STATE OF INDIANA

INDIANA UTILITY REGULATORY COMMISSION

APPLICATION OF INDIANA MICHIGAN POWER COMPANY, AN INDIANA CORPORATION, FOR APPROVAL OF 20 MW_{AC} CLEAN ENERGY SOLAR PROJECT; FOR APPROVAL OF RELATED ACCOUNTING AND RATEMAKING INCLUDING: TIMELY RECOVERY OF COSTS INCURRED DURING CONSTRUCTION AND OPERATION OF THE PROJECT THROUGH I&M'S BASIC RATES OR A SOLAR POWER RIDER, APPROVAL OF DEPRECIATION PROPOSAL, AND AUTHORITY TO DEFER COSTS UNTIL SUCH COSTS ARE REFLECTED IN RATES; AND FOR APPROVAL OF SALE OF RENEWABLE ENERGY CREDITS.	)	CAUSE NO. 45245

FILED
September 17, 2019
INDIANA UTILITY
REGULATORY COMMISSION

INDIANA MICHIGAN POWER COMPANY'S SUBMISSION OF PROPOSED ORDER

Indiana Michigan Power Company ("I&M"), by counsel, hereby submits the attached proposed order.

Respectfully submitted,

Teresa Morton Nyhart (14044-49)
Jeffrey M. Peabody (28000-53)
Barnes & Thornburg LLP
11 South Meridian Street
Indianapolis, Indiana 46204-3535
Nyhart Phone: (317) 231-7716
Peabody Phone: (317) 231-6465
Fax: (317) 231-7433
Nyhart Email: tnyhart@btlaw.com
Peabody Email: jpeabody@btlaw.com

Attorneys For
INDIANA MICHIGAN POWER COMPANY

CERTIFICATE OF SERVICE

The undersigned hereby certifies that a copy of Petitioner's Submission of Proposed Order was served by hand delivery and or email transmission upon the following this 17th day of September, 2019:

T. Jason Haas
Office of Utility Consumer Counselor
PNC Center
115 W. Washington St., Suite 1500 South
Indianapolis, Indiana 46204
infomgt@oucc.in.gov.
THaas@oucc.IN.gov

Jennifer A. Washburn
Margo Tucker
Citizens Action Coalition
1915 West 18th Street, Suite C
Indianapolis, Indiana 46202
jwashburn@citact.org
mtucker@citact.org

Jeffrey M. Peabody

Teresa Morton Nyhart (14044-49)
Jeffrey M. Peabody (28000-53)
Barnes & Thornburg LLP
11 South Meridian Street
Indianapolis, Indiana 46204-3535
Nyhart Phone: (317) 231-7716
Peabody Phone: (317) 231-6465
Fax: (317) 231-7433
Nyhart Email: tnyhart@btlaw.com
Peabody Email: jpeabody@btlaw.com

Attorneys For
INDIANA MICHIGAN POWER COMPANY

DMS 14847713v1

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	)	**APPROVED:**

ORDER OF THE COMMISSION

Presiding Officers:
David E. Ziegner, Commissioner
Jennifer L. Schuster, Administrative Law Judge

On June 12, 2019, Indiana Michigan Power Company ("I&M" or "Company") filed its Verified Application with the Indiana Utility Regulatory Commission ("Commission") for approval of a 20 megawatt $(MW)_{AC}$ Clean Energy Solar Project, referred to as the South Bend Solar Project or "SBSP") and for associated accounting and ratemaking relief and sale of renewable energy credits ("RECs") as further detailed below. I&M also filed its case-in-chief on June 12, 2019.

On June 18, 2019 the Citizens Action Coalition of Indiana, Inc. ("CAC") filed its petition to intervene, which petition was granted by docket entry dated June 24, 2019. On June 27, 2019, I&M, the Indiana Office of Utility Consumer Counselor ("OUCC") and CAC filed a stipulation and agreed procedural schedule and associated terms in lieu of prehearing conference, which agreement was approved by docket entry dated June 27, 2019. On July 2, 2019, the OUCC filed a Motion to Dismiss or in the Alternative, Motion to Stay Proceeding ("OUCC Motion"), which I&M opposed. By docket entry dated July 3, 2019, the Commission requested information from I&M, which information was provided on July 12, 2019. The OUCC Motion was granted in part and denied in part by docket entry dated July 25, 2019.

On August 12, 2019, the OUCC filed its case-in-chief. CAC did not file testimony. On August 26, 2019, I&M filed its rebuttal evidence. Pursuant to notice as required by law, proof of which was incorporated into the record, a public hearing in this Cause was held on September 9, 2019, at 9:30 a.m. in Room 222, PNC Center, 101 W. Washington Street, Indianapolis, Indiana. Counsel for I&M, the OUCC and CAC appeared and participated at the hearing. At this time, evidence was admitted to the record and cross-examination was waived by the parties. Following the hearing, the parties filed post-hearing proposed orders and briefs in accordance with an agreed procedural schedule.

Based upon applicable law and evidence presented, the Commission finds:

1. Notice and Jurisdiction. Due, legal, and timely notice of the evidentiary hearing in this Cause was given and published by the Commission as required by law. Petitioner is a "public utility" under Ind. Code § 8-1-2-1 and an "energy utility" as defined in Ind. Code § 8-1-2.5-2. I&M is an "eligible business" as defined in Ind. Code § 8-1-8.8-6. I&M is subject to the jurisdiction of the Commission in the manner and to the extent provided by the Public Service Commission Act, as amended, and other pertinent laws of the State of Indiana. The Commission has jurisdiction to approve financial incentives for clean energy projects under Ind. Code § 8-1-8.8-11. Accordingly, the Commission has jurisdiction over Petitioner and the subject matter of this proceeding.

2. Petitioner's Characteristics and Business. I&M, a wholly-owned subsidiary of American Electric Power Company, Inc. ("AEP"), is a corporation organized and existing under the laws of the State of Indiana, with its principal office at Indiana Michigan Power Center, Fort Wayne, Indiana. I&M is engaged in, among other things, rendering electric service in the States of Indiana and Michigan. In Indiana, I&M provides retail electric service to approximately 468,000 customers.

3. Relief Requested. I&M requests the Commission to approve the Company's proposal to construct, own and operate a single site, 20 MW_{AC} name plate capacity solar facility. The facility will be located east of South Bend, Indiana in close proximity to the University of Notre Dame. This project is referred to as the "South Bend Solar Project" or "Project". In accordance with Ind. Code § 8-1-8.8-11, I&M requests the Commission approve associated accounting and ratemaking treatment for the Project as discussed below. I&M and the University of Notre Dame ("Notre Dame" or "University"), an I&M customer, have entered into a 30-year agreement whereby I&M will designate to Notre Dame eight MWs of the renewable attributes of the South Bend Solar Project (representing 40% of the overall Project output). In exchange, Notre Dame will compensate I&M for the Renewable Energy Credits ("RECs") associated with 40% of the output of the Project. This arrangement furthers the University's sustainability goals in a manner that is beneficial to Notre Dame and I&M's other customers. I&M requests the Commission approve the sale of RECs. I&M will include the non-administrative fee revenues received through the sale of RECs in its fuel adjustment clause ("FAC") proceedings as a credit to ensure that all customers benefit on a timely basis from this arrangement.

4. The Parties' Evidence.

A. I&M's Case-in-Chief. I&M President and Chief Operating Officer, Toby Thomas described I&M's request for approval to construct, own and operate the South Bend Solar Project. He discussed the need for the Project as part of I&M's continuing actions, consistent with its Integrated Resource Plans ("IRPs"), to transition its generation portfolio to include more renewable energy, and as part of I&M's efforts to support the economic development of the communities it serves. Mr. Thomas also described the arrangements made with the Notre Dame to further its sustainability goals in a manner that is beneficial to Notre Dame and I&M's other customers.

1. Reasonableness of Project. Mr. Thomas explained that I&M's interest in solar power arises from many reasons. Thomas, p. 5. He said I&M supports the use of solar energy as a means for creating a diverse portfolio of generating resources. He testified that solar energy is emerging as a generating resource of increasing efficiency and heightened public interest that will become a more significant resource as installation costs for universal solar generation continue to decline and as utilities diversify their generation portfolios. He added that it is important to I&M, as a company that embraces the change toward solar energy in a logical, progressive and disciplined manner. *Id.*

Mr. Thomas explained that although solar generation is an intermittent energy resource, it provides a zero-carbon source of electricity that can further diversify I&M's generation portfolio, which now consists of coal, nuclear, solar, wind and hydro generation. *Id.*

Mr. Thomas also stated that I&M's customers are increasingly interested in, and demanding of, the use of more renewables to meet their needs. *Id.* at 6-7. He said the availability of renewable energy is an important element of I&M's efforts to attract and retain customers. *Id.* Mr. Thomas said that adding a modest amount of solar energy to I&M's generation portfolio at this time allows I&M to meet customer expectations with a relatively small impact on customers' overall electricity bills. *Id.* at 6. He said it also provides I&M with the opportunity to continue the education of I&M's customers about renewable energy. In addition, Mr. Thomas explained that the generation of solar power encourages further development of solar technology, which continues to evolve into a more competitive, efficient technology. *Id.* at 6. Mr. Thomas explained that I&M and its customers benefit from the inclusion of renewable resources in a manner that balances the slightly higher cost of that power with the benefits of further diversification, the "home grown" location of supply, and demand from customers for utilities to use more renewable resources. *Id.* at 6-7.

