

BEFORE THE  
PUBLIC UTILITIES COMMISSION OF OHIO

In the Matter of the Application of Ohio	)	
Edison Company, The Cleveland Electric	)	
Illuminating Company, and The Toledo	)	Case Nos. 12-2190-EL-POR
Edison Company For Approval of Their	)	12-2191-EL-POR
Energy Efficiency and Peak Demand	)	12-2192-EL-POR
Reduction Program Portfolio Plans for 2013	)	
through 2015	)	

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POST-HEARING BRIEF OF OHIO EDISON COMPANY,  
THE CLEVELAND ELECTRIC ILLUMINATING COMPANY,  
AND THE TOLEDO EDISON COMPANY  
IN SUPPORT OF THEIR ENERGY EFFICIENCY AND PEAK DEMAND  
REDUCTION PROGRAM PORTFOLIO PLANS FOR 2013 THROUGH 2015

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Pursuant to the Attorney Examiners' directive, Ohio Edison Company, The Cleveland Electric Illuminating Company and The Toledo Edison Company (collectively "Companies") submit their Initial Brief in this proceeding.

## **I. BACKGROUND**

Section 4928.66(A)(1)(a) of the Ohio Revised Code requires an electric distribution utility ("EDU"), starting in 2009, to "implement energy efficiency programs that achieve energy savings equivalent to at least three-tenths of one percent of the total, annual average, and normalized kilowatt-hour sales of the [EDU] during the preceding three calendar years to customers in this state. The savings requirement, using such a three-year average, shall increase to an additional [2.0% through 2012], nine-tenths of one per cent in 2013 [and] one per cent from 2014 to 2018." Thus, for years 2013, 2014 and 2015, the cumulative energy efficiency benchmarks are 3.2%, 4.2% and 5.2%, respectively.<sup>1</sup> In addition, R.C. § 4928.66(A)(1)(b) requires an EDU, starting in 2009, to "implement peak demand reduction programs designed to achieve a one per cent reduction in peak demand in 2009 and an additional seventy-five hundredths of one per cent reduction each year through 2018." Thus, the cumulative peak demand reduction benchmarks for 2013, 2014 and 2015 are 4.0%, 4.75% and 5.5%, respectively.<sup>2</sup> Companies' Witness Bradley D. Eberts submitted testimony describing how the Companies calculated both the baselines and the energy efficiency and peak demand reduction

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<sup>1</sup> Companies' Exhibits 12, 13 and 14, - Company Table 1. Each Plan includes tables specific to each Company, and, in Appendix C-3, PUCO Tables 1 through 7. Rather than list each Company's tables individually, this Brief will refer to them generically as "Company" tables. One correction was made to Appendix C-1, which was filed on October 3, 2012. (Company Exh. 2, Direct Testimony of Bradley D. Eberts ("Eberts Testimony"), at Exhibit BDE-1).

<sup>2</sup> Eberts Testimony at Exhibit BDE-3.

benchmarks derived from these baselines, resulting in the following energy and demand savings requirements during the Plan Period:

Energy Efficiency Requirements (GW<sup>h</sup>s)<sup>3</sup>

Company	2013	2014	2015
OE	777	1,033	1,292
CEI	608	810	1,016
TE	340	463	595

Demand Reduction Requirements (MWs)<sup>4</sup>

Company	2013	2014	2015
OE	215	257	290
CEI	166	195	219
TE	83	99	113

No party objected to these calculations.

Companies' Witness George L. Fitzpatrick, of Black & Veatch Corporation ("Black & Veatch"), presented the Companies' Market Potential Study, which is required by Section 4901:1-39-03, Ohio Administrative Code ("OAC"). While the Natural Resources Defense Council ("NRDC") criticized the methodology used to determine the market potential in the Companies' respective service territories,<sup>5</sup> these criticisms are irrelevant for purposes of this case and, accordingly, the Commission should reject them.

Based on the baselines and targets calculated by the Companies and the market potential as identified in the Market Potential Study, the Companies, pursuant to R.C. § 4928.66, OAC

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<sup>3</sup> Exh. BDE-1, Eberts Testimony.

<sup>4</sup> Exh. BDE-3, Eberts Testimony.

<sup>5</sup> NRDC Exh. 1, Direct Testimony of Joel Swisher ("Swisher Testimony") at 3-9.

§ 4901:1-39-04(A), and the Commission's Entry in Case No. 12-814-EL-UNC,<sup>6</sup> filed their Energy Efficiency ("EE") and Peak Demand Reduction ("PDR") Portfolio Plans (the "Proposed Plans") for the period January 1, 2013 through December 31, 2015 ("Plan Period") with the Commission on July 31, 2012.<sup>7</sup> As discussed in Sections II (A), the Proposed Plans satisfy all requirements set forth in R.C. § 4928.66 and the Commission's rules as set forth in OAC §§ 4901:1-39-01 *et seq.* ("Commission Rules"). Assuming the Proposed Plans are authorized to be launched on January 1, 2013, they are designed to meet or exceed the statutory benchmarks during the Plan Period,<sup>8</sup> resulting in the following projected energy and demand reductions:

Projected Energy Efficiency Results (GWhs)<sup>9</sup>

Company	2013	2014	2015
OE	913	1,120	1,322
CEI	903	1,012	1,125
TE	394.5	502	598

Projected Demand Results Requirements (MWs)<sup>10</sup>

Company	2013	2014	2015
OE	226	269	302
CEI	174	204	228
TE	212	110	128

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<sup>6</sup> *In re the Commission's Review of the Participation of [the Companies] in the May 2012 PJM Reliability Pricing Model Auction*, Case No. 12-814-EL-UNC, Entry at 3 (Feb. 29, 2012).

<sup>7</sup> The Proposed Plans are Company Exhibits 12 (Ohio Edison), 13 (CEI) and 14 (Toledo Edison), Tr. Vol. III at 466.

<sup>8</sup> Company Exh. 4, Direct Testimony of Edward C. Miller ("Miller Testimony") at 4.

<sup>9</sup> Company Exh. 22, Rebuttal Testimony of Eren G. Demiray ("Demiray Rebuttal"), Exh. EGD-R4. *See also id.*, Exh. EGD-R1 (showing cumulative savings from Existing Plan estimated year-end 2012 in column 5, and projected cumulative pro-rata savings for years 2013, 2014 and 2015 as reflected in Miller Testimony, Exh. ECM-2).

<sup>10</sup> *Id.*

The Proposed Plans are cost-effective on a portfolio basis, passing the Total Resource Cost ("TRC") test with scores of 2.0 for Ohio Edison, 1.7 for CEI, and 1.9 for Toledo Edison.<sup>11</sup> The Proposed Plans include all descriptions and details required by OAC Section 4901:1-39-04(C), including a description of all proposed programs.<sup>12</sup> As more fully explained in Section II (C) below, these plans provide savings opportunities to all customer classes. In addition, the Proposed Plans describe the Companies' planning, reporting and tracking systems,<sup>13</sup> management and implementation strategies,<sup>14</sup> and evaluation, measurement and verification ("EM&V") activities,<sup>15</sup> and include a proposed shared savings mechanism and a PJM bidding strategy that, as discussed in Section II (B) below, are both just and reasonable.<sup>16</sup>

Notwithstanding the above, based on recommendations presented by several of the parties during the evidentiary hearing, the Companies adopted certain modifications to the Proposed Plans during the rebuttal phase of the proceeding. These modifications included an expansion of energy audits for hospitals and the incorporation of ENERGY STAR benchmarking for members of the Ohio Hospital Association. The Companies also agreed to create a sub program within their Commercial and Industrial ("C/I") Efficient Equipment Program, Small and Large that will specifically target data center participation through the development of special marketing materials and the assistance of an implementation vendor or trade allies with skills

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<sup>11</sup> See Proposed Plans, Section 8.0 and PUCO Table 1; Miller Testimony at 4 and Exhibit ECM-1.

<sup>12</sup> Proposed Plans, Sections 2.0 and 3.0.

<sup>13</sup> *Id.*, Section 4.0.

<sup>14</sup> *Id.*, Section 5.0.

<sup>15</sup> *Id.*, Section 6.0.

<sup>16</sup> *Id.*, Section 7.1; *see also*, Company Exh. 5, Direct Testimony of Eren G. Demiray ("Demiray Testimony") at 7-14; Company Exh. 1, Direct Testimony of John C. Dargie ("Dargie Testimony") at 14-15; Company Exh. 23, Rebuttal Testimony of Eileen M. Mikkelsen ("Mikkelsen Rebuttal") at 3-9.

geared towards data center assessments.<sup>17</sup> None of these modifications are expected to adversely affect the Proposed Plans' TRC results.<sup>18</sup>

The estimated costs of each of the Proposed Plans are summarized in PUCO Table 3.<sup>19</sup> No party claimed in testimony that the total cost of the Proposed Plans was too high; but several complained that the Companies did not spend enough money,<sup>20</sup> even though the Proposed Plans, as filed, are designed to achieve the statutory targets each year during the Plan Period. As explained in Section II (D) below, the costs of the Proposed Plans are just and reasonable and will be recovered through the Companies' Demand Side Management and Energy Efficiency Rider ("Rider DSE"), which was originally approved by the Commission in Case No. 08-935-EL-SSO.<sup>21</sup>

Finally, while not part of the Proposed Plans, the Companies have requested two waivers of Commission directives. The first deals with a request to determine savings based on an annualized rather than pro rata basis, as was permitted in the portfolio case of American Electric Power,<sup>22</sup> and is being requested in an effort to simplify plan administration and minimize costs.<sup>23</sup> The second request deals with the format of the plans vis-à-vis customer classifications and is being requested due to certain limitations surrounding the Companies' billing systems and rate

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<sup>17</sup> Company Exh. 21, Rebuttal Testimony of Edward C. Miller ("Miller Rebuttal") at 8.

<sup>18</sup> *Id.* at 9.

<sup>19</sup> Budgets by cost category for each sector are set forth in Appendices B-1 through B-4.

<sup>20</sup> See, e.g., NRDC Exh. 4, Direct Testimony of Dylan Sullivan ("Sullivan Testimony") at 4-5.

<sup>21</sup> *In re Application of [the Companies] for Authority to Establish a Standard Service Offer Pursuant to Section 4928.143, Revised Code, in the Form of an Electric Security Plan*, Case No. 08-935-EL-SSO, Second Opinion and Order at 14 (Mar. 25, 2009).

<sup>22</sup> Dargie Testimony at 14; *In the Matter of the Application of Columbus Southern Power Company for Approval of its Program Portfolio Plan and Request for Expedited Consideration*, Case No. 11-5568-EL-POR, Opinion and Order at p. 17 (Mar. 21, 2012) ("AEP Ohio POR Order").

<sup>23</sup> Company Exh. 3, Direct Testimony of George L. Fitzpatrick ("Fitzpatrick Testimony"), pp. 10-14.



structures.<sup>24</sup> For reasons more fully discussed in Section II (E) below, both of these waiver requests are reasonable and, accordingly, both should be granted.

