

ORIGINAL

STATE OF INDIANA

Commissioner	Yes	No	Not Participating
Huston	√		
Freeman	√		
Krevda	√		
Ober	√		
Ziegner	√		

INDIANA UTILITY REGULATORY COMMISSION

PETITION OF DUKE ENERGY INDIANA, LLC FOR)
 (1) APPROVAL OF ITS PROPOSED PLAN FOR)
 DEMAND SIDE MANAGEMENT AND ENERGY)
 EFFICIENCY PROGRAMS FOR 2020-2023; (2))
 AUTHORITY TO RECOVER ALL PROGRAM)
 COSTS, INCLUDING LOST REVENUES AND)
 FINANCIAL INCENTIVES IN ACCORDANCE)
 WITH IND. CODE §§ 8-1-8.5-3, 8-1-8.5-10, 8-1-2-42(a))
 AND PURSUANT TO 170 IAC 4-8-5 AND 170 IAC 4-8-)
 6; (3) AUTHORITY TO DEFER ALL SUCH COSTS)
 INCURRED UNTIL SUCH TIME THEY ARE)
 REFLECTED IN RETAIL RATES; (4) REVISIONS)
 TO STANDARD CONTRACT RIDER 66A; AND (5))
 INTERIM AUTHORITY TO CONTINUE OFFERING)
 ITS CURRENT DEMAND SIDE MANAGEMENT)
 AND ENERGY EFFICIENCY PROGRAMS UNTIL A)
 FINAL ORDER IS ISSUED IN THIS CAUSE.)

CAUSE NO. 43955 DSM 8

APPROVED: DEC 29 2020

ORDER OF THE COMMISSION

Presiding Officers:

Sarah E. Freeman, Commissioner

Loraine L. Seyfried, Chief Administrative Law Judge

On November 8, 2019, Duke Energy Indiana, LLC (“Duke Energy Indiana” or “Petitioner”) filed its Petition as well as its direct testimony, exhibits, and workpapers with the Indiana Utility Regulatory Commission (“Commission”) seeking approval of its 2020–2023 Energy Efficiency Plan (“EE Plan” or “Plan”). Also, on November 8, 2019, Petitioner filed its Motion for Administrative Notice, Motion for Protection of Confidential and Proprietary Information, and Verified Motion on an Expedited Basis to Amend Order to Extend Plan for Interim Period, including the Verified Declaration of Timothy J. Duff.

On November 14, 2019, the Commission issued a Docket Entry amending the caption of this Cause and scheduling the Prehearing Conference and Preliminary Hearing for December 18, 2019, to determine a procedural schedule and receive evidence regarding Petitioner’s Motion for interim relief.

On November 21, 2019, Petitioner’s Motion for Protection of Confidential and Proprietary Information was granted by the Presiding Officers on a preliminary basis, and Petitioner subsequently filed its confidential information.

On November 26, 2019, Petitioner filed an Agreed Procedural Schedule on behalf of Petitioner, the Indiana Office of Utility Consumer Counselor (“OUCC”), and the Citizens Action

Coalition of Indiana, Inc. (“CAC”). On November 26, 2019, the CAC filed its Petition to Intervene in this proceeding, which was granted on December 9, 2019.

On December 18, 2019, the Commission held a Prehearing Conference and Preliminary Hearing at which Petitioner, the OUCC, and the CAC appeared. On December 27, 2019, the Commission issued its Prehearing Conference and Interim Order establishing an agreed-to procedural schedule, granting Petitioner’s request to withdraw its Motion for Administrative Notice, and authorizing Petitioner, on an interim basis, to continue offering its current energy efficiency (“EE”) programs with associated cost recovery until a final order is issued in this Cause.

Petitioner submitted corrections to its case-in-chief on February 17, 2020. On March 2, 2020, the OUCC and the CAC filed their cases-in-chief, and on March 9, 2020, the CAC submitted corrections to its case. On March 19, 2020, Petitioner filed its rebuttal along with a Motion for Administrative Notice of Scott Park’s rebuttal testimony and Rebuttal Workpaper 1-SP filed in Cause No. 45253, which was subsequently granted on April 9, 2020. On March 24, 2020, Petitioner filed a Motion to Strike Portions of the Testimony of OUCC Witness John E. Haselden, which was subsequently denied. Also, on March 24, 2020, Petitioner filed corrections to portions of its prefiled testimony and exhibits. On July 24, 2020, Petitioner responded to the Presiding Officers’ July 17, 2020 request for additional information. On September 1, 2020, the CAC filed corrections to its prefiled case. On September 4, 2020, the CAC filed its Stipulation of Facts and Evidence between the CAC and Duke Energy Indiana.

Pursuant to a September 4, 2020 Docket Entry, the Evidentiary Hearing scheduled for September 8, 2020, at 9:30 a.m. in Room 222 of the PNC Center at 101 West Washington Street, Indianapolis, Indiana was converted to a virtual hearing via Webex due to the ongoing COVID-19 pandemic. At the hearing, the parties offered their respective exhibits, which were admitted into the evidentiary record.

The Commission, having considered the evidence and applicable law, finds as follows:

1. Notice and Commission Jurisdiction. Notice of the hearings held in this Cause was given and published as required by law. Petitioner is a “public utility” under Ind. Code § 8-1-2-1 and Ind. Code § 8-1-8.5-1, and an “electricity supplier” pursuant to Ind. Code § 8-1-8.5-10. Under Ind. Code §§ 8-1-2-4, -42, -68, -69, Ind. Code ch. 8-1-8.5, and 170 IAC 4-8, the Commission has jurisdiction over Petitioner’s demand side management (“DSM”) and EE program offerings and associated cost recovery. Therefore, the Commission has jurisdiction over Petitioner and the subject matter of this proceeding.

2. Petitioner’s Characteristics. Duke Energy Indiana is a public utility corporation organized and existing under the laws of the State of Indiana with its principal office in Plainfield, Indiana, and is a second tier wholly owned subsidiary of Duke Energy Corporation. Petitioner is engaged in rendering electric utility service in the State of Indiana and owns, operates, manages, and controls, among other things, plants and equipment within the State of Indiana used for the production, transmission, delivery, and furnishing of such service to the public, including the central, north central, and southern parts of the State of Indiana. It also sells electric energy for

resale to municipal utilities and to other public utilities that, in turn, supply electric utility service to numerous customers in areas not served directly by Petitioner.

3. Requested Relief. Duke Energy Indiana requests approval of an EE Plan for the period 2020–2023. Similar to the EE plan approved in Cause No. 43955 DSM 4 (“DSM-4”), the EE Plan includes EE goals, a portfolio of programs to meet those goals, program budgets and costs, and independent evaluation, measurement, and verification (“EM&V”) procedures.

Through the EE Plan, Petitioner proposes to achieve energy savings by an average of approximately 1.18% of eligible retail sales each year over the four-year term of the Plan. The Plan includes programs for all customer classes, programs that have been deployed in the past as well as new and modified programs, and low-income programs. Petitioner estimates that its program budgets are approximately \$147,249,627 for the four-year Plan, including direct and indirect costs, customer incentives, and independent EM&V. Petitioner seeks no modifications to its oversight board (“OSB”) authority.

Petitioner also requests accounting and ratemaking authority to recover associated program costs, including lost revenues and financial incentives. Petitioner requests authority to adjust its Standard Contract Rider No. 66-A (“EE Rider”) and for continued authority to use deferred accounting on an ongoing basis until such costs are reflected in retail rates to ensure proper matching of expenses with the rate recovery of such expenses through the EE Rider.

4. Evidence.

A. Petitioner’s Case-in-Chief. Mr. Timothy J. Duff, General Manager, Customer Solutions, Portfolio Analysis and Regulatory Strategy for Duke Energy Business Services LLC (“Duke Business Services”), provided an overview of Petitioner’s proposed EE Plan. He testified Petitioner is seeking approval of a four-year plan during 2020–2023 that includes goals, programs, program budgets and costs, and EM&V procedures.

Mr. Duff testified the EE Plan was designed by considering information from the Market Potential Study (“MPS”) performed by Nexant, the state of EE in Duke Energy Indiana’s service territory, past program performance, and new programs. The program portfolio was also designed to be consistent with Duke Energy Indiana’s 2018 Integrated Resource Plan (“IRP”).¹

Mr. Duff explained that Duke Energy Indiana is seeking approval of a four-year plan to better align with Petitioner’s IRP schedule. He stated that Duke Energy Indiana will have completed and submitted its 2021 IRP and vetted it with interested shareholders and Commission staff prior to Petitioner’s filing of its next EE Plan in late 2022. In addition, approval of a four-year plan will also mitigate the need for Petitioner to seek interim authority to continue its existing programs during the first year of its next EE plan.

Mr. Duff presented the annual gross energy savings goals for the proposed EE Plan. He expressed his belief that Petitioner can reasonably achieve these goals, even accounting for a 90% opt out of eligible non-residential load.

¹ Petitioner’s 2018 IRP was submitted to the Commission on July 1, 2019.

Mr. Duff testified Petitioner is seeking to recover program costs, including direct and indirect costs, the cost of EM&V, lost revenues, and a financial incentive through its EE Rider, which is reconciled annually. Total costs for Petitioner's EE Plan are \$197,135,234.

Regarding lost revenues, Mr. Duff testified Petitioner is seeking cost recovery for the life of the measure, consistent with the Commission's approval of its prior EE plan in DSM-4. He explained Petitioner is seeking lost revenues because customers benefit from EE through immediate bill savings and lower electric rates at the same time the utility experiences a reduction in fixed cost recovery through its promotion of EE. He testified that lost revenues are a mechanism to make a utility whole between rate cases.

Mr. Duff testified Petitioner is seeking approval for the same financial incentive approved in DSM-4, except for its Low-Income Neighborhood program. He testified that the currently approved financial incentive effectively encourages Duke Energy Indiana to minimize portfolio costs while striving to achieve as much EE as is reasonably possible. Regarding the Low-Income Neighborhood program, Mr. Duff noted that Petitioner has offered this program without an incentive in the past and that it fails the Utility Cost Test ("UCT"). However, because the program provides needed EE and bill relief in low-income neighborhoods, Petitioner proposes a modified financial incentive that uses the same tiers as the rest of the portfolio but applies the sharing percentage to the net present value ("NPV") of the avoided costs, as opposed to the UCT net benefit. Mr. Duff testified that, if approved, the Low-Income Neighborhood program proposed incentive would be less than \$119,000 over the four-year EE Plan period.

Mr. Duff testified that Petitioner proposes to maintain its OSB and continue using independent EM&V vendors. He also explained how the proposed EE Plan meets the requirements of Ind. Code § 8-1-8.5-10 ("Section 10") and the filing requirements in 170 IAC 4-8-2. He testified that, pursuant to Section 10, Petitioner provided a copy of the Petition and Plan to the OUCC and posted an electronic copy of the Petition and Plan on Petitioner's website.

Mr. Duff concluded that Petitioner's EE Plan is in the public interest and consistent with its 2018 IRP, and as a result, is designed to lower emissions and delay the need to build additional generation in Petitioner's service territory into the future. The EE Plan reflects a cost-effective portfolio of EE programs, which can assist customers to manage their energy bills and act as a resource for meeting Petitioner's future generation requirements.