Mr. Thomas testified that the Company is interested in serving customers in the manner in which they want to be served. He said that for years, wind energy has been a more economical renewable energy resource than solar, but recent advancements in technology have allowed gains in the efficiency and cost-effectiveness of solar energy. He said, I&M has gained valuable experience with the Clean Energy Solar Pilot Project construction and operation, following the Commission's approval in Cause No. 44511 and the SBSP will enable I&M to become more proficient in operating solar generation and integrating it reliably into the PJM transmission grid. Mr. Thomas stated that as solar power continues to grow as an energy resource, I&M needs to

take its expertise to the next level and the SBSP will help I&M continue to develop the skills and ability to safely, reliably and efficiently operate universal solar facilities. Thomas Direct at 9.

Mr. Thomas showed that SBSP is consistent with I&M's IRPs. Thomas Direct at 9. He testified that the increased efficacy of solar is evidenced in I&M's IRP and its selection of solar as a supply-side resource to be added in significant quantities going forward. He said I&M's request in this Cause is consistent with achieving the Preferred Portfolio Resource mix set forth in the Company's 2015 IRP, which identified annual solar nameplate capacity additions totaling 350 MWs by 2030 and 600 MWs by 2035. He said the 2015 IRP specifically identified 20 MWs of new solar capacity in 2020, which aligns with the solar capacity amount requested for approval in this filing. He clarified that these amounts are in addition to the 15 MWs of solar capacity approved in Cause No. 44511 (Clean Energy Solar Pilot Project). Mr. Thomas also explained that I&M's Preferred Portfolio Resource plan for the 2019 IRP includes additional solar resources that exceed the amounts identified in the 2015 IRP. Thomas Direct at 10. Mr. Thomas added that while the IRP is subject to change if circumstances change over time, it is clear that solar energy will be part of the energy equation going forward and it is important that I&M be skillful at integrating solar into its generation portfolio, at both universal and distributed generation levels. *Id.* at 9. Mr. Thomas testified that to efficiently achieve 350 MW of installed solar investment by 2030, I&M needs to begin planning and installing resources in the near future. *Id.*

Mr. Thomas explained the benefits to I&M and its customers from I&M-owned solar generation include: obtaining cost efficiency through the deployment of larger scale solar resources; exercising quality control over construction, operation, and maintenance of solar projects; utilizing the Company's experience in operating existing generation assets for the benefit of operating new solar generation projects likely to be built going forward; locating utility-owned solar photovoltaic facilities close to load centers, which, when located strategically, could reduce the need for energy delivery infrastructure development; providing support for meeting summer peak loads; contributing to meeting I&M's PJM capacity obligations; lowering I&M's variable cost of fuel by displacing fossil-fired generation; and obtaining investment tax credits ("ITC"). Thomas Direct at 10-11.

Mr. Thomas testified that solar energy is well suited for utility ownership because the systems can be installed quickly as compared to other types of generation resources. *Id.* at 11. He stated that the various solar energy technologies themselves are more mature, and costs have come down making solar systems more economically attractive. *Id.* Mr. Thomas added that these systems are the most geographically versatile of the universal generation technologies as they can be designed to consider various shapes and sizes of available land, can be located in the Company's distribution system where feeders are close to capacity or where transmission congestion may be an issue, and can also be scaled to meet the resource needs of the area in which they are situated. *Id.*

Mr. Thomas also testified that the SBSP will provide diversification of I&M's renewable portfolio that today consists primarily of Power Purchase Agreements ("PPA") to include utility owned renewable resources. *Id.* He added that rating agencies currently impute debt related to PPAs. *Id.* He said that with no corresponding equity, the mere signing of a PPA may weaken the

Company's credit profile. He explained conversely, ownership of solar assets, such as proposed by I&M, will allow I&M to finance the program with a mixture of both debt and equity, which will maintain the Company's financial health. *Id.*

Mr. Thomas explained that renewable energy projects, such as the SBSP, support the economic development of the communities in which I&M serves. Thomas Direct at 12. He stated that many customers these days are seeking to meet their energy needs with a greater percentage of renewable energy. *Id.* Mr. Thomas stated that to meet customers' needs in this area, I&M is implementing a strategy to offer customers the opportunity to participate in solar projects that are visible in the local community, encourage economic development, provide value to all customers, and create partnerships with customers committed to a sustainable energy future. *Id.* at 12-13. Mr. Thomas identified the Notre Dame arrangement (discussed below) as the first example of such a partnership. *Id.*

2. Project Cost. Mr. Joseph G. DeRuntz, Project Director with AEP Service Corporation ("AEPSC"), explained the project management and technical aspects of I&M's proposed SBSP. Mr. DeRuntz discussed: 1) I&M's experience with solar energy projects and technology; 2) a general overview of the Project; 3) the Engineering, Procurement and Construction ("EPC") request for proposals ("RFP") process and contract; 4) the estimated capital costs for the Project; 5) the Project schedule, including major milestones; and 6) the operation and maintenance of the Project.

I&M witnesses Thomas and DeRuntz explained that I&M seeks approval to invest approximately $37 million through 2020 to develop the SBSP. Thomas Direct at 4; DeRuntz Direct at 10-12. The cost of the solar installation is based on a competitive procurement process, with expected issuance of a notice to proceed to the EPC contractor in April 2020 and project construction to start in or around May 2020. Thomas Direct at 4; DeRuntz Direct at 13. As stated by Mr. Thomas, this schedule ensures the Project will qualify for the 26% federal investment tax credit available to projects that begin construction in 2020. Thomas Direct at 4; DeRuntz Direct at 13.

Mr. DeRuntz testified that based on the competitive bidding process used, the geographical location requirements, and the solar insolation available, the Project cost is reasonable. DeRuntz Direct at 13. He explained that the RFP process resulted in a solar facility cost of $1,270/kW. He stated that considering the location, the land cost at $21,500/acre is reasonable and will retain if not increase in value during the life of the Project. He stated that the 34.5 kV connection is a distribution-sized line, which reduces the connection costs. He explained that the combined solar facility and land cost of $1,838/kW and first year production of 36,787 MWh/year yield a levelized cost of energy ("LCOE") of $82.38/MWh, for the 30-year life of the Project. He said the solar facility's expected capacity factor of 20.6% reflects the solar resource profile in northern Indiana. He added that this expected capacity factor is stipulated in the EPC contract, which imposes liquidated damages, if the contractor fails to achieve the contract capacity. Mr. DeRuntz stated that any increase in actual facility capacity from the EPC contract capacity would only further benefit the Company's customers. *Id.* at 13.

Mr. DeRuntz testified that the estimated cost to operate and maintain the SBSP is $15/kW-year in 2018 dollars, escalating at 2% per year for the 30-year life of the facility. He said the estimate includes all material and labor needed to perform routine preventative and corrective maintenance, including inverter maintenance and added that the estimated annual operating and maintenance ("O&M") expense compares favorably with I&M's experience managing and operating its four Pilot Project sites, scaled to account for the economies associated with a single 20 MW_{AC} solar facility. DeRuntz Direct at 15.

3. <u>Accounting and Ratemaking</u>. Mr. Brent E. Auer, I&M Regulatory Analysis & Case Manager, explained I&M's requested accounting and ratemaking treatment for the proposed SBSP. Mr. Auer discussed I&M's proposed Solar Power Rider ("SPR"), which provides for timely recovery of the SBSP costs. In addition, he explained how REC sales will reduce the cost of service for all I&M customers. Finally, he discussed how this proceeding works in conjunction with I&M's base case filed on May 14, 2019 in Cause No. 45235.

I&M witness Auer stated that I&M is requesting the Commission approve the SPR tariff to allow for timely cost recovery of the SBSP, including depreciation expense, carrying costs on the post in-service investment, income and property taxes, O&M costs and gross revenue conversion factor ("GRCF") costs. *Id.* Mr. Auer discussed the extent to which the cost recovery will also be reduced by the amortization of the ITC associated with the SBSP. *Id.* at 3-4, 7-8. He explained that I&M requests the Commission to authorize the depreciation of the South Bend Solar Project over a period of 30 years, which represents the expected life of the facility. *Id.* at 4, 6-7; DeRuntz Direct at 13, 15. Mr. Auer discussed the accrual of allowance for funds used during construction and explained that carrying costs to be recovered in the Solar Power Rider will be computed by applying I&M's pre-tax weighted average cost of capital ("WACC") to I&M's investment when the solar project is placed into electric plant in-service. Auer Direct at 4-5, 8. Mr. Auer testified that for the SPR, the return on equity portion of the WACC will utilize the rate approved by the Commission in I&M's most recent base case. *Id.* at 4. He said GRCF costs will be calculated consistent with the methodology approved by the Commission for I&M's current riders. *Id.* Mr. Auer stated that I&M proposes to include the O&M costs associated with operating and maintaining the SBSP and property tax expense within its SPR if it becomes necessary to file SPR rates. *Id.* at 8-9. He explained that cost recovery through the SPR will be subject to reconciliation to actual costs. *Id.* at 4, 9. He said I&M proposes to perform traditional over/under-recovery accounting consistent with I&M's current rider reconciliations. *Id.* He said, I&M also requests authority to create a regulatory asset to defer any costs associated with the SBSP until they are recovered through the ratemaking process, either through the SPR or base rates. *Id.* at 4, 6.

