

**BEFORE
THE PUBLIC UTILITIES COMMISSION OF OHIO**

In the Matter of the Application of Duke)
Energy Ohio, Inc. for Approval of its)
Energy Efficiency and Peak Demand)
Reduction Program Portfolio Plan.) Case No. 16-0576-EL-POR

**INITIAL POST-HEARING BRIEF OF ENVIRONMENTAL LAW & POLICY CENTER,
NATURAL RESOURCES DEFENSE COUNCIL, OHIO ENVIRONMENTAL COUNCIL,
AND ENVIRONMENTAL DEFENSE FUND**

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I. INTRODUCTION

The 2017-2019 Energy Efficiency & Peak Demand Reduction Program Portfolio Plan proposed by Duke Energy Ohio (“Duke” or the “Company”), as modified by the Amended Stipulation and Recommendation, provides customers with a comprehensive selection of efficiency programs that will generate significant, cost-effective savings. Staff of the Public Utilities Commission (“Staff”) and the Office of the Ohio Consumers’ Counsel (“OCC”) ask the Commission to reject the Stipulation, in part because it does not contain an overall cap on plan costs. One element of the three-part test the Commission uses to evaluate the reasonableness of a settlement is whether, as a package, the settlement benefits customers and the public interest. While Staff and OCC argue that the Commission should impose a 3.5 percent cost cap on portfolio costs to meet this element, Environmental Law and Policy Center, Natural Resources Defense Council, Ohio Environmental Council, and Environmental Defense Fund (collectively, “Environmental Intervenors”) submit that customers will not benefit from such a cap. Rather, the evidence in the record shows they will be harmed.

Staff and OCC make a series of conclusory statements that customers need to be protected from energy efficiency program costs, but fail to provide any compelling evidence that there is a problem that needs fixing, let alone whether the solution they offer is in the customer interest. In fact, just the opposite appears to be true. A simple calculation of first-year acquisition costs for the proposed portfolio illustrates that such a narrow focus on costs will cause far more harm than good—driving down program quality and depriving customers of valuable energy savings. Staff and OCC present no evidence that would refute this conclusion. And while they assert that Duke will still be able to meet its annual statutory energy efficiency targets under a cap, neither Staff nor OCC present any analysis to support their claim.

Environmental Intervenors agree that controlling costs is a desirable goal, but this is already being accomplished through the existing stakeholder collaborative and Commission review process, resulting in a diverse portfolio of programs that produce cost-effective savings and drive down power prices for all the Company's customers. A cost cap would upend this well-balanced approach, because it would focus on only the cost part of the equation and ignore the benefits—in direct contravention of Ohio law and established Commission precedent. The evidence in this case strongly suggests that a cap would reduce benefits far more than it would costs. This, combined with the lack of any compelling evidentiary support, renders the proposed cap both arbitrary in design and harmful in effect to Duke's customers.

II. FACTS

Duke submitted its initial Energy Efficiency & Peak Demand Reduction Program Portfolio Plan on June 15, 2016, and submitted an amended version on October 14, 2016 to incorporate the results of its market potential study. (These two versions are collectively referred to herein as the "Plan" unless otherwise specified.) On December 22, 2016, Duke submitted an initial Stipulation and Recommendation. The Company then filed an amended version of that stipulation on January 27, 2017 that was supported by a range of parties. (The amended version is hereinafter referred to as the "Stipulation" unless otherwise specified.) Staff is not a party to the Stipulation and instead proposes imposing a cap on the Company's annual energy efficiency program costs and shared savings, equal to 3.5 percent of Company revenues reported on line 10 of page 300 of the 2015 version of FERC Form 1. Staff Ex. 1, Donlon Test. at 4. OCC, also not a party to the Stipulation, supports this cost cap proposal. OCC Ex. 13, Shutrump Test. at 3, 7-8.

In its Plan, Duke proposes to spend approximately \$38.06 million per year on program costs, not including any annual shared savings incentive they may earn. Duke Ex. 13, Duff

Rebuttal at 4. Staff calculates that under the proposed cost cap Duke would be permitted to spend approximately \$33.8 million annually—an 11 percent reduction from proposed program costs. Staff Ex. 1, Donlon Test. at 6; Duke Ex. 13, Duff Rebuttal at 4. But the cap will not just limit program spending alone; it will apply as a *total overall cap* to the sum of program spending *and* shareholder incentives. *Id.* If the Commission approves Duke’s proposed shareholder incentive mechanism, it will be eligible to earn up to \$8 million in after-tax profits, equivalent to approximately \$12.5 million in pre-tax profits. Joint Ex. 2, Amended Stipulation at 5; OCC Ex. 13, Shutrump Test. at 5. Thus, assuming Duke plans to achieve its maximum shareholder incentive (which is likely), it would only be left with an annual program budget of \$25.56 million. In other words, imposition of the proposed spending cap will force Duke to cut its budget by \$12.5 million—equivalent to a *nearly 1/3* reduction in the budget the parties agreed to in the Stipulation.¹

Customers pay for the energy efficiency programs through a rider (referred to as “Rider EE-PDR”) that averages between \$2 and \$3 per month for residential customers under the proposed Plan, according to projections by both Staff and Duke. Tr. at 184-185; OCC Ex. 3 (response to OCC Interrogatory 02-002). The impact of this rider is minimal. For residential customers that consume between 750 and 1,000 kilowatt-hours (kWh) per month, Rider EE-PDR accounts for approximately 2 to 3 percent of the overall bill. *Id.* This cost, meanwhile, replaces the far larger costs of generation, thereby saving customers money on their energy bills. The