In sum, the Proposed Plans comply with all statutory and regulatory requirements in a cost effective manner and have been enhanced through the adoption of several recommendations made by other parties. The fact that several of the opposing parties believe the Companies should have done more does not change these facts. While these same parties made additional suggested modifications to the Proposed Plans, none provided details sufficient to support the adoption of any of these recommendations. In light of this, the only EE&PDR plans before the Commission that comply with all statutory and regulatory requirements and are supported by the evidentiary record are those presented by the Companies. Accordingly, the Companies respectfully request that the Proposed Plans, as subsequently modified by the Companies, be approved and that the proposed costs of the plans be found to be just and reasonable and recoverable through Rider DSE. The Companies further ask that their requested waiver of any rules regarding customer classifications be granted and that they be permitted to determine savings during the Plan Period using the annualized savings methodology.

## **II. ARGUMENT**

### **A. The Proposed Plans Comply with All Statutory and Regulatory Requirements.**

Section 4928.66, Ohio Revised Code, requires the Companies to achieve energy savings of at least 3.2%, 4.2% and 5.2%, for the years 2013, 2014 and 2015, respectively, and peak demand reductions of 4.0%, 4.75% and 5.5% for these same years based on a three-year rolling

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<sup>24</sup> Dargie Testimony at 13-14.

average of kilowatt hour sales.<sup>25</sup> As Witness Eberts explained, this equates to the kWh and kW reductions for each of the Companies as set forth in Exhibits BDE-1 and BDE-3 which were attached to his direct testimony. No party challenged these calculations.

The Commission Rules further require the Companies to develop three-year plans that are designed to meet or exceed the energy reduction targets and meet the peak demand reduction targets.<sup>26</sup> These plans must be cost effective on a portfolio basis, using the TRC test, as defined in OAC Section 4901:1-39-01(Y).<sup>27</sup> The portfolio plans must also include at a minimum: (i) an executive summary, along with a market potential study; (ii) a description of stakeholder participation in program planning efforts and program development; (iii) a description of attempts to coordinate programs with other public utilities' programs; (iv) a description of existing programs and whether the programs should continue; (v) a description of proposed programs that includes information such as program objectives, targeted customer segments, proposed duration of the program, estimated program participation levels, program participation requirements, marketing approach, including any rebates or other incentives, program implementation approach, program budgets, participant costs, if any, market transformation activities, and a description of EM&V processes.<sup>28</sup> As is explained below, the Proposed Plans meet all of the above requirements.

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<sup>25</sup> R.C. § 4928.66(A)(1) and (2).

<sup>26</sup> OAC Section 4901:1-39-04(A)

<sup>27</sup> *Id.* at (B).

<sup>28</sup> *Id.* at (C)(1)-(5).

**1. The Proposed Plans are designed to achieve the statutory energy efficiency and peak demand reduction targets during the Plan Period.**

The Companies' in-house experts in EE&PDR program design, along with the experience and expertise of their major consultants, vendors and program administrators, including ADM Associates, the Companies' Efficiency, Measurement and Verification ("EM&V") contractor, and Black & Veatch, Honeywell International, Inc., JACO Environmental, Power Direct and SAIC, Inc., developed the Proposed Plans.<sup>29</sup> Sections 1.0 and 3.0 of the Proposed Plans describe the process that was used to select the programs, sub-programs and measures in the Proposed Plans. As Companies' Witness Miller explained, the FirstEnergy plan development team and its consultants (collectively "Team"), and interested parties representing various stakeholders ("Collaborative Group"), reviewed the programs and measures offered by other FirstEnergy utilities as well as other Ohio utilities in order to establish a universe of programs and measures for consideration. The Team also completed initial modeling taking into account: (i) implementation of existing programs; (ii) program costs; (iii) the current draft technical reference manual ("TRM") being considered by the Commission in Case No. 09-512-GE-UNC,<sup>30</sup> as well as technical reference manuals or databases established to support energy efficiency programs in other jurisdictions; (iv) the 2009 and 2012 Market Potential Studies conducted by Black & Veatch; and (v) other sources identified in Appendix C-1 of the Proposed Plans.<sup>31</sup> The Companies prescreened over 100 EE&PDR measures, including those suggested by the Collaborative Group, and ultimately included 90 distinct measures at various levels of

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<sup>29</sup> Dargie Testimony at 8-9.

<sup>30</sup> *In re Protocols for the Measurement and Verification of Energy Efficiency and Peak Demand Reduction Measures*, Case No. 09-0512-GE-UNC.

<sup>31</sup> Miller Testimony at 6.

participation.<sup>32</sup> Based upon input from vendors, consultants, trade allies and interested stakeholders, as well as a detailed assessment of program costs and benefits – individually and in terms of overall impact – the Companies selected for implementation the suite of programs included in the Proposed Plans.<sup>33</sup>

As Witness Miller explained, virtually all of the measures and programs included in the currently existing portfolio plans that were approved by the Commission in Case Nos. 09-1947-EL-POR, *et al.*<sup>34</sup> (“Existing Plans”) are incorporated in some fashion in the Proposed Plans.<sup>35</sup> The Proposed Plans also include additional measures; and programs from the Existing Plans have been consolidated and reorganized based on lessons learned and to make the Proposed Plans more consistent with the energy efficiency plans and programs of the Companies’ sister utilities in other states.<sup>36</sup> The Companies have designed programs consistently throughout the FirstEnergy footprint, when practicable, in order to create economies of scale in both program administration and measurement and verification activities.<sup>37</sup>

If the projected savings and peak demand reduction estimates included in Companies’ Witness Demiray’s rebuttal testimony at EGD-R1 and EGD-R4 are compared to the EE and PDR targets as calculated and set forth in Exhibits BDE-1 and BDE-3 of Witness Eberts’ direct testimony, the suite of programs included in the Proposed Plans are clearly designed to achieve

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<sup>32</sup> Miller Testimony at 6-7. *See also* Proposed Plans, § 1.2.

<sup>33</sup> Miller Testimony at 6-7. *See also* Proposed Plans, §§ 3.1.1 and 3.1.2.

<sup>34</sup> *See generally, In re Application of Ohio Edison Company, The Cleveland Electric Illuminating Company, and The Toledo Edison Company For Approval of Their Energy Efficiency and Peak Demand Reduction Program Portfolio Plans for 2010 through 2012 and Associated Cost Recovery Mechanisms*, Case Nos. 09-1947-EL-POR, *et al.* (Opinion and Order, Mar. 23, 2011).

<sup>35</sup> Dargie Testimony at 7; Testimony of Gregory C. Scheck (“Scheck Testimony”) at 3.

<sup>36</sup> Dargie Testimony at 7; Miller Testimony Exhibit ECM-4; Scheck Testimony at 3.

<sup>37</sup> Dargie Testimony at 8-9.

annual energy savings and peak reductions in excess of the statutory EE and PDR requirements during the Plan Period:

EE Statutory Savings Requirements/Co. Projected Savings (Pro Rata) By Year (GWh)<sup>38</sup>:

Company	2013 Req/Proj	2014 Req/Proj	2015 Req/Proj
OE	777/913	1033/1120	1292/1322
CEI	608/903	810/1011	1016/1125
TE	340/395	463/502	595/598

PDR Statutory Requirements/Co. Projections By Year (MWs)

Company	2013 Req/Proj	2014 Req/Proj	2015 Req/Proj
OE	215/226	257/269	290/302
CEI	166/174	195/204	219/228
TE	83/212	99/110	113/128

- a. **The Companies have correctly calculated the cumulative benchmarks and cumulative savings, including banked savings.**

No party challenged the Companies' projections regarding the Proposed Plans' ability to achieve the statutory PDR requirements during the Plan Period; and very few challenged the projected level of energy efficiency savings the Proposed Plans are designed to achieve. Indeed, only NRDC claims that the Proposed Plans will not achieve the statutory energy efficiency targets, while Sierra Club claims that estimated savings in certain instances are overstated.<sup>39</sup> As

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<sup>38</sup> The energy savings and peak demand reduction results have also been summarized in more detail in Exhibit EGD-R4 attached to Mr. Demiray's rebuttal testimony.

<sup>39</sup> NRDC Exh. 5, Supplemental Testimony of Dylan Sullivan ("Sullivan Supplemental") at 3-6; Direct Testimony of Glenn Reed ("Reed Testimony") at 6-9.

more fully discussed below, both the claims of NRDC as well as those made by other environmental advocates are without merit and should be rejected.

On the first day of hearings, NRDC submitted its late-filed supplemental testimony of Dylan Sullivan in which Mr. Sullivan erroneously claims that the Proposed Plans will not achieve the statutory energy efficiency targets during the Plan Period on either an incremental or cumulative basis.<sup>40</sup> In support of these assertions, Mr. Sullivan set forth several calculations that were attached to his testimony (Exhibits DES-3 – DES-5). However, as Mr. Sullivan acknowledged, none of his calculations in Exhibits DES-4 or DES-5 took into account the level of the Companies' respective banked savings that could be drawn down in order to achieve incremental energy efficiency targets during the Plan Period.<sup>41</sup> As Witness Demiray explained, to the extent that an electric utility's actual energy savings exceeds its energy efficiency benchmark for any year, the surplus energy savings may be applied towards its benchmarks in subsequent year(s).<sup>42</sup> Witness Demiray also pointed out another flaw in Mr. Sullivan's analysis of incremental savings, noting that the "incremental annual" baseline calculated by Mr. Sullivan in DES-4 and DES-5 is not consistent with the incremental difference each year using the cumulative benchmark as a basis.<sup>43</sup> As identified by Witness Eberts, the calculation of the baseline differs from year to year based on the fully adjusted retail sales after energy efficiency impacts, on a rolling three year average basis.<sup>44</sup> The correct way to calculate the additional

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<sup>40</sup> Sullivan Supplemental at 3. Although the Companies do not agree with Mr. Sullivan's assertion that R.C. § 4928.66 requires the Companies to achieve incremental savings targets in each year during the Plan Period, they will nevertheless address the flaws in his annual incremental savings analysis.

<sup>41</sup> Tr. Vol. V, p. 1010-11.

<sup>42</sup> Demiray Rebuttal at 5.

<sup>43</sup> *Id.*

<sup>44</sup> See Eberts Testimony at 5-6.

incremental annual baseline is to use the difference in the yearly cumulative benchmarks, consistent with R.C. 4928.66(A)(1)(a).<sup>45</sup>

As demonstrated on Exhibits EGD-R2 and EGD-R3 of Mr. Demiray's rebuttal testimony, when these errors are corrected, even using Mr. Sullivan's analysis, there are no projected shortfalls on an incremental basis during the Plan Period for any of the Companies using either pro-rata or annualized savings values.<sup>46</sup>

Mr. Sullivan's analysis on cumulative energy efficiency savings as set forth in Exhibit DES-3 is equally flawed. His calculations failed to take into account projected results at the end of 2012 when establishing the starting savings amounts for the new Plan Period, instead using levels of savings achieved for mercantile customer self direct projects through September 18, 2012 and savings levels achieved through the other programs as of July 31, 2012.<sup>47</sup> In fact, when preparing these analyses, Mr. Sullivan had no idea as to what the actual savings levels at the end of 2012 should be, nor did he know the assumptions made by the Companies when making their estimates.<sup>48</sup> As Witness Demiray explained, Mr. Sullivan's analysis on DES-3 failed to include any energy efficiency savings that are projected to be achieved for the remainder of 2012, including the pro-rata portion of the 2012 installations that will be counted towards compliance in 2013.<sup>49</sup> As demonstrated on Exhibit EGD-R1 of Mr. Demiray's rebuttal testimony, when

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<sup>45</sup> Demiray Rebuttal at 5-6.

<sup>46</sup> *Id.* at 6.

<sup>47</sup> Tr. Vol. V, pp. 1008-1009.