Mr. Auer clarified that I&M seeks approval of the timely cost recovery and the associated Solar Power Rider, but the initial Rider factors will be zero. *Id.* at 9, 11; Attachment BEA-2. He noted that I&M filed a base case pending before the Commission as Cause No. 45235. *Id.* at 10. He explained that if cost recovery and rates are established in the base case proceeding and the SBSP project is placed into service prior to December 31, 2020, then I&M will not need to make an SPR filing to establish rates. *Id.* at 10; 12-13. He said the amount of plant in-service will be reflected in the Phase-in Rate Adjustment that is proposed in the base case filing. *Id.* at 10. He stated that an order in the base case is expected in the first or second quarter of 2020 and added

that if Cause No. 45235 does not address cost recovery or the SBSP is not placed into service on or before December 31, 2020, then I&M proposes to file its first SPR filing shortly after the SBSP project goes into service. *Id.* at 10. Mr. Auer said those rate factors would be based upon the forecasted costs for the following twelve-month period and thereafter, I&M proposes to file SPR proceedings on an annual basis. *Id.* He explained that the form and content of these filings (*i.e.* schedules) will be consistent with previous SPR filings that occurred under Cause No. 44511. Mr. Auer stated that I&M proposes to reflect the authorized return (also referred to herein as the post in-service carrying costs) on the SBSP from its most recent SPR Order in determining the total authorized net operating income level to be utilized in the I.C. 8-1-2-42(d)(3) earnings test. *Id.* at 10-11. Mr. Auer stated that the requested ratemaking treatment will continue until the SBSP is included in rate base in a proceeding that involves the establishment of I&M's basic rates and charges. Mr. Auer estimated a year one rate impact under a SPR filing of 0.17% if the SBSP is not reflect in rates established in Cause No. 45235. *Id.* at 11.

4. **RECs**. Mr. Thomas and Mr. Auer explained that I&M and Notre Dame have engaged in lengthy and arms-length discussions and worked together to create an agreement that supports Notre Dame's environmental values and goals. Thomas Direct at 13; Auer at 11-12. Mr. Thomas testified that under a 30-year agreement, I&M will provide educational opportunities for Notre Dame's students and faculty, jointly create an awareness campaign for the community, and provide Notre Dame with naming rights for the Project. In exchange, Notre Dame will compensate I&M for Renewable Energy Certificates (RECs) in an amount based on 40% of the output of the Project. Thomas Direct at 13; Auer at 12.

Mr. Thomas testified that I&M proposes to use a variable rate approach over the 30 years of the agreement. *Id.* at 13. He said the REC compensation will be based upon the S&P Global Energy Credit Index for a New Jersey Class 1 Renewable Energy Certificate, plus a 20% program administrative fee. For example, if the current market price for a PJM Class 1 REC is $6.00, a 20% administrative fee would result in a REC price of $7.20 ($6.00 + (.20 * $6.00)). He stated that under this approach, the REC compensation will be reset annually in January based upon the average New Jersey Class 1 REC price for the prior calendar year. Mr. Thomas added that this compensation (excluding program administrative fees) will be used to offset the cost of the Project for the benefit of all of I&M's customers. *Id.*

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Mr. Thomas said I&M anticipates that other customers within I&M's footprint may be interested in a similar arrangement to meet their needs by procuring RECs. *Id.* at 14; Auer at 12. Mr. Thomas explained that while discussions with other customers have not progressed to the point the Company has reached with Notre Dame, I&M's IM Green Rider (IMG) proposal in Cause No. 45235 includes a contract option to address this potential demand. He stated that under this option, I&M could enter into a multi-year agreement with a customer under which the customer would compensate I&M for a portion of the monthly energy generated by a renewable energy project, such as the SBSP. He said the monthly sale price would be determined by the number of RECs produced by the facility and a set annual price for each REC, as described above, and a negotiated administrative fee. Thomas Direct at 14-15. He stated that each month, the customer will be billed for their portion of the RECs and contract amounts. He said I&M, in turn, will retire the RECs on behalf of the customer. He added that in this manner, interested

customers would essentially become sponsors of the SBSP and be able to demonstrate their individual support for solar energy. *Id.* at 14.

Mr. Thomas and Mr. Auer testified that the compensation for the RECs (excluding program administrative fees) will be flowed through the FAC, which will provide a timely credit to all customers for the revenue received and thus reduce the fuel rates charged to all customers. Thomas Direct at 14; Auer Direct at 12. He stated that this proposal is consistent with the current practice of using the FAC as a vehicle to flow net proceeds from the Company's voluntary Renewable Energy Option to customers. Mr. Thomas added that this will allow for timely reflection of the associated credits in customer rates without needing to file separate docketed proceedings in the future. Thomas Direct at 15.

Finally, Mr. Thomas explained that any RECs not subscribed to by customers will be maintained and counted toward I&M's compliance with RPS (Renewable Portfolio Standard) or GHG (Green House Gas) regulations to which it is, or may be, subject. Regardless of any future RPS or GHG mandates, receiving the RECs helps voluntarily reduce GHG emissions per megawatt hour.

B. OUCC's Case-in-Chief. Ms. Lauren M. Aguilar, Utility Analyst in the OUCC Electric Division, Mr. John E. Haselden, Senior Utility Analyst in the OUCC Electric Division and Mr. Wes Blakley, Senior Utility Analyst in the OUCC Electric Division, testified in support of the OUCC's recommendation to deny I&M's request to construct, own and operate the 20 MW SBSP.

1. Reasonableness of Project. Ms. Aguilar discussed her evaluation of the issues, noted that the OUCC supports renewable generation facilities that are reasonable, necessary and cost-effective and discussed Ind. Code § 8-1-2-0.5. Public's Ex. 1 at 1-4. Ms. Aguilar opined that I&M did not meet its burden of proof because its testimony discussed the agreements underlying the SBSP but did not copies of them. *Id.* at 5. Rather I&M provide unexecuted copies of the documents in the discovery process. *Id.* at 6-7. She testified that the OUCC cannot base its analysis on unexecuted draft agreements, as the terms may change before execution and the OUCC's opinion on the draft document may influence the parties' relationship in an unforeseen way. *Id.* at 7-8, also 10. Ms. Aguilar also explained her view that the Company's case-in-chief included uncertainties and misrepresentations, citing the use of two documents, rather than one, to memorialize the overall agreement between I&M and Notre Dame and the absence of the words "naming rights" in the draft agreements. *Id.* at 8-9, 16. She contended that Mr. DeRuntz's statement that "Negotiations with the selected bidder were completed on May 2, 2019" was a misrepresentation because the contract document was still under negotiation at this time. *Id.* at 10.

Ms. Aguilar contended that I&M's evidence did not sufficiently support the reasonableness of the SBSP. *Id.* at 15-16. She testified that the Company's responses to numerous discovery requests, including the unexecuted draft agreements, failed to provide support for its supposed public benefits and do not support all claims made by I&M in its case-in-chief; leaving the OUCC and the Commission at a severe informational disadvantage in trying to analyze the reasonableness and necessity of this proposed Project. *Id.* at 15, also 12-14;

Attachment LMA-1. She said the OUCC recommends I&M's requested relief be denied and added that should the Commission approve the SBSP, the approval should be conditioned on the recommendations of OUCC witnesses Haselden and Blakley. *Id.* at 16.

Mr. Haselden discussed his concerns about the role the SBSP may play in providing an opportunity to learn about renewable energy and the role the SBSP may play in offering customers the opportunity to participate in visible, local solar projects and encourage economic development. *Id.* at 8-9. He questioned whether the project would satisfy the requirements of corporate customers that subscribe to the Corporate Renewable Energy Buyer's Principles. *Id.* at 9-10, 20-21. He stated that I&M provided no concrete evidence that the presence of the SBSP will spur companies to move to this region. *Id.* at 9-10.

2. Project Cost. Mr. Haselden discussed his view that the SBSP is unreasonably expensive compared to responses to a recent NIPSCO RFP and other reference points for the LCOE of utility-scale solar, and not in the interest of ratepayers as proposed. Public's Exhibit 2 at 1, 16-17, 21. He explained his concerns about the role the SBSP plays in fulfilling I&M's 2015 and 2019 IRPs and testified that the project would not represent a meaningful diversification of I&M's generating portfolio. *Id.* at 4-8. He testified that I&M customers should not be required to pay for the project at a cost higher than I&M modelled in its most recent IRP and should arguably be lower and comparable to current market conditions. *Id.* at 4-6. He stated that I&M was demonstrating an inability to function in a manner that retains flexibility as noted in the Commission's order in Cause No. 45052. *Id.* at 6.