¹ These figures exclude PJM revenues that the utilities may receive and that are not currently counted toward the cap. Joint Ex. 2, Amended Stipulation at 6; Tr. at 174-175; Duke Ex. 5, Haemmerle Direct Test. at 12. While Duke has agreed to apply these revenues to program spending, they are currently speculative. Moreover, in addition to the program costs included in the budget, Duke agreed to a series of supplemental programs in the Stipulation (for example, smart thermostats and combined heat and power) that will draw down the energy efficiency budget, but are not included in Duke’s proposed \$38.06 million annual budget. Tr. at 42:16-25. Thus, the estimated cap impacts on program spending is conservative, and will very likely be reduced even further once these additional programs are operationalized.

programs in the Plan will cost approximately \$114 million over three years, while at the same time producing about \$357 million in benefits—resulting in a net energy cost savings to customers of \$240 million.² Duke Ex. 3, Amended Application at 8 (Table 1); Tr. at 42:12-25.

By law, energy efficiency plans must be cost-effective on the portfolio basis, which means that they must provide more benefits than their costs. R.C. 4928.66; O.A.C. 4901:1-39-04 (B). Cost-effectiveness is measured based on the Total Resource Cost Test (“TRC”). O.A.C. 4901:1-39-01(F). The TRC compares the cost of programs to both the utility and participating customers to the avoided costs of purchasing supply, including energy, transmission and distribution, and operation and maintenance. Duke’s overall Plan averages a TRC score of 2.30. Duke Ex. 3, Amended Application at 8, Table 1.³

While savings will depend on the nature and volume of participation, the Plan offers many opportunities for customers to control their energy bills. For example, a customer who takes the minimal step of replacing ten incandescent bulbs with ten LEDs through Duke’s Residential Smart Saver Program will save a conservative \$44 per year for an average of 12

² Benefits calculated as follows: Utility Cost Test (“UCT”) benefits equal \$118.9 million per year (program spending [\$38.1 million/year] multiplied by UCT benefit-cost ratio [3.12 for the overall portfolio]). See Duke Ex. 3, Amended Application at 8 (Table 1). UCT *net* benefits equal \$80.8 million per year (UCT benefits [118.9 million] minus program costs [\$38.1 million/year]) for each year of running the program (i.e. about \$240 million in net benefits over the three-year period).

³ The TRC considers cost-effectiveness from a different perspective than the UCT discussed above. The UCT compares utility system costs (i.e. efficiency program costs) to utility system benefits (avoided energy costs, avoided capacity costs, avoided T&D costs, etc.), much the way other utility investments are considered. Ohio shared savings incentives for efficiency programs are based on UCT net benefits. Duke Ex. 5, Haemmerle Direct Test. at 9; Duke Ex. 6, Haemmerle Supp. Test. at 4. In contrast, the TRC is intended to compare costs and benefits from the combined perspectives of the utility system and program participants. See O.A.C. 4901:1-39-01 (Y). In other words, it adds the program participants’ perspective to the UCT. On the cost side of the equation, that means adding to the UCT any costs incurred by program participants to install efficiency measures; on the benefits side of the equation, it should mean adding other fuel savings, water savings, and other non-energy benefits (comfort improvements, productivity improvements, etc.) that program participants receive. In contrast, the TRC is what is used in Ohio to determine energy efficiency portfolio cost-effectiveness. O.A.C. 4901:1-39-01(F). Duke’s TRC cost-effectiveness estimates are conservative, because the Company adds participant costs to the UCT but does not account for the additional participant benefits.

years⁴—significantly more than the estimated cost of the rider. The Smart Saver Program is projected to result in the installation of nearly 3 million measures over the term of the Plan, including LED bulbs, HVAC measures, and other improvements. Duke Ex. 1, Application at 20, Appendix B at 1 of 13.

Moreover, both participants and non-participants benefit from the Plan. For example, when efficiency programs produce savings at peak times, they reduce the amount of new generating capacity that needs to be purchased and the amount of future investment in transmission and distribution system infrastructure that a utility needs to make. All customers benefit from such savings. In addition, Staff forecasted that an overall one percent reduction in energy demand from energy efficiency programs could cut wholesale power costs in Ohio by an average of 5.7 percent. Env. Int. Ex. 6, Commission Letter to Energy Mandates Study Committee at 12 (Feb. 26, 2015). This is termed “price suppression;” energy efficiency programs reduce consumption at times of peak demand, which lowers wholesale capacity market prices for everyone. These reduced prices provide additional cost savings for all customers on top of the avoided cost benefits measured through the TRC test.

⁴ Based on calculation of average LED savings per bulb derived from appendices to the Plan and other record evidence: 36.72 kWh/year savings, at average residential rate of 12 to 14 cents/kWh, multiplied by 10 bulbs. *See* Duke Ex. 1, Application, Appendix A at 1 of 5 (source of savings estimate for LED bulb [“Retail Fixture”]); *see also* Tr. at 185:11-17 (source of average residential rate [calculation based on \$90 to \$108 monthly bill for the average residential customer using 750 kWh]). This calculation equals \$44 to \$51 per year for the average residential customer installing 10 LED bulbs. This is a conservative estimate, given that it does not account for other savings customers (including non-participants) would realize from avoided T&D investment, avoided capacity costs, and market price suppression effects, including successful measures like LEDs with up to 12 years of useful savings. Source of LED (“Retail Fixture”) measure life: Duke Ex. 1, Application, Appendix A at 1 of 5.

III. STANDARD OF REVIEW

The 2017-2019 Plan is the product of the Stipulation supported by Duke and a range of diverse parties, including Environmental Intervenors. In reviewing such a proposed stipulation, the Commission has explained that “[t]he ultimate issue for our consideration is whether the agreement, which embodies considerable time and effort by the signatory parties, is reasonable and should be adopted.” *In re Columbia Gas of Ohio*, Case Nos. 16-1309 *et al.*, Opinion and Order, ¶40 (Dec. 21, 2016).