Ms. Amy B. Dean, Senior Strategy and Collaboration Manager for Duke Business Services, summarized the programs and budgets for the EE Plan as set forth in the table below:

Duke Energy Indiana 2020 - 2023 Energy Efficiency Programs *

Residential	
Agency Assistance Portal	\$ 128,925
Energy Efficiency Education Program for Schools	\$ 3,421,567
Low Income Neighborhood	\$ 2,702,836
Low Income Weatherization	\$ 6,409,068
Multi-Family EE Products & Services	\$ 8,888,181
MyHome Energy Report	\$ 12,216,932
Residential Energy Assessments	\$ 5,821,479
Smart Saver® Residential	\$ 18,539,694
Power Manager	\$ 11,195,414
Total Residential	\$ 69,324,096
Non-Residential	
Public Efficiency Streetlighting	\$ 2,242,460
Smart Saver Non-Residential	\$ 53,248,383
Power Manager for Business	\$ 6,967,667
Small Business Energy Saver	\$ 15,192,022
Total Non-Residential	\$ 77,650,532
Market Potential Study	\$ 275,000
Total Market Potential Study	\$ 275,000
Grand Total 2020-2023 Portfolio	\$ 147,249,627

* Totals may not foot due to rounding

Ms. Dean stated that the Plan contains most of the same programs as approved in DSM-4, except for the Public Efficiency Streetlighting program, which is a new program. She explained the Public Efficiency Streetlighting program will provide outdoor lighting customers an incentive to upgrade Duke Energy Indiana-owned lighting to more efficient LED fixtures. Ms. Dean testified this program is targeted to a subset of customers who have been participating in the EE Rider, but had no targeted program offerings.

Ms. Dean testified that the Order in DSM-4 also approved programs that were under development at the time and were proposed to launch during 2018–2019. However, these programs were never offered to customers and some measures from these programs are being rolled into the existing programs for this filing. Ms. Dean also noted that Petitioner’s proposed portfolio continues to include two demand response programs, Power Manager for residential customers and Power Manager for Business for its commercial customers, which were also approved in DSM-4.

Ms. Dean testified the Low-Income Neighborhood program provides 16 low-cost measures to be installed in selected neighborhoods. As to the Low-Income Weatherization program, Ms. Dean testified the program includes up to \$750 for health and safety measures for qualifying customers and a refrigerator replacement component.

Ms. Dean testified Petitioner also requests approval for recovery of \$275,000 to fund an MPS to inform the upcoming IRP and the next EE plan filing. She stated Duke Energy Indiana will work with its OSB on the request for proposals and to oversee the work product. She further testified that Petitioner proposes to maintain its OSB without any changes.

Mr. Scott Park, Director, IRP & Analytics-Midwest for Duke Business Services, addressed the EE Plan's consistency with Petitioner's 2018 IRP. He testified the 2018 IRP modeled EE as bundles of energy savings, similar to how EE was modeled in the 2015 IRP. He explained the 2018 IRP had 70 bundles of EE grouped by shape and time period. These EE bundles were inputted into the System Optimizer Model, which then selected a set of EE bundles depending on the scenario that was modeled. Mr. Park stated that for 2018–2020, the IRP model was required to select base bundles that represent the 2017–2019 portfolio approved in DSM-4.

Mr. Park explained changes that were made to the portfolio to reflect updated EM&V for Petitioner's My Home Energy Report ("MyHER") program. He also noted the low-income programs were not economically selected in the IRP modeling, but were appended to the EE portfolio filing. Mr. Park also provided the annual amounts of EE in terms of energy, demand, and costs in the 2018 IRP and the proposed EE Plan selected by the Preferred Portfolio, which he testified were very similar.

Mr. Park concluded the EE Plan is reasonable and consistent with the 2018 IRP as seen on an energy, capacity, and cost basis. He stated the proposed Plan is within the boundaries of the EE from the optimized portfolios of five different scenarios that considered different amounts of load, fuel, and power prices, as well as three different levels of carbon regulation. Mr. Park further testified that it was his opinion that the EE Plan is consistent with the most recent state energy analysis developed under Ind. Code § 8-1-8.5-3. He stated Petitioner provided the State Utility Forecasting Group ("SUFG") information regarding its DSM and EE programs and performance levels, which are reflected in the state energy analysis.

Ms. Jean P. Williams, Manager, DSM Analytics for Duke Business Services, addressed the cost-effectiveness of Petitioner's Plan and its proposed EM&V. She testified Petitioner evaluates the cost-effectiveness of EE programs using the tests specified in the California Standard Practice Manual and presented the cost-effectiveness test scores for: the Participant Cost Test ("PCT"), the UCT, the Total Resource Cost ("TRC"), and the Ratepayer Impact Measure ("RIM"). She testified that all Plan programs, except the Low-Income Weatherization and Low-Income Neighborhood programs, are cost-effective because they passed the UCT and TRC tests. However, all the programs, including the low-income programs, pass the PCT.

Ms. Williams identified the types of evaluations used by Duke Energy Indiana to conduct EM&V. She testified the evaluation studies will be performed by independent, qualified evaluation professionals. Ms. Williams provided information regarding the initial design, process, and

timeframe for the EM&V analysis, which she testified complies with the Commission's rules on EM&V. She testified the estimated cost for all EM&V over the four-year portfolio period is \$5,794,025, which is approximately 3.9% of total costs.

Ms. Williams testified that Duke Energy Indiana's analysis on the long-term and short-term effect on customer bills relies on the PCT, RIM, and UCT. The PCT compares participant benefits through bill savings plus incentives from the utility relative to the participant's incremental costs to implement the EE measure. The long-term effect on rates and bills of non-participants is demonstrated through the RIM test. If a program's RIM test score is lower than one, it indicates that rates would likely increase over time. The UCT indicates whether revenues would increase more if the programs were not implemented and hence require a rate increase. Ms. Williams testified that because all the programs, except the Low-Income Weatherization and Low-Income Neighborhood programs, pass the UCT, one can conclude that all customers would benefit in the long-term from implementation of the EE programs.

Ms. Williams testified the EM&V results will be used in developing a true-up for the proposed EE Rider. Petitioner will use the actual participation information and ex-post load impacts as the basis for retrospective true-ups of estimated lost revenues. Petitioner will also use the ex-post load impacts prospectively to calculate the financial incentive.

Ms. Karen K. Holbrook, Director Portfolio Regulatory Strategy and Support for Duke Business Services, testified as to the various calculations performed for this filing and the processes and sources used to develop actual and projected costs of providing EE programs for 2020–2023. Ms. Holbrook provided a summary of forecasted performance by program, including total requested revenue requirements by year, and the full impact of lost revenues associated with the program performance forecasted through the life of the measure, assuming no impacts from rate cases.

Ms. Holbrook testified that calculation of Petitioner's incentive at a level that reflects achievement at 100% of target across the entire portfolio results in an 8% shared savings incentive for all programs eligible for a financial incentive. She provided the forecasted incentive amounts at the 100% target achievement level for the portfolio for each program year as well as each program's contribution toward the portfolio incentive amount. The financial incentive was added to the program costs and EM&V for all programs eligible for financial incentives to calculate the input to the revenue requirement and the rate applicable to 2020.

Ms. Holbrook testified that Duke Energy Indiana is proposing that all programs, except the Low-Income Weatherization, are eligible for the incentive. She noted that although the Low-Income Neighborhood program has typically not been eligible for an incentive, Petitioner is now proposing this program be eligible. If approved, that incentive would be calculated as a percentage of avoided costs and collected at the time of the 2020 reconciliation filing. Additionally, she noted costs for the 2021 MPS were added to the portfolio with no incentive included.

Ms. Holbrook further explained how the 2020–2023 lost revenues were calculated prior to any adjustments for the rate case. As a result of the pending rate case, she testified Petitioner used projected sales for 2020 in developing the new base rates, and the projected sales included a monthly forecast of EE reductions in 2020, as well as a forecast of year end 2019 reductions. She testified

that, as a simplifying assumption for the calculations, Petitioner assumed January 1, 2020, as the effective date for the application of new base rates. Ms. Holbrook provided Exhibit 5-B showing the estimates of the impact of the lost revenues requested in this proceeding beyond the four-year period and assuming no future rate cases.

Ms. Kathryn C. Lilly, Rates & Regulatory Strategy Manager for Duke Energy Indiana, explained Petitioner's proposed ratemaking treatment and provided proposed rate calculations under the EE Rider along with updated tariffs for Commission approval. She testified all customers and rate classes are charged for the cost of a vintage year's EE programs to the extent they are or were eligible to participate in the programs offered for that period.

Ms. Lilly testified that since the enactment of Ind. Code § 8-1-8.5-9, Petitioner has received opt-out notifications from customers in all opt-out windows and opt-in notices in four windows. Ms. Lilly provided the tariff rates for each of these opt-out groups. She explained that a customer who opts out remains responsible for EE program costs, including lost revenues, financial incentives and related reconciliations, that accrued or were incurred or relate to EE investments made before the date on which the opt out is effective, regardless of the date on which the rates are actually assessed. These groups will continue to be responsible in future years for their proportionate share of reconciliations and persisting lost revenues related to their respective opt-out date.

Ms. Lilly testified that, as previously approved by the Commission, the lost revenues associated with the 2012–2015 and 2017–2019 program years will be included in EE Rider rates until the measure life has expired for the individual programs or until rates are effective from a base rate case. In addition, the lost revenues associated with the 2016 program year will be included in EE Rider rates for the lesser of four years or measure life, or until rates are effective from a base rate case. Additionally, the lost revenues for these years are also subject to additional reconciliations in future years due to retrospective application of EM&V. Ms. Lilly also noted that new, qualifying customers who sign a demand contract of more than one MW and provide notice of opt-out under the terms of the tariff will not be responsible for any EE Rider costs.

Ms. Lilly provided the rates proposed for the 2020 program year and explained that they were calculated using the actual program costs, EM&V costs, lost revenues, and incentive amounts for 2018; updated lost revenue amounts for the re-reconciliation of 2015, 2016, and 2017; adjustments applicable to 2014 and 2015 opt-out groups; and estimated program costs, EM&V costs, and incentive amounts for 2020 using the 2020 data from the EE Plan proposed in this filing.

Regarding the reconciliation of the current EE Rider amount being billed, Ms. Lilly stated Petitioner plans to reconcile 2019 EE actual costs and lost revenues approved in DSM-6 to amounts billed for the EE Rider during calendar year 2019. The reconciliation is expected to include a true-up of 2019 lost revenues based on 2019 actual participation in the EE programs and the retrospective application of EM&V results. It will also reflect additional true-ups of any prior reconciliations to reflect the results of additional EM&V reports on the calculation of lost revenues. Ms. Lilly further testified that the estimated costs and impacts used to develop the 2020 rates proposed in this filing are expected to be reconciled in the EE Rider filing planned for mid-2021, developing rates to be billed in 2022, using actual participation and applicable EM&V.

Ms. Lilly explained the calculation of actual lost revenues in this filing. She stated Petitioner used lost revenue pricing rates (*i.e.*, rates reflecting fixed costs embedded in base rates) that were developed for each rate schedule in the residential and non-residential rate groups that had identified participation. In a few cases where rate schedule level data was not available, average lost revenue pricing rates were developed using rate schedules most likely to be applicable to customers served by the programs. Ms. Lilly noted that these lost revenue rates would change at the time new base rates are approved to reflect the fixed charges embedded in the newly approved base rates.

Finally, Ms. Lilly testified that Petitioner requests authority to continue using the deferral accounting treatment approved in Cause No. 43955 to minimize the timing difference between cost or revenue recognition in Petitioner's books and actual cost recovery.

B. OUC's Case-in-Chief. Mr. John E. Haselden, Senior Utility Analyst in the OUC's Electric Division, expressed his general concern that Petitioner's filing fails to adequately explain and support the requested relief. He stated Petitioner made programmatic changes without explanation and focused on changes to increase financial incentives.

Mr. Haselden compared the EE Plan to Petitioner's prior approved plan and raised several concerns. He testified the proposed EE Plan significantly decreases the amount of general service lighting ("GSL") LED light bulbs offered through the Smart Saver[®] Residential program and increases the amount of GSL LED bulbs in other programs, such as Multi-family Energy Efficiency Products and Services and Residential Energy Assessments programs. He noted the latter programs yield a much higher financial incentive, which Petitioner did not justify.

Mr. Haselden stated that Petitioner also proposes budget increases for the Smart Saver[®] Non-Residential, Multi-family Energy Efficiency Products and Services, and Residential Energy Assessments, while proposing budget decreases for the Smart Saver[®] Residential program. In addition, the Agency Assistance Portal program will cease providing packages of LED light bulbs to qualifying customers after 2020, and the Energy Efficiency Education program will replace GSL A-Line LED bulbs with specialty LED bulbs in kits after June 30, 2020. He also explained other changes to the lighting component of the Smart Saver[®] Residential program.