<sup>48</sup> *Id.* at 1009-1010.

<sup>49</sup> Demiray Rebuttal at 3.

these errors are corrected, again using Mr. Sullivan's analysis, there is no shortfall on a cumulative basis for any of the years for any of the Companies during the Plan Period.<sup>50</sup>

**b. The Companies' savings estimates are reasonable.**

Sierra Club claims that the estimated savings for energy efficiency kits as set forth in the Proposed Plans are inflated, while NRDC believes the estimate to be too low.<sup>51</sup> Ohio Environmental Council ("OEC") and the Environmental Law and Policy Center ("ELPC") simply think there are "lingering questions" without providing any analysis or further explanation.<sup>52</sup> In modeling the savings for the energy efficiency kits, the Companies utilized the 86% installation rate identified in the draft Ohio TRM,<sup>53</sup> and conservatively included EISA impacts for all CFLs included with the kits for the entire Plan Period.<sup>54</sup> The savings estimate for kits modeled in the Proposed Plans is a constant value that represents the full reduction of savings for all CFLs for the Plan Period.<sup>55</sup> Notably, the 86% installation rate identified in the TRM closely resembles the results achieved by the Companies' sister utilities in other jurisdictions.<sup>56</sup>

NRDC apparently believes that these estimates are too low, which is possible but not unreasonable. NRDC recently argued in its Comments on the Ohio Independent Evaluator's

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<sup>50</sup> *Id.* at 3.

<sup>51</sup> Reed Testimony at 6-9; *see fn. 55, infra.*

<sup>52</sup> Direct Testimony of Geoffrey C. Crandall ("Crandall Testimony") at 13.

<sup>53</sup> Tr. Vol. II, p. 344.

<sup>54</sup> Miller Rebuttal at 3-4.

<sup>55</sup> *Id.* As explained by Witness Miller, EISA reduces the baseline for a 60W incandescent lamp to 43 watts effective January 1, 2014. Instead of using the higher wattage between January 1, 2013 and January 1, 2014, the Companies modeled the entire Plan Period using the 43W baseline. *Id.* at 4. Thus, the actual results, which would reflect the 60W baseline for 2013, should be higher than as reflected in the Companies' models. *Id.*

<sup>56</sup> Tr. Vol. II at 344-345.



Report on the Companies' 2009 and 2010 Portfolio Status Reports, Case No. 12-665-EL-UNC, that an installation rate of *no less than 100%* should be utilized for CFLs.<sup>57</sup> NRDC believes that a utility should get credit for later installation of CFLs because bulbs will be installed within a plan period and customers should be encouraged to make their inventory of bulbs as efficient as possible.<sup>58</sup> While these comments are directed to point-of-sale CFLs, the same holds true for the CFLs provided in kits. Customers have many opportunities to utilize these bulbs and are unlikely to keep track of which bulbs in their inventory were directly purchased versus received through an energy efficiency kit. Had the Companies utilized a 100% installation factor as suggested by NRDC, the estimated savings would be greater than that included for this program in the Proposed Plans.

Conversely, Sierra Club claims the Companies' projected savings from the energy efficiency kits is too high. Yet it provided no alternative level of savings,<sup>59</sup> and failed to factor in information that refutes its claim. For example, Sierra Club witness Loiter pointed to no empirical evidence and, when drawing his conclusion, failed to check any of the measure lives for the CFLs, smart strips or aerators.<sup>60</sup> He also failed to perform any independent analysis specifically on the commercial in-service rates of the kits.<sup>61</sup> Sierra Club witness Reed, while relying on the initial survey findings in the Annual Report to the Pennsylvania Public Utility Commission submitted by the Companies' affiliate, Pennsylvania Electric Company, failed to

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<sup>57</sup> See *In the Matter of the Annual Verification of the Energy Efficiency and Peak Demand Reductions Achieved by the Electric Distribution Utilities Pursuant to Section 4928.66, Revised Code*, Case No. 12-665-EL-UNC, NRDC Comments at 2-3 (Nov. 2, 2012).

<sup>58</sup> *Id.*

<sup>59</sup> See, e.g., Tr. Vol. III, 584-85 (Sierra Club witness Loiter), 653-654 (Sierra Club witness Reed).

<sup>60</sup> Tr. Vol. III at 584.

<sup>61</sup> *Id.* at 585.

incorporate *all* of the findings in this report. While it is true that this report identifies a 70 percent in-service rate for similar kits,<sup>62</sup> Mr. Reed fails to acknowledge that this same report noted that the installation rate climbed to 82 percent during the first year of the program.<sup>63</sup> He also failed to take into account the fact that the Companies are offering the kits through an opt-in process, which, as Mr. Reed acknowledged and Staff agreed, would have a higher in-service rate than for kits that are sent randomly.<sup>64</sup>

In sum, the evidence demonstrates that the Companies were conservative when determining estimated savings from the energy efficiency kits and that, when banked savings is factored into the analysis, and when 2012 year-end savings projections are properly considered, the Proposed Plans are designed to achieve all statutory energy reduction targets during the Plan Period.

## **2. The Proposed Plans pass the TRC test on a portfolio basis.**

Each of the Proposed Plans passes the TRC test on a portfolio basis. Section 8.0 in each of the Proposed Plans describes how the TRC test was performed on both a portfolio and individual program basis. The TRC test results are set forth in PUCO Tables 7A through 7G in each of the Proposed Plans. On a portfolio basis, the TRC for Ohio Edison is 2.0; for CEI, 1.7; and for Toledo Edison, 1.9,<sup>65</sup> and these results are not expected to be impacted by the several modifications to the Proposed Plans adopted by the Companies during the rebuttal phase of the proceeding.<sup>66</sup> Except for NRDC Witness Swisher, who claimed that the avoided costs used to

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<sup>62</sup> Reed Testimony at 7.

<sup>63</sup> Tr. Vol. III at 650.

<sup>64</sup> Tr. Vol. III at 651, 832.

<sup>65</sup> Proposed Plans, Appendix C-3, PUCO Table 1 and Miller Testimony, Exhibit ECM-1.

<sup>66</sup> Miller Rebuttal at 9.

calculate the TRCs were too low (which would result in plans that are *more* cost effective),<sup>67</sup> no party challenged the TRC calculations and results; and Staff witness Gregory Scheck agrees that the Proposed Plans pass the TRC test.<sup>68</sup> As such, the Commission should also find that the Proposed Plans meet this requirement.

**3. The Proposed Plans include an executive summary along with a market potential study.**

OAC § 4901:1-39-04(C)(1) requires the Companies to include in the Proposed Plans an executive summary and a market potential study, the latter of which is required by OAC § 4901:1-39-03(A). Each of the Proposed Plans includes an executive summary, which can be found in Section 1.0 of the Proposed Plans. The Companies commissioned Black & Veatch to prepare a market potential study for the period 2012 through 2026, with an emphasis on the Plan Period.<sup>69</sup> The Market Potential Study was included with the Proposed Plans as Appendix D. As Witness Fitzpatrick explained, the resulting market potential percentage values for savings during the Plan Period are all above the annual energy savings requirements established in R.C. § 4928.66.<sup>70</sup>

NRDC Witness Swisher challenged the findings of Black & Veatch on both the level of potential in the market place<sup>71</sup> and the values used as avoided cost.<sup>72</sup> However, he acknowledged that the market potential during the Plan Period is not constrained because it exceeds the statutory energy efficiency and peak demand reduction target levels in each of the

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<sup>67</sup> Tr. Vol. IV, pp. 726-727.

<sup>68</sup> Scheck Testimony at 3.

<sup>69</sup> Fitzpatrick Testimony at 6.

<sup>70</sup> *Id.* at 8.

<sup>71</sup> Swisher Testimony at 5.

<sup>72</sup> *Id.* at 22.

years during the Plan Period.<sup>73</sup> Moreover, while Mr. Swisher criticized the approach utilized by Black & Veatch when preparing the Market Potential Study, he conceded (at least during his deposition) that the levels of achievable potential during the Plan Period “doesn’t matter.”<sup>74</sup> Similarly, in Mr. Swisher’s opinion, the avoided cost values utilized in the Market Potential Study are too low,<sup>75</sup> thus resulting in more measures that are cost effective.<sup>76</sup> Inasmuch as the Proposed Plans have already been proven to be cost effective based upon the TRC test, the question of whether the avoided cost values should be higher as suggested by Mr. Swisher is moot.

In light of the foregoing, while there may exist philosophical and theoretical differences on what the correct avoided cost values and market potential levels should be in later years of the Market Potential Study, these differences have no impact on the Proposed Plans during the Plan Period. Therefore, the criticisms surrounding the Market Potential Study as raised by NRDC are irrelevant for purposes of evaluating the Proposed Plans.

#### **4. The Proposed Plans include all other required information.**

As required by OAC Section 4901:1-39-04(C)(2) – (C)(5), the Proposed Plans also include a description of the stakeholder process, a description of how the Companies attempted to align programs with other utilities, and a description of both existing and proposed programs.

##### **a. Stakeholder Process**

The stakeholder process, which is commonly referred to as the “collaborative process” or the “collaborative” or the “Collaborative Group,” was utilized throughout the plan development

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<sup>73</sup> Tr. Vol. IV, pp. 716-717.

<sup>74</sup> *Id.* at 718.

<sup>75</sup> *Id.* at 726-727.

<sup>76</sup> *Id.* at 727.

period and described throughout the Proposed Plans, specifically addressing it in Section 3.1.5.<sup>77</sup> Companies' Witness Dargie also discussed the process, explaining that, since its inception in 2009, the Companies have continued to work with the Collaborative Group during the implementation of the Existing Plans as well as during the development of the Proposed Plans.<sup>78</sup> The Companies shared their thoughts on the development of the Proposed Plans and the programs and measures to be included therein starting in September 2011.<sup>79</sup> They met with the Collaborative Group subcommittees on November 15, 2011 and with the full Collaborative Group on December 19, 2011 to review preliminary thoughts on the Proposed Plans.<sup>80</sup> Another update on plan development and on the development of the Market Potential Study was provided during the Collaborative Group meeting held on February 24, 2012. Complete modeling results were provided to the Collaborative Group on June 29 2012; and on July 10, 2012, the Companies presented the almost final results of both the Proposed Plans and the Market Potential Study to the Collaborative Group.<sup>81</sup> At each of the meetings, including the last one held on July 10, the Companies solicited input and suggestions on how the Proposed Plans could be improved. The Proposed Plans were indeed modified, for example, to remove the dishwasher measure and to add a consumer electronics measure at the suggestion of collaborative members.<sup>82</sup> The

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<sup>77</sup> See also, e.g., Sections 1.2, 1.4, 3.1 and 4.1 of the Proposed Plans.

<sup>78</sup> Dargie Testimony at 10.