In conducting this inquiry, the Commission has traditionally considered three criteria:

1. Is the settlement a product of serious bargaining among capable, knowledgeable parties?
2. Does the settlement, as a package, benefit ratepayers and the public interest?
3. Does the settlement package violate any important regulatory principle or practice?

Id. While the Commission is not bound by a stipulation, it may place substantial weight on its terms. *Id.*

Recently, the Commission has placed particular emphasis on the thoroughness of opposing parties’ analysis in applying the standard of review for a stipulation. For example, in its recent decision regarding Columbia Gas’s efficiency programs, the Commission rejected a recommended revision to that utility’s demand-side management plan that would shift funding toward customer education about smart thermostats and additional smart thermostat rebates, in part because “the record does not include sufficient information of the cost-effectiveness of the Simple Energy Solutions program if revised as opposing intervenors recommend.” *Id.*, ¶71.

Similarly, in approving stipulations establishing power purchase agreements proposed by both FirstEnergy and Ohio Power Company (“AEP”), the Commission cited the lack of

alternative analysis by opposing intervenors when it rejected criticisms of forecasts of the financial impacts of those power purchase agreements. *In re FirstEnergy ESP IV*, Case No. 14-1297-EL-SSO, Opinion and Order, at 81 (Mar. 31, 2016) ("*In re FirstEnergy ESP IV*") ("Although we are mindful of the fact that FirstEnergy has the burden of proof in this proceeding, no other party has presented a full projection of energy prices and the net revenues under Rider RRS."); *In re Ohio Power Co.*, Case Nos. 14-1693-EL-RDR et al., Opinion and Order, at 80 (Mar. 31, 2016). Further, the Commission has held it must base its decision on the record before it. *In the Matter of Duke Energy*, Case No. 14-841-EL-SSO et al., Opinion and Order, at 46 (Apr. 2, 2015) (citing *Tongren v. Pub. Util. Comm.*, 85 Ohio St.3d 87, 90, 706 N.E.2d 1255 (1999)).

The Commission is required to base its decision on the record before it and has required rigorous analysis from prior stipulation opponents. The Commission should do the same here. Staff and OCC's opposition to the Stipulation and their insistence on applying a cost cap without credible evidentiary support, as discussed in the following sections, does not meet those standards.

IV. ARGUMENT

Duke's Plan will help both participants and non-participants lower their bills by increasing energy efficiency opportunities, and it will help pave the way for future, deeper savings by developing the market for newer technologies such as LED lighting and smart thermostats. Duke Ex. 1, Application at 4; Joint Ex. 2, Amended Stipulation at 8. Additionally, the Plan will open up new areas for customer engagement, such as in Duke's commitment to work with Ohio Manufacturers' Association to improve industrial participation in the programs (Joint Ex. 2, Amended Stipulation at 6-7), to access institutional customers through Ohio Hospital Association (*id.*, at 11-12), and to expand its reach to single and multi-family homes

with primary electric heat (*id.*, at 9). Duke’s Plan is a comprehensive portfolio that includes key improvements over the quality of programs from its prior 2014-2016 plan, and that maximizes benefits while keeping program spending reasonable.

Imposing a cap on the Plan would jeopardize these portfolio improvements and customer benefits. The Commission should reject the cost cap proposal for three main reasons: 1) Staff’s single-minded focus on cost, to the exclusion of customer benefits, program quality, and a host of other factors critical to successful energy efficiency programs, stands in direct conflict with fundamental principles of Ohio law and Commission rules and precedent; 2) Staff and OCC present no compelling evidence that the cap is sound in design, rationale, or impact, and thus fail to meet their burden of proof under the Commission’s rigorous standard for parties opposing stipulations; and 3) evidence strongly suggests a cap will have detrimental impacts on program quality and savings opportunities for customers.

A. The Proposed Cap is Inconsistent with Law and Commission Orders that Emphasize the Value of Energy Efficiency Savings and High Quality Programs.

One of the most concerning elements of Staff’s proposal is the implication that limiting customer access to energy efficiency—a least-cost resource—would be a desirable outcome. Energy efficiency delays the need to incur expensive generation and T&D costs, provides direct bill savings to participating customers, and drives down the price of wholesale power for all customers. Therefore, a cap to limit Rider EE-PDR may ultimately *raise* bills overall by depriving customers of savings opportunities. Yet, Staff and OCC fail to consider this potential value in favor of an exclusive focus on the rider cost (see discussion in Section IV.B below) and even suggest that otherwise valuable customer programs should be cut in the interest of meeting the cap constraints (*see, e.g.* Staff Ex. 1, Donlon Test. at 8). This perspective runs contrary to Ohio law and prior Commission orders that prioritize high-quality programs and encourage

utilities to meet and even exceed their annual statutory energy efficiency requirements. Focusing on the second and third prongs of the Commission’s stipulation review standard, the record shows that Duke’s Plan will benefit ratepayers and the public interest, and implement applicable laws and regulations. The Plan is designed to cost-effectively deliver significant energy savings that will lower bills for all customers, while putting Duke on a path to continue running successful programs during future plan periods. Imposing a cost cap on this well-constructed portfolio would only undermine Ohio law and Commission rules and precedent.

