projects. (**Decision Option 8 and 11**)

In response, OTP stated it does not agree with the Department’s assessment with cost recovery of future inflationary costs, discontinuation of the Investment Tax Credit (ITC), and a fifteen percent contingency for all proposed small-solar projects. The Company does not believe it is reasonable to keep costs at 2024 levels through 2035. Citing increases in labor, equipment, and

¹⁹ OTP Reply Comments, at 4.

²⁰ Id.

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other supporting costs typical with any project over time and inflationary increases, as well as other cost increases which make the adjustments for inflation and a fifteen percent contingency for increased costs at each site necessary for viability.²¹ **(Decision Option 7)**

OTP provided data in Table 1 below, stating if all 60 of OTP's proposed solar projects were built, the combined annual impact on a typical residential customer's bill would be \$7.70 (including the 15 projects already in service and the reduction to 30 customer-sited projects).²²

Table 1: OTP Forecasted Customer Impacts

			Inflation	Contingency
			3%	15%
			Annual Res. Customer Impact w/3% Inflation	Annual Res. Customer Impact w/15% Inflation
2024	Year 1	1st 15 Solar Projects	\$1.56	\$1.56
2025	Year 2	2nd 15 Solar Projects	\$1.61	\$1.85
2026	Year 3		\$1.66	
2027	Year 4		\$1.70	
2028	Year 5	15 Customer Hosted	\$1.76	\$2.02
2029	Year 6		\$1.81	
2030	Year 7		\$1.86	
2031	Year 8		\$1.92	
2032	Year 9	15 Customer Hosted	\$1.98	\$2.27
Total Impact to Residential Customers				\$7.70

The Department recommended the Commission limit OTP cost recovery to a capital cost cap with the total costs recovered set at the dollar per kilowatt costs proposed by OTP in its Petition. But OTP can request Commission approval to exceed the cost cap if it can show that

²¹ OTP Reply Comments, at 6.

²² Id at 8.

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any of the costs incurred are the result of government action (e.g. tariff, trade investigation, etc.) that causes meaningful disruption to market prices (**Decision Option 8a and 11a**).²³

STAFF ANALYSIS

OTP's proposal to build fifteen additional small-scale solar projects went uncontested as the Department supported the proposal. Staff also agrees with this proposal.

Regarding OTP's request for approval of the Customer Hosted Solar program, Staff does not believe this would provide enough benefit to outweigh its costs. This program would greatly increase installed small-scale solar kW in OTP's service area, however, Staff believes it does not enrich the community or the ratepayers.

The Customer Hosted Solar Program is slated to run from 2026-2035. In that time OTP could instead focus those efforts on projects it cited in its petitions were time and planning intensive such as POP Solar. It will always be easier for the utility to convince a customer to do something at no cost to that customer.

Given OTP would achieve SES compliance with the additional fifteen small-scale solar projects (see figure 1 above), Staff agrees with the Department that the approval of the Customer Hosted Solar program is not necessary at this time.

Staff has not recommended additional reporting or compliance requirements. Staff believes the current compliance reporting requirements are sufficient.

Staff agrees with both OTP and the Department and recommends the Commission authorize cost recovery through OTP's Renewable Resource Cost Recovery Rider (RRCR). Staff interprets the Department's recommendation to have the Commission authorize any approval to exceed the cost cap if OTP can show the costs incurred are above the result of government action that causes meaningful disruption to market prices. However, if the Commission does approve the Customer Hosted Program it may wish to consider accepting OTP's request for cost recovery protections given the program is over ten years. It is unreasonable to expect 2024 costs to apply to 2034 projects.

DECISION OPTIONS

Fifteen Small-Scale Solar Projects

²³ Department Comments, at 13.

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1. Approve OTP's proposal to build, operate and own an additional fifteen small-scale solar arrays with flexibility to place them on Company or customer property, with construction beginning in 2025. (OTP)

(OR)

2. Approve OTP's proposal to build an additional fifteen small-scale solar arrays and require OTP to reserve at least two-thirds of the fifteen projects to be OTP-owned on OTP land. The remaining projects may be OTP-owned, customer-sited projects. (Department)

Customer Hosted Solar Program

3. Approve OTP's proposed Customer Hosted Solar program, which allows the Company to build, operate and own up to thirty small-scale solar systems on business or government customer property, to be constructed from 2026 through 2035. (OTP in Reply)

(OR)

4. Deny OTP's Customer Hosted Solar proposal. (Department)

Cost Recovery – Fifteen Small-Scale Solar Projects *(consider 5–7 if decision option 1 or 2 is selected)*

5. Authorize OTP to recover costs of the approved solar projects through its Renewable Resource Cost Recovery Rider, subject to Commission review and approval of specific costs to be presented in a future petition under Minn. Stat. § 216.1645, subd. 2a, or in a general rate case. (OTP and Department)

(AND/OR)

6. Subject to Commission review and approval of specific costs in a future proceeding, for the additional fifteen small-scale solar arrays beginning in 2025, authorize OTP to recover costs in alignment with the Company's 2024 small-scale solar projects' cost per kilowatt installed, adjusted for annual inflation based on the Handy-Whitman Index, with up to a fifteen percent contingency for any actual costs above 2024 levels. If the ITC is discontinued or any government actions materially change costs from 2024, OTP may recover the difference from Minnesota ratepayers. (OTP)

(OR)

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7. Deny OTP's request for cost recovery protections that include adjustments for inflation, any potential discontinuation of the Investment Tax Credit, and a 15 percent contingency. Limit cost recovery for the fifteen 2025 solar projects to a capital cost cap with the total costs set at the dollar per kilowatt costs proposed by OTP in its Petition. (Department)

(The Commission may also select "a" with 7)

- a. Authorize OTP to request Commission approval to exceed the cost cap if it shows that any costs incurred above the cost cap are the result of a government action that causes meaningful disruption to solar panel supplies and market prices. (Department)

Cost Recovery – Customer Hosted Solar Program *(Consider the following only if decision option 3 is selected)*

8. Approve OTP's proposal to allocate future costs of the Customer Hosted Solar Program projects to Minnesota customers with recovery through the Company's Renewable Resource Cost Recovery Rider, subject to Commission review and approval of specific costs to be presented in a future petition by Otter Tail Power under Minn. Stat. § 216.1645, subd. 2a, or in a general rate case. (OTP)

(AND EITHER)

9. Subject to Commission review and approval of specific costs in a future proceeding, authorize OTP to recover costs of Customer Hosted Solar projects in alignment with the Company's 2024 small-scale solar projects' cost per kilowatt installed, adjusted for annual inflation based on the Handy-Whitman Index, and allow for up to a fifteen percent contingency for any actual costs above 2024 levels. OTP shall not pursue Customer Hosted Solar projects if the ITC is discontinued or material government actions impacting pricing occur. (OTP)

(OR)

10. Deny OTP's request for cost recovery protections that include adjustments for inflation, any potential discontinuation of the Investment Tax Credit, and a 15 percent contingency. Limit cost recovery for Customer Hosted Solar Program projects to a

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capital cost cap with the total costs set at the dollar per kilowatt costs proposed by OTP in its Petition. (Department Alternative if Decision Option 4 is not adopted)

(The Commission may also select "a" with 8)

- a. Authorize OTP to request Commission approval to exceed the cost cap if it shows that any costs incurred above the cost cap are the result of a government action that causes meaningful disruption to solar panel supplies and market prices.
(Department)