<sup>79</sup> *Id.*

<sup>80</sup> *Id.*

<sup>81</sup> *Id.*

<sup>82</sup> *Id.*

Companies anticipate continuing their efforts to include the Collaborative Group during the implementation of the Proposed Plans.<sup>83</sup>

NRDC was the most critical of the collaborative process, claiming that it was limited by “the nature of the Companies’ request for input.”<sup>84</sup> NRDC also asserts that it “needed to view and comment on a draft plan.”<sup>85</sup> Yet, prior to receiving the final Proposed Plans at the time of filing with the Commission, NRDC and other Collaborative members received a 42-page slide deck, along with a significant amount of Plan information, including: (i) a sector level kilowatt hour and megawatt savings by year analysis; (ii) a sector level program budget by year analysis; (iii) program level cumulative savings projections; (iv) portfolio of specific assignment of energy efficiency costs by program and sector; (v) allocation of costs to customer sectors; (vi) annual lifetime costs, lifetime benefits, TRC results, lifetime kWh savings, megawatt savings by sector and program, but not by subprogram; (vii) projected units by measure, by year; (viii) program descriptions; (ix) incentive levels on a program specific basis; (x) incremental cost measures on a measure-specific basis; and (xi) model rebates on a measure specific basis.<sup>86</sup> NRDC Witness Sullivan also acknowledged that he could not recall any instance where the Companies refused to discuss an issue raised by a collaborative member if the information was available.<sup>87</sup>

**b. Alignment of Programs with Other Utilities**

The Proposed Plans address the alignment of programs with other utilities in Section 3.1.6. While not mentioned specifically in the Proposed Plans, the Companies aligned their

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<sup>83</sup> *Id.* at 11.

<sup>84</sup> Sullivan Testimony at 7.

<sup>85</sup> *Id.*

<sup>86</sup> Tr. Vol. V, pp. 962-69.

<sup>87</sup> Tr. Vol. V, pp. 969-970.

programs to be consistent among the three Ohio Companies. Further, as Witness Dargie explained, the development team attempted to align the programs being offered by the Companies with those of their sister companies in other jurisdictions so as to create economies of scale in both program administration and measurement and verification activities.<sup>88</sup> As Mr. Dargie also explained, the development team, when practical, attempted to align and coordinate programs with other Ohio EDUs.<sup>89</sup> An example of such a program is the appliance recycling program.<sup>90</sup> The EDUs in Ohio all utilize the same vendor, the same toll free number and the same recycle facilities.<sup>91</sup>

Notwithstanding these efforts, there are barriers to joint implementation. Back office and tracking and reporting systems would have to be integrated before significant joint implementation could occur,<sup>92</sup> which could increase costs of programs. And joint implementation may hinder an EDU's ability to control its compliance with statutory requirements as it tries to achieve annual statutory targets through joint efforts. Therefore, while the Companies are not opposed to aligning programs with other unaffiliated EDUs, there are certain barriers and statewide issues that would need to be resolved before significant alignment can become a reality.

**c. A Description of Existing and Proposed Programs**

With regard to existing programs, virtually all of the programs included in the Existing Plans are included in the Proposed Plans and, therefore, implicit in the Proposed Plans is a

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<sup>88</sup> Dargie Testimony at 8-9.

<sup>89</sup> Dargie Testimony at 11; Proposed Plans, § 3.1.6.

<sup>90</sup> Tr. Vol. I, pp. 50-51.

<sup>91</sup> *Id.*

<sup>92</sup> *Id.*

recommendation that each of these programs should be continued as required by OAC § 4901:1-39-04(C)(4). As Witness Miller explained, many of the programs and measures included in the Existing Plans were reorganized, and their relationship to proposed programs was included in a summary set forth in Company Table 3 in Section 1.1 of the Proposed Plans.<sup>93</sup>

Included in Sections 2.0 and 3.0 of the Proposed Plans is a description of each of the programs included in those plans. These descriptions include: (i) program objectives and metrics; (ii) target markets and participation requirements; (iii) program approach, rationale and description; (iv) implementation strategies; (v) program issues, risks and risk mitigation strategies; (vi) program ramp up strategies; (vii) marketing strategy; (viii) market transformation strategy; (ix) eligible measures and incentive levels; (x) non-energy benefits; and (xi) any other information deemed necessary. Projected participation rates and program budgets for each program are set forth in the Proposed Plans at Appendix C-2 and Appendix B, respectively. The Proposed Plans also describe the Companies' planning, reporting and tracking systems,<sup>94</sup> management and implementation strategies,<sup>95</sup> and EM&V processes that will be followed during the Plan Period.<sup>96</sup>

**B. The Proposed Plans Include a Reasonable Shared Savings Mechanism and PJM Capacity Market Bidding Strategy.**

While not expressly required by Commission Rule, the Commission, in its Finding and Order in which the Existing Plans were approved, encouraged the Companies to develop a

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<sup>93</sup> Miller Testimony at 7, 9-15 and Exhibits ECM-5, 6 and 7.

<sup>94</sup> Proposed Plans, Section 4.0.

<sup>95</sup> *Id.*, Section 5.0.

<sup>96</sup> *Id.*, Section 6.0.



shared savings mechanism.<sup>97</sup> And in the case in which the Companies' most recent Electric Security Plan was approved, it suggested several modifications to the Companies' approach to determining ownership of energy credits for purposes of bidding into the PJM auctions.<sup>98</sup> Both of these issues are also addressed in the Proposed Plans in Section 7.1 and, as more fully discussed below, are reasonable and should be approved.

**1. The Companies' proposed shared savings mechanism is reasonable.**

The Companies' Proposed Plans include a shared savings incentive mechanism that was influenced by Staff recommendations, AEP Ohio's recently approved mechanism, and the result of negotiations with interested parties.<sup>99</sup> Intervenor witnesses generally support a shared savings incentive mechanism and have proposed a wide variety of incentive levels.<sup>100</sup> Staff Witness Scheck also supports a shared savings incentive mechanism with a top tier incentive of 10%.<sup>101</sup> Shared savings are designed as a mechanism to encourage the Companies to exceed the benchmarks set by statute to the extent net benefits can be gained, thereby providing additional

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<sup>97</sup> *In the Matter of the Application of The Cleveland Electric Illuminating Company, Ohio Edison Company, and The Toledo Edison Company for Approval of Their Energy Efficiency and Peak Demand Reduction Program Portfolio Plans for 2010 through 2012 and Associated Cost Recovery Mechanism*, Case Nos. 09-1947-EL-POR *et al.*, Opinion and Order, p. 15 (Mar. 23, 2011).

<sup>98</sup> *In the Matter of Ohio Edison Company, The Cleveland Electric Illuminating Company, and The Toledo Edison Company for Authority to Provide for a Standard Service Offer Pursuant to Section 4928.143, Revised Code, in the Form of an Electric Security Plan*, Case No. 12-1230-EL-SSO, Opinion and Order, p. 38 (July 18, 2012) ("ESP III Order").

<sup>99</sup> Demiray Testimony, pp. 6-7. *See* AEP Ohio POR Order, pp. 7-8 (approving a shared savings incentive mechanism that provides an after-tax net benefit of 87 percent to AEP-Ohio's customers and 13 percent to AEP Ohio, based on the Utility Cost Test inclusive of all costs at the portfolio level, when it exceeds the energy efficiency benchmark compliance requirement by 15 percent, with intermediate tiers).

<sup>100</sup> *See* Reed Testimony, pp. 20-23 (supporting shared savings with a maximum incentive of 14% and no cap); Sullivan Testimony, pp. 11-20 (supporting shared savings with a maximum incentive of 10%); OCC Exh. 1, Direct Testimony of Wilson Gonzalez ("Gonzalez Testimony"), p. 5 (supporting a shared savings incentive mechanism); Tr. Vol. VI, pp. 849-50 (OCC witness Gonzalez describing shared savings tiers, with top tier of 8%).

<sup>101</sup> Scheck Testimony, p. 9.

opportunities for customers to further reduce energy consumption over and above the baseline established by statute.<sup>102</sup> Shared savings are earned on a Company-specific basis (results are not aggregated across the Companies) when a Company achieves more reductions than are mandated by R.C. § 4928.66 in any given year.<sup>103</sup>

The amount of shared savings as proposed by the Companies is determined by calculating the net benefits gained using the Utility Cost Test (“UCT”) for generating savings in excess of a Company’s benchmarks.<sup>104</sup> These net benefits are then “shared” so that the Company earning these benefits may obtain up to 13% of the savings (with 87% or more of savings going to customers).<sup>105</sup> The advantage of using the UCT over the TRC test is that the former includes only those costs and benefits that inure to ratepayers.<sup>106</sup> Sierra Club Witness Reed and Staff Witness Scheck support use of the UCT, and the Commission approved its use for calculating shared savings in AEP Ohio’s most-recent Portfolio Plan proceeding.<sup>107</sup> Although OCC Witness Wilson Gonzalez argued that the TRC test should be used, he agreed that it is not designed as a measure for considering proper incentive levels for a utility.<sup>108</sup> Using the UCT provides the Companies with an inducement to make sure incentive payments are not higher than they need to be to encourage program participation.<sup>109</sup>

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<sup>102</sup> Demiray Testimony, p. 4.

<sup>103</sup> Demiray Testimony, p. 4.

<sup>104</sup> Demiray Testimony, p. 4-5.

<sup>105</sup> Demiray Testimony, pp. 8-10.

<sup>106</sup> Demiray Testimony, pp. 5-6; Tr. Vol. IV, pp. 856-57. *See* Rule 4901:1-39-01(Y) (definition of Total Resource Cost test).

<sup>107</sup> Reed Testimony, p. 22; Scheck Testimony, p. 10; AEP Ohio POR Order, p. 7.

<sup>108</sup> Tr. Vol. IV, pp. 855-57.

<sup>109</sup> Demiray Testimony, p. 5.

The incentive mechanism will run concurrently with the Plan Period and will be triggered only if a Company exceeds both its annual and cumulative energy savings targets as set forth in R.C. § 4928.66(A)(1)(a) in any given year.<sup>110</sup> Should the incentive mechanism be triggered in a given year, the incentive will be calculated based upon two components: (i) an incentive percentage, and (ii) adjusted discounted net lifetime benefits based upon the UCT (“Adjusted Net Benefits”).<sup>111</sup> If the incentive mechanism is triggered, the Companies will collect incentive dollars based on an allocation at the rate schedule level in the proportions at which the Adjusted Net Benefits were achieved for the reported year.<sup>112</sup> As explained by Witness Demiray, the Adjusted Net Benefits will be calculated by modifying the Total Discounted Net Lifetime Benefits produced by a Proposed Plan in a given year to exclude the impacts of certain mercantile customer projects, transmission and distribution (“T&D”) infrastructure projects, and behavioral modification projects.<sup>113</sup>

Several intervenor witnesses questioned the inclusion in the shared savings calculation of savings derived from T&D improvements and mercantile customer projects.<sup>114</sup> As a preliminary matter, shared savings is intended to encourage the Companies to exceed their statutory benchmarks. When determining whether the Companies achieved these benchmarks, R.C. § 4928.66 allows the Companies to include the results from both approved mercantile customer projects and approved T&D infrastructure improvements. Therefore, it is appropriate to include

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<sup>110</sup> Demiray Testimony, pp. 7, 8.

<sup>111</sup> Demiray Testimony, p. 9.

<sup>112</sup> Demiray Testimony, pp. 11-12.

<sup>113</sup> Demiray Testimony, pp. 10-11.