Mr. Haselden testified the OUC is concerned with the cost-effectiveness of Petitioner's programs because of the inputs used to calculate financial incentives and the continued use of halogen lighting as the baseline for GSL LED lighting measures. Mr. Haselden stated that Petitioner's proposed financial incentive is disproportionately larger than the other investor-owned electric utilities.

Mr. Haselden expressed concerns with Petitioner's measure assumptions and recommended an independent review of the impact assumptions Petitioner uses in its DSMore and UIPlanner software programs. He recommended denial of the proposed programs until the measure impact assumptions are reviewed by an independent third party and the cost-benefit tests are calculated using correct avoided cost estimates.

Regarding Petitioner's proposed non-residential programs, Mr. Haselden stated that customer incentive levels need to be monitored more closely to minimize free ridership and any impacts on

cost-effectiveness because of technology improvements and rapidly decreasing costs. In addition, because Petitioner does not evaluate all programs on an annual basis, the OUCC recommends continued diligence in administering the non-residential programs and more frequent re-evaluation measures when prices and efficiencies change significantly.

Mr. Haselden explained the appropriate economic level of DSM is determined in the IRP process. He stated that various levels of DSM impacts and costs are modeled in conjunction with supply-side resources to find the most economic combination over the planning period. These analyses are distilled down to NPV of revenue requirements necessary over various scenarios and sensitivities, and DSM resources may be selected to the extent they contribute to a lower NPV.

Mr. Haselden testified that the methodology for determining cost-effectiveness for individual DSM programs differs from the IRP process in that the programs and measures that comprise those programs are evaluated comparing their costs over time to their benefits on an NPV basis. He stated Petitioner did not model the benefits of avoided capacity correctly because no consideration was given to when capacity costs are actually avoided. Citing to the 2001 California Standard Practice Manual (“CSPM”), Mr. Haselden stated that the avoided capacity costs for Petitioner will not begin until 2023 or later, despite there being a demand reduction due to DSM efforts in 2020 through 2024, and therefore, the appropriate value for capacity costs avoided for years 2020 through 2022 should be zero.

Mr. Haselden also testified that Petitioner’s calculations for the RIM and TRC tests are incorrect because the calculations omit the financial incentive. Citing to 170 IAC 4-8-1(n), he stated financial incentives are defined as EE program costs. He also noted that although “shareholder incentive” does not appear in the CSPM, the general concept of cost-benefit tests requires its inclusion in the TRC and RIM tests because such incentives increase customer bills.

Mr. Haselden expressed concern with the cost-effectiveness calculations for the Public Efficiency Streetlighting program because Petitioner assumed the high-intensity discharge fixtures would be replaced in kind and that the LED fixture is an upgrade. Mr. Haselden stated that this would only be true if the existing fixture had failed and needed to be replaced. He also argued that earning financial incentives for this program is inappropriate because shareholders will also earn a return of and on the investments in the measures.

Regarding Petitioner’s proposed financial incentive for the Low-Income Neighborhood program, Mr. Haselden testified Duke Energy Indiana has offered this program for years without a financial incentive. He argued the Commission’s rules at 170 IAC 4-8 prohibit financial incentives for this program.

Mr. Haselden expressed concern with the avoided energy and capacity costs Petitioner used in calculating the cost-benefit tests, especially the UCT. He disagreed with Petitioner’s inclusion of a carbon tax in its avoided energy cost calculations when calculating the UCT because it has the effect of artificially inflating the NPV of benefits and, consequently, the financial incentive by avoiding a pseudo cost that does not exist.

As to the avoided capacity costs, Mr. Haselden disagreed with the amount of avoided transmission and distribution (“T&D”) capacity costs, which he considered to be excessive. He testified that T&D capacity benefits are created when DSM programs alleviate capacity issues on specific circuits, and none of Petitioner’s DSM programs target specific circuits. He also noted that although Petitioner is implementing a \$1.4 billion Transmission, Distribution, Storage System Improvement Charge (“TDSIC”) plan, DSM programs cannot take credit for benefits from TDSIC projects.

Mr. Haselden also testified that Petitioner’s values for avoided T&D capacity costs are not reasonable because they are based on a 2016 calculation of the average cost of Petitioner’s T&D projects from 2008 to 2015, and he identified a number of flaws with Petitioner’s methodology. He stated that inflating the T&D avoided capacity cost component approximately doubles the calculated financial incentive contributed by avoided capacity costs. Mr. Haselden recommended that avoided T&D capacity costs be set to zero and that Petitioner be required to re-calculate the cost-benefit tests using correct amounts and discounted treatment of avoided capacity costs.

As to Petitioner’s proposed financial incentive, Mr. Haselden testified there is no true-up of the shared savings approach adopted by all Indiana utilities and the methodology is not aligned with the issue as accurately as it should be. He pointed out several shortcomings with Petitioner’s proposal that he believes result in overstated UCT scores and, therefore, overstated financial incentives. Consequently, Mr. Haselden recommended replacing the current UCT-based methodology with a more straightforward methodology that would directly address the lost opportunity to invest in a supply-side resource and be easier to administer.

Mr. Loveman, Utility Analyst in the OUCC’s Electric Division, recommended the Commission authorize Petitioner continued recovery of the most recently approved DSM adjustment factor, subject to later reconciliation, until Petitioner receives Commission approval of a new DSM Plan. He also recommended Petitioner book plant-in-service capital costs by removing the rebate given to customers for the LED fixture change-outs in the proposed Public Efficiency Streetlighting program.

As to the Public Efficiency Streetlighting program, Mr. Loveman testified that it is unclear how Petitioner intends to account for change-outs within its accounting records or in any future filings. He recommended that in any future base rate case filing where the capital costs for Petitioner-owned lighting is updated, the capital costs booked as plant in-service should reflect the actual cost of conversion, which is the material and labor to install the new fixture less the rebate given to customers. Mr. Loveman stated that Petitioner is currently earning a return of and a return on these lighting fixtures through its base rates. So, if the rebate amount is not removed when capital costs are booked for the changed-out fixtures, Petitioner will also recover this rebate amount in base rates via depreciation expense and a return on the assets over the life of the assets.

Finally, Mr. Loveman stated that if the Commission rejects a portion of any particular program or finds the entirety of Plan unreasonable, then the OUCC recommends the Commission continue Petitioner’s interim program authority previously granted in this Cause and associated cost recovery using the most-recently approved DSM adjustment factor, subject to reconciliation, until a new DSM Plan is approved.

C. **CAC's Case-in-Chief.** Mr. Jim Grevatt, Managing Consultant at Energy Futures Group, recommended the Commission reject the EE Plan in its entirety and that Petitioner be directed to work with its OSB to address shortcomings so that a revised Plan can be submitted that will meet the “reasonableness” standard required for Commission approval. He made specific recommendations relating to the transparency of the MPS process, the prioritization of certain short-life measures, the Low-Income Weatherization program, non-residential lighting controls, and lost revenue recovery.

As to the MPS, Mr. Grevatt testified that the MPS relied on Petitioner’s Spring 2017 forecast, which projected load to increase by 21% through 2042, whereas the 2018 IRP projected an increase of about 13.5% through 2038. Mr. Grevatt recommended Petitioner work with its OSB to reconcile these differences and gain stakeholder consensus for inputs into its next IRP and use in its revised EE plan. Despite this discrepancy between the MPS and IRP, he stated Petitioner is projecting significant load growth. Accordingly, he also recommended Petitioner focus on promoting long-lived measures that can mitigate load growth and reduce the need for costly infrastructure investment.

Mr. Grevatt stated the CAC opposes Petitioner’s proposal of a four-year plan, rather than a three-year plan, because of the potential risks associated with “locking-in” program implementation strategies, budgets, and savings levels over the extended approval, even with the limited flexibility provided by the OSB governance model framework.

Mr. Grevatt compared the proposed level of savings in the EE Plan against Petitioner’s preferred portfolio in its 2018 IRP. He stated that although Petitioner is proposing to implement more EE than was selected in the IRP, the CAC has concerns about what level of EE should have been selected as cost-effective given the errors in the IRP identified by CAC witness Sommer.

Regarding Petitioner’s proposed EE programs, Mr. Grevatt testified that the proposed portfolio does not strike an appropriate balance in the savings it proposes to achieve because the Plan is overly reliant on short-lived residential behavioral program savings. Mr. Grevatt raised three concerns with the MyHER program: (1) the program comprises 57% of the total annual residential sector savings, equating to 28% of the total annual portfolio savings and is the least cost-effective of Petitioner’s residential programs; (2) the individual customer savings are almost negligible and do not help customers manage their energy bills; and (3) the short-lived savings will not endure to help mitigate load growth projections in the residential sector.

Mr. Grevatt recommended Petitioner focus on longer-lived measures, such as heat pump water heaters (“HPWH”) and other lighting controls, that would provide greater savings opportunities for customers and persistent savings to help mitigate anticipated load growth. Specifically, Mr. Grevatt recommended Petitioner increase HPWH midstream promotion, increase promotion of high-efficiency heat pumps, increase promotion of residential shell measures (such as attic insulation and air sealing), and expand its promotion of non-residential networked lighting controls.

Regarding the Low-Income Weatherization program, Mr. Grevatt discussed past performance issues and asserted the dollar limits on health and safety expenditures are too low and too restrictive to meaningfully address the issues that stall weatherization. He testified that based on his experience

managing EE programs, it would be appropriate to use an objective third-party evaluator to identify issues and propose solutions to improve program performance. Mr. Grevatt recommended that approval of the EE Plan be contingent on Petitioner conducting an analysis to evaluate the cause of the program's poor past performance and proposed solutions for any cause.

As for lost revenue recovery, Mr. Grevatt testified that Petitioner's request to collect \$28.8 million in lost revenues during the four-year Plan period is an incomplete and misleading representation of the funds that it proposes to recover. He stated that because Duke Energy Indiana proposes to collect lost revenues for the life of the measure, it will continue to collect lost revenues beyond the four-year Plan period. He noted the projected lost revenues pursuant to Petitioner's Corrected Exhibit 5-B for 2021-2026 is \$66.7 million compared to \$147 million in contemplated program costs for the proposed four-year program cycle.

Mr. Grevatt testified that Petitioner's lost revenue proposal is unreasonable and transfers risk to customers because customers will be forced to pay regardless of any changes that affect sales volumes. He recommended the collection of lost revenues be limited to the measure life, or three years, whichever is less, because three years mirrors the typical Plan period, and is a reasonable time period for which evaluators can make estimates about technology and market condition changes that will affect natural adoption of efficiency measures. In addition, limiting lost revenue recovery to three years would result in Petitioner collecting approximately \$42.5 million in lost revenues, or roughly 29% of program costs, which is more reasonable. Mr. Grevatt also recommended Petitioner implement a true-up process for lost revenues that considers the amount Petitioner collects towards its approved revenue requirement.

Finally, Mr. Grevatt stated he generally supports Petitioner's financial incentive proposal if its lost revenue recovery is limited as recommended. He believes that earning an attractive financial incentive on top of no-risk lost recovery is unreasonable.

Ms. Anna Sommer, Principal at Energy Futures Group, testified that Petitioner's IRP is "irredeemably flawed." She stated the three major flaws related to EE include: (1) modeling costs were inconsistent with actual EE costs; (2) use of incorrect transmission loss figures to translate savings from meter to generator; and (3) lack of an avoided T&D estimate in the selection of EE.

Regarding Petitioner's modeling costs, Ms. Sommer provided a table showing that the levelized costs of Petitioner's EE bundles used in the 2018 IRP are almost always higher than the levelized costs of the actual DSM programs, and at times nearly twice as high. She disagreed with Petitioner that it is not appropriate to compare Duke DSM Program levelized costs to Duke IRP EE bundle levelized costs. Ms. Sommer pointed to Mr. Park's rebuttal testimony in Cause No. 45253 and noted there were inconsistencies in what was relied on in the IRP versus what was filed in Petitioner's 2017 scorecard, as updated in February of 2020. Ms. Sommer concluded that Mr. Park's calculations do not support the levelized costs used by Petitioner to model future EE programs, and that there is more cost-effective EE available than what was selected in the IRP.