He said his primary concerns about I&M's direct ownership of the SBSP are related to initial costs, treatment of federal tax incentives in I&M's proposed ratemaking treatment, ongoing O&M costs and O&M risks. *Id.* at 9-10. He stated that compared to alternatives such as a PPA, there are significantly more costs and risks borne by ratepayers, including risk associated with cost, cost overruns, O&M, federal tax incentives and uncertainty surrounding I&M's history concerning the ability to monetize tax credits and the tax effects of accelerated depreciation. *Id.* at 9-16. Mr. Haselden pointed to the transformer failure at I&M's Deer Creek solar facility as an example of ownership risk and cited the cost incurred to address the Deer Creek issue as an example of the magnitude of the O&M risk if something goes wrong. *Id.* at 11-12. Should the project be approved, Mr. Haselden recommended the Commission cap cumulative O&M expenses. *Id.* at 22.

Mr. Haselden explained that to date, I&M has been unable to take advantage of the federal ITC and tax accelerated depreciation tax benefits associated with its four solar projects approved in Cause No. 44511 and added that the Company has been deferring the ITC and may be able to begin amortizing deferred ITCs for these projects at some future date.

Mr. Haselden presented his calculation of the LCOE for the SBSP if the Company is not able to take advantage of the ITC in a timely manner and to correct what he viewed as an I&M mistake in the property tax calculation. *Id.* at 13-15.

Mr. Haselden noted that Notre Dame will pay a 20% fee to cover customer specific aspects of the arrangement, and testified that to the extent administrative costs are greater than

the fees collected from Notre Dame, I&M customers should not be required to pay the excess costs. *Id.* at 21, 22.

Mr. Haselden considered the land purchase to be imprudent and said similar projects of this type would be located in more rural areas and closer to the receiving substation. *Id.* at 5, 17. He recommended the cost of the land not be included for cost recovery due to the image building nature of the cost. *Id.* at 17, 22.

He testified that although the OUCC supports the development of renewable resources, he recommended the Commission deny recovery of the SBSP costs in the manner I&M requests. Public's Ex. 2 at 1, 21. Mr. Haselden offered recommended conditions and an alternative method of cost recovery should the Commission decide to approve the Project including the above referenced cap on O&M cost recovery and a limitation on the per kWh cost recovery based on the value I&M used to model solar in its most recent IRP. *Id.* at 1-2, 22.

3. Accounting and Ratemaking. Mr. Blakley addressed I&M's requested accounting and ratemaking treatment. Public's Exhibit 3. He stated that based on the testimony of OUCC witnesses Aguilar and Haselden, the OUCC recommends the Commission deny I&M recovery of the SBSP. *Id.* at 6. He added that if the Commission allows I&M to recover costs associated with the SBSP, a renewable energy project rider, which I&M proposes in the form of the SPR, best accomplishes this. *Id.* at 2, 6. He stated that if renewable energy projects are blended into a utility's rate base, the OUCC is concerned that the Commission and the OUCC will lose valuable cost information regarding different generating technologies or between different renewable energy projects and referenced the settlement agreement approved in Cause No. 44734 as providing the type of information that could be valuable to the Commission and the OUCC. *Id.* at 3-4. Mr. Blakley discussed the benefits of tracking renewable energy projects and explained that cost recovery through a tracker strikes an appropriate balance between providing a customer benefit in the form of an annual reduction in revenue requirement, while also not harming I&M because the return "on" and "of" will still be matched with its renewable plant investment. *Id.* at 6. He added that in the future such a rider could be used for the recovery of other specific renewable energy projects where cost recovery treatment is requested and approved. *Id.*

4. RECs. Mr. Haselden discussed the proposed treatment of the RECs generated at the SBSP and I&M's RECs portfolio. *Id.* at 18-19. He recommended monetizing all unused RECs in the market and crediting of proceeds through the SPR or FAC. *Id.* at 19-20, 22.

C. I&M Rebuttal Evidence.

1. Reasonableness of Project. Mr. Thomas testified that the OUCC's recommendations are contrary to the State's energy policy, which not only supports the orderly deployment of renewable energy, but specifically encourages the very kind of project I&M is proposing here. He said the OUCC's recommendations would turn Indiana's "all-of-the-above" approach to energy into a shortsighted analysis that ignores the intangible merits of adding renewables to I&M's generation portfolio. He stated that the OUCC's recommendations would harm customers, the Company and the communities in which I&M provides service, and

explained that the OUCC's conclusion that this project was developed for and only benefits the University of Notre Dame is simply wrong. Thomas Rebuttal at 2-3, 4-5.

Mr. Thomas disagreed with the OUCC view of the impact of the project on customers. He testified that economic development is an important element of the filing because it is essential to increase the amount of load over which I&M's fixed costs of service can be recovered. He stated that I&M's load over the past decade has been flat or declining for a number of reasons, which puts upward pressure on rates. He added that while I&M has worked hard to control the costs of serving customers, it is important to also grow load as a means of keeping rates reasonable for all customers. He stated that attracting new customers, who are increasingly interested in being recognized as being served by renewable resources located in close proximity, is an important part of achieving that goal. He also explained why the SBSP will be an important feature that attracts new customers who can keep rates lower for all customers. *Id.* at 4. He added that I&M's customers have numerous options to taking service from the Company such as self-generation, distributed generation, energy efficiency, and relocation, and explained that if I&M is unable to meet the customers' needs, the Company will fail to be able to provide service at reasonable rates. Mr. Thomas testified that if I&M is not allowed to transform its business in the way customers want, its business will decline and the costs of service will be spread over fewer and fewer units. Thus, it is in the interest of I&M's customers that the Company will be able to move forward into the new reality of the energy world by successfully serving its customers as they want to be served. *Id.* at 5-6.

Mr. Thomas explained why he disagreed with the OUCC suggestion that the policy of the State of Indiana does not differentiate between the review of large generation projects, such as recently proposed by NIPSCO and Vectren, and the small solar project being proposed in this case. He stated that the State expressly encourages projects like the SBSP and exempts them from the certificate of need requirements imposed on larger projects. *Id.* at 6. While he clarified that he was not suggesting that projects like the SBSP should receive "automatic approval", Mr. Thomas testified that the evaluation of a 20 MW solar facility encouraged by State policy should not be evaluated in the same manner as an 800 MW natural gas facility. *Id.*

John F. Torpey, AEPSC Managing Director – Resource Planning and Operational Analysis, responded to the OUCC testimony regarding I&M's IRPs. He testified that the OUCC's criticism fails to properly recognize that the IRP is a tool to help I&M's management make decisions about long-term resource planning and is not designed to model specific projects. Torpey Rebuttal at 3-4. He refuted Mr. Haselden's testimony regarding the impact of the Fifth Joint Modification to the Consent Decree and Rockport Unit 2 lease on I&M's capacity needs. He testified that regardless of when the Rockport Unit 2 lease terminates, I&M will face a capacity gap of approximately 500 MW and the 20 MW SBSP is a modest step towards closing that gap. *Id.* at 5.

Mr. Torpey also disagreed with Mr. Haselden's contentions regarding the cost of the SBSP compared to the cost assumed in I&M's current IRP. *Id.* at 5-7. Mr. Torpey testified that the 2018/19 IRP addresses a different timeframe, assumes larger installations than the current project and also assumes that solar resource cost will continue to trend downward during the future period modeled in the most recent IRP. *Id.* at 5-7. He noted that the SBSP was

competitively bid and therefore represents the market price for a project of its size. *Id.* at 5, 7. He stated that the 2015 IRP solar cost estimates are comparable to the estimated cost of the SBSP with a 2020 in-service date. *Id.* at 6. He added that as the SBSP estimate results from a competitive solicitation and compares favorably to the assumption used in the Company's 2015 IRP for a 2020 solar project of this size, this estimate corroborates the continued reasonableness of the Company's plan to add 20 MW of solar in 2020. *Id.* at 7. He also explained that the differing assumptions do not demonstrate the SBSP cost estimate is unreasonable. He testified that the current and prior IRPs reflect the addition of significant amounts of solar over the planning horizons and noted that as discussed by I&M witness Thomas, these resources, which will further diversify the Company's generation, are reasonably obtained through incremental additions and doing so maintains flexibility. *Id.* at 5-7.