<sup>114</sup> Sullivan Testimony, pp. 17-18; Reed Testimony, p. 22; Gonzalez Testimony, pp. 13-14.

the results from these types of projects for purposes of determining whether the Companies exceeded their statutory benchmarks.<sup>115</sup>

For purposes of calculating Adjusted Net Benefits, the Companies have agreed to include only mercantile customer projects installed after March 23, 2011, which is the date on which the Commission approved the Companies' existing Mercantile Self-Direct Program.<sup>116</sup> After that date, mercantile customers have had the option of receiving an incentive through the C&I Equipment Program or receiving a rebate or exemption through the Mercantile Self-Direct Program.<sup>117</sup> Because the mercantile customers' choice of incentive is the only distinction, the Companies' calculation of Adjusted Net Benefits treats these projects equally. In either case, the Companies will count only those benefits resulting from the Companies' Proposed Plans.<sup>118</sup> Similarly, the Companies will count only the incremental benefits obtained from T&D projects that are planned and then modified to provide additional energy efficiency benefits.<sup>119</sup> NRDC Witness Sullivan testified that the impacts of T&D projects should not be counted toward shared savings unless such projects go beyond business-as-usual levels of efficiency;<sup>120</sup> and the Companies agree that they will not count for purposes of shared savings the business-as-usual T&D projects but only incremental project results generated for energy efficiency purposes.<sup>121</sup>

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<sup>115</sup> See Tr. Vol. IV, pp. 845-46 (OCC witness Gonzalez agreeing that mercantile results should be counted for purposes of calculating compliance with the benchmarks).

<sup>116</sup> Demiray Testimony, p. 10.

<sup>117</sup> See Tr. Vol. IV, pp. 847-49.

<sup>118</sup> See Tr. Vol. IV, pp. 846-47 (OCC witness Gonzalez recognizing that the Mercantile Self-Direct Program was approved as a component of the Companies' Existing Plans in March, 2011, and that the Mercantile Self-Direct Program is intended, in part, to incent customers to invest in new energy efficiency projects).

<sup>119</sup> Demiray Testimony, p. 10.

<sup>120</sup> Tr. Vol. V, p. 923.

<sup>121</sup> Demiray Testimony, p. 10.

Also for purposes of calculating Adjusted Net Benefits, the Companies will count behavioral modification programs only if they demonstrate continued applicability towards compliance with the statutory energy efficiency benchmarks.<sup>122</sup> An example of a behavioral program is the Companies' on-line audit program, and the concern of some intervenors is that the benefits of such programs may not persist over time.<sup>123</sup> To address these concerns, the Companies will count only verifiable benefits of behavioral programs, which must be re-verified each year as part of the Companies' annual EM&V activities.

The Companies have proposed incentive tiers that start with an incentive percentage of 5% for exceeding the benchmarks by up to 105% and increase to a top tier of 13% for exceeding the benchmarks by greater than 115%.<sup>124</sup>

Incentive Tier	Compliance Percentage	Incentive Percentage
1	< 100%	0.0%
2	100-105%	5.0%
3	>105-110%	7.5%
4	>110-115%	10.0%
5	>115%	13.0%

Intervenor witnesses and Staff have proposed alternative incentive tiers with a top tier ranging from 8% to 14%.<sup>125</sup> OCC Witness Gonzalez also testified regarding incentive tiers in

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<sup>122</sup> Demiray Testimony, p. 11.

<sup>123</sup> Gonzalez Testimony, p. 15; Reed Testimony, p. 22.

<sup>124</sup> Demiray Testimony, p. 10.

<sup>125</sup> Sullivan Testimony, p. 19 (10%); Reed Testimony, p. 23 (14%); Tr. Vol. VI, pp. 849-50 (OCC witness Gonzalez proposing top tier of 8%); Goins Testimony, p. 17 (8%); Goins Testimony, p. 18 (6%); Sheck Testimony, p. 9 (10%).

other states that range from 5% to 15%, with an outlier at 30%.<sup>126</sup> As is obvious from the wide range of mechanisms approved in Ohio and elsewhere, the design of the incentive tiers is a policy or normative decision to be made by the Commission, including whether the top tier is 8%, 15% or somewhere in between.<sup>127</sup>

The Companies also have proposed that the incentive amount not be subject to an arbitrary cap.<sup>128</sup> Intervenors disagree over whether a cap should be imposed.<sup>129</sup> Staff Witness Scheck opposes a cap.<sup>130</sup> Although OCC Witness Gonzalez supports a cap, he agreed that a cap would work as a disincentive to increased energy efficiency savings.<sup>131</sup> He also agreed that using known avoided costs, not future avoided costs, would eliminate one of the risks he identified in his pre-filed testimony.<sup>132</sup> The Companies' use of the UCT avoids this risk and encourages the Companies to make prudent and cost effective decisions.<sup>133</sup> As explained by Witness Demiray, "use of the TRC for portfolio and program selection, and the UCT for utility incentives, provides a system that encourages the Companies to make prudent and cost effective decisions throughout program design, administration, and implementation."<sup>134</sup>

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<sup>126</sup> Tr. Vol. VI, pp. 851-55 and Company Exh. 17 (*Aligning Utility Incentives with Investment in Energy Efficiency*, National Action Plan for Energy Efficiency, November 2007, pages 6-1 and 6-2).

<sup>127</sup> Tr. Vol. II, pp. 247-48 (OEG/Nucor witness Goins agreeing that whether the Commission uses 8 percent or 10 percent or 15 percent as the maximum sharing percentage is a normative judgment to be made by the Commission). *See also* Tr. Vol. IV, pp. 843-45.

<sup>128</sup> Demiray Testimony, p. 12. This is the one difference between the Companies' proposal and the shared savings incentive mechanism approved for AEP Ohio in the AEP Ohio POR Order. *Id.*

<sup>129</sup> Compare Reed Testimony, p. 23 (no cap) with Gonzalez Testimony, p. 16 (cap).

<sup>130</sup> Scheck Testimony, p. 11.

<sup>131</sup> Tr. Vol. IV, pp. 862-63.

<sup>132</sup> Tr. Vol. IV, pp. 863-64. *See* Gonzalez Testimony, p. 16 (referring to "an unexpected and unprecedented increase in avoided costs").

<sup>133</sup> Demiray Testimony, p. 6.

<sup>134</sup> Demiray Testimony, p. 6.

In sum, the Companies believe that the shared savings incentive mechanism included in the Proposed Plans balances the interests of all parties and represents a reasonable approach.<sup>135</sup> The Commission should approve the mechanism as filed.

## **2. The Companies' PJM Bidding Strategy is Reasonable.**

As directed by the Commission,<sup>136</sup> the Companies have taken steps to amend their terms and conditions for programs included in the Proposed Plans to ensure that customers knowingly tender to the Companies ownership of energy efficiency resources as a condition of participation in the Companies' programs.<sup>137</sup> The Companies intend to bid into PJM auctions – the annual Base Residual Auction (“BRA”) and incremental auctions, as appropriate – all eligible, installed energy efficiency resources for which they have ownership rights at the time of the auction, provided that these resources are of sufficient scale, will meet PJM Measurement and Verification (“M&V”) standards and are included in an M&V plan approved by PJM.<sup>138</sup> By following these guidelines, the Companies will participate in these PJM auctions in a manner that prudently manages risk to the Companies and their customers.<sup>139</sup> Once qualified measures are installed over the lifetime of the Plans, ownership is transferred to the Companies, and the measures satisfy eligibility requirements, the Companies will bid those measures into a PJM

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<sup>135</sup> Demiray Testimony, p. 7.

<sup>136</sup> ESP III Order, p. 38.

<sup>137</sup> Dargie Testimony, pp. 15-17; Tr. Vol. I, pp. 44, 95 (describing latest terms and conditions to obtain ownership for C&I programs, modifying page 15, lines 17-21, of Mr. Dargie's prefiled testimony).

<sup>138</sup> Dargie Testimony, p. 15; Mikkelsen Rebuttal, p. 3.

<sup>139</sup> Tr. Vol. VI, pp. 1149-50.

capacity auction.<sup>140</sup> Any proceeds received from the auctions related to Plan resources will be credited to Rider DSE at the time the proceeds are received by the Companies.<sup>141</sup>

Because the Commission required in the ESP III Order that customers “knowingly” transfer ownership as a condition of participation in the Companies’ programs, the Companies request that the Commission approve the Companies’ proposed approach for taking ownership of energy efficiency credits in those circumstances where the Companies cannot obtain consent through standard terms and conditions. An example is the provision of “upstream” financial incentives to retailers to encourage the sale of CFL lighting and other products through the Energy Efficient Products Program.<sup>142</sup> As set forth in Witness Dargie’s testimony, the Companies propose to put a notice on their website indicating that customers who participate in such programs are thereby consenting to transfer the energy credits generated through their participation.<sup>143</sup> The Companies ask that the Commission find in its Order approving the Proposed Plans that this notice is sufficient to automatically transfer ownership of energy efficiency credits to the Companies.

Several intervenors mistakenly have focused on the theoretical maximum amount of energy efficiency resources that could be bid into a PJM BRA based on projected cumulative benchmark levels for the BRA delivery year.<sup>144</sup> Yet this myopic focus does not assist the Companies or the Commission in determining the level of energy efficiency resources that will be incremental (*i.e.*, newly installed), will qualify in a Post-Installation M&V Report and will

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<sup>140</sup> Tr. Vol. VI, p. 1157.

<sup>141</sup> See Tr. Vol. VI, p. 1145; IEU-Ohio Exh. 2, PJM Manual 18: PJM Capacity Market § 9.3.

<sup>142</sup> See Proposed Plans, § 3.2; Dargie Testimony, p. 16.

<sup>143</sup> Dargie Testimony, p. 17.

<sup>144</sup> See Gonzalez Testimony, p. 23; Loiter Testimony, pp. 3-5; Goins Testimony, pp. 21-22.



actually be delivered in a particular delivery year.<sup>145</sup> As Companies' Witness Mikkelsen explained, given that PJM BRAs are for delivery years three years in the future, there are too many unknowns and uncertainties associated with guessing what resources will be installed, which of those installed resources will qualify to meet the projected commitments and M&V standards, and which of those the Companies will have ownership rights to.<sup>146</sup> Because the Companies have a substantial amount of implementation flexibility in the Proposed Plans to meet annual targets, the Companies cannot with reasonable certainty know at the time of bidding into a PJM BRA specifically what the mix will be of eligible and ineligible programs or measures ultimately implemented between the auction date and the delivery year.<sup>147</sup> Thus, the Companies are committing to bid eligible, installed resources into the first auction that occurs after the Companies obtain ownership of those resources.<sup>148</sup> Staff Witness Scheck agrees that the Companies should bid only owned resources, with the qualification that the Companies should bid 75% of owned resources to mitigate the quantity risk.<sup>149</sup>

One example of uncertainty faced by the Companies involves the energy efficiency projects of mercantile self-direct customers who obtain rider exemptions through application to the Commission. Prior to September 1, 2012, the Companies did not obtain ownership of the

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<sup>145</sup> See IEU-Ohio Exh. 3, PJM Manual 18B – Energy Efficiency Measurement and Verification § 5.2.3; Tr. Vol. VI, pp. 1158, 1186-87.

<sup>146</sup> Mikkelsen Rebuttal, p. 5.

<sup>147</sup> Tr. Vol. VI, pp. 1155-56; Tr. Vol. III, pp. 523-25 (Companies Witness Demiray explaining financial risks created by bidding into BRA and “taking a forward position on specific technologies that you are expecting to be installed, which may or may not overlap with the ultimate rules PJM has for specific technologies that can be admitted” and further explaining the “risk that if you are bidding a set amount based off a projected, you don't know at the end of the day where those specific – specific technologies will come from and if it will be 100 percent eligible for PJM.”).

<sup>148</sup> Tr. Vol. III, pp. 516-17, 518-19.

