

**STATE OF ILLINOIS
ILLINOIS COMMERCE COMMISSION**

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| COMMONWEALTH EDISON COMPANY |) | |
| Approval of the Energy Efficiency and |) | |
| Demand Response Plan Pursuant to |) | Docket No. 13-0495 |
| Section 8-103(f) of the Public Utilities Act |) | |

INITIAL BRIEF OF THE NATURAL RESOURCES DEFENSE COUNCIL

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I. INTRODUCTION

The Illinois Commerce Commission (“ICC” or the “Commission”) has before it the application of Commonwealth Edison Company (“ComEd” or “Company”) for approval of its third Electric Energy Efficiency and Demand Response and Natural Gas Efficiency Plan (“Plan 3”), which consists of a portfolio of programs for the 7th, 8th and 9th plan years (PY 7, PY8 and PY9) and a set of policy considerations about which ComEd seeks Commission direction. This plan was filed pursuant to 220 ILCS 5/8-103(f) and 220 ILCS 5/8-104(f) of the Public Utilities Act (“PUA”). The Natural Resources Defense Council was an active participant in the Commission proceeding approving ComEd’s Plan 2 for its 4th, 5th and 6th plan years (ICC Docket 10-0570) and has participated in the Stakeholder Advisory Group (SAG) deliberations on the Illinois utilities’ and DCEO’s programs. While NRDC supports much of ComEd’s Plan 3, it believes that ComEd can do better. Adoption of the recommendations set forth below will enable ComEd to provide a more effective set of energy efficiency and demand response programs well within its statutory obligations.

NRDC submitted the testimony of Chris Neme, a co-founder and Principal of Energy Futures Group, a consulting firm that provides specialized expertise on energy efficiency

markets, programs and policies. Mr. Neme has extensive experience in that area, having helped develop energy efficiency potential studies in five states and provinces, served as a technical advisor to utility-stakeholder “collaboratives” in ten states, negotiated or supported development of efficiency program performance incentive mechanisms in six different jurisdictions and reviewed or developed efficiency programs for clients in more than 20 states and provinces as well as parts of Europe.

He has direct knowledge of ComEd’s energy efficiency program because for the past three years he has represented NRDC in the Illinois Stakeholder Advisory Group (SAG) deliberations on the Illinois utilities’ and DCEO’s programs and related regulatory policies at its monthly meetings and conference calls. He also provided testimony in ComEd’s last three-year energy efficiency plan in Docket 10-0570 and has filed testimony on DCEO’s 3rd three-year energy efficiency plan in Docket 13-0499. NRDC Ex. 1.0 p. 1-4.

Based on Mr. Neme’s analysis of ComEd’s plan, NRDC addresses below three aspects of Com Ed’s 3rd Energy Efficiency Portfolio Plan:

1. The reasonableness of Com Ed’s proposed savings for each of the three years of its plan.

Com Ed has incorporated numerous conservatisms into its plan that collectively led to proposed savings goals that are considerably lower than is reasonable. Just addressing some of those conservatisms would lead to an increase in savings goals of approximately 90,000 MWh per year so. That would bring Com Ed’s plan to the point where it would achieve approximately 0.80% of annual sales.

2. The reasonableness of Com Ed's policy proposals on Evaluation, Measurement and Verification (EM&V). Many of Com Ed's policy proposals on EM&V are reasonable. However, several require modification. First, while NRDC supports deeming of net-to-gross (NTG) assumptions, the deeming should not remain in effect if there are substantial changes to the design of the program which evaluators would expect to have a significant impact on actual NTGs (in either direction). Second, it would be appropriate for the SAG to have an opportunity to attempt to reach consensus on establishing deemed NTG values. If the SAG cannot reach consensus by March 1, then the evaluators should be the final arbiters so that deemed NTG values can be established with enough time to allow the utilities to adjust plans for the coming year. This is similar to, but still different than Com Ed's revised proposal in that the SAG would not simply "advise" the evaluators but have the opportunity to make a decision on NTG values if there is consensus; the independent evaluators would be the final decision-makers only if there was no SAG consensus. Third, while NRDC agrees with ComEd's revised position (articulated in Brandt's rebuttal testimony pp. 71-72) that "NTG ratios for each plan year should take into account the impacts of both free ridership and spillover" (rather than requiring that every evaluation study address both) and that the independent evaluators should propose spillover effects that should be included in the NTGs, we continue to believe that allowing for SAG discussion and negotiation on appropriate values (consistent with the point above) would be ideal. Again, the evaluators would become decision-makers if and when the SAG cannot reach consensus.
3. The reasonableness of Com Ed's policy proposals regarding banking of savings.