Mr. Lucas responded to the OUCC's contention that the Company did not adequately support the Project in its testimony. He clarified the status and provided copies of the executed agreements for the SBSP and explained the process used to negotiate these agreements is consistent with the normal business practices for projects of this type. Lucas Rebuttal at 4-5. Mr. Lucas said the overall price and scope of work in the executed EPC Agreement is the same as provided in the draft agreement and summarized in the Company's case-in-chief. *Id.* at 6. Mr. Lucas responded to the OUCC's criticism and showed that the Company's direct testimony accurately represented all of the essential elements of the final executed agreements with Notre Dame. He added that the executed agreements are consistent with the discussion of pricing and other key terms reflected in the Company's case-in-chief. *Id.* at 6-22. Mr. Lucas discussed in detail why the SBSP benefits are not illusory or unsupported as suggested by the OUCC. *Id.* at 9. He also explained that the SBSP is not driven only by Notre Dame, discussed how the agreement with Notre Dame adequately safeguards against the concerns raised by the OUCC and refuted the idea that the SBSP, including its operational data, does not have education and research value. *Id.* at 9-14. Finally, Mr. Lucas explained that information I&M produced through the discovery process and the many conversations I&M has had with its customers, site selectors, and communities refute OUCC suggestion that communities do not want to differentiate themselves with regard to sustainability and climate change plans. *Id.* at 14-17. In other words, he showed that access to renewable energy is becoming an increasingly significant factor in economic development. *Id.* at 17-19.

Mr. Lucas also discussed the factors that have made I&M's existing programs difficult to market to customers and stated that the IM Green proposal in the Company's pending rate case will align costs with a market index and reduce the cost to participate. Lucas Rebuttal at 19-20.

2. <u>Project Cost</u>. Mr. DeRuntz and Mr. Lucas responded to the OUCC testimony regarding the Project cost estimate with respect to the timing of the EPC contract execution. DeRuntz Rebuttal at 2-3; Lucas Rebuttal at 5-6. They explained that the Company's direct testimony was based on the completed negotiations and the fully executed EPC contract reflected no change to the Project scope or costs. *Id.*

Mr. DeRuntz also addressed the OUCC's testimony regarding the Project cost and the LCOE. He and Mr. Auer explained that Mr. Haselden's LCOE reflected an incorrect treatment of property taxes. DeRuntz Rebuttal at 3; Auer Rebuttal at 8-9.

Mr. DeRuntz also testified that Mr. Haselden's analysis reflected a selective use of project cost and LCOE information from a NIPSCO 2018 IRP presentation, explaining in particular that the NIPSCO presentation reflected an average bid price for a total capacity of 669 MWs. He stated that a direct comparison of multiple projects totaling 669 MWs to a single 20 MW project is inappropriate, because the larger projects are less expensive due to the economies of scale. He also noted that the references in the NIPSCO presentation were labeled "Preliminary – Subject to Due Diligence" and had not been fully vetted whereas I&M had secured final EPC contract pricing for the SBSP. DeRuntz Rebuttal at 2-4.

Mr. DeRuntz also explained why a direct comparison of costs between solar projects does not always yield meaningful results, noting in particular, the impact of project size and geographical location. *Id.* at 4. He explained that Mr. Haselden's comparison of capacity factors between solar generating units is inappropriate and does not yield meaningful results because the projects have different degrees of insolation. *Id.* at 5. He added that even when the insolation is equal between two solar projects, capacity factor remains dependent on the number of solar panels installed. *Id.* at 5.

Mr. DeRuntz testified that while Mr. Haselden references only a single point out of the NIPSCO Presentation, the research in this same presentation produced a range of utility-scale solar build project costs from $1,155/kW - $2,370/kW. Mr. DeRuntz testified that Mr. Haselden did not mention this additional information and added that at $1,838.54/kW, the SBSP cost falls well within this range. *Id.* at 6.

Mr. DeRuntz pointed out that Mr. Haselden did not offer any criticism of the Company's use of a competitive bidding process for the SBSP and stated that Mr. Haselden's suggestion that the SBSP has not been optimized for energy output reflects the tradeoff between the cost of additional solar panels and a facility's capacity factor. Mr. DeRuntz testified that the Company was mindful of this tradeoff when it structured the Project's RFP and explained that by providing the desired nameplate capacity of the facility, with no restrictions on capacity factor or equipment configuration, the bidders were free to optimize their proposals to balance the cost of the facility with the energy output. He said evaluating the proposals based on LCOE resulted in the most cost effective solution for optimizing energy output. *Id.* at 7. Mr. DeRuntz stated that the interconnection cost is less than five percent of the total Project cost and thus disagreed with Mr. Haselden's claim that this cost is a significant portion of the total Project cost. *Id.* at 7-8.

Mr. DeRuntz responded to the OUCC concerns regarding "customer risks" associated with the Project's initial cost and ongoing O&M expense. *Id.* at 9-10. He explained that the transformer replacement at the Company's Deer Creek facility was an isolated capital expenditure, not an O&M expense. He added that the type of transformer that failed at Deer Creek will not be used for the SBSP. He explained that the Company's Clean Energy Solar Pilot Project has provided valuable experience with owning solar generation, including lessons learned from Deer Creek's transformer failure. He stated that by installing a variety of equipment and technology at the four different Pilot facilities, the Company gained the experience needed to make an informed decision to replace the unreliable transformer at Deer Creek with the type installed at the remaining three Pilot facilities, where the equipment has been reliable. Mr.

DeRuntz stated that with the exception of the transformer failure at Deer Creek, the Company has only invested $29,000 in its four Pilot facilities since the first unit went into service in December 2015. He said the use of an isolated historical capital expenditure to justify limiting future O&M expense is not appropriate. *Id.* at 9-10.

Mr. DeRuntz addressed the benefits of owning the SBSP versus entering into a PPA as suggested by OUCC witness Haselden. *Id.* at 10. He said the many advantages to owning solar generation versus entering into PPAs include the Company's ability to: have control over operations over the life of the facility and be able to respond to market changes, which may not be possible under a PPA; have control over determining whether the facility's expected useful life could be extended or the site repowered; and take advantage of new or existing generation technologies when economically beneficial. *Id.* at 10.

Finally, Mr. Lucas responded to Mr. Haselden's criticism of the project location and land cost, showing among other things that I&M did not pay a premium for the land and the proximity and visibility attributes of the SBSP location near the Indiana Toll Road and one of the premier educational institutions in the country, are not isolated to I&M, but rather benefit the area as a whole. Lucas Rebuttal at 25.

3. <u>Accounting and Ratemaking</u>. Mr. Auer addressed OUCC witness Blakley's testimony and recommendation that that the SBSP costs be recovered in an annual renewable energy project rider that will provide detailed cost information and kWh generated during the relevant period. Auer Rebuttal at 2. He testified that I&M's proposal in this case is consistent with past practices of establishing a rider to initiate timely recovery and then incorporating those costs and plant in service balances into future base case proceedings. He said this was the case with I&M's Solar Power Rider that adjusted rates to recognize costs associated with I&M's Clean Energy Solar Pilot Project and added that if the project can be rolled into base rates, the additional work stream necessary to conduct rider filings for the life of the project would be avoided. *Id.* at 3. Mr. Auer explained that the OUCC testimony in I&M's previous base rate case supported a process that had fewer trackers and less frequent filings. *Id.* at 4.

Mr. Auer viewed the use of an annual rider filing to provide project performance data as inefficient and unnecessary and explained that I&M currently reports performance data as part of its annual collaborative performance metric reporting process, in which the OUCC is actively involved. He said I&M's most recent performance metric report, filed June 28, 2019, provides performance data for I&M's solar generating portfolio. He stated that collaborative meetings are held in advance of the submission of the annual performance report and this forum is an ideal and efficient place for parties to discussion renewable energy asset performance. *Id.* at 3.

Mr. Auer stated that I&M recommends that the Commission adopt the Company's proposal. He concluded that the OUCC's recommendation will increase administrative burden and is contrary to Commission practice. He added that the OUCC's desire for renewable energy performance data can be more efficiently addressed through I&M's existing performance metrics reporting process. *Id.* at 5.

Mr. Auer also explained why the Commission should not accept Mr. Haselden's recommendation to place a cap on O&M. *Id.* at 5-6. He explained that a certain level of maintenance activities will be required and planned in the future to maintain the SBSP in a state to provide reliable, efficient, cost effective generation. He stated that not all events and maintenance activities can be foreseen and testified that I&M needs to have the opportunity to recover the O&M costs incurred for providing service to customers. Referring to Mr. Haselden's discussion of the Deer Creek transformer failure, Mr. Auer said that utilizing one data point to say that O&M costs should be capped is unpersuasive. He concluded therefore, that the Commission should reject the OUCC recommendation to cap O&M costs. *Id.* at 5-6.

Mr. Auer also responded to Mr. Haselden's testimony regarding what the OUCC sees as risks associated with the ratemaking treatment of the federal ITC. Auer Rebuttal at 6. Mr. Auer explained that Mr. Haselden's concern is overstated for a couple of reasons. First, he explained that I&M is forecasting to be able to utilize ITCs in the future, beginning in 2019. In addition, ITC amortization associated with I&M's solar generation plants has been included in base rates in pending Cause No 45235. Second, he testified that if there is a year(s) in the future where AEP does not have sufficient taxable income to utilize the ITCs, I&M will amortize that year's ITC amount over the remaining life of the asset. In other words, the ITC will be an offsetting component of the revenue requirement for the life of the facility. *Id.* Finally, Mr. Auer clarified that AEP expects to have sufficient taxable income in both 2019 and 2020 to begin amortizing prior year's deferred ITC related to solar projects. He added that I&M expects to be able to utilize the ITC for the SBSP assuming it is completed prior to the end of 2020. *Id.* at 7.