Ms. Sommer also argued that Petitioner should have converted energy savings from the meter using marginal cost as opposed to the average line loss that it used because EE always saves energy

at the margin due to above-average T&D costs. According to Ms. Sommer, if Duke Energy Indiana had used the marginal cost, the modeled savings would have increased by about 10%.

Finally, Ms. Sommer testified that Petitioner omitted avoided T&D costs when it assessed the economically optimal level of EE. Citing to 170 IAC 4-7-8(c)(6) and the Commission's Order in Cause No. 43955 DSM 7, she stated that she found it highly improbable there were no avoided costs.

D. Petitioner's Rebuttal Case. Mr. Duff responded to concerns raised by the OUCC and the CAC. Mr. Duff disagreed with OUCC witness Haselden's general allegation that Petitioner failed to adequately support its requested relief and pointed to the information it provided to satisfy the requirements of Section 10.

In response to the OUCC's concern with the proposed financial incentive mechanism, Mr. Duff testified that Petitioner is proposing to continue the same incentive structure approved in DSM-4 because it: (1) is well understood by interested stakeholders, Petitioner, and the Commission; (2) effectively aligns Petitioner's incentives with customers' interests; and (3) has incentivized the type of performance from Petitioner's portfolio that was intended. He stated that during the three years of its EE plan approved in DSM-4, Petitioner's portfolio of programs has delivered over 118% of the expected MWh of energy savings while incurring less than 83% of the expected cost.

Mr. Duff testified that Mr. Haselden's argument that Petitioner's financial incentive is disproportionately higher than that of other utilities is misleading and inaccurate because it ties the magnitude of a utility's financial incentive to customer count, which has little to do with the magnitude of the energy and capacity savings achieved and does not correlate to the cost of the EE programs. He said a more reasonable and accurate approach is to look at the financial incentive that is earned compared to the energy savings achieved.

Responding to Mr. Haselden's concern with a lack of true-up of the shared savings incentive calculation, Mr. Duff agreed it was important to update the avoided cost inputs in determining the UCT benefit at the time of EE plan approval. However, citing to the Commission's February 26, 2020 Order in Cause No. 43955 DSM 7, Mr. Duff said that a level of certainty and stability in the avoided costs used for calculating cost-effectiveness and shared savings is needed during plan implementation.

Mr. Duff also disagreed with Mr. Haselden's proposed alternative to replace the UCT-based methodology to address the foregone supply-side investment. He testified that aside from being unnecessarily complex, the OUCC's proposed alternative is also impractical because it requires many assumptions to be made. He also stated that the methodology is flawed because it only reflects the lost opportunity to invest in supply-side resources or avoided capacity costs and excludes avoided energy, which is one of the primary goals of EE programs.

Regarding the OUCC's position that Petitioner's ability to earn a financial incentive on the Low-Income Neighborhood program is prohibited by Commission rule, Mr. Duff noted that the program does not meet the definition of a home energy efficiency assistance program, as defined by 170 IAC 4-8-3(a)(2), because the program is targeted geographically, rather than specific customers based on financial need.

Finally, in response to the CAC's concern about the OSB having flexibility to modify programs over the four-year EE Plan, Mr. Duff proposed to double the OSB's discretionary spending cap to 20% to allow for more substantial portfolio changes that could potentially be required.

Ms. Dean responded to Mr. Haselden's and the OUCC's concerns with some of Petitioner's proposed programs. Regarding the OUCC's concern with Petitioner ceasing to provide LED light bulbs to qualifying customers after 2020 as part of the Agency Assistance Portal program, Ms. Dean testified that Petitioner has not yet decided to stop providing packages of LEDs but is evaluating potential program modifications for the future. She said Petitioner is looking to pursue other alternatives, such as offering specialty lamps, and will take any such recommendation to the OSB.

Ms. Dean also responded to Mr. Haselden's complaint that the Energy Efficiency Education program will no longer provide GSL A-Line LED bulbs in kits after June 30, 2020, and that the kits will instead include specialty LED bulbs. Ms. Dean testified that the OUCC has been voicing concerns about Petitioner's reliance on A-Line LEDs and that Petitioner's decision to change to candelabra bulbs was communicated to the OSB at its February 12, 2020 meeting.

As to the Multi-Family Energy Efficiency Products and Services, Residential Energy Assessments, and Smart Saver[®] Non-Residential Incentive Programs, Ms. Dean testified that Petitioner was proposing to increase spending for these programs because they are successful programs and Petitioner's Program Managers believe there is increased potential for customer participation. She also noted that Petitioner requested additional funding from its OSB for each of these programs in 2019.

Ms. Dean further addressed Mr. Haselden's concerns with a decrease in the Smart Saver[®] Residential program budget and his concern that GSL LED bulbs will not be offered through the On-Line Savings Store or through the Free Lighting programs after June 30, 2020. Ms. Dean testified the Smart Saver[®] Residential program budget decreased because Petitioner is shifting to direct install programs and increasing the types of retail establishments that attract lower income shoppers. She stated direct installs will help ensure customers' needs are met and that the new LEDs have been installed in permanent fixtures that used to be incandescent. GSL LED bulbs are proposed to continue through the Retail Lighting program, but at a diminishing rate in each subsequent year.

As to the OUCC's recommendation that Petitioner should not earn financial incentives or lost revenues on the Public Efficiency Streetlighting program, Ms. Dean distinguished Petitioner's program from Indiana Michigan Power Company's ("I&M") outdoor lighting program. She understands that I&M chose to use the rebate to buy down the capital cost of the streetlights it owns; whereas Petitioner structured its program to directly provide the incentive to the customer. Ms. Dean stated this is consistent with Petitioner's DSM program design, which has been based on operation and maintenance items and not on capital spend. Ms. Dean further testified that Petitioner believes this will lead to success because the cash incentive to help offset the customer's cost to upgrade to LED will incent customers to participate in the program.

Ms. Dean disagreed with Mr. Haselden's recommendation that Petitioner use the full direct and indirect costs for the cost-benefit test for its Public Efficiency Streetlighting program because the

program uses a “replace upon fixture failure” model and assumes equipment is being replaced due to the imminent or actual failure of existing lighting equipment. She stated that, because current lighting tariff structures do not mandate the customer upgrade to LED, the customer could replace the inefficient light with another inefficient light absent an incentive to do otherwise. Ms. Dean explained that Petitioner is trying to incentivize the customer to upgrade to LED. Because a customer can choose a less efficient non-LED lighting fixture, she said it is appropriate to use just the incremental costs of switching to the LED fixture in the cost-benefit analysis.

In response to Mr. Loveman’s concerns with accounting treatment for the Public Efficiency Streetlighting program, Ms. Dean explained that Petitioner is not asking for any recovery or return on capital for lighting in this proceeding. The only budgeted items are for incentive payments to customers, administrative costs, and associated financial incentives and lost revenues.

Regarding Mr. Haselden’s recommendation to deny financial incentives and lost revenues for the Public Efficiency Streetlighting program, Ms. Dean explained the program was structured similarly to Petitioner’s other programs (providing rebates to customers), and that financial incentives and lost revenues help to reduce Petitioner’s disincentive to implement this type of program. In addition, the program allows customers to get uniform, more energy efficient lighting deployment earlier than if the customer only upgrades one light upon failure.

In response to CAC witness Grevatt’s recommendation that Petitioner focus on longer-lived measures, Ms. Dean noted that all of Duke Energy Indiana’s residential programs have a measure life average of five years or greater (with the exception of the My Home Energy Report), with the Smart Saver[®] Residential average measure life being the highest at 14.1 years. She also explained how Petitioner is working to increase participation in program offerings of HPWH, high-efficiency heat pumps, and residential shell measures. In addition, Ms. Dean testified that Petitioner’s Smart Saver[®] Non-Residential program already offers networked lighting controls similar to those recommended by Mr. Grevatt.

Regarding the Low-Income Weatherization program, Ms. Dean testified that the CAC and Petitioner have been working to remedy participation concerns. She noted Petitioner initiated a weatherization improvement plan in 2018 that was presented to the OSB, but the plan did not result in much progress. She testified Petitioner is willing to remove the requirement that the health and safety component average no more than \$250 per home. However, the maximum amount provided per home would remain at \$750, which would allow completion of additional health and safety measures without having to track the average cost for the program. Ms. Dean also testified that Petitioner is willing to open the program to renters.

As to Mr. Grevatt’s concerns with the MyHER program, Ms. Dean responded that MyHER is an important component of Petitioner’s overall portfolio. She testified that the independent verification of the MyHER program has shown MyHER customers are more motivated, engaged, and aware of EE programs than customers who are not in MyHER. She also disagreed with Mr. Grevatt’s calculation for the program savings, noting that customers save, on average, 136.2 kWh. Ms. Dean testified that any savings for Petitioner’s customers, especially its low-income customers, are helpful to reduce energy consumption and increase customer savings for implementing behavioral modifications.

Mr. Park addressed concerns raised regarding Petitioner's 2018 IRP. He again explained how EE was modeled in the 2018 IRP. He testified that the amount of EE in the preferred portfolio is appropriate as seen relative to the amount of EE selected across the range of optimized portfolios, and that Petitioner's filing is consistent with the 2018 IRP when measured on the basis of energy, capacity, and cost. Mr. Park testified that the difference between the filing and the IRP is less than 1% across all three metrics.

In response to Mr. Haselden's concerns, Mr. Park explained how avoided capacity and energy was considered in the 2018 IRP. He stated that evaluation of all resource decisions across a range of plausible futures is important, and that focusing on a single avoided capacity and energy forecast results in an incomplete resource analysis. As to Petitioner's inclusion of a carbon tax in the IRP and analysis of EE, Mr. Park stated that recognition of the possibility of carbon regulation is not only appropriate, but prudent. He explained that carbon regulation will improve the value proposition of EE and will do so for the portion of measure lives that realize savings after carbon regulation begins.

In response to the CAC's concerns, Mr. Park addressed the three main issues with how EE was modeled in the IRP. Regarding avoided T&D costs, Mr. Park testified that avoided T&D costs have not been part of the IRP analysis in the past because those costs are highly locational dependent. However, in response to Ms. Sommer's testimony, he stated Petitioner conducted a sensitivity analysis to test the impact of a 20% reduction in EE cost to reflect the T&D avoided costs used in its EE portfolio filing in the IRP Reference Case scenarios with and without a price on carbon emissions. Mr. Park testified that the results are comparable to Petitioner's proposed portfolio. Although the IRP model did select two additional EE bundles, the additional kWh was not significantly higher than the original analysis.

Regarding the consistency of the IRP modeling costs with Petitioner's actual EE costs, Mr. Park identified several disagreements with Ms. Sommer's methodology, including: inaccurate comparisons of her calculated historical levelized costs of EE programs to those provided by Petitioner because of differing underlying assumptions; errors in her EE levelized cost calculations; and use of incorrect program costs for the Smart Saver[®] Non-Residential program during 2017. Mr. Park testified that to make an accurate comparison to the IRP levelized costs, it is necessary to perform the levelized cost calculations at the individual program level and then add the total levelized costs together, which is then divided by the overall portfolio kWh. He noted that Ms. Sommer's calculated values are even more understated when viewed on the same basis as the IRP.

Mr. Park disagreed with Ms. Sommer's claim that the IRP is invalid because the historical levelized program costs are so much lower than those used in the IRP bundles. He stated that when the calculations are performed correctly to view the information on an equivalent basis, the values are not significantly different, and in several cases, the values in the bundles in the IRP are lower than those in the historical portfolio. In response to Ms. Sommer's allegation that the levelized cost of the IRP EE bundles is higher than the levelized cost calculations based on actual DSM scorecard data, Mr. Park stated that the actual levelized costs of the current EE portfolio in 2017-2019 and continuing into 2020 are very close to the threshold at issue.