Ohio Revised Code Section 4928.66 sets out the utilities’ annual energy efficiency requirements, referring to the benchmarks as more of a floor than a ceiling: “[b]eginning in 2009, an electric distribution utility shall implement energy efficiency programs that achieve energy savings equivalent to *at least* three-tenths of one percent of the total, annual average...” (emphasis added). The Commission has specifically rewarded utilities for exceeding their energy efficiency benchmarks in the series of orders approving previous portfolio plans with tiered shared savings mechanisms. *See, e.g. In the Matter of Duke Energy Ohio, Inc.*, Case No. 11-4393-EL-RDR, Opinion and Order, at 8 (Aug. 15, 2012) (establishing Duke’s shared savings structure); *In the Matter of Duke Energy Ohio, Inc.*, 13-0431-EL-POR, Opinion and Order, at 4 (Dec. 4, 2013) (continuing the 2011 mechanism); *In the Matter of Columbus S. Power Co.*, Case Nos. 11-5568-EL-POR et al., Opinion and Order, at 8 (March 21, 2012); *In the Matter of The Cleveland Elec. Illum. Co.*, Case Nos. 12-2190-EL-POR, et al, Opinion and Order, at 15-16 (March 20, 2013).

Similarly, Commission rules emphasize that the annual benchmarks are a *minimum* requirement, even encouraging utilities to strive to exceed them:

Such programs, *at a minimum*, shall achieve established statutory benchmarks for energy efficiency * * * The purpose of this chapter is to establish rules for the

implementation of electric utility programs that will *encourage innovation and market access* for cost-effective energy efficiency and peak-demand reduction, achieve the statutory benchmark for peak-demand reduction, *meet or exceed the statutory benchmark for energy efficiency*, and provide for the participation of stakeholders in developing energy efficiency and peak-demand reduction programs for the benefit of the state of Ohio.

Ohio Admin. Code 4901:1-39-02(A) (Dec. 10, 2009) (*emphasis added*). Further, the above rule requires utilities to consider factors such as encouragement of innovation and market access in developing plans.

The Commission also recently outlined an explicit policy encouraging utilities to accelerate their energy efficiency offerings and seek out every possible kWh of cost-effective savings, as this provides net benefits—not costs—to customers:

[T]he increase in the shared savings cap is in the public interest because it encourages the Companies to seek to provide to their customers all available cost effective energy opportunities. As the Commission has previously stated “because *** energy savings must be cost-effective, by definition, customers in the aggregate save money when the Companies deliver energy savings opportunities to their customers instead energy. To the extent the Companies accelerate the delivery of cost-effective energy savings opportunities to their customers, they will also accelerate the net savings which customers enjoy. Thus, every kWh of energy that can be displaced through cost-effective energy efficiency programs is a savings, not a cost to the Companies’ customer.

In re FirstEnergy ESP IV, Opinion and Order, at 95 (citing *In re FirstEnergy*, Case No. 09-1947, Entry on Rehearing, at 6 (Sept. 7, 2011)). The Commission further emphasized that delivering cost-effective energy efficiency savings is in the *public interest*.

While efficiency is valuable as a least-cost energy resource, the Commission’s rules also provide that several other factors are relevant to evaluating beneficial programs. Ohio Admin. Code 4901:1-39-03 sets forth thirteen criteria—beyond mere costs—to guide the development of successful efficiency programs over the long-term:

- (1) Relative cost-effectiveness.
- (2) Benefit to all members of a customer class, including nonparticipants.

- (3) Potential for broad participation within the targeted customer class.
- (4) Likely magnitude of aggregate energy savings or peak-demand reduction.
- (5) Nonenergy benefits.
- (6) Equity among customer classes.
- (7) Relative advantages or disadvantages of energy efficiency and peak-demand reduction programs for the construction of new facilities, replacement of retiring capital stock, or retrofitting existing capital stock.
- (8) Potential to integrate the proposed program with similar programs offered by other utilities, if such integration produces the most cost-effective result and is in the public interest.
- (9) The degree to which a program bundles measures so as to avoid lost opportunities to attain energy savings or peak reductions that would not be cost-effective or would be less cost-effective if installed individually.
- (10) The degree to which the program design engages the energy efficiency supply chain and leverages partners in program delivery.
- (11) The degree to which the program successfully addresses market barriers or market failures.
- (12) The degree to which the program leverages knowledge gained from existing program successes and failures.
- (13) The degree to which the program promotes market transformation.

Ohio Admin. Code 4901:1-39-03(B).

The Commission has confirmed the value of investing in well-designed efficiency programs that provide benefits beyond just cheap energy savings. In FirstEnergy's ESP IV case, the Commission approved funding for small business and low income efficiency programs, explaining that the programs would advance "Ohio policy, which calls upon the Commission to protect at-risk populations and to encourage the education of small business owners regarding the use of, and to encourage the use of, energy efficiency programs. R.C. 4928.02(L), (M)." *In re FirstEnergy ESP IV*, Opinion and Order, at 44, 94-95. The Commission found this to be a

sufficient basis to approve these stipulation provisions because of the benefits they provide aside from cost-effective energy savings alone. *Id.*, at 106.

Finally, Commission and Ohio Supreme Court precedent has repeatedly noted the importance of evaluating energy efficiency portfolio plans not just on the potential costs to consumers, but also the benefits. On an appeal on the Commission's approval of AEP Ohio's 2009-2011 plan, the Ohio Supreme Court denied Industrial Energy Users of Ohio's preferred approach to reducing peak demand that was less expensive than the approved plan. The Court found that, as a matter of course in evaluating these plans, ". . . one must evaluate costs and benefits." *In re Columbus S. Power Co.*, 129 Ohio St.3d 46, 2011-Ohio-2383, 950 N.E.2d 164, ¶28. The Court further noted that, "[w]hile cost is surely a relevant concern to be balanced in evaluating peak-demand reduction plans, it is not the only concern, and the commission is entitled to consider more." *Id.*, ¶29.