Mr. Auer also addressed the OUCC position regarding the treatment of the ITC if the project is placed into base rates. *Id.* at 7. He explained that if the project is placed into base rates, in subsequent years, the Company will reflect the benefits associated with the Accumulated Deferred Federal Income Tax (ADFIT) related to accelerated depreciation at a zero cost of capital in the Company's capital structure. He explained that this serves to reduce the overall cost of capital for revenue requirement calculations regardless of whether recovery occurs through base rates or through a rider. *Id.*

4. <u>RECs</u>. Mr. Auer explained that the Company's proposed treatment of RECs generated from the SBSP is not unclear. He stated that it is the intent of I&M and Notre Dame that 40% of the RECs generated by the SBSP will be sold to Notre Dame and pointed to the executed agreement as confirmation. Auer Rebuttal at 10-11. Mr. Auer also confirmed that proposal to use the compensation (excluding the program administrative fees) from Notre Dame to offset the cost of the project for the benefit of all of I&M's customers, explaining the compensation received from Notre Dame will be flowed through the FAC, which will provide a timely credit to all customers for the revenue received and thus reduce the fuel rates charged to all customers. *Id.* at 11.

Mr. Auer also explained why he found Mr. Haselden's apparent support for selling RECs from the SBSP to be at odds with what he understood to be the OUCC's general view on renewable energy. *Id.* at 11. He said mandating that I&M monetize (sell) RECs in the open market would not be in the best interest of customers and explained that by not monetizing unsubscribed RECs (RECs not sold to Notre Dame or to customers through the Renewable

Energy Option or Green Power Rider), I&M and its customers are able to recognize that certain amounts of generation and energy consumption are carbon free. He said I&M's customers expect and I&M is committed to providing a diversified mix of energy resources that includes renewable energy. He stated that the SBSP, along with I&M's other renewable resources, helps meet this expectation and commitment. He added that if I&M were to monetize the unsubscribed RECs, then I&M and its customers would no longer be able to make a claim that part of their generation came from carbon free energy sources. He stated that when RECs are sold, the right to claim the environmental attributes is sold as well. *Id.* at 11-12.

Mr. Auer testified that in the case for Notre Dame, I&M will sell RECs to Notre Dame and I&M will retire them on Notre Dame's behalf. He said, this provides Notre Dame with the ability to recognize that they are using green energy. He explained that this proposal is unlike the OUCC proposal to sell RECs on the open market, which may result in I&M and its customers being unable to claim green energy generation and usage. He also clarified that with respect to the sale of RECs, it is important to recognize that I&M cannot actually sell SBSP RECs *into* the Pennsylvania or New Jersey market as a solar REC but rather has looked outside the state for the pricing of RECs under the GPR and Notre Dame Agreement because Indiana does not have a market supported by a Renewable Energy Portfolio Standard. *Id.* Mr. Auer added that retiring RECs on Notre Dame's behalf, means that the benefit of green energy will remain in Indiana. *Id.* at 12-13.

Mr. Auer explained that Mr. Haselden grossly overstated the value of I&M's RECs in inventory because his analysis erroneously assumes that RECs with a vintage date of 2019 are equal in value to those with earlier vintage dates. He said RECs that are produced today have a greater market value than RECs produced several years ago. *Id.* at 13. Finally, Mr. Auer responded to Mr. Haselden's reference to the "higher cost of solar RECs approved in Cause No. 44511", by clarifying that the value in I&M's current Green Power Rider is inflated by over 50% due to the inclusion of marketing costs as proposed by the OUCC in that Cause. *Id.* at 14.

Mr. Auer stated that as I&M works with Notre Dame to provide educational prospects, research opportunities, sharing of information, signage, etc., Notre Dame will pay a 20% administrative fee to cover the customer specific aspects of the arrangement. Mr. Auer clarified that if in any year the costs incurred due to this arrangement with Notre Dame exceed the amount of the 20% administrative fee that I&M collects, I&M will not seek recovery of those excess costs from other customers. *Id.* at 14.

Finally, Mr. Auer explained why I&M does not agree with Mr. Haselden's proposal that the Commission impose a fixed price per kWh for recovery through the SPR. *Id.* at 15. Mr. Auer testified that at Mr. Haselden's proposed $50/MWh, in the early years of the project, I&M would not be recovering its revenue requirement due to the high undepreciated value of the solar facility. He added that this is true for any plant investment and this ratemaking construct would significantly disadvantage and serve as a disincentive to a utility from making such investments to serve customers. Mr. Auer noted that Mr. Haselden's proposal is in direct conflict with the testimony of OUCC witness Blakley that "[c]ost recovery through a tracker strikes an appropriate balance between providing a customer benefit in the form of an annual reduction in revenue requirement, while also not harming I&M because the return "on" and "of" will still be

matched with its renewable plant investment." *Id.* at 15. Mr Auer also explained that Mr. Haselden's fixed $50/MWh proposal also assumes that a certain level of production from the SBSP is achieved. Mr. Auer stated that this is unreasonable because events outside of I&M's control may impact SBSP production. He stated for example, an unpredictable amount of lake effect snowfall each year can impact the output of the solar facility and added that it is unreasonable to penalize I&M for matters that are outside of I&M's control. *Id.* at 16.

5. Discussion and Findings. Indiana Code § 8-1-8.8-11 provides that "[a]n eligible business must file an application to the commission for approval of a clean energy project" and that "[t]he commission shall encourage clean energy projects by creating [certain] financial incentives for clean energy projects, if the projects are found to be reasonable and necessary." As discussed below, substantial evidence shows, and we find, that the SBSP meets the definition of a "clean energy project" and is eligible for financial incentives.

A. CPCN under Ind. Code 8-1-8.5. A certificate of public convenience and necessity ("CPCN") is not required for the SBSP. Indiana Code § 8-1-8.5-7 contains an exemption from the requirement to obtain a CPCN for public utilities that install a clean energy project that is approved by the Commission and uses a clean energy resource with a nameplate capacity of 50,000 kW or less, given that the utility uses a contractor in the engineering, procurement, or construction of the project that is subject to Indiana unemployment taxes and is selected by the public utility through bids solicited in a competitive procurement process. I&M witness DeRuntz discussed the Company's competitive procurement process and the Company's selection of an EPC contractor for the Project. The record shows the facility being installed utilizes a clean energy resource, has a nameplate capacity of not more than 50,000 kW and uses an Indiana contractor who is subject to Indiana unemployment taxes and was selected through a competitive procurement process. The Company submitted the draft EPC contract in response to the Commission's July 3, 2019 docket entry and the executed EPC contract was included with Mr. Lucas' rebuttal testimony (Attachment DAL-2R and 2C). Thus, we find the SBSP falls within the statutory exemption and therefore a CPCN under Ind. Code 8-1-8.5 is not required.

B. Clean Energy Project. The SBSP is a 20 MW_{AC} solar facility that I&M proposes to build, own, and operate near South Bend, Indiana. The facility is designed to use thin film solar panels with single axis tracking supports and will be electrically interconnected to PJM through a 34.5 kV line. Thomas Direct at 3; DeRuntz Direct at 6. "Solar energy" is specifically listed as one of the clean energy resources in Ind. Code § 8-l-37-4(a) (l) through Ind. Code § 8-l-37-4(a) (l6), thus making it a "renewable energy resource" under Ind. Code § 8-1-8.8-10. Thomas Direct at 7. There is no dispute that I&M is a "public utility" within the meaning of Ind. Code § 8-1-2-1, a "utility" within the meaning of Ind. Code § 8-1-2-6.8, an "energy utility" within the meaning of Ind. Code § 8-1-2.5-2, and an "eligible business" within the meaning of Ind. Code § 8-1-8.8-6. There is also no dispute that the SBSP constitutes a "clean energy project" under Ind. Code § 8-1-8.8-2(2) and we so find.