Regarding the level of transmission losses used in the analysis of EE in the IRP, Mr. Park responded that because the IRP does not have locational information on where customers will choose to adopt EE programs and the EE savings are being spread across all hours, assuming average losses is more appropriate than assuming marginal losses.

Mr. Phillip O. Stillman, Managing Director, Load Forecast & Corporate Strategic Regulatory Initiatives for Duke Business Services, addressed the CAC's concerns about Petitioner's load forecast. In response to Mr. Grevatt's comment that the 2017 load forecast projected electricity use to increase by 21% from 2018 through 2042, Mr. Stillman testified that it can be misleading to quote a growth figure over a long period of time. Mr. Stillman disagreed that a concerning discrepancy existed between the spring 2017 and spring 2018 forecasts because the MPS and the IRP look to different planning horizons. Also, the MPS forecast does not include the impacts of EE programs, whereas the IRP does. By correcting the time frames and the impact of EE, Mr. Stillman presented a table showing the 2017 and 2018 load forecast were very similar.

Ms. Williams responded to concerns raised regarding the exclusion of financial incentives/lost revenues in the RIM and TRC calculations and Petitioner's assumptions around LED GSL useful life and savings impacts. Ms. Williams disagreed that the RIM and TRC test calculations are incorrect because they do not include financial incentives. She said Mr. Haselden's position is inconsistent with the standard framework Petitioner and other utilities use to evaluate cost-effectiveness. She explained that, while the National Standard Practice Manual includes financial incentives in its definition of a cost, the state of Indiana does not require utilities use that manual for its primary cost-effectiveness calculations.

Ms. Williams also disagreed that Petitioner's use of halogen lighting as a baseline for GSL LEDs is incorrect. She testified that many of the facts underlying Mr. Haselden's position that LEDs should be the baseline have fundamentally changed due to actions taken by the U.S. Department of Energy. Citing to a September 4, 2019 order, she testified that the backstop provision, which would have effectively eliminated the sale of halogen and incandescent lamps on January 1, 2020, did not go into effect, and that retail stores continue to offer incandescent, halogen and CFL bulbs in Petitioner's service territory.

Regarding Mr. Haselden's contention that the portable LED desk lamp should receive no lost revenue, financial incentive, or cost recovery of customer incentives, Ms. Williams committed that Petitioner would review the assumptions made and present any adjustments to the OSB. However, she disagreed that a detailed, independent analysis must be undertaken to ensure underlying measure assumptions are correct because of the significant investment in time and money required.

Ms. Williams disagreed that Petitioner should revise its savings estimates for the Energy Efficiency Education program when the two 9-watt LED bulbs are changed to two 5-watt candelabra-base bulbs. She testified that the lighting component of this program is only 13% of its overall savings and because the program provides a kit with multiple energy saving measures, it is not possible to determine the impact of the change without a full EM&V evaluation. However, Ms. Williams agreed with Mr. Haselden that the measure life for the non-residential LED A-lamp should have accounted for the hours of use for this specific bulb and had a shorter measure life. She said Petitioner will

review the hours of use and measure life assumptions and will present any downward adjustments to the OSB.

Ms. Holbrook responded to Mr. Haselden's testimony regarding the avoided capacity values used in calculating cost-effectiveness and financial incentives. She testified that Petitioner calculated avoided capacity benefits for the EE Plan consistent with previously approved filings. She stated it is irrelevant whether Petitioner has a planning reserve margin deficit in calculating avoided costs. In addition, zeroing out avoided capacity benefits in years Petitioner is long on capacity would adversely affect the cost-effectiveness scores for all DSM programs and result in a much smaller portfolio.

Regarding the OUCC's concerns with the DSMore and UIPlanner software programs Petitioner uses to calculate its actual and forecasted results, Ms. Holbrook testified that the DSMore program is an industry-accepted program used in approximately 30 states and by several independent evaluators. She explained how the DSMore and UIPlanner were used in this filing and the steps Petitioner took to ensure the accuracy of the information.

In response to the CAC's issues with Petitioner's lost revenue calculations, Ms. Holbrook responded that Indiana statute specifically allows for recovery of lost revenues associated with utility EE programs. She also disagreed that Petitioner's request for \$28.8 million in lost revenues during the four-year period is misleading because Petitioner's Corrected Exhibit 5B showed the full impact of the lost revenue over the measure life. In addition, because Petitioner's TDSIC plan requires a rate case to be filed before its expiration (between five and seven years), the full amount of the lost revenue recovery through the EE Rider will be mitigated.

Regarding the CAC's recommendation that lost revenue recovery should be limited to three years, Ms. Holbrook testified that Mr. Grevatt provided no factual basis that such a limit is necessary to mitigate the potential that customers may have implemented the efficiency measure during the life of the measure without Petitioner's incentive. She further indicated that without a meaningful way to measure this future free ridership, utilities have historically relied on the application of free ridership at the point of implementation to determine lost revenues. She also disagreed that lost revenue recovery for the life of measure transfers the risk of future adoption of EE technology. She testified there is no transfer of risk to Petitioner's customers because the recovery of these revenues would have occurred through base rates had Petitioner not provided the EE measures.

Regarding Mr. Grevatt's proposal of a true-up process for lost revenues, Ms. Holbrook stated that lost revenues are a component of one specific rider and is meant to compensate the utility for revenue lost as a result of its EE efforts. She said the lost revenues requested in this proceeding do not guarantee any type of returns on rate base and are focused only on EE activity covered in this rider.

Mr. Jayme T. Stemle, Senior Rates & Regulatory Strategy Analyst for Duke Business Services, responded to concerns with Petitioner's T&D avoided costs. Mr. Stemle explained how Petitioner calculated the T&D avoided cost value and provided additional detail supporting those calculations. He noted the Commission has previously approved this methodology for calculating T&D avoided costs. Mr. Stemle testified the methodology is also reasonable because the calculation divides the growth-related T&D investment dollars by the growth in peak load, which is,

theoretically, a reasonable calculation for growth-related T&D investment throughout Petitioner's service territory. He also testified that Petitioner's TDSIC projects are not growth-related T&D investment dollars.

Mr. Stemle also provided a benchmarking study addressing methods of calculating T&D avoided costs for EE investments. He testified Petitioner is investigating other methods of calculating T&D avoided costs because, in recent years, Petitioner's load forecast has flattened considerably. However, even though Petitioner's peak load growth has slowed, Mr. Stemle stated Petitioner is still avoiding T&D costs because customers continue to electrify their daily lives with appliances, technology, and even the potential for mass electric vehicle adoption.

Mr. Stemle disagreed with Mr. Haselden that T&D capacity benefits are only created when DSM programs alleviate capacity issues on specific circuits and that none of Petitioner's DSM programs target specific circuits, so avoided T&D costs should be set to zero. He testified it is difficult to forecast which customers will use Petitioner's DSM programs and which circuits will be affected, and therefore, using a system-wide average to estimate the T&D avoided cost is reasonable. Mr. Stemle further testified that setting avoided T&D costs to zero is unreasonable because EE programs reduce the energy power plants must produce and the T&D system capacity needed to transport electricity from power plants to customers. In addition, he testified it is more difficult and costly to build a DSM resource on a specific circuit in a short time period at exactly the time the resources will be needed to avoid a T&D expansion.

E. Additional Evidence. At the September 8, 2020, evidentiary hearing, the following additional evidence was offered and admitted into the record: (1) Duke Energy Indiana's Response to the Commission's July 17, 2020 Docket Entry; (2) Duke Energy Indiana's November 8, 2019 Petition filed in this Cause; (3) Scott Park's rebuttal testimony and Rebuttal Workpaper 1-SP filed in Cause No. 45253; and (4) the September 4, 2020 Stipulation of Facts and Evidence Between CAC and Duke Energy Indiana.

Petitioner's response to the July 17, 2020 Docket Entry indicated that avoided T&D costs and impacts influenced the EE analysis in the 2018 IRP in two main areas: development of the EE bundles in the MPS and adjusting for avoided T&D energy losses in the IRP.

Facts stipulated between Petitioner and the CAC include: (1) Petitioner plans to begin its 2021 IRP stakeholder process in November 2020, and Petitioner's next IRP is due in November 2021; (2) Petitioner plans to hold a collaborative process for its OSB in development of its MPS due in February 2021, which included a kick-off meeting on August 12, 2020; (3) Petitioner projects incentivizing 230 HPWHs during its EE Plan, and approximately 51% of Petitioner's residential customers use electricity for water heating; (4) Petitioner does not have a recent EM&V report for its Low-Income Weatherization program, but the process is set to begin first quarter of 2021; (5) the CAC has provided recommendations to Petitioner to address issues with low goal achievement in the Low-Income Weatherization program; and (6) Projected lost revenues in Corrected Exhibit 5-B for 2021-2026 is \$66.7 million compared to \$147 million in contemplated program costs for the EE Plan.

5. Commission Discussion and Findings. Petitioner requests approval of its proposed EE Plan for 2020–2023 and authority to recover direct and indirect program costs, a financial incentive, and lost revenues pursuant to Section 10.

As an initial matter, we note that by the time this Order is issued, the year 2020 will have passed. However, in accordance with the Commission’s December 27, 2019 Prehearing Conference and Interim Order, Petitioner has continued to implement, on an interim basis, its current EE programs with associated cost recovery. Consequently, the approval herein of Petitioner’s proposed EE Plan is for a period of three years, *i.e.*, for 2021–2023.²

Section 10(h) requires electricity suppliers to apply at least one time every three years for approval of a plan that includes: (1) EE goals; (2) EE programs to achieve those EE goals; (3) program budgets and costs; and (4) procedures for independent EM&V. Once such a plan has been submitted, the Commission is required to consider the following ten factors enumerated in Section 10(j) to determine the overall reasonableness of the proposed plan:

- (1) Projected changes in customer consumption of electricity resulting from the implementation of the plan.
- (2) A cost and benefit analysis of the plan, including the likelihood of achieving the goals of the EE programs included in the plan.
- (3) Whether the plan is consistent with the following:
 - (A) The state energy analysis developed by the Commission under Ind. Code § 8-1-8.5-3.
 - (B) The electricity supplier’s most recent IRP submitted to the Commission.
- (4) The inclusion and reasonableness of procedures to evaluate, measure, and verify the results of the EE programs included in the plan, including the alignment of the procedures with applicable environmental regulations, including federal regulations concerning credits for emission reductions.
- (5) Any undue or unreasonable preference to any customer class resulting, or potentially resulting, from the implementation of an EE program or from the overall design of a plan.
- (6) Comments provided by customers, customer representatives, the OUCC, and other stakeholders concerning the adequacy and reasonableness of the plan, including alternative or additional means to achieve EE in the electricity supplier’s service territory.
- (7) The effect, or potential effect, in both the long term and the short term, of the plan on the electric rates and bills of customers that participate in EE programs compared to the electric rates and bills of customers that do not participate in EE programs.

² Because our approval is for a three-year period, we do not address the parties’ arguments regarding Petitioner’s submission of a four-year plan.

(8) The lost revenues and financial incentives associated with the plan and sought to be recovered or received by the electricity supplier.

(9) The electricity supplier's current IRP and the underlying resource assessment.

(10) Any other information the commission considers necessary.

Following a determination of overall reasonableness by the Commission, Sections 10(k), (l), and (m) establish three possible actions the Commission may take concerning the proposed Plan.

Accordingly, we consider Petitioner's request for approval of its proposed EE Plan.

A. Presentation of a Plan. The evidence is uncontroverted that Petitioner is an electricity supplier as defined by Section 10(a) and that it has made a submission under Section 10(h) seeking approval of a proposed plan. However, the evidence is disputed as to whether Petitioner has submitted a plan that includes the four elements required by Section 10(h), *i.e.*, goals, programs to achieve those goals, budgets and program costs, and independent EM&V.

Based on the evidence presented, as discussed further below, we find that Duke Energy Indiana's EE Plan satisfies the requirements of Section 10(h).