NRDC supports Com Ed's proposal that it have a single savings goal for PY7 through PY9, which would allow unlimited banking of savings across the three year plan period. A single three year goal gives ComEd flexibility in managing its efficiency program portfolio to best meet ratepayer needs and lowers disincentives to invest in measures and/programs with long-term payoffs. Regarding ComEd's proposal for inter-plan banking (i.e., to apply savings banked in PY1 through PY6 to goals set for this plan or to apply savings banked in this plan to goals for the 4th plan to be filed in three years), NRDC recommends that the Commission either revise Plan 3 savings goals upward to account for any banked savings available at the end of PY6 or reject ComEd's proposal.

In addition to commenting on the above aspects of ComEd's proposed program, NRDC will discuss below some of the proposals of other parties in this proceeding. These include:

1. REACT's proposal for a self-direct program to replace Com Ed's proposed Large C&I Pilot program;
2. Staff witnesses Hinman's and/or Brightwell's proposals with respect to:
 - a. the importance of measure-level cost-effectiveness;
 - b. changes to Com Ed's proposed EM&V framework
 - c. the definition of "breakthrough equipment and devices" (what Com Ed calls R&D);
 - d. changes to Com Ed's proposal for the flexibility to change its program designs and budgets; and

- e. a revised net-to-gross (NTG) framework

II. ComEd's Proposed Savings Goals Are Too Low.

Com Ed proposed spending an average of approximately \$158 million per year during the next three year plan (PY7 through PY9). Because 25% of the budget is allocated to DCEO, Com Ed would spend approximately \$118 million per year on its programs. Those programs result in a proposed average annual savings goal, including DCEO savings, of approximately 615,000 MWh, or 0.68% of sales, from PY7 through PY9. That goal, which is only 35% of its statutory goal, is inadequate.

It is worth noting that ComEd spent less in in PY4 and PY5 than it is proposing to spend in PY7 through PY9, but achieved approximately 50% greater savings in those years than it is proposing for PY7 through PY9. NRDC expected savings per dollar spent in PY7 through PY9 to be somewhat lower than in PY4 and PY5 due to the shifting of Home Energy Reports program (which produces more savings per dollar than any other Com Ed program in PY4 and PY5) into the IPA plan and a reduction in savings from the Company's residential lighting program due to a combination of lower gross savings per CFL (the result of new federal efficiency standards improving the efficiency of the baseline lamps and lower net to gross (NTG) ratios). (Mr. Neme noted that other NTG changes represent increases or decreases in proposed savings and thus have no substantial net effect.) NRDC Ex. 1.0, p. 9-10. However, the magnitude of the reduction in savings should not be as great as Com Ed has proposed. Put simply, Com Ed's has built its proposed savings goals on a foundation of numerous conservative assumptions, budget allocations and other decisions. These include:

1. An unsupportable 62 percent increase in the assumed cost of acquiring savings from its C&I Incentives program – its single largest program, accounting for roughly half of all its business customer savings in recent years;
2. An unsupported assumption that the cost per unit of savings in its Appliance Recycling program – its second largest residential program – would increase by about 25% while participation is forecast to drop by nearly 20% (Com Ed response to NRDC 1.02, Attachment 1);
3. Improper accounting for CFL carry-over savings;
4. Allocating greater than necessary budget to cross-cutting support services that produce no savings (including general education, general labor and R&D), while retaining the flexibility – once goals are set – to shift funds from those line items to programs that generate savings;
5. Not accounting for potential savings from R&D initiatives in setting its proposed goals, even though it plans to count any savings it generates from R&D towards those goals;
6. Assuming that its Plan 1 legacy A/C cycling participant costs must continue to be recovered through its EEPS portfolio budget;
7. Not accounting for savings that could be generated through spending of PJM capacity market revenues; and