The cost cap is in direct conflict with these provisions of Ohio law, rules, and legal precedent. While Staff does acknowledge that energy efficiency is "beneficial" (Staff Ex. 1, Donlon Test. at 6-7), they nonetheless disregard the Commission's directive by focusing on costs and ignoring benefits. The only lens through which Staff is viewing the Plan is the size of Rider EE-PDR. But using the rider as the sole indicator of value is misleading because (as Staff has acknowledged) the rider reflects upfront costs *only* and is not adjusted after-the-fact to account for any savings delivered back to customers through program participation or reduced rates. Tr. at 188:5-18. Further, Rider EE-PDR is projected to have only minimal impact on the average residential customer bill (approximately 2-3%) (Tr. at 184-185; OCC Ex. 3), and it is the *only* rider that has the potential to *reduce* costs. Staff and OCC completely omit the true value of efficiency from their consideration. Energy efficiency is not an expense added on to customers'

bills after the utility purchases generation; efficiency *replaces* generation. The cost of acquiring each kWh of electricity savings is less than the cost of acquiring the same kWh from a generator and delivering it to homes and businesses across Duke's poles and wires. Thus, the more energy efficiency is created, the more customers save on their energy bills. As explained in the following sections, because the cap is likely to limit high quality program options, more generation will be needed to fill the gap, ultimately raising bills.

Staff and OCC's narrow focus on cost also ignores the range of additional criteria the Commission considers in evaluating a well-rounded portfolio, such as innovation, promoting market transformation, and extending options to a broad range of classes. The Plan reasonably balances these criteria, while making important advancements from Duke's June and October applications and from the prior 2014-2016 portfolio. However, a cap would devalue the diversity of offerings and longer-term savings opportunities, and it would force the Plan to be measured only by its short-term costs—not its long-term benefits. The likely result of this single-minded focus (as discussed in the following sections) will be a constrained portfolio that limits Duke's ability to meet its annual targets without severely reducing cost-savings opportunities for consumers.

Moreover (and as discussed in more detail below), neither Staff nor OCC has done any analysis to illuminate whether the cost cap would force program changes that would sacrifice the important criteria outlined in statute and Commission rules. As discussed in more depth below, the evidence on the record suggests that such sacrifices would be significant.

B. Staff and OCC Fail to Support their Conclusion that the Proposed Cap is Appropriate, and that Duke Can Meet Their Statutory Targets.

Staff asserts that its proposal to cap Duke's program spending at 3.5 percent is "appropriate" and "effective," and argues that the Company can still meet its statutory

benchmarks with this cost limit in place. Staff Ex. 1, Donlon Test. at 6-7. However, Staff offers little insight into its specific rationale or basis for these conclusions, and appears to have done little to no substantive analysis to support its proposal. Most importantly, the record lacks a considered evaluation of the potential impacts of a cap on Duke's efficiency plan and customer bills, a vital predicate before the Commission can conclude that Staff's proposal is in the public interest.

For example, there is no evidence on the record that specifically outlines the upfront process Staff went through to choose the 3.5 percent cap. Staff witness Patrick Donlon indicates that a key factor in selecting the cap was "price security for all ratepayers" (as he defines it— "a limit to how much the customers can be charged in any given year"). *Id.*, at 6; Tr. at 158:8-13. But he then indicates that Staff did no analysis to confirm whether the proposed cap would, in fact, give consumers that security. Tr. at 158:4-19. Mr. Donlon attests to having reviewed many options for a cap with Staff, and then summarily concludes that the proposed cap structure is the best option (again, to provide "price security") without offering any detail on those alternative options or further support for this conclusion. Staff Ex. 1, Donlon Test. at 6. A similar lack of support is provided for Staff's statement that a cap is "most effective" to mitigate the perceived "risk" of energy efficiency costs. *Id.* at 7. These statements are made in a conclusory fashion, with little evidentiary support.

Most glaringly, Staff makes the blanket statement that Duke will be able to deliver on its efficiency requirements under the cap constraint—without having done any of the analysis necessary to come to this conclusion. *Id.* at 6-7. Missing from the record is any specific evidence that Staff evaluated the Plan itself when developing the cap proposal, such as a review of individual programs proposed in the portfolio, their budgets, their cost-effectiveness, and

program participation rates. Tr. at 148:11-22; 189:1-12. Exploring these portfolio elements—at a minimum—would have been necessary to make any credible assessments about Duke’s annual requirements. Mr. Donlon admits to having done no modeling or forecasting to substantiate the statement that the cost cap will not hinder Duke’s ability to meet or exceed its benchmarks. *Id.* at 198:6-19.

The few specific assertions that Staff does make regarding the basis for a cap are vague and not supported by the record. Mr. Donlon bases his conclusion that Duke will be able to meet its requirements under a cap on Duke’s spending levels in prior years. *Id.* at 170:16-25, 171:1-7; 198:6-15. But this unreasonably assumes that past performance is a guarantee of future results. Aside from the fact that Staff did no specific analyses to test out this conclusion, it also rests on shaky ground because costs for efficiency appear to be going up, rather than down. Mr. Donlon testifies to the economic theory of a product life cycle, which would (in his opinion) dictate that meeting energy efficiency targets will get cheaper over time. *Id.* at 168:7-17; Staff Ex. 1, Donlon Test. at 7-8. But Duke’s recent experience suggests otherwise. There is an overall trend of Duke’s portfolio costs actually increasing, with the average cost per kWh of saved energy during the 2013-2015 period nearly double that of the previous 2010-2012 period. Duke Ex. 13, Duff Rebuttal at 4 (TJD-Attachment 1). As Duke witness Tim Duff notes, “Energy efficiency is getting more difficult to achieve and more costly to achieve.” Tr. at 62:24-25. While energy efficiency is still more cost-effective than alternative resources, as discussed above, the evidence shows that it is unreasonable to expect energy savings to remain at the same or lower cost over time.