1. EE Goals. Section 10(c) specifically defines "energy efficiency goals" as:

All energy efficiency produced by cost-effective plans that are:

- (1) reasonably achievable;
- (2) consistent with an electricity supplier's integrated resource plan; and
- (3) designed to achieve an optimal balance of energy resources in an electricity supplier's service territory.

Petitioner proposed EE goals to be achieved through its EE Plan that are expected to result in energy savings of approximately 1.18% of eligible retail sales for each year of its Plan, assuming 90% of eligible non-residential load has opted out of participation. Ms. Dean testified that most of the programs in the proposed EE Plan are the same as the previously approved programs, except for the Public Efficiency Streetlighting program. Mr. Park explained Petitioner's process for developing its EE Plan with goals that are consistent with its 2018 IRP.

The CAC raised several issues with Petitioner's 2018 IRP and argues that it is flawed because, *inter alia*, (1) modeling costs are inconsistent with Petitioner's actual costs of implementing EE; (2) incorrect transmission loss figures to translate savings from the meter to the generator were used; and (3) there was no avoided T&D estimate in the selection of EE. The CAC argued that Petitioner's IRP likely would have selected significantly more cost-effective EE if the issues the CAC raised were addressed.

In response to the CAC's concerns, Mr. Park testified that Petitioner's historical leveled program costs are not significantly different from those used in its IRP. He explained that Ms. Sommer's calculations were not performed correctly to view the information on an equivalent basis. But, when the calculations are corrected, the values of the EE bundles are not significantly different, and some in the IRP are lower than those in the historical portfolio. As to the transmission loss figures, Mr. Park explained that because savings from EE occurs during all hours, the use of average line losses, rather than the marginal line losses, is more appropriate.

Regarding avoided T&D costs, Mr. Park testified that these generally have not been included as part of the IRP analysis because they are highly locational dependent. Petitioner further explained in its July 24, 2020 Docket Entry response that avoided T&D costs are considered as part of the total avoided costs used in the economic screening of EE measures in the MPS. This information is then incorporated in the IRP optimization process. Mr. Park also performed a sensitivity analysis that reduced EE costs by 20% to act as a proxy for including specific T&D avoided cost savings in the IRP analysis. In that analysis, the IRP model did select two additional EE bundles, but the additional savings were not significantly higher than in the original analysis.

Pursuant to Section 10, the EE goals should be reasonably achievable, consistent with the utility's most recent IRP, and designed to achieve an optimal balance of energy resources. Based on the evidence presented, we find that Petitioner appropriately considered and modeled EE in its 2018 IRP analysis, and that Petitioner's proposed EE Plan is consistent with its 2018 IRP when measured on the basis of energy, capacity, and cost. The evidence demonstrates that the proposed EE goals are consistent with the preferred portfolio from the IRP and within the boundaries of the EE from the optimized portfolios of five different scenarios that considered different amounts of load, fuel, power prices, and different levels of carbon regulation. Accordingly, we find Duke Energy Indiana has proposed EE goals that are reasonably achievable, consistent with its 2018 IRP, and designed to achieve an optimal balance of energy resources over time.

2. EE Programs. The EE Plan includes nine residential and four non-residential programs designed to achieve the set EE goals. Except for the Public Efficiency Streetlighting program, the proposed EE programs are essentially the same as those currently being implemented.

The OUCC primarily raised concern with the cost-effectiveness of several programs, which we discuss further below in our consideration of the costs and benefits of each proposed program. The CAC, however, argued that Petitioner's portfolio of residential programs is over-reliant on the MyHER program and that Petitioner should promote longer-lived measures. The CAC also recommended Petitioner look for more ways to improve its Low-Income Weatherization program.

The record reflects that, except for the MyHER program, all of Petitioner's proposed residential programs have a measure life average of five years or greater. In addition, Petitioner is working to increase its program offerings of HPWH, high-efficiency heat pumps, and residential shell measures. Although Petitioner's MyHER program is a significant portion of the residential portfolio, the evidence shows that participation in the program increases customer motivation and engagement in EE. Petitioner's EM&V also shows that these customers are 50% more likely to have

made past and future equipment purchases and that the program drives participation in other programs.

As to its Low-Income Weatherization program, Ms. Dean stated that although the CAC and Duke Energy Indiana have been working to remedy participation concerns, little progress has been made. However, in her rebuttal testimony, Ms. Dean proposed to remove the average health and safety requirement of no more than \$250 per home and add renters as eligible participants. We agree that these are reasonable next steps in attempting to address participation issues and should be made. We also encourage Petitioner to continuing working cooperatively with its OSB to improve participation in the Low-Income Weatherization program.

Based on the evidence presented, we find that Petitioner’s proposed EE Plan includes a reasonable mix of residential and non-residential EE programs that are designed to meet Duke Energy Indiana’s EE goals.

3. Program Budgets and Costs. Duke Energy Indiana witness Dean identified the annual budget associated with the Plan and the costs associated with each of the programs, for a total of \$147,249,627, exclusive of a financial incentives and lost revenues. Mr. Duff testified that this amount includes direct and indirect costs, customer incentives, and EM&V. Petitioner proposes no changes to its OSB’s authority to approve new programs without seeking additional approval from the Commission if those program budgets are within the 10% spending cap previously approved for existing programs’ approved budgets. Accordingly, we find Petitioner has sufficiently identified its proposed program budgets and the associated costs.

4. Independent EM&V. Ms. Williams testified that the proposed EE Plan includes EM&V with a process for independent evaluation of the programs. She explained the EM&V processes that Petitioner currently uses and will continue to use if its proposed EE Plan is approved. No party raised any issues with Petitioner’s EM&V process. Accordingly, we find that Petitioner’s proposed EE Plan includes a process for independent EM&V.

B. Reasonableness of the Plan. Having determined that Petitioner has submitted an EE Plan as required by Section 10(h), Section 10(j) identifies ten factors the Commission must consider in determining its overall reasonableness. For the reasons set forth below, we find that Petitioner’s EE Plan, except for the financial incentive associated with the Low-Income Neighborhood program, is reasonable and should be approved as set forth herein.

1. Projected Changes in Customer Consumption. Mr. Duff identified the targeted energy savings resulting from implementation of the EE Plan, which are reflected below:

Duke Energy Indiana Projected Energy Savings (MWh Gross Savings @Plant)				
	<u>2020</u>	<u>2021</u>	<u>2022</u>	<u>2023</u>
Total	203,310	207,105	214,947	213,247

These projected savings along with Petitioner’s load forecast in its 2018 IRP enable us to consider projected changes in customer consumption of electricity resulting from implementation of the Plan. Because Petitioner’s proposed programs are designed to result in energy savings of 1.18% of eligible

retail sales each year of the Plan, we expect a corresponding decrease in customer consumption of electricity compared to what it would be without the programs. Although the CAC argued that Petitioner should and could do more, no party provided any evidence to the contrary regarding changes in customer consumption.

2. Cost-Benefit Analysis. Duke Energy Indiana evaluated the cost-effectiveness of its proposed EE programs using the four industry standard tests: UCT, TRC, RIM, and PCT. Ms. Williams explained the purpose of the various tests and provided the test results for each of Duke Energy Indiana's proposed programs. Based on Petitioner's calculations, all of the programs passed the UCT and TRC tests, except the Low-Income Weatherization and Low-Income Neighborhood programs. All programs in which participants face an incremental out-of-pocket cost also passed the PCT. Although very few of the EE programs passed the RIM test, this is not unusual because it includes lost revenues as a program cost. Petitioner's portfolio of programs was informed by the MPS performed by Nexant and actual market experience, creating a high level of confidence that the Plan is achievable. The calculation of the overall portfolio cost and benefit analysis was performed utilizing the UCT with a score of 2.75, meaning the benefits are 275% of the costs of the portfolio Plan. Exhibit 1-A attached to Petitioner's Exhibit 1.

The Commission's Guidelines for Demand-Side Cost Recovery by Electric Utilities at 170 IAC 4-8-2(b)(3) requires utilities to provide a cost-benefit analysis that uses, at a minimum, the TRC, PCT, UCT, and RIM. As noted by the parties, each of these tests is designed to compare various costs and benefits from a different perspective. The TRC test helps determine whether EE is cost-effective overall, whereas the PCT, UCT, and RIM tests help to determine whether the program design and efficiency measures provided by the program are balanced from the perspective of the participant, utility, and non-participants, respectively. The purpose of applying several different tests is to provide a more comprehensive analysis of the cost-effectiveness than that which can be accomplished with just one of the tests. Hence, consideration of multiple cost-effectiveness tests allows us to better evaluate the reasonableness of individual programs and the overall EE portfolio.

The OUCC expressed concern with Petitioner's cost-effectiveness calculations for its proposed lighting measures and recommended the Commission establish January 1, 2021 as the effective date for considering LEDs as the baseline for programs containing GSLs. On rebuttal, Ms. Williams explained that the backstop energy conservation standard of 45 lumens per watt, which was expected to take effect on January 1, 2020, never went into effect. Consequently, retail stores in Petitioner's service territory continue to sell incandescent, halogen, and CFL bulbs. While we recognize that LEDs have become more widely available, we find the continued use of halogen lighting as the baseline to be reasonable at this time, particularly given the current U.S. Department of Energy lighting standards. The OUCC also raised similar concerns with the estimated useful lives of desk lamps, residential GSLs, and non-residential smart saver GSLs. While we find Petitioner's treatment of these bulbs to be reasonable, we note that these issues are more appropriately raised and addressed in the OSB process, and we encourage the parties to do so.

The OUCC also disagreed with Petitioner's use of only the incremental costs, and not all the direct costs, in calculating the cost-effectiveness of the proposed Public Efficiency Streetlighting program. To calculate the cost-benefit of this program, Petitioner used a "replace upon fixture failure model" that assumes the equipment is being replaced due to imminent or actual failure of existing

lighting equipment. Mr. Haselden noted that this program is not limited to customers replacing a failed or imminently failing light fixture. Instead, the program is also for the replacement of working light fixtures. However, Ms. Dean explained that because some of the lighting fixtures are fully depreciated and some are nearly depreciated, many customers are near a decision point for their lighting fixtures. In addition, because Petitioner's current lighting tariff structure does not mandate the customer upgrade to LED, the customer could replace the current inefficient light with another inefficient light. Because these lights will generally need to be replaced within the next few years and the fact that a planned replacement over a three-year period is more economical than a piecemeal replacement, we find Petitioner's use of incremental costs in the cost-benefit tests is reasonable.

The OUCC also raised several general issues with Petitioner's cost-benefit analysis. More specifically, Mr. Haselden argued that Petitioner did not model the benefits of avoided generation capacity correctly because Petitioner did not take into consideration when capacity was avoided. Mr. Haselden would have the utility look to when capacity is needed and then include avoided capacity only in those years when capacity is actually avoided. We agree with Mr. Park's statements that, "[a]voided capacity and energy is a benchmark for resource planning subject to need and the portfolio's ability to reliably operate the system. Defining avoided capacity can be challenging." Pet.'s Ex. 9 at 6. Among the challenges is how to choose the appropriate proxy to measure avoided capacity costs given the type of analysis being done. Another consideration is to recognize that an estimate of avoided costs embodies two perspectives: (1) a potential cost to be incurred if a utility must acquire a unit of generation capacity, and (2) an opportunity cost (or potential benefit) given that additional capacity can be sold in the wholesale market. These two perspectives of marginal cost must be reasonably considered when performing both the IRP modeling and the modeling reflected in the market potential study and EE program development. These different forms of analyses are done at different points in time, but the benchmarks of avoided capacity and energy should be comparable, accounting for the differences necessitated by each analysis being done at different times and the different characteristics of the analyses being performed. As a result, the Commission finds Petitioner has reasonably used avoided capacity costs in both the IRP and the cost-benefit test calculations.