C. Estimated Cost. The record reflects that the SBSP is a single site, 20 MW_{AC} solar generating facility, being developed using the experience gained from the Company's solar pilot project. A competitive bidding process was used to solicit and evaluate three qualified bidders. The selected bidder not only had the highest overall score of those submitting bids, they were

also the lowest priced bid. The Project takes advantage of the latest solar technology and economies of scale to reduce capital and O&M costs. DeRuntz Direct, p. 15. The Project is also eligible for the 26% ITC. *Id.*

Based on our review of the record, we find that the concerns raised by Mr. Haselden regarding the SBSP cost are not grounds to reject the Project or the Project cost estimate. Mr. Haselden's contention was based on an inappropriate comparison of the SBSP estimated cost to responses to a recent NIPSCO RFP and other reference points for the LCOE of utility-scale solar. As Mr. DeRuntz explained, the information Mr. Haselden relied on from the NIPSCO 2018 IRP presentation reflected an average bid price for a total capacity of 669 MWs. A direct comparison of multiple projects totaling 669 MWs to a single 20 MW project is inappropriate because the larger projects are less expensive per MW due to the economies of scale. Also, the references in the NISPSO presentation were labeled "Preliminary – Subject to Due Diligence" and had not been fully vetted whereas I&M has secured final EPC contract pricing for the SBSP. DeRuntz Rebuttal at 2-4. Furthermore, Mr. Haselden's comparison of capacity factors between solar generating units is inappropriate and does not yield meaningful results because the projects have different degrees of insolation and, as Mr. DeRuntz also testified, even when the insolation is equal between two solar projects, capacity factor remains dependent on the number of solar panels installed. Additional panels increase capacity factor but also the project cost and the resulting LCOE. *Id.* at 5. Mr. DeRuntz explained that Mr. Haselden's use of the Lazard analysis also neglects to take into account the disparity between the size and higher insolation for the projects in the Lazard data and the relatively low degree of insolation for the SBSP. *Id.* at 6. Finally, while Mr. Haselden referenced only a single point out of the NIPSCO Presentation, Mr. DeRuntz shows the research in this same presentation produced a range of utility-scale solar build project costs from $1,155/kW - $2,370/kW. Mr. DeRuntz testified, that at $1,838.54/kW, the SBSP cost falls well within this range. *Id.* at 6. Mr. DeRuntz also stated that the range of solar project LCOE costs Mr Haselden took from the EIA tables represent costs for projects going into service in 2023; the correct information from the same report for projects going into service in 2021 provides a range of solar project LCOE costs from $32.60/MWh - $82.80/MWh. Mr. DeRuntz added that the SBSP's LCOE of $82.38/MWh falls within this range. *Id.* at 6. Finally, Mr. Haselden's LCOE reflected an incorrect treatment of the property tax. DeRuntz Rebuttal at 3; Auer Rebuttal at 8-9.

Mr. Haselden also cited a concern about the SBSP estimate cost because future solar projects in I&M's most recent IRP (filed in July 2019) are assumed to cost less than the SBSP. As Mr. Torpey testified, the 2018/19 IRP addresses a different timeframe, assumes larger installations than the current project and also assumes that solar resource cost will continue to trend downward during the future period modeled in the most recent IRP. Torpey Rebuttal at 5-7. As noted above, the SBSP was competitively bid and therefore represents the market price for a project of its size. *Id.* at 5, 7. Additionally, the record reflects that the 2015 IRP solar cost estimates are comparable to the estimated cost of the SBSP with a 2020 in-service date. *Id.* at 6. Given that the SBSP estimate results from a competitive solicitation and compares favorably to the assumption used in the Company's 2015 IRP for a 2020 solar project of this size, this SBSP estimate corroborates the continued reasonableness of the Company's plan to add 20 MW of solar in 2020. *Id.* at 7.

We decline to reject I&M's cost estimate based on I&M's proposal to own the SBSP versus enter into a PPA. Indiana energy policy encourages the development of Indiana renewable resources by energy utilities such as I&M, and it specifically supports small, utility-owned renewable energy projects such as the SBSP. Ind. Code. Ch. 8-1-8.8 and 8.5-7. This policy is not limited to PPAs and artificially restraining the statute to PPAs would not further the legislative goal of incenting Indiana's energy utilities to undertake the type of investments desired by the statute. Furthermore, Mr. Haselden failed to adequately consider the many advantages to owning solar generation versus entering into PPAs, such as the Company's ability to have control over operations over the life of the facility and be able to respond to market changes, which may not be possible under a PPA; the Company's ability to have control over determining whether the facility's expected useful life could be extended or the site repowered; and the Company's ability to take advantage of new or existing generation technologies when economically beneficial. DeRuntz Rebuttal at 10.

Mr. Haselden said his primary concerns about I&M's direct ownership of the SBSP are related to 1) initial costs, 2) treatment of federal tax incentives in I&M's proposed ratemaking treatment, and 3) ongoing O&M costs and O&M risks. *Id.* at 9-10. Based on our review of the evidence, we find these concerns are not reasons to reject the Project or the cost estimate. First, the cost estimate is the product of a competitive bidding process and the potential for change is safeguarded by the executed EPC contract. In addition, the cost is within the range of solar cost identified in the research and EIA tables discussed by Mr. DeRuntz. DeRuntz Rebuttal at 6.

Second, while to date I&M has been unable to take advantage of the federal ITC and accelerated depreciation tax benefits associated with its four solar projects approved in Cause No. 44511, the record shows that I&M is forecasting to be able to utilize ITCs in the future, beginning in 2019. Auer Rebuttal at 6. As Mr. Auer explained AEP expects to have sufficient taxable income in both 2019 and 2020 to begin amortizing prior year's deferred ITC related to solar projects. He added that I&M expects to be able to utilize the ITC for the SBSP assuming it is completed prior to the end of 2020. *Id.* at 7. Mr. Auer also explained ITC amortization associated with I&M's solar generation plants has been included in base rates in pending Cause No 45235. Second, Mr. Auer testified that if there is a year(s) in the future where AEP does not have sufficient taxable income to utilize the ITCs, I&M will amortize that year's ITC amount over the remaining life of the asset. In other words, the ITC will be an offsetting component of the revenue requirement for the life of the facility. *Id.*

Third, Ind. Code § 8-1-8.8-11(a) directs the Commission to provide financial incentives, including timely recovery of costs incurred during construction *and* operation where a project is found to be reasonable and necessary. Disallowing or capping ongoing O&M costs is not consistent with this statutory directive. Furthermore, the transformer replacement at the Company's Deer Creek facility identified by Mr. Haselden was an isolated capital expenditure, not an O&M expense. The type of transformer that failed at Deer Creek will not be used for the SBSP. This isolated historical capital expenditure does not justify limiting future O&M expense. DeRuntz Rebuttal at 9-10.

Mr. Haselden also criticized the cost of the SBSP based on project location. Mr. Haselden recommended the Commission exclude cost of the land from ratemaking recovery. *Id.* at 17, 22.

As an initial matter, we note that the governing statute contains no language that authorizes the Commission to limit or disallow reasonable project costs. Doing so would penalize a utility, not incentivize it to develop renewable energy resources. Mr. Haselden did not present information demonstrating the price paid for this location is unreasonable for the area. Rather, Mr. Haselden's claim that the cost of the land is excessive rests on the contention that the cost of land in a rural location would be less. While this may be so, it does not demonstrate that the price paid for the SBSP project land is excessive given its location. The proximity and visibility attributes of the SBSP location near the Indiana Toll Road and one of the premier educational institutions in the country, are not isolated to I&M, but rather benefit the area as a whole. Lucas Rebuttal at 25. A location that benefits local economies and communities is consistent with the Corporate Renewable Energy Buyers' Principles relied on by Mr. Haselden. Lucas Rebuttal at 24. I&M's Real Estate group evaluated the cost of the land for this Project by comparing the cost to other agricultural real estate transactions in the area. As Mr. Lucas showed, the cost per acre was very much in line with the market at the time and this confirms that I&M did not pay a premium for this land. Lucas Rebuttal at 24. Finally, the suggestion that the Company should not have purchased the land prior to receiving Commission approval of the Project also lacks merit. Purchasing the land allowed the Company to secure this location and bring definition to the overall Project. Lucas Rebuttal at 24-25.

Accordingly, we find the $37 million estimated cost of the SBSP is reasonable and approve this best estimate.

D. <u>Project Is Reasonable and Necessary</u>. Ind. Code § 8-1-8.8-11 provides that the Commission shall encourage clean energy projects by creating financial incentives for such projects, if found to be reasonable and necessary, and Ind. Code § 8-1-8.5-7 encourages small renewable projects. As discussed above and below, we find the SBSP satisfies the criteria of both statutes and is consistent with the state policy encouraging renewable energy.

I&M's testimony regarding the importance of reasonably-priced renewable energy located in its service territory is consistent with the express recognition in the Indiana statutory and regulatory scheme that the addition of renewable energy resources in the State is both beneficial and necessary. For example, Ind. Code § 8-1-8.8-1 l (a) states that: "The commission shall encourage clean energy projects [which includes solar energy projects] by creating financial incentives for clean energy projects, if the projects are found to be reasonable and necessary." Additionally, Ind. Code § 8-1-2.4-1 states: "It is the policy of this state to encourage the development of alternate energy production facilities [including solar facilities], cogeneration facilities, and small hydro facilities in order to conserve our finite and expensive energy resources and to provide for their most efficient utilization."

The SBSP provides I&M and its customers an opportunity to make a further step toward integrating solar power into I&M's integrated resource portfolio. The SBSP will provide for the development of "home grown" renewable energy resources and meets the increasing interest of customers in the use of more renewable resources. Locating the Project by the toll road and Notre Dame can showcase Michiana and the state of Indiana as leaders in innovation and sustainable energy and attract potential customers to the region. Thus both the Project and its location will further Indiana's energy policy of encouraging economic development through the

deployment of renewable resources, particularly because it is in a location that allows customers to feel a connection to the facility.