<sup>149</sup> Tr. Vol. IV, pp. 803-04, 806.

capacity credits from these projects.<sup>150</sup> Effective September 1, 2012, the Companies modified their mercantile self-direct contract to prospectively require transfer of ownership to the Companies for PJM bidding purposes.<sup>151</sup> However, Staff Witness Scheck testified that mercantile self-direct customers should have the option of retaining these capacity credits, presumably so that they could be sold to a Curtailment Service Provider (“CSP”).<sup>152</sup> IEU-Ohio, which functions in part as a CSP, appears to favor this approach.<sup>153</sup> As a result of this uncertainty, the Companies believe the prudent course is to bid into PJM auctions only those energy efficiency resources from mercantile self-direct projects for which they have obtained clear ownership rights expressly transferred to the Companies by these customers.

A further complication arises from the fact that the Companies currently have no Rider ELR interruptible load beyond May 31, 2016, because Rider ELR terminates on that date.<sup>154</sup> None of the Companies’ contracts with Rider ELR customers extends beyond May 31, 2016, and some currently do not extend beyond May 31, 2014.<sup>155</sup> The Companies have solicited extensions through May 31, 2016 from all of their Rider ELR customers, but only fourteen had agreed to extend as of the hearing date.<sup>156</sup> These customers have the option, which some may already have

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<sup>150</sup> Mikkelsen Rebuttal, p. 6.

<sup>151</sup> *Id.*

<sup>152</sup> Tr. Vol. IV, pp. 769-71 (distinguishing customers who obtained rebate, who did commit rights to the Companies, from customers who obtained a rider exemption). The Companies would note that mercantile customers, since the inception of the self-direct program, have negotiated terms and deleted contractual provisions that they believe are not in their best interest. Thus, future mercantile customers seeking a rider exemption will continue to have the option, as suggested by Staff witness Scheck, of asking the Commission to approve contract terms under which the customer retains PJM bidding rights for its resources.

<sup>153</sup> *See Id.*

<sup>154</sup> Mikkelsen Rebuttal, pp. 7-8; Tr. Vol. II, pp. 258-59.

<sup>155</sup> Mikkelsen Rebuttal, p. 6.

<sup>156</sup> Tr. Vol. VI, p. 1177; Mikkelsen Rebuttal, p. 8.

exercised, to contract with CSPs to bid their interruptible load into the May 2013 BRA and future BRAs.<sup>157</sup> The likely substitute for those demand reduction resources starting June 1, 2016 are contracted demand resources.<sup>158</sup> However, contracted demand resources are not available to the Companies to bid into the PJM BRA in May 2013 for the 2016-17 Delivery Year (or incremental auctions for that delivery year) because the ownership rights belong to CSPs, and regardless, contract rights will not be obtained until much closer to the delivery year.<sup>159</sup> Thus, if Rider ELR is not extended beyond May 31, 2016 and the Companies use contracted demand resources to satisfy statutory benchmarks in 2016 and 2017, the forecasted load that OEG/Nucor and others believe should be bid into the May 2013 PJM BRA will not be available for delivery in the 2016/17 Delivery Year and the Companies, or their customers, could face substantial PJM penalties if the Rider ELR resources were bid.<sup>160</sup>

The prudent course to bidding interruptible load is as proposed by the Companies: once the Companies have clear ownership rights to this demand resource, they will bid the eligible ELR-related demand resources into future PJM incremental auctions.<sup>161</sup> Indeed, this is what the Companies did in the first incremental auction for the 2014/15 Delivery Year, which was held in

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<sup>157</sup> Tr. Vol. VI, pp. 1177, 1178-79; Mikkelsen Rebuttal, p. 9. See Tr. Vol. II, pp. 259-60, 261-62 (OEG/Nucor witness Goins stating that he does not know whether Nucor or any other OEG member already has contracted with a CSP to bid interruptible load into the May 2013, May 2014 or May 2015 auctions, but recognizing that they are free to do so).

<sup>158</sup> Mikkelsen Rebuttal, p. 6.

<sup>159</sup> Mikkelsen Rebuttal, p. 5; Tr. Vol. VI, p. 1156.

<sup>160</sup> *Id.* See IEU-Ohio Exh. 2, PJM Manual 18, § 9.1 (Deficiency and Penalty Charges). The penalties could be substantial. OEG/Nucor witness Goins noted that the Companies are projecting approximately 200 MW of Rider ELR load as of 2013, but also agreed that, as of the May 2013 BRA, the Companies will have ownership rights to none of this load. Tr. Vol. II, pp. 258-59, 261; Goins Testimony, Exh. DWG-1 (Nucor Set 1 – INT-19 (Companies projecting a total of 200 MW delivered on interruptible tariffs in 2013)). Dr. Goins was not familiar with how PJM penalties are calculated. Tr. Vol. II, p. 262.

<sup>161</sup> Mikkelsen Rebuttal, p. 7; Tr. Vol. III, pp. 516-17.

September 2012.<sup>162</sup> Prior to that incremental auction, the Companies obtained signed addendums to support offering 10 MWs into the auction, and those 10 MWs cleared in the auction.<sup>163</sup> Until the Companies have additional signed contracts for ELR load extending from May 31, 2014 through or beyond May 31, 2016, which would require modification of Rider ELR in a separate proceeding,<sup>164</sup> the Companies do not consider ELR-related demand resources to satisfy the PJM requirement of a planned resource because, at the time of the auction, the Companies will be unable to verify that the resources are scheduled for the applicable delivery year or that the Companies will have ownership rights for the applicable delivery year.<sup>165</sup>

The Companies' proposal for bidding energy efficiency and demand response resources into PJM auctions appropriately manages risk, is consistent with the Commission's ESP III Order, is reasonable, and should, therefore, be approved.

**C. The Energy Efficiency and Peak Demand Reduction Programs Included in the Proposed Programs, as Modified, are Just and Reasonable and Should Be Approved.**

**1. The Companies' programs provide EE&PDR savings opportunities to all customer segments.**

The programs included in the Proposed Plans are geared to five customer sectors: (1) Residential; (2) Low-Income; (3) Large Commercial and Industrial ("C/I"); (4) Small C/I; and (5) Government.<sup>166</sup> The Companies' residential programs are listed in Exhibit ECM-5 of Witness Miller's testimony and are described in Section 3.2 of the Proposed Plans. They include

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<sup>162</sup> Mikkelsen Rebuttal, p. 8; Tr. Vol. III, pp. 511-13.

<sup>163</sup> Mikkelsen Rebuttal, p. 8. The Companies bid a total of 21 MW into the first incremental auction for the 2014/15 Deliver Year, which included energy efficiency resources. Tr. Vol. III, pp. 514-15.

<sup>164</sup> Witness Mikkelsen noted that the Companies have not determined whether they would want to continue Rider ELR beyond May 31, 2016. Tr. Vol. VI, p. 1181.

<sup>165</sup> Mikkelsen Rebuttal, pp. 8-9. See Tr. Vol. VI, pp. 1129, 1154.

<sup>166</sup> Each of the program offerings are more fully described in Section 3.0 of the Proposed Plans.

the following programs that are carried forward from the Existing Plans: (i) Appliance Turn-In Program; (ii) Direct Load control Program; and (iii) Low Income Program (which was known as the “Community Connections Program” in the Existing Plan).<sup>167</sup> The Proposed Plans also include the Energy Efficient Products Program, which is a continuation and consolidation of the existing Energy Efficient Products Program and CFL Program,<sup>168</sup> only with slight modifications to the mix of measures being offered.<sup>169</sup> The Proposed Plans also include the Home Performance Program, which is a continuation and consolidation of the existing “Comprehensive Residential Retrofit Program, “Online Audit Program,” and “Efficient New Homes Program,” again with slight modifications.<sup>170</sup>

The Companies’ small enterprise programs are listed in Exhibit ECM-6 of Witness Miller’s testimony and are described in Section 3.3 of the Proposed Plans. They include the C&I Energy Efficient Equipment Program – Small, which is a continuation and consolidation of the existing C&I Equipment Program – Small, C&I Equipment Program (Industrial Motors) – Small, and C&I Equipment Program (Commercial Lighting) – Small, with several enhancements.<sup>171</sup>

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<sup>167</sup> Miller Testimony at 9-11 and Exh. ECM-5 and Proposed Plans, Section 3.2.

<sup>168</sup> *Id.* at 10.

<sup>169</sup> The modifications include (i) the addition of whole house fans and ductless mini-splits to HVAC and water heating sub-program; (ii) removal of the programmable thermostats from the appliances sub-program because they are no longer Energy Star® qualified; (iii) the addition of televisions, computers and computer monitors to the consumer electronics sub-program; and (iv) the addition of point-of-sale CFLs and LEDs, ceiling fans and new emerging technologies to the lighting sub-program. *Id.*

<sup>170</sup> These modifications include the addition of all-electric home audits, energy efficiency kits including customized contents for standard, all-electric and school kits, and a behavioral program that provides customers with energy usage reports. *Id.* at 10-11.

<sup>171</sup> These enhancements include (i) expanded measures in the HVAC and water heating sub-program; (ii) expanded measures including recycling in the appliances sub-program; (iii) expanded measures in the food service sub-program; (iv) expanded measures to include LED, Halogen and other EE Lighting technologies in the lighting sub-program; and (v) the removal of prescriptive rebates for motors up to and over 200HP from the customer equipment sub-program. *Id.* at 11-12.

These customers also qualify for the Energy Efficient Buildings Program – Small, which is a continuation and consolidation of the C&I New Construction Program and C&I Audit Program, with special emphasis on targeting customer building offerings for shell improvements and the addition of energy efficiency kits.<sup>172</sup>

The Companies' mercantile-utility (large enterprise) programs are outlined in Exhibit ECM-7 of Witness Miller's testimony and are described in Section 3.4 of the Proposed Plans. They include the C&I Energy Efficient Equipment Program – Large, which is a continuation and consolidation of the C&I Equipment Program – Large, C&I Equipment Program (Industrial Motors) – Large, Technical Assessment Umbrella Program and C&I Equipment Program (Commercial Lighting) – Large, with several modifications.<sup>173</sup> The Companies are also offering the Energy Efficient Buildings Program – Large, which is a continuation and consolidation of the C&I Audits – Large and Custom Buildings – Large Sub-Programs, with no changes to the measures being offered.<sup>174</sup> Also included is the Demand Reduction Program, which is a continuation of the existing C&I Interruptible Load Tariffs (Rider ELR and Rider OLR) approved in the Companies' ESP proceedings, and contracted demand resources, which allow the Companies to count or contract with CSPs or customers registered with PJM for demand attributes.<sup>175</sup>

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<sup>172</sup> *Id.* at 12.

<sup>173</sup> These modifications include (i) an expansion of measures in the HVAC sub-program; (ii) an expansion of measures to include LED, Halogen and other EE Lighting technologies in the lighting sub-program; and (iii) the removal of prescriptive rebates for motors up to and over 200HP from the customer equipment sub-program. *Id.* at 13.

<sup>174</sup> *Id.* at 14.

<sup>175</sup> *Id.* at 14-15; Proposed Plans, Section 3.4.