Further, a central premise for the cap proposal is Staff’s belief that the energy efficiency rider is the highest on customer bills. Staff Ex. 1, Donlon Test. at 6-7. Again, no evidence is

provided nor comparisons made amongst riders to substantiate this concern. In fact, there are other residential customer riders that are far larger than the energy efficiency rider. For example, Staff acknowledges that Duke's Smart Grid rider (Rider DR-IM) is amongst the highest on customer bills. Tr. at 160:4-25, 161:1-16. That rider, currently set at a \$6.28 fixed charge for each residential customer, is two to three times larger than Rider EE-PDR, yet it is not subjected to a cost cap. *Id.* at 185:21-25; 186-187:4-23; Env. Int. Ex. 4, Infrastructure Modernization Rider Tariff.

Moreover, Staff's focus on reducing Rider EE-PDR to control costs is perplexing given that it is the *only* rider on the bill that provides opportunities for customers to reduce their bills—both in direct (program participation) and indirect ways (driving down the cost of power). As discussed above, the Commission has repeatedly recognized the important benefits of energy efficiency, even encouraging utilities to dig deeper for savings above and beyond the statutory requirements. The Commission recognizes that delivering cost-effective energy efficiency savings is in the *public interest*. *In re FirstEnergy ESP IV*, Opinion and Order, at 95. Before Staff plunged headlong into a cost cap proposal, it would have been logical to evaluate the need for a cap in the first place, for example, by analyzing the suite of benefits from the programs versus the rider costs and making a threshold determination of whether cost is even a concern. But the record is devoid of such analysis. And despite its focus on the supposedly escalating rider costs, Staff did not even run the numbers on what the magnitude of the rider would be with a cap in place. Tr. at 184-185. Without even this basic information, the cap is arbitrary at best.

OCC compounds this error by providing little information—and no substantive analysis—of their rationale for supporting the cap proposal. Like Staff's assertions, OCC witness Colleen Shutrump states summarily that “[c]ustomers are not adequately protected from

overpaying for Duke's energy efficiency programs.” OCC Ex. 13, Shutrump Test. at 5. Yet OCC does not define what it means by “overpayment” (particularly in the context of energy efficiency investments that produce net cost savings) and presents no evidence of specific unreasonable program costs. Indeed, Ms. Shutrump indicates that OCC did not evaluate the individual program costs or their cost-effectiveness (Tr. at 90:13-16, 118:20-25, 119:1-3). The only window into OCC’s concern about value is Ms. Shutrump’s statement that non-participating customers do not receive direct benefits from the programs. OCC Ex. 13, Shutrump Test. at 8. But even this concern is undefined. While acknowledging that energy efficiency provides direct benefits to program participants and indirect benefits to non-participants through suppressed energy prices (*id.*), Ms. Shutrump admits to having done no analysis that would illuminate her concerns about non-participating customers. For example, OCC did not evaluate the number of Duke’s customers that do not participate in energy efficiency programs (either in the coming plan period or past plan years), nor did they evaluate the rate impacts of Duke’s Plan on non-participating customers. Tr. at 139:21-25, 140:1-5.

Further, similar to Staff, OCC admits to having done no specific analysis of the Plan to determine whether—in fact—Duke will be able to meet its annual benchmarks under the cap. OCC did not review specific programs, nor did they explore what the total costs (or the first-year acquisition costs) would be for Duke to meet its requirements with a cap in place, either with or without shared savings. *Id.* at 114-118. Nor did OCC look into the impacts of the cap from a program breadth and quality perspective. They did not analyze how Duke’s portfolio may need to be revised under a cap and the consequences of those revisions on customer savings opportunities and the quality of programs. *Id.*

Finally, Ms. Shutrump’s testimony regarding cost cap policies in other states fails to provide any additional support for Staff’s proposal. For example, one of the states referenced is Pennsylvania, where utilities are subject to a cost cap under Pennsylvania Act 129 that limits energy efficiency costs to no more than 2% of the utility’s *total annual revenue*. OCC Ex. 13, Shutrump Test. at 10. However, Pennsylvania’s cap structure does not provide useful precedent for Ohio. The baseline upon which the cap is measured in Pennsylvania is significantly different than Staff’s proposal, creating a potentially large divide between the program dollars that would be allowable for each state. As Mr. Duff points out, one of the problems with Staff’s proposed methodology is that it is based on the operating revenues reported on line 10 of FERC Form 1—revenues that are greatly impacted by customer switching, or “shopping” for a different utility. Duke Ex. 13, Duff Rebuttal at 6-7. The more Duke’s customers switch to a competing utility, the lower their operating revenues. Because Staff’s proposed cap would base Duke’s allowable program expenditures off this figure, lower operating revenues would mean a smaller program budget and shared savings under the cap—even if customers’ total electricity bills are not falling. This limitation does not occur in Pennsylvania. That cap is based on *total overall revenue*, which the Pennsylvania Public Utility Commission has specified shall include revenue from shopping customers to address any equity concerns amongst utilities in how the cap is implemented.⁵ Ms. Shutrump testified to having no knowledge of this distinguishing factor. Tr. at 132-135.