The SBSP will further diversify I&M's generation portfolio while maintaining flexibility in the overall implementation of the Preferred Resource Plan reflected in the Company's most recent IRPs. As recently stated in *Re Southern Indiana Gas and Electric Company*, Cause No. 45086 (IURC 3/20/19) p. 25, the Commission continues "to believe fuel diversity and the addition of local renewable resources is important to protect electric utilities and their customers from contingencies such as fuel price fluctuations, and changes in regulatory practices that can drive up the cost of a particular fuel *(e.g.,* environmental regulations). Fuel diversity also can help ensure stability and reliability of electricity supply and can strengthen national security."

We disagree with the OUCC's contention that the SBSP was developed for and only benefits the University of Notre Dame. While Notre Dame is a leader in this kind of endeavor, the record reflects it is not the only customer that has expressed or may have an interest in collaborating with I&M. Mr. Lucas discussed in detail the many expressions of customer interest in I&M obtaining more renewable resources. Lucas Rebuttal at 21-22; Attachment DAL-7R. I&M also presented substantial evidence that renewable resources are beneficial in efforts to retain and attract industrial and commercial customers seeking to meet renewable energy goals. Mr. Thomas explained that the SBSP is the first of a few small solar projects I&M plans to deploy in larger cities to encourage economic development and transition the generation portfolio.

While part of that effort is intended to provide customers interested in sustainable energy the opportunity to participate in the projects to help them succeed as customers, the record shows that the addition of solar resources is consistent with the Company's IRPs and is part of an overall plan to meet the current and future need for electricity. As the Company's two most recent IRPs show, solar resources are part of the reasonable least cost plan to serve I&M's customers. Approval of the modest amount of solar energy reflected in the SBSP will allow I&M to continue to embrace the change toward solar energy in a logical, progressive and disciplined manner with a relatively small impact on customers' overall electricity bills.

Much of the OUCC testimony based its opposition on matters addressed in the July 25, 2019 docket entry, which the OUCC did not appeal to the full Commission. We find these matters are not grounds to reject the SBSP. While we have considered the other concerns raised by the OUCC, these concerns do not establish the SBSP is unreasonable or unnecessary.

The evidence demonstrates that approval of the SBSP will provide a number of benefits to I&M, further economic development, and enhance customer education. In particular, the development of this solar resource is consistent with the interests of customers who want to be served with more renewable energy and this is turn helps to keep I&M's rates reasonable by retaining load and attracting more load over which the Company's fixed costs of service can be spread. Further, I&M will gain additional construction, maintenance, operations, and technical experience with utility scale solar facilities. Recent advancements in technology have allowed gains in the efficiency and cost-effectiveness of solar energy. As a result, solar energy is

becoming more viable and customers are more interested in it as a resource. Accordingly, the Commission finds and concludes that the SBSP is reasonable and necessary.

E. Financial Incentives. I&M's request for financial incentives under Chapter 8.8 is limited to timely recovery of the costs incurred during the construction and operation of the SBSP. I&M asks the Commission to approve the SPR with the initial rider factor set to zero. If the SBSP project is placed into service prior to December 31, 2020 and cost recover is reflected in the rates established in I&M's pending general rate case, then I&M will not need to make an SPR filing to establish rates. If the SBSP is not in service by the end of 2020 or otherwise not reflected in base rates in Cause No. 42535, then I&M proposes to file its first annual SPR filing shortly after the SBSP project goes into service. The Company's proposed timely cost recovery through the SPR is consistent with the Rider the Commission approved for I&M's previous solar pilot project.

The OUCC recommended that if the Commission allows I&M to recover costs associated with the SBSP, a renewable energy project rider, which I&M proposes in the form of the SPR, best accomplishes this. Blakley at 2, 6. Mr. Blakley stated that if renewable energy projects are blended into a utility's rate base, the OUCC is concerned that the Commission and the OUCC will lose valuable cost information regarding different generating technologies or between different renewable energy projects. *Id.* at 3-4. As an initial matter, we note that the Mr. Blakley's desire for access to the valuable SBSP cost and operating data corroborates Mr. Lucas' views with respect to the education and research value of the SBSP and refutes Mr. Haselden's testimony on this issue. We find I&M's proposal to roll the SBSP into rates either through the pending general rate case or a future one is consistent with Commission practice. We agree with Mr. Auer that operating data can be reviewed through the collaborative process established following the Commission Order in Cause No. 44967. Therefore, we find and conclude that the Company's proposed accounting and ratemaking for the SBSP, including the proposal to utilize the SPR in the event the SBSP is not reflected in the rates established in Cause No. 45235, is consistent with Commission practice, reasonable and should be approved.

F. REC Sales. Forty percent of the RECs generated by the SBSP will be sold to Notre Dame pursuant to a long term agreement between I&M and Notre Dame. The price of the RECs to be sold will be reset annually based on the S&P Global Energy Credit Index for a New Jersey Class 1 Renewable Energy Certificate for the prior year, plus a 20% program administrative fee. I&M proposes to flow the compensation for the RECs (excluding program administrative fees) through the FAC to provide a timely credit to all customers for the revenue received and thus reduce the fuel rates charged to all customers.

The OUCC recommended that costs incurred by I&M for the Notre Dame arrangement that are in excess of the 20% administrative fee paid to I&M by Notre Dame should not be included in the SPR. Haselden at 22. I&M agreed. Accordingly, if in any year the costs incurred due to this arrangement with Notre Dame exceed the amount of the 20% administrative fee that I&M collects, we find that I&M shall not seek recovery of those excess costs from other customers. *Id.* at 14.

The OUCC also recommended the Commission require I&M monetize all unused RECS in the market and credit proceeds to the SPR or FAC. Haselden at 22. We find it would be premature to mandate that I&M sell the remaining RECs of the SBSP into the market, as suggested by OUCC Witness Haselden. This would eliminate the ability of the SBSP to attract new or existing customers who may be attracted to the opportunity provided by the SBSP to meet their sustainability goals. While those goals may not have been satisfied by I&M's existing green programs, I&M continues to evolve its offerings. When I&M retains its RECs or selling RECs based on market conditions and retires them on behalf of the participating Indiana customers, the benefit of green energy remains in Indiana. Therefore, we find the OUCC recommendation would not in in the best interest of I&M's customers and decline to mandate that I&M monetize all of its RECs on the open market.

G. Conclusion. Based on the evidence presented, we find that the SBSP is reasonable and necessary and should be approved. This project is therefore eligible for a financial incentive and we find the accounting and ratemaking proposed by I&M is reasonable and shall be approved.

6. Confidentiality. On June 12 and August 26, 2019, I&M filed motions for protection and nondisclosure of confidential and proprietary information, each of which was supported by affidavit showing documents to be submitted to the Commission were trade secret information within the scope of Ind. Code §§ 5-14-3-4(a)(4) and (9) and Ind. Code § 24-2-3-2. The Presiding Officers issued docket entries dated June 19 and August 27, 2019 finding such information to be preliminarily confidential, after which such information was submitted under seal. There was no disagreement among the parties as to the confidential and proprietary nature of the information submitted under seal in this proceeding. We find all such information is confidential pursuant to Ind. Code §§ 5-14-3-4 and 24-2-3-2, is exempt from public access and disclosure by Indiana law and shall be held confidential and protected from public access and disclosure by the Commission.

IT IS THEREFORE ORDERED BY THE INDIANA UTILITY REGULATORY COMMISSION that:

1. I&M's proposed South Bend Solar Project is approved as a "clean energy project" pursuant to Ind. Code § 8-1-8.8-3 and qualifies for timely recovery of project costs under Ind. Code § 8-1-8.8-11 as set forth in this Order.

2. I&M's cost estimate for the South Bend Solar Project, as set forth in Finding No. 5.C, is approved, which estimate totals $37 million.

3. I&M's proposed accounting and ratemaking treatment to timely recover the cost of the South Bend Solar Project through its retail rates or its Solar Power Rider is approved. Any Solar Power Rider filings shall be docketed as Cause No. 45245 SPR X.

4. I&M is authorized to defer costs associated with the SBSP until such costs are reflected in I&M's retail rates and charges.

5. I&M's proposal to depreciate the SBSP over a period of 30 years is approved.

6. The REC sale arrangement with Notre Dame is approved.

7. The pricing methodology for future REC sales is approved.

8. The net proceeds from any sale of RECs stemming from the approved solar facilities shall flow back to I&M's customers through its FAC Rider as proposed by I&M.

9. The information filed by I&M in this Cause pursuant to its Motions for Protective Order is deemed confidential pursuant to Indiana Code § 5-14-3-4 and Indiana Code § 24-2-3-2, is exempt from public access and disclosure by Indiana law, and shall be held confidential and protected from public access and disclosure by the Commission.

10. This Order shall be effective on and after the date of its approval.

HUSTON, FREEMAN, KREVDA, OBER AND ZIEGNER CONCUR;

APPROVED:

I hereby certify that the above is a true
and correct copy of the Order as approved.

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Mary M. Becerra
Secretary of the Commission

DMS 14847621v1