The Companies' government programs are outlined in Exhibit ECM-7 of Witness Miller's testimony and are described in Section 3.5 of the Proposed Plans. They include the Government Tariff Lighting Program, which is a continuation of the LED Traffic Signals program, with the addition of an Energy Efficiency Street Lighting measure and rebates for Government customers served under the Companies' Street Lighting rate schedules who replace customer-owned and maintained street lighting equipment with higher efficiency equipment.<sup>176</sup>

**2. The Companies' proposed revision to their demand response program in order to avoid customers receiving double compensation is sound policy.**

The Companies' Demand Response Program continues the existing program that counts C/I interruptible load obtained through Rider ELR and Contracted Demand Resources.<sup>177</sup> In addition, the Companies propose to include demand response resources generated by customers who are participating in the PJM market for the applicable delivery year but that are not under contract with the Companies.<sup>178</sup> Because the owners of these resources already will have been compensated for participation in the PJM market – typically through payment from a CSP – the Companies will not compensate them again for these resources as an element of the Demand Response Program.<sup>179</sup> Staff Witness Scheck testified that allowing the Companies to count these resources toward their peak demand reduction benchmark was sound economic policy:

I think the best policy would be to allow companies to count all retail customers in their territory for demand reductions, whether they were acquired through a third party versus the company directly because these are all reductions that occurred within the service territory, the customers were already compensated

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<sup>176</sup> *Id.*

<sup>177</sup> Miller Testimony at 14-15; Proposed Plans, Section 3.4 and Appendix C-4.

<sup>178</sup> Miller Testimony at 14-15; Proposed Plans, Section 3.5.

<sup>179</sup> *See* Tr. Vol. IV, pp. 818-22.

whatever the split was from their third party and, therefore, additional compensation shouldn't be required from any distribution company to meet its goals because the customer and its third party were already provided that compensation.<sup>180</sup>

Although Staff Witness Scheck expressed doubts concerning the lawfulness of counting these resources without first paying the customer to commit them to the Companies,<sup>181</sup> a close reading of the applicable provisions of R.C. § 4928.66(A)(2)(c) should alleviate those concerns. Mr. Scheck focuses on the second sentence of this paragraph, which authorizes the Commission to exempt mercantile customers from the cost-recovery mechanism for EE&PDR programs if those customers "commit their demand-response or other customer-sited capabilities, whether existing or new, for integration into the electric distribution utility's . . . peak demand reduction programs."<sup>182</sup> Under this sentence, the customer must commit its resources to the Companies in exchange for obtaining an exemption from the DSE2 charge in Rider DSE.<sup>183</sup> The committing of the resources is tied to an exemption from the charge, not to whether the Companies may count those resources under their peak demand reduction programs.

It is the first sentence of R.C. § 4928.66(A)(2)(c) which authorizes the Companies to count all demand resources under their peak demand reduction programs. In enacting this provision, the General Assembly presumably understood that a top-down mandate imposed on the state's EDUs, which would be paid for by retail customers, should recognize and not duplicate the bottom-up efforts of Ohio's private industry. Thus, the first sentence of R.C.

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<sup>180</sup> Tr. Vol. IV, p. 826.

<sup>181</sup> Scheck Testimony at 13; Tr. Vol. IV, pp. 817, 823-24.

<sup>182</sup> Scheck Testimony at 13; *See* Tr. Vol. IV, p. 817 (Staff Witness Scheck stating: "I think that foundation is actually established in Senate Bill 221 where it says 'the customer may commit.' It doesn't say 'the company shall count.' It says 'the customer may commit,' and I draw a nexus between committing and counting.").

<sup>183</sup> *See In re Application of Columbus S. Power Co.*, 129 Ohio St.3d 46, 2011-Ohio-2383, ¶ 30.



§ 4928.66(A)(2)(c) authorizes the Companies and the state's other EDUs to measure compliance with the energy efficiency and peak demand reduction benchmarks "by including the effects of all demand-response programs for mercantile customers of the subject electric distribution utility, all waste energy recovery systems and all combined heat and power systems, and all such mercantile customer-sited energy efficiency, including waste energy recovery and combined heat and power, and peak demand reduction programs, adjusted upward by the appropriate loss factors." The Companies' customers are required to pay only for the additional compliance measures required to achieve the state's EE and PDR objectives after existing mercantile projects are taken into account. Demand response resources participating in the PJM market are easily-verifiable resources that qualify for compliance under R.C. § 4928.143(A)(2)(c) as one component of the Companies' Demand Response Program.

As such, the Companies' Demand Reduction Program is consistent with R.C. § 4928.143(A)(2)(c) and, as Staff Witness Scheck agreed, is sound public policy. The Commission should approve the Demand Reduction Program as filed.

**3. The Companies have enhanced their program offerings based on intervenor recommendations.**

While the Companies believe that the programs included in the Proposed Plans as filed provide sufficient opportunities for customers to reduce energy consumption and peak demand, several parties made certain suggestions that the Companies believe will enhance the program offerings. Therefore, as part of the rebuttal phase of the evidentiary hearing, the Companies adopted the following suggestions:

- First, the Companies agreed to expand the Energy Efficient Buildings Program – Large by \$200,000.<sup>184</sup> These funds will

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<sup>184</sup> Miller Rebuttal at 5.

be paid through the Ohio Hospital Association (“OHA”) in an amount not to exceed the lesser of \$5,000 or 50% of the cost of a ASHRAE level I audit.<sup>185</sup> These funds are in addition to any other funding for which a hospital may qualify under the Companies’ standard audit program included in the Proposed Plans.<sup>186</sup> In order to maximize the benefit of this expansion of the program, the Companies also agreed to earmark an additional \$50,000 total over the term of the Proposed Plans to enable the OHA to conduct ENERGY STAR Portfolio Manager benchmarking for OHA member hospitals served by the Companies.<sup>187</sup>

- Second, the Companies adopted the recommendation of numerous parties and agreed to develop a sub-program in the Energy Efficient Equipment Program – Small and Large that will specifically target data centers and have a budget of approximately \$3.2 million.<sup>188</sup>

As Mr. Miller explained, the adoption of these modifications will have little to no effect on the TRC scores for any of the Proposed Plans.<sup>189</sup> Moreover, the Companies believe that each of these suggestions enhances the Proposed Plans. Finally, no party opposed any of these changes and, accordingly, the Companies urge the Commission to approve them as part of the Plans.

**4. Intervenor’s additional suggestions for changes to the portfolio of programs are unfounded and unsupported by the evidentiary record.**

Some parties suggested other revisions to the Companies’ program offerings, including:

- i) modifications or elimination of the Companies’ Energy Efficiency Kits Program; ii) the creation of a retro-commissioning program; and iii) the elimination of incentives for standard T8

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<sup>185</sup> *Id.*

<sup>186</sup> *Id.*

<sup>187</sup> *Id.*

<sup>188</sup> *Id.* at 8; *see* Tr. Vol. VI, pp. 1059-61. OEC/ELPC Witness Crandall and Sierra Club Witness Swisher recommended a data center program, but neither witness provided specifics on what that program should be. Crandall Testimony at 5-8; Swisher Testimony at 9-12; Tr. Vol. III, p. 720.

<sup>189</sup> *Id.* at 9.

lighting. Yet, not one of these parties provided a comprehensive analysis as to how the suggestions should be incorporated into the Proposed Plans, or what the market potential for such suggestions might be. Nor did they provide estimated participation rates for any of these suggestions, or the budget levels or how the TRC might be affected if these suggestions were incorporated into the Proposed Plans.<sup>190</sup> These suggested amendments to the program offerings are unsupported in the evidentiary record and should, therefore, be rejected on this basis alone.

Nevertheless, given the fact that it is the Companies' responsibility to either achieve the statutory energy efficiency and peak demand reduction targets, or alternatively face the possibility of incurring penalties, deference to their rationale for rejecting these suggestions, which is explained below, is also warranted.

OEC/ELPC Witness Crandall, Sierra Club Witness Reed, and Sierra Club Witness Loiter suggest that the Commission modify or eliminate the Companies' Energy Efficiency Kits Programs.<sup>191</sup> The Companies are proposing energy efficiency kits that may contain a combination of various measures, including Compact Fluorescent Light bulbs ("CFLs"), LED nightlights, furnace whistles, smart strips, shower heads and aerators.<sup>192</sup> The Companies' Home Performance Program includes 325,882 Opt-In Energy Efficiency Kits for Residential customers during the Plan Period, which represents less than 20% of the total residential customers of the

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<sup>190</sup> See e.g. Tr. Vol. III, pp. 616-617 (Sierra Club Witness Loiter agreeing he did not provide budgets, did not estimate additional savings, or estimate a change in the TRC), 656-657 (Sierra Club Witness Reed agreeing he had not completed a revised residential plan, does not know what the cost impact would be of his recommendations, and does not know what savings would be generated); Tr. Vol. IV, p. 723 (NRDC Witness Swisher agreeing that he is not recommending a specific program design or budget for retro-commissioning).

<sup>191</sup> Crandall Testimony at 13; Reed Testimony at 6; Loiter Testimony at 11.

<sup>192</sup> Proposed Plan, Section 3.2 (under Home Performance Program); Tr. Vol. II, p. 344.

Companies.<sup>193</sup> In Pennsylvania, an affiliate of the Companies, West Penn Power Company, implemented an Opt-In Kit program during the second quarter of 2011, and distributed kits to 341,490 residential customers to date, representing approximately 55% of that Company's residential customers.<sup>194</sup> In Maryland, an affiliate of the Companies, Potomac Edison Company, implemented an Opt-In Kit program in the fourth quarter of 2011 and distributed kits to 105,285 residential customers to date, representing approximately 46% of that Company's residential customer base.<sup>195</sup> The Opt-In Kit program has proven successful in both Pennsylvania and Maryland and is a major source of cost effective energy savings for the Companies' sister utilities and is expected to provide the same for the Companies. Therefore, the number of energy efficiency kits contemplated in the Proposed Plans should not be modified.

Second, the Companies propose to continue to incent standard T-8 lighting installations that result in the early retirement of T-12 lighting installations at an incentive level less than that offered for higher efficiency lighting options.<sup>196</sup> OEC/ELPC Witness Crandall and Sierra Club Witness Loiter criticize the Companies for incentivizing standard T8s, despite neither knowing the Companies' incentive levels being offered nor whether the Commission allows them to count for energy savings.<sup>197</sup> In Case No. 09-512-GE-UNC, in which the Commission developed a draft TRM, the Commission supported the as-found condition for early retirement as the baseline for determining energy savings, which supports the energy savings associated with a standard T-

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<sup>193</sup> Miller Rebuttal at 3.

<sup>194</sup> *Id.*

<sup>195</sup> *Id.*

<sup>196</sup> Proposed Plans, Appendix C-4; Miller Rebuttal at 4-5.

<sup>197</sup> Crandall Testimony at 11; Loiter Testimony at 11; Tr. Vol. III, pp. 598-599.