The OUCC also argued that Petitioner should not include a carbon tax in its energy costs when calculating costs and benefits because a carbon tax does not currently exist. Although a carbon tax does not currently exist, we do not find Duke Energy Indiana's inclusion of a carbon cost beginning in 2025 to be an unreasonable projection of when such costs may become a reality. In addition, the OUCC's position makes a distinction between the avoided costs used in the IRP modeling and those used in the cost-benefit tests. According to the OUCC, the inclusion of a potential future carbon tax is reasonable in the IRP scenario and optimization analysis used to develop the amount and timing of the EE resource, but it is inappropriate in the EE cost-benefit test analysis. As indicated above, the use of avoided costs in the IRP and the EE program evaluation should be comparable, accounting for the difference in time when the studies are done and the characteristics of the analyses being performed.

We also note that the OUCC's primary concern appears to be with Petitioner's calculations of the cost-benefit tests, which are used in calculating the financial incentive. The calculation of the net benefits used in the financial incentive should also be consistent, to the extent practicable, with the analyses used in the IRP and the EE program development. Utilities are tasked with making resource

decisions based on projections of various cost drivers and potential futures, all of which is uncertain and impossible to predict. Resource planning requires a utility to make reasonable decisions that reflect this large uncertainty, and potential future environmental requirements is a significant consideration. To the extent the utility appropriately considers this uncertainty, the inclusion of potential future carbon taxes in the calculation of net benefits for financial incentives is reasonable.

The OUCC further argued that Petitioner's values for avoided T&D costs were unreasonable, and that Petitioner provided no evidence to support the claim that its EE programs will result in avoided T&D costs. Mr. Haselden recommended that avoided T&D costs be set to zero absent the presentation of actual evidence. On rebuttal, Mr. Stemle explained that Petitioner is investigating alternative methods for calculating avoided T&D costs due to the decrease in peak load growth in recent years, but because the investigation is not complete, Petitioner used the previously approved T&D values with an annual escalation. He also explained that Petitioner used a system-wide average to estimate avoided T&D costs due to the difficulty of identifying specific circuits that may be affected by the EE programs, and that Petitioner's results were within the range of reasonable values used by other utilities. Based on the evidence presented, we find Petitioner's approach reasonable.

The OUCC also argued that Petitioner did not correctly calculate the RIM and TRC tests because Petitioner did not include the financial incentive and lost revenues. The Commission previously addressed this issue in DSM-4 and explained that the cost-benefit analysis of the Plan does not require a comparison of the program costs as defined in Section 10(g) with the benefits of the program.

Finally, the OUCC also expressed concern with Petitioner's measure assumptions that it used in its DSMore and UIPlanner software programs and the transparency of those programs. As explained by Ms. Holbrook, the DSMore software is a widely accepted industry standard and was made available to the OUCC for its review. She also explained the steps Petitioner took to ensure the accuracy of the information used in these programs. Accordingly, we find no reason to require an independent third-party review.

Based on the evidence presented, we find that Petitioner has demonstrated that its proposed EE Plan and the individual programs, except for the Low-Income Weatherization and Low-Income Neighborhood programs, are reasonably cost-effective.

3. Consistent with State Energy Analysis and Utility IRP. Ind. Code § 8-1-8.5-3 requires the Commission to develop, publicize, and keep current an analysis of the long-range need for the expansion of electric generation facilities and sets forth certain requirements that the analysis must include. The most recent staff report on the Commission's analysis is contained in the 2018 Report on the Statewide Analysis of Future Resource Requirements for Electricity.³ Mr. Park testified that the proposed EE Plan is consistent with the statewide analysis as presented in that report. Petitioner provided SUFG information regarding its EE programs and performance levels and, therefore, the SUFG's energy analysis reflects information provided by Petitioner. No party provided any evidence to the contrary. Accordingly, we find the evidence supports that Petitioner's proposed EE Plan is consistent with the State Energy Analysis.

³<https://www.in.gov/iurc/files/2018%20Report%20on%20the%20Statewide%20Analysis%20of%20Future%20Resource%20Requirements%20for%20Electricity.pdf>

As discussed earlier in this Order, we find that Petitioner’s EE Plan is consistent with its 2018 IRP.

4. **EM&V.** The evidence presented demonstrates that evaluation for all programs in the Plan will be conducted by independent evaluators. Ms. Williams testified that the independent evaluators would perform a process evaluation and an impact evaluation. Ms. Williams described the process and rigor that Petitioner applies to its EM&V. She noted that Petitioner’s approach to EM&V was approved in DSM 4 and presented a current schedule of EM&V timelines for each EE program. Ms. Williams testified that Petitioner would continue to file in accordance with 170 IAC 4-8-4(b) copies of its EM&V studies completed within a given year and would work with its OSB by providing draft EM&V studies and periodic updates on evaluation status and progress. Petitioner’s estimated EM&V costs for the duration of the proposed EE Plan is \$5,794,025, or approximately 3.9% of total program costs.

Petitioner proposed to continue its current process of issuing EM&V reports every other year for each of its EE programs. In DSM-4, Petitioner explained this approach was reasonable because programs must be allowed to mature sufficiently so that a statistically significant sample size is available. *Duke Energy Indiana, LLC*, Cause No. 43955 DSM 4 at 29 (IURC Dec. 28, 2017). However, in this case, most of Petitioner’s proposed programs have been implemented for some time and are well-established. Only the Public Efficiency Streetlighting program is a new program.

Although neither Section 10 nor the Commission’s rules require a utility to perform and issue annual EM&V reports,⁴ all the other large, investor-owned Indiana electric utilities conduct and issue EM&V reports on an annual basis.⁵ As the OUCC noted, technologies are improving and costs are rapidly decreasing (particularly in the commercial/industrial sector), and therefore, more frequent evaluation of the measures when prices and efficiencies change significantly is recommended. The CAC also noted the importance and need for EM&V to assist in remedying the under-performance of the Low-Income Weatherization program. EM&V measures accountability of impacts, provides risk management to support energy resource planning, and identifies areas for continuous improvement. Consequently, it is important to verify energy savings in a timely manner to ensure ongoing cost-effectiveness of programs and allow for decisions on whether changes should be made in program design or implementation.

Exhibit 4-B of Petitioner’s Exhibit 4 indicates that the actual EM&V report dates “will vary depending on program participation to provide a significant sample and the time needed to collect adequate data.” Given that most of Petitioner’s EE programs have been operating for some time, we believe that EM&V reports may readily be conducted more frequently than indicated and encourage Duke Energy Indiana to make this change.

⁴ 170 IAC 4-8-4(b) simply requires a utility to annually submit information, data, and results from the utility’s EM&V activities.

⁵ See, *Ind. Mich. Power Co.*, Cause No. 44841 (IURC Sept. 20, 2017); *S. Ind. Gas and Elec. Co.*, Cause No. 44927 (IURC Dec. 28, 2017); *N. Ind. Pub. Serv. Co.*, Cause No. 45011 (IURC Sept. 12, 2018); *Indianapolis Power & Light Co.*, Cause No. 44945 (IURC Feb. 7, 2018).

Based on the evidence presented, we find that Petitioner's proposed EM&V procedures to independently verify the results of its proposed programs are reasonable. However, because the EE Plan approved herein will only be effective for three years (i.e., 2021 through 2023), Petitioner shall update its Exhibit 4-B attached to Petitioner's Exhibit 4 to reflect a revised timeline for conducting EM&V. The revised timeline must also include at least one evaluation report for the Public Efficiency Streetlighting program. In addition, while we find that Petitioner's proposed EM&V is reasonable for this EE Plan, Petitioner, in its next filing for approval of a new EE plan, shall provide for the filing of annual EM&V reports for each program or explain why annual filing of EM&V reports are unnecessary or unreasonable.

5. Undue or Unreasonable Preference to Customer Classes.

Petitioner's portfolio of programs offers a variety of programs and measures for both residential and non-residential customers. It includes several delivery channels to ensure that interested customers have an opportunity to participate. The evidence demonstrates the costs have been appropriately allocated to customer rate calculations consistent with accepted ratemaking practices. There was no evidence presented identifying any undue or unreasonable preference to any customer class resulting, or potentially resulting, from the implementation of a proposed program or from the overall design of the EE Plan. While the CAC argued that Duke Energy Indiana over-relies on the MyHER program to the detriment of other residential programs and longer-lived measures, we disagree for the reasons explained earlier in this Order. Accordingly, we find the EE Plan will not result in undue or unreasonable preference to any customer class.

6. Stakeholder Comments. This provision simply requires the Commission to consider comments provided by customers, customer representatives, the OUCC, or other stakeholders concerning the adequacy and reasonableness of the EE Plan. As Petitioner's witness Dean testified, in preparation of the EE Plan, Petitioner presented the results of its MPS performed by Nexant with its OSB for input on February 8, 2018. Petitioner also met with the OUCC and the CAC to discuss the proposed EE Plan for feedback prior to its filing with the Commission. Furthermore, the OUCC and the CAC provided comments through the evidence they presented in this proceeding, which the Commission has considered and addressed in making its determinations in this Order.

7. Effect or Potential Effect of the Plan on Electric Rates and Customer Bills of Participants and Non-participants. Petitioner provided evidence of the short-term bill impacts on customers as well as various cost-effectiveness tests, some of which are designed specifically to evaluate the long-term effect of the proposed programs on the electric rates and bills of both participating and non-participating customers. Petitioner's witness Lilly testified that the short-term effect for participating customers is reduced energy consumption, which can result in lower energy bills. The projected long- and short-term impact on customer rates and bills for both program participants and non-participants were considered and presented in Petitioner's case-in-chief. In addition to the calculation and presentation of the projected EE Rider rates, Petitioner evaluated each program under the PCT and RIM test to assess the impact it is projected to have on the rates and energy bills of participating and non-participating customers.

Based on Petitioner’s estimated impact information along with the results of the cost-effectiveness tests, we find that the effects or potential effects of the EE Plan on electric rates and customer bills of participants and non-participants to be reasonable

8. Lost Revenues and Financial Incentives. If the Commission finds that an electricity supplier’s EE Plan is reasonable, Section 10(o) requires us to allow an electricity supplier to recover the following:

- (1) Reasonable financial incentives that:
 - (A) encourage implementation of cost-effective energy efficiency programs; or
 - (B) eliminate or offset regulatory or financial bias:
 - (i) against energy efficiency programs; or
 - (ii) in favor of supply side resources.
- (2) Reasonable lost revenues.

Accordingly, we must consider whether Petitioner’s request for financial incentives and lost revenues associated with the proposed EE programs are reasonable.

i. Lost Revenues. Petitioner seeks approval of lost revenue cost recovery for the life of the measure of the programs approved in its EE Plan, consistent with the Commission’s prior approval in DSM-4. Corrected Petitioner’s Exhibit 5-B, sponsored by Ms. Holbrook and attached to Petitioner’s Exhibit 5, shows the lost revenue amounts of each program by year. Total lost revenue recovery is estimated to be \$28,798,288.

The OUCC recommended the Commission deny lost revenues for the Public Efficiency Streetlighting program and raised concerns with the estimated useful life for several GSL bulbs (which ultimately impacts the amount of lost revenue recovery and was addressed above), but otherwise did not oppose Petitioner’s proposed lost revenue recovery. Regarding the Public Efficiency Streetlighting program, the OUCC argued that because Petitioner currently owns the outdoor lighting fixtures and will continue to do so after the fixture is upgraded, Petitioner will earn a return of, and a return on, the newly upgraded assets when placed in rate base. As such, the OUCC argues it would be unreasonable to doubly compensate Petitioner’s shareholders with lost revenues (and incentives) for this program. However, as Ms. Dean explained, Duke Energy Indiana has not requested any recovery or return on capital for lighting in this proceeding. Instead, the accounting treatment for any fixture changeouts will be addressed in a future rate case. Therefore, we see no reason to deny recovery of lost revenues associated with the Public Efficiency Streetlighting program.