⁵ Pennsylvania Public Utility Commission, Docket No. M-2008-2069887, *Energy Efficiency and Conservation Program*, Implementation Order at 32-36 (January 15, 2009), available at http://www.puc.state.pa.us/electric/pdf/Act129/EEC_Implementation_Order.pdf (interpreting the 2% cap on total annual revenue to “include all amounts paid to the EDC [electric distribution company] for generation service, including generation revenues collected by an EDC for an EGS [electric generation supplier] that uses consolidated billing.”) (administrative notice taken of this document in the current case [Tr. at 140:23-25]).

Even setting aside this critical difference in the magnitude of program spending allowable under Pennsylvania’s cap, OCC also declined to do any specific analysis comparing the programs in Duke’s Plan to programs run in Pennsylvania, or with any of the other three states that Ms. Shutrump references in her testimony. OCC Ex. 13, Shutrump Test. at 9-11; Tr. at 119:11-20, 125:23-25, 126:1-2. Such an analysis would be a necessary precondition of determining whether Duke’s 2017-2019 programs are—in fact—comparable enough to those in Pennsylvania, Texas, Maine, or Illinois so as to warrant consideration of those state’s cost caps.

Staff and OCC lack evidence substantiating the need, rationale, or impact of a cost cap on Duke’s ability to meet its annual benchmarks. Thus, they fail to meet their burden of proof under the Commission’s rigorous standard for parties opposing stipulations.

C. The Cap Will Harm Customers by Driving Duke to Rely on an Abbreviated Portfolio of Programs that Greatly Reduces Consumer Benefit.

Not only have Staff and OCC presented no analysis or other compelling support for a cap, but they have also declined to consider its impact on programs and, thus, customer opportunities to manage their energy bills. Yet, despite Staff’s lack of analysis of the consequences on program quality, they nonetheless assert that a cap would require Duke to pick “the most cost effective and efficient means of achieving their benchmarks, thus avoiding unnecessary charges to customers.” Staff Ex. 1, Donlon Test. at 9. But the opposite appears to be true. A simple review of Duke’s program portfolio and its first-year acquisition costs strongly suggests that if subjected to a cost cap the Company will have difficulty meeting its annual benchmarks, while also delivery high-quality programs and achieving shared savings. This will ultimately harm customers.

Environmental Intervenors are concerned that, because the proposed cost cap focuses only on the costs per first-year energy savings rather than lifetime savings or other relevant

considerations, it creates the wrong incentives for Duke and will undermine program quality. This is illustrated by comparing the average first-year cost per kWh saved that Duke would need to achieve to comply with a cap, with the first-year costs for each proposed program. Mr. Duff estimates that Duke's acquisition costs from 2015 were approximately 16.7 cents per first-year kWh saved. Duke Ex. 13, Duff Rebuttal, TJD-Attachment 2 (line 5).⁶ Taking into account Duke's maximum annual pre-tax shared savings proposal of \$12.5 million for the Plan period, that estimate drops to approximately 10.6 cents per first-year kWh saved. *Id.* (line 9). The 16.7 cents figure assumes that Duke would only just meet its statutory savings target each year, and that it would not earn any shareholder incentive. In reality, however, Duke will (understandably) endeavor to achieve the maximum shareholder incentive level possible, within the constraints of a cap. Thus, the 10.6 cents per first-year kWh saved is a more realistic bar by which to measure Duke's acquisition costs under the cap constraint, since shared savings will undoubtedly be a factor.

Table 1 below lists the first-year savings, proposed budget and estimated costs per first-year kWh saved for every program proposed in Duke's Plan. This comparison demonstrates that only *one program* (Residential "My Home Energy Report") is cheap enough (at or below 10.6 cents per first-year kWh saved) to qualify under the cap.

⁶ Acquisition costs from Mr. Duff's attachment converted from MWh to kWh for ease of comparison. Also of note, Mr. Duff's estimate of 10.6 cents per first year kWh saved was based on Duke's required incremental annual savings of 201,497 MWh in 2015 (Duke Ex. 13, Duff Rebuttal at TJD-Attachment 2). That is a reasonable proxy for the cost per first year kWh saved required in 2017 because Duke's statutory incremental annual savings percentage in 2017 – 1.0% of sales – is the same as it was in 2015. This is further supported by Duke's estimated incremental annual savings requirements of 203,213 MWh for 2018 and 203,595 for 2019 (*see* Duke Ex. 3, Amended Application at 12 [cumulative numbers broken out into incremental annual savings]), which are within one percent of the statutory MWh target for 2015.

Table 1: Cost Per First-Year kWh Saved in Proposed Plan⁷

Sector/Program		1st Year Savings (MWh)	Budget (\$)	\$ per 1st Year kWh Saved
1. Res	Smart Saver (lighting, HVAC, kits, MF)	37,571	\$7,879,154	\$0.210
2. Res	Energy Assessments (audit, kits)	2,051	\$1,033,319	\$0.504
3. Res	My Home Energy Report (MyHER)	97,847	\$4,622,106	\$0.047
4. Res	EE Education for Schools	3,210	\$503,192	\$0.157
5. Res	Power Manager (load control)	0	\$2,058,344	N/A
6. Res	Low Income Neighborhood (DI)	600	\$587,106	\$0.979
7. Res	Low Income Weatherization - Pay-for-Performance	5,679	\$890,149	\$0.157
8.	Power Manager for Apts (DR)	0	\$116,217	N/A
9. C&I	Smart Saver Prescriptive	44,236	\$6,661,057	\$0.151
10. C&I	Smart Saver Custom	23,557	\$3,008,863	\$0.128
11. C&I	Smart Saver Small Business	26,258	\$5,252,572	\$0.200
12. C&I	Power Share (DR)	0	\$3,029,934	N/A
13. C&I	Power Manager for Bus (DR)	63	\$531,272	\$8.433
14. C&I	Smart Saver Non-Res Performance Incentive	631	\$227,863	\$0.361