8 lighting installation replacing a T-12 lighting installation.<sup>198</sup> EISA recently prohibited the manufacturing or import of T-12 lamps as of July 14, 2012. Based on the likelihood that T-12 lamps remain in retail stock or customer inventory, the Companies believe that there are opportunities to incent standard T-8 lighting installations that provide the early retirement of T-12 lighting installations and achieve greater participation in the Companies' programs<sup>199</sup> – a theory shared in other jurisdictions. In developing the draft update to the Pennsylvania TRM, for the period June 1, 2013 through May 31, 2014, the Pennsylvania Statewide Evaluator recognized savings for conversions to standard T-8 lighting, based in part on the 2012 Illinois TRM, and proposes to continue to accept a T-12 baseline condition in the 2013 Pennsylvania TRM supporting the energy savings and continued incentives associated with standard T-8 installations.<sup>200</sup> As Staff Witness Scheck acknowledged, this is “an overwhelming successful program,”<sup>201</sup> and as a result, the Companies are continuing this program in their Proposed Plans, especially since (i) the decision as to which lighting system is to be installed ultimately resides with the customer; (ii) there is real savings to be had if the customer replaces a T-12 system with a standard T-8 system; and (iii) the Companies incent conversions to a standard T-8 system at a lower level than for other more efficient options.<sup>202</sup>

Lastly, NRDC Witness Swisher and Ohio Manufacturing Association (“OMA”) Witness Seryak recommend that the Companies include a retro-commissioning program in their Proposed

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<sup>198</sup> Miller Rebuttal at 4-5.

<sup>199</sup> *Id.*

<sup>200</sup> *Id.*

<sup>201</sup> Scheck Testimony at 6.

<sup>202</sup> Proposed Plans, Appendix C-4 (under Lighting sub-program, linear fluorescent retrofits); Miller Rebuttal at 4-5.

Plans.<sup>203</sup> As Mr. Seryak agreed, a large percentage of manufacturing customers' energy efficiency programs are specific to their premises and, therefore, require customized solutions.<sup>204</sup> As Witness Miller explained, the Companies considered a retro-commissioning program when developing their Proposed Plans.<sup>205</sup> However, because of the need to customize the solutions, the Companies' plan development team opted to offer retro-commissioning as a custom measure within the Commercial and Industrial Energy Efficiency Buildings Program – Large, rather than as a separate prescriptive program.<sup>206</sup> Moreover, the Ohio draft TRM does not provide a way to measure the savings realized from a stand alone retro-commissioning program, which would make it difficult to develop standardized EM&V protocols for such a program.<sup>207</sup> Finally, neither Mr. Swisher nor Mr. Seryak offers a specific program design or budget for the Commission to consider.<sup>208</sup>

In sum, given the lack of details surrounding the above suggestions, as well as the Companies' valid reasons for not adopting them, the Commission should reject each of the above modifications to the Companies' Proposed Plans.

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<sup>203</sup> Swisher Testimony at 13-18; Seryak Testimony at 4. NRDC Witness Sullivan suggests a Continuous Energy Improvement Program which is similar to a retro-commissioning program and is deemed to be unnecessary for similar reasons.

<sup>204</sup> Tr. Vol. III, p. 750.

<sup>205</sup> Tr. Vol. II, pp. 363-364.

<sup>206</sup> Tr. Vol. IV, p. 734; Proposed Plans, Section 3.4 (C&I Energy Efficient Program – Large, under “Custom” description).

<sup>207</sup> Tr. Vol. III, p. 746.

<sup>208</sup> Tr. Vol. III, p. 723.

**D. The Costs of the Proposed Plans are Just and Reasonable and Should be Recovered Through Rider DSE**

The estimated cost of each of the Proposed Plans is \$121 million for the Ohio Edison Plan; \$77.9 million, for the CEI Plan; and \$50 million, for the Toledo Edison Plan.<sup>209</sup> No party claimed that these costs were unreasonably high. In fact, Staff Witness Scheck commended the Companies, noting that “[t]he 3-year Portfolio Plan put forward by the Compan[ies] has one of the most cost-effective ex-ante analyses of all the Ohio distribution utilities.”<sup>210</sup> Notwithstanding, Sierra Club, the NRDC, the OEC and ELPC each complained that the Companies should have spent more money on the Proposed Plans. These parties – none of whom are the recognized advocates for the customers who have to pay for these Proposed Plans – have failed to demonstrate that the level of spending proposed by the Companies is unreasonable. The budgets included in the Proposed Plans are expected to be sufficient to achieve the energy efficiency and peak demand reduction levels required by law, thus making the budgets just and reasonable. Accordingly, the Companies ask the Commission to authorize recovery of these funds starting with service rendered on or after January 1, 2013, consistent with Rider DSE, which has already been approved by the Commission and is not being modified in this proceeding.

**E. The Waiver Requests are Reasonable and Should be Granted**

In their Application, the Companies requested waiver of two Commission directives related to their Proposed Plans – the first, deals with the plan template; the second, with the use of a pro rata methodology for determining savings.<sup>211</sup> In Case No. 09-714-EL-UNC the

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<sup>209</sup> Proposed Plans, Appendix C-3, PUCO Table 3.

<sup>210</sup> Scheck Testimony at 3.

<sup>211</sup> Dargie Testimony at 13-14.

Commission proposed a template for use by EDUs when filing their three-year energy efficiency and peak demand reduction portfolio plans.<sup>212</sup> The Commission has yet to issue a final order in that docket. The Commission's proposed template describes seven "customer classifications": Residential, Residential Low-Income, Small Enterprise, Mercantile Self-Directed, Mercantile-Utility, Government & Nonprofit and Transmission & Distribution. The Companies classify five different customer sectors, which closely track the classifications included in the proposed template,<sup>213</sup> because the Companies' customer accounting systems and rates do not track customer data in the manner needed to conform reporting precisely to the classifications proposed by the Commission.<sup>214</sup> To do so would require costly modifications to the Companies' systems. Further, in order to be consistent and facilitate a comparison of the Proposed Plans with the Existing Plans, the Companies utilized the same format in both.<sup>215</sup> In light of the foregoing, the Companies have asked the Commission for a waiver of any rules to the degree any such rules would require information included in the Proposed Plans to be presented in a different format.<sup>216</sup> No party opposed this request and, given the reasonableness of the request, the waiver should be granted.

While not technically a Commission Rule, the Commission has also directed EDUs to determine savings using a pro rata rather than annualized methodology.<sup>217</sup> Under the pro rata methodology, only the savings from the time a measure is implemented until the end of the year

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<sup>212</sup> See generally, *In re Adoption of a Portfolio Plan Template for Electric Utility Energy Efficiency & Peak Demand Reduction Programs*, Case No. 09-714-EL-UNC.

<sup>213</sup> Eberts Testimony at 12-13.

<sup>214</sup> Dargie Testimony at 13.

<sup>215</sup> *Id.*

<sup>216</sup> Dargie Testimony at 13.

<sup>217</sup> See Fitzpatrick Testimony at 10.



in which a measure is first installed can count towards a utility's statutory energy efficiency benchmarks during that initial year.<sup>218</sup> As Witness Fitzpatrick explained, there are several problems with the use of the pro rata methodology.<sup>219</sup> First, this methodology is more costly by requiring the acceleration of costs necessary to implement additional programs in order to overcome the deficit created by only allowing savings for a portion of the year to count. Additional costs must also be incurred because the use of the pro rata methodology requires vendors to customize EM&V and reporting protocols to accommodate a methodology that is not used in many other states.<sup>220</sup> Second, the pro rata methodology creates an impression of accuracy that simply does not exist. The entire energy efficiency process involves estimates and assumptions, several of which are for upwards of fifteen or more years. Therefore, given the aforementioned additional costs, it is somewhat impractical to focus on this single aspect of energy efficiency and attempt such precision.<sup>221</sup> Third, the pro rata methodology does not properly track costs with benefits, because the entire cost of the program is incurred in the year in which the measure is implemented, but the savings results straddle two years, unless it is installed on the first day of the year.<sup>222</sup> And finally, the Commission recently authorized the use of the annualized savings methodology in the AEP portfolio plan case.<sup>223</sup> Because EDUs are all

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<sup>218</sup> Fitzpatrick Testimony at 10.

<sup>219</sup> *Id.* at 10-11.

<sup>220</sup> Annualized reporting is the industry practice. At least 23 states use annualized reporting when measuring energy savings results. In addition to Pennsylvania, where the Companies' EM&V contractor also performs services on behalf of the Companies' sister utilities in that state, Arizona, California, Colorado, Connecticut, Florida, Illinois, Indiana, Iowa, Maine, Maryland, Massachusetts, Michigan, Minnesota, Nebraska, New Jersey, New York, Oregon, South Carolina, Texas, Vermont, Washington and Wisconsin also all use the annualized savings methodology to track savings results. *Id.* at 11-12.

<sup>221</sup> *Id.*

<sup>222</sup> *Id.*

<sup>223</sup> AEP Ohio POR Order, p. 17.

subject to the same statutory requirements, and face the possibility of penalties should they fail to meet these requirements, it would be inherently unfair to have some EDUs measure savings based on one methodology while others measure it under another, especially if one of those methodologies requires an EDU to incur additional costs that would have to be paid by its customers.

Very few parties addressed this issue. Staff, recognizing the additional costs of utilizing the pro rata savings methodology, recommends counting savings on an annualized basis.<sup>224</sup> As Staff Witness Scheck indicated, calculating savings on an annualized basis “makes it easier and less costly from an accounting standpoint to keep track of energy efficiency savings,”<sup>225</sup> while “[u]nder the pro-rata method, [the Companies] and [their] contractors would need to keep track of measure installation on a daily basis to accurately account for savings on a pro-rata basis,” which is “inefficient and expensive.”<sup>226</sup> Indeed, the only party to submit testimony challenging the Companies’ request was OEC/ELPC Witness Crandall.<sup>227</sup> Other than his perceived notion that the pro rata approach is more accurate, Witness Crandall provided very little evidence to support his opinion. He was unaware of the methodology used by other states to determine savings,<sup>228</sup> and he did not address any of the points in support of the use of an annualized approach raised by Mr. Fitzpatrick. In light of the foregoing, the request of the Companies to determine savings during the Plan Period based on an annualized methodology is reasonable, supported by the evidence, and should, accordingly, be granted.

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<sup>224</sup> Tr. Vol. III, p. 757.

<sup>225</sup> Scheck Testimony at 2.

<sup>226</sup> *Id.* at 2-3.

<sup>227</sup> Crandall Testimony at 13-14.

<sup>228</sup> Tr. Vol. V, pp. 1036-1037.

### III. CONCLUSION

For the reasons set forth above, the Companies respectfully ask that the Commission issue an order no later than December 12, 2012 in which:

- their Proposed Plans, as modified during the evidentiary hearing, are approved;
- the costs of the Proposed Plans are found to be just and reasonable and recoverable through Rider DSE for service rendered on or after January 1, 2013;
- the request for a waiver of any rule that requires information included in the Proposed Plans to be modified based on customer classifications is granted;
- the Companies' request to determine savings during the Plan Period based on the use of the annualized savings methodology is approved; and
- the Companies' approach to determining ownership rights for purposes of bidding energy credits into the PJM auction when there are no specific program terms and conditions is approved as reasonable.

Respectfully submitted,

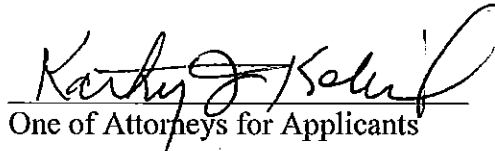
  
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## CERTIFICATE OF SERVICE

I hereby certify that this **Post-Hearing Brief** was filed electronically this 20th day of November, 2012, with the Public Utilities Commission of Ohio Docketing Information System.

Notice of this filing will be sent via e-mail to the list below.

  
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Summary: Brief In Support of Their Energy Efficiency and Peak Demand Reductrion Program Portfolio Plans for 2013 Through 2015 electronically filed by Ms. Kathy J Kolich on behalf of Ohio Edison Company and The Cleveland Electric Illuminating Company and The Toledo Edison Company