The CAC recommended that lost revenues be capped at three years or measure life, whichever is less, subject to a true-up process to ensure customers do not pay, and Petitioner does not earn, more than the utility’s approved revenue requirement. CAC witness Gravett argued that Petitioner’s estimated lost revenue recovery of \$28.8 million is misleading because this amount applies only to lost revenue collected during the four years of the Plan. When lost revenues beyond the term of the Plan are included, the projected lost revenues for 2021-2026 are \$66.7 million. Mr. Gravett argued that this amount when compared to the \$147 million in total program costs is unreasonable. He asserted that limiting lost revenue recovery to three years, which is the typical DSM plan period and

a more reasonable time period for estimating future adoption of EE, would result in a lost revenue recovery of \$42.5 million, or 29% of program costs, which is more reasonable.

EM&V is the most established approach to reasonably estimating energy savings and lost revenues associated with EE programs. Petitioner’s approach appears reasonably designed to ensure it recovers only the lost revenues that EM&V can establish with a high degree of confidence will result from savings driven by EE measures. Although we recognize that EM&V degrades over time based on accumulated changes, this degradation is built into the EM&V process. The CAC offered no basis on which we could make factual findings that a three-year cap, or any other limitation, would allow Petitioner to recover reasonable lost revenues. As we have previously explained, “[i]t is inherent that energy savings validated by EM&V will create lost revenues. Consequently, cost-effective EE programs should have lower program costs with larger energy savings, which does result in higher lost revenues relative to program costs.” *S. Ind. Gas and Elec. Co.*, Cause No. 44927 at 24 (IURC Dec. 28, 2017).

Therefore, based on the evidence presented, we find that lost revenue recovery for the life of the measure for Petitioner’s EE programs is reasonable and appropriate. Petitioner has an EM&V program in place to verify EE impacts, which accounts for free-ridership, and provides an independent basis for verifying lost revenues associated with its EE programs. Our conclusion is consistent with the Commission’s rules at 170 IAC 4-8 and Section 10, which recognize that EE programs are designed to reduce energy sales, thereby reducing utility revenues.

ii. Financial incentives. Petitioner requests approval to earn a financial incentive on all programs except its Low-Income Weatherization program. Petitioner also requests that its proposed financial incentive mechanism, which is based on the performance of the portfolio of programs measured in terms of its actual, independently verified, net energy and demand savings compared to projected net energy and demand savings, be effective for all eligible programs offered to customers during the EE Plan. Total estimated shared savings is \$21,087,319.

Petitioner proposed a shared savings tiered-incentive structure based on energy saving achievements for the portfolio for each program year, as measured by EM&V, such as was previously approved by the Commission in DSM-4. Under its approved shared savings incentive structure in DSM-4, Petitioner’s proposed incentive structure is as follows:

Financial Incentive (Shared Savings)	
<u>Achievement Level</u> (kWh)	<u>Incentive Level</u> (% of NPV of UCT net benefits)
110% or more	10%
100-109.99 %	8%
90-99.99 %	7%
80-89.99 %	6%
75-79.99 %	5%
0-74.99 %	0%

Although Petitioner has offered the Low-Income Neighborhood program for the past several years without receiving any financial incentive, it now requests a modified financial incentive for

this program. This program is not cost-effective but does pass the PCT because there are no participant costs associated with this program. The proposed financial incentive for this program is tied to the NPV of the avoided costs.

The CAC was generally supportive of Petitioner's proposed financial incentives, but only if lost revenues were limited. Mr. Grevatt testified that allowing Petitioner to earn an attractive incentive on top of no-risk revenue recovery is not reasonable. Both the Commission's rules at 170 IAC 4-8 and Section 10 authorize the recovery of reasonable lost revenues and financial incentives without requiring consideration of the other. This is because they serve two different purposes. Lost revenue recovery allows the utility to recover the revenues it would have recovered absent the energy reductions achieved as a result of the EE programs. Financial incentives, on the other hand, serve to encourage utility investment in cost-effective EE and to remove any bias against pursuing EE. Therefore, we decline to limit or deny financial incentives simply because we have found Petitioner's lost revenue recovery to be reasonable.

The OUCC took issue with Petitioner's calculation of certain avoided costs used in determining its financial incentives. The OUCC argues that Petitioner's methodologies for calculating avoided T&D capacity costs, avoided energy costs, and avoided generation capacity costs unreasonably increases the financial incentives Petitioner can earn. For the reasons explained above in our discussion of Petitioner's cost-benefit analysis, we find Petitioner's calculations to be reasonable.

The OUCC also took exception to approving a financial incentive for the Low-Income Neighborhood and the Public Efficiency Streetlighting programs. As to the Low-Income Neighborhood program, Mr. Haselden argued that a financial incentive is prohibited by 170 IAC 4-8 because it is not a cost-effective program. While we agree that 170 IAC 4-8-3(c) prohibits financial incentives for home energy efficiency assistance programs that are not cost effective, 170 IAC 4-8-3(a) defines a "home energy efficiency assistance program" as one that allows participation by customers who qualify based on financial need. Because the Low-Income Neighborhood program is not targeted to specific customers based on financial need, but is instead targeted geographically to low-income neighborhoods, we agree with Duke Energy Indiana that the Commission's rules do not prohibit financial incentives for this type of program. The Commission recognizes that this program is directed at a segment of the customer base for which other EE programs may be too costly for the customer to take advantage of and, thus, serves to broaden the number of customers that can directly benefit from EE programs. However, we agree with the OUCC that the approval of a financial incentive for this type of program, which is not cost-effective, is unreasonable, especially since Petitioner has been successfully implementing this program since at least 2014 without any financial incentive to do so.⁶ Recognizing that its request to earn a financial incentive for this program may be unreasonable, Mr. Duff testified that if a financial incentive was not approved, then Petitioner's incentive mechanism should exclude the Low-Income Neighborhood program from the calculation of shared savings. Pet.'s Ex. 1 at 19. Because we agree that only approved EE programs that pass the UCT should be included in the financial incentive calculation, we find the Low-Income Neighborhood program should be excluded from Petitioner's incentive mechanism and the calculation of shared savings.

⁶ See, *Duke Energy Indiana, Inc.*, Cause No. 43955 DSM 2 (IURC Dec. 30, 2014) and *Duke Energy Indiana, LLC*, Cause No. 43955 DSM 4 (IURC Dec.28, 2017).

As for the Public Efficiency Streetlighting program, Mr. Haselden argued that the program should not be eligible for financial incentives for the same reason he argued that Petitioner should not recover any lost revenues—because Petitioner will earn a return of, and a return on, the company-owned lighting fixtures. As noted above, Petitioner has not requested any recovery or return on capital for lighting in this proceeding. Instead, any accounting treatment for the replaced fixtures will be addressed in Petitioner’s next base rate case.

The OUCC also proposed an alternative financial incentive in which the utility earns an enhanced ROE on the foregone supply-side investment discounted to the year the DSM measures are deployed. We agree with Petitioner’s witness Duff that such a methodology would add unnecessary complexity and increased potential for disagreement. It also fails to consider avoided energy costs, which is one of the primary goals of EE programs. Petitioner’s proposed methodology was approved in DSM-4 and is consistent with the methodology approved for other Indiana utilities.⁷ In addition, we note that under Petitioner’s current DSM plan, it has delivered 118% of the expected MWh energy savings at just less than 83% of the expected cost. Accordingly, we find Petitioner’s proposed shared savings incentive structure to be reasonable.

9. Petitioner’s IRP. The EE Plan’s consistency with Petitioner’s IRP and underlying resource assessment is discussed above.

C. Conclusion on EE Plan. Based on the evidence presented and considering the factors discussed above, we find Duke Energy Indiana’s proposed EE Plan, except for the financial incentive associated with the Low-Income Neighborhood program, to be reasonable and should be approved.

D. Program Cost Recovery. Petitioner requests that it be authorized to recover program costs through its approved EE Rider. Section 10 provides that once an electricity supplier’s EE Plan is approved, the Commission shall allow the electricity supplier to recover all associated program costs on a timely basis through a periodic rate adjustment mechanism. Section 10(k)(2). The Commission’s rules at 170 IAC 4-8-5 also provide authorization for the recovery of such program costs. Having found Petitioner’s EE Plan to be reasonable, we therefore find that Petitioner shall be authorized to recover its program costs associated with the EE programs approved herein.

E. Oversight and Stakeholder Input. Petitioner proposed to maintain its current OSB, which meets monthly with four quarterly in-person meetings and seven phone calls. At each meeting the OSB reviews the previous month’s scorecard on the performance of each program in the portfolio, the year-to-date performance, and what is expected for the remainder of the year. During the quarterly in-person meetings, the OSB has a more in-depth meeting to review EM&V draft reports and other substantive issues. In rebuttal, Mr. Duff proposed to increase the discretionary spending cap to 20% to allow the OSB to more nimbly respond to changes that could occur over the EE Plan timeframe. No party voiced any objection to Petitioner’s proposal. We find this approach reasonable and so approve.

⁷ *E.g., S. Ind. Gas & Elec. Co*, Cause No. 44645 (IURC March 23, 2016).

F. Update to Rider No. 66. Ms. Lilly testified that upon Commission approval, Petitioner is proposing to update its Standard Contract Rider No. 66, First Revised Sheet No. 66, Pages 1 through 28 (Petitioner's Exhibit 6-A, Pages 1 through 28) subject to Petitioner's filing of the updated EE Rider Tariff sheet with the Commission's Energy Division and begin billing the rates on a bills-rendered basis effective with the Commission's Order in this proceeding. Petitioner's proposed update to Rider No. 66 is approved.

G. Program Scorecard. In DSM-4, the Commission ordered Petitioner to provide additional information regarding its program scorecards so interested parties would have a better understanding of the savings being achieved in each program. Petitioner has been and continues to file its quarterly scorecards in the DSM-4 proceeding. Accordingly, we find that Petitioner shall continue to file such quarterly score cards containing the information required by the DSM-4 Order, but that such filings shall be made under this proceeding's cause number, Cause No. 43955 DSM 10.

6. Other Matters. When Petitioner files its next EE plan for Commission approval in accordance with Ind. Code § 8-1-8.5-10(h), Petitioner shall file its petition under a new Cause and not within its DSM tracker, which should be limited to tracking the costs approved for recovery.

7. Confidential Information. Petitioner filed a Motion for Protection of Confidential and Proprietary Information on November 8, 2019, which was supported by Affidavits, showing certain exhibits and workpapers filed in this proceeding were trade secret information as defined in Ind. Code § 24-2-3-2 and excepted from public disclosure under Ind. Code § 5-14-3-4(a)(4). The Presiding Officers found such information to be confidential on a preliminary basis. Accordingly, having reviewed the confidential information, we find that all such information qualifies as trade secret information and should continue to be held confidential pursuant to Ind. Code §§ 8-1-2-29 and 5-14-3-4(a)(4).

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

1. Petitioner's EE Plan is approved as set forth in this Order.
2. Petitioner's request for timely recovery of costs, including program costs, lost revenues, and financial incentives associated with Petitioner's portfolio of approved EE programs offered to customers during 2021–2023, through its EE Rider is approved consistent with the terms of this Order.
3. Petitioner's request for continued authority to use deferred accounting on an ongoing basis until such costs are reflected in retail rates through its Rider EE is approved.
4. Petitioner shall continue to maintain its OSB as discussed herein.
5. In accordance with 170 IAC 4-8-4, Petitioner shall file under this Cause and post to its website, annually, a document containing information, data, and results from its EM&V activities. In addition, Petitioner shall file its EM&V reports and quarterly scorecards under this Cause.

6. Within 30 days of this Order, Petitioner shall file under this Cause a revised Exhibit 4-B that reflects an updated timeline for conducting EM&V.

7. The material submitted to the Commission under seal is declared to contain trade secret information as defined in Ind. Code § 24-2-3-2 and, therefore, is exempted from the public access requirements contained in Ind. Code ch. 5-14-3 and Ind. Code § 8-1-2-29.

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

HUSTON, FREEMAN, KREVDA, OBER, AND ZIEGNER CONCUR:

APPROVED: DEC 29 2020

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

Mary M. Schneider
Secretary of the Commission