This is not merely an academic exercise. It could have serious impacts, namely the elimination or scaling back of the vast majority of otherwise cost-effective programs. For example, on the chopping block would be one of Duke’s largest residential programs—Smart Saver, which helps develop the market for LEDs and provides critical heating, ventilation and cooling efficiencies—not to mention *all* of Duke’s commercial and industrial programs. But beyond this fact (which is concerning enough), the cap reduces Duke’s ability to consider other aspects of program value. For example, the Company will be driven to modify its current program mix to one that has a greater emphasis on programs with shorter-lived savings. As

⁷ All first-year savings and budget numbers derived from Duke Ex. 3, Amended Application, Appendix A. Note that cited program budgets exclude EM&V costs (as per Appendix A), which will total about \$5.2 million during the three-year period (5% of program costs). Duke Ex. 5, Haemmerle Direct Test. at 13. Thus, costs per first-year kWh saved represent conservative estimates.

Table 1 illustrates, the only program that clears the cost per first-year kWh saved threshold necessary to meet the cap is the Residential Home Energy Report. While this behavioral-focused program has a very low cost (4.7 cents/kWh), it produces only short-lived savings (one year, to be exact). Duke Ex. 1, Application, Appendix A at 1 of 5; OCC Ex. 7 (response to NRDC-INT-01-015). This program has value as currently proposed. But reliance on it should not be increased because it would shift funding away from programs with greater long-term value.

Unfortunately, while programs like the Residential Home Energy Report with a one-year life would be emphasized under a cap, programs like Smart Saver would be deemphasized, including successful measures like LEDs with up to 12 years of useful savings. Duke Ex. 1, Application, Appendix A at 1 of 5. Measure life is a critical concept for evaluating program value, particularly as it relates to short and long-term costs. Even though some measures like LEDs may be more expensive (at least for now) on a first-year per-kWh basis, they can be significantly cheaper in the long run because the savings last for years beyond that program expenditure. Indeed, OCC has expressed support for programs with more durable savings, indicating that longer-lived measures hold more value than those that are shorter-lived. Tr. at 122:6-9. Even where a given program is truly more expensive overall, giving a utility some flexibility on those costs helps to ensure that program dollars are spent on developing statewide markets for improved, more innovative efficiency products rather than only facilitating adoption of current-day or even outdated technology, consistent with the consideration of market transformation required under Ohio Admin. Code 4901:1-39-03(B). Yet, again, neither Staff nor OCC conducted any analyses on the individual programs and their costs to determine whether the cap proposal would have these kinds of impacts on program design, and ultimately, customer savings.

This reduction in program quality is especially concerning given Staff’s lack of guidance as to how to implement the proposed cost cap in practice. Staff characterizes the complications of how to design programs under a cost cap as “management decisions” that Duke must grapple with on its own. Staff Ex. 1, Donlon Test. at 8; Tr. at 199-200. But while it is true that Duke has a range of options for managing its portfolio and developing an appropriate balance of programs, the proposed cost cap would severely constrain those options. Staff’s proposal would force rigid limits on program spending without addressing the likely adverse consequences of that approach.

Finally, Staff’s proposal of a blanket cost cap, without any analysis of the consequences for Duke’s program mix, runs contrary to the careful and detailed planning process that the Commission has previously envisioned:

The planning process provides for transparency and meaningful participation by stakeholders in determining the appropriate program mix and whether an electric utility is doing all that it can. The Commission strongly believes in the value of such public vetting. In such a context, after-the-fact review of rejected programs will be minimized by publicly reviewing programs in advance.

In addition, Section 4928.66(A)(2)(b), Revised Code, allows the Commission to adjust benchmarks due to regulatory, economic, or technological reasons beyond an electric utility's control. Our belief is that the statutory benchmarks represent the minimum requirement, and that a rigorous planning process is the only way to determine whether better efficiency can be achieved, or whether an electric utility has exhausted all reasonable opportunities for achieving energy efficiency.

In the Matter of Rules, Case No. 08-888-EL-ORD, Entry on Rehearing, ¶13 (June 17, 2009).

This process allows for the level of detailed analysis of programs that is necessary to identify whether Duke’s program expenditures are delivering actual value to customers—the kind of analysis lacking in Staff’s cost cap proposal.

V. CONCLUSION

The Commission must carefully consider the facts in the record to determine the reasonableness of the Stipulation and proposed Plan. In conjunction with the numerous parties to the Stipulation, Duke has developed a suite of programs that optimize costs and benefits consistent with the legal standards discussed above. The Plan will produce savings well beyond costs, and the record evidence strongly suggests that applying a cap will likely harm, rather than protect, consumers. In contrast, Staff and OCC fail to demonstrate that Duke will be able to achieve its annual savings requirements under a cap, while also taking into account the factors required in Commission rules such as innovative programming and broad customer accessibility to savings options. Most glaringly, however, is that neither Staff nor OCC took the initiative to analyze individual programs or otherwise explore the impact of the cap on the portfolio itself—a critical step in evaluating whether their proposal will achieve its desired objective. This lack of evidentiary support precludes the Commission from imposing a cap on the Plan.

The parties supporting the Stipulation have met their burden of proof, while opponents have not. Environmental Intervenors respectfully request that the Commission approve the Stipulation and Plan, and reject the proposal for a cost cap.

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Respectfully Submitted,

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CERTIFICATE OF SERVICE

I hereby certify that a true copy of the foregoing *Initial Post-Hearing Brief* submitted on behalf of the Natural Resource Defense Council, Environmental Law & Policy Center, the Ohio Environmental Council, and the Environmental Defense Fund was served by electronic mail upon the following Parties of Record on March 31, 2017.

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