8. Adding an arbitrary 5% downward adjustment to savings estimates to provide a cushion for risk.

It should be noted that these are only the problems regarding ComEd's savings targets that have surfaced during this proceeding. It is entirely possible – indeed likely, given experience with Plan 2 in which Com Ed exceeded goals by a substantial margin (see Neme testimony pp. 20-21) – that the Company has made it a practice to lower expectations by building its plan upon an enormous volume of conservative program budget and savings assumptions, which time and resource limitations make it difficult for intervenors to fully explore. Moreover, Mr. Neme's recommended adjustments to Com Ed's proposed savings goals address only five of the eight conservatisms outlined above (items 1, 3, 4, 6 and 7). Thus, one could reasonably assume that even his proposed goals are conservative.

Each of Mr. Neme's proposed adjustments to Com Ed's savings goals are explained below:

A. Unsupportable increase in the assumed cost of savings from the C&I Incentives program

In its filed plan, ComEd forecast that it will spend \$5.2 million per year – more than 5% of its total portfolio budget – on its proposed new large C&I pilot program , but did not appear to include any savings from such spending in its proposed savings goals (Com Ed plan p. 3). If the Company was able to acquire savings at the same cost per first year MWh saved as its business Incentives program – about \$200/MWh – it would produce about 25,000 MWh a year, or about 75,000 MWh over the three year plan. Thus, NRDC initially suggested that Com Ed's savings goals should be increased by that amount. NRDC Ex. 1.0, p. 11-12. NRDC Ex. 1.0, p. 11-12.

Com Ed later suggested that though its plan was not clear on this issue, the Company included expected savings from its large C&I pilot program in its C&I Incentives program (Brandt rebuttal p. 15). The Company argues that there is therefore no need to increase its savings target.

However, the Company's rebuttal is less than satisfactory. First, other than the Company's assertion in Mr. Brandt's rebuttal testimony, there is no evidence that the filed C&I Incentives program savings estimate actually includes savings from the Large C&I pilot program (NRDC response to Com Ed 2.01). Moreover, even if one takes Mr. Brandt at his word, the suggestion that the C&I Pilot program savings are already included in the C&I Incentives program raises serious questions about the reasonableness of the Company's C&I Incentives program savings estimate. As Mr. Neme points out in response to a Com Ed data request (response to Com Ed 2.01), when one combines the C&I Incentives and Large C&I Pilot program budgets (consistent with how Com Ed has suggested it has combined their savings), the cost per unit of savings from the combined program is 62% more than the Company actually experienced in PY5. This is a function of spending an average of \$5.1 million more per year on program implementation (a 74% increase over PY5) and \$3.1 million more per year on financial incentives (14% more than in PY5) while producing an average of 20% less savings per year than in PY5 (Com Ed Response to NRDC 1.02, Attachment 1).

Com Ed offers four reasons for why it needs to spend a lot more in Plan 3 (Com Ed Response to NRDC 5.05):

1. it has moved some measures out of its C&I Incentives program to its Midstream Incentives program;
2. it has moved savings from its C&I Incentives program to its Multi-Family program;
3. the expansion of its small business direct install program (funded through IPA) is expected to reduce participation of small business customers in the C&I Incentives program; and
4. the TRM will preclude its ability to count T12 replacement/retrofit savings beginning in January of 2012.

However, Mr. Neme analysis and subsequent Com Ed responses to data requests clearly demonstrate that those factors cannot account for a 62% increase in the cost of the C&I Incentives program savings:

1. Most of the measures that that migrated to the Midstream Incentives program (sometimes called the Business Instant Lighting Discounts program, or BILD program) did so prior to PY5. Com Ed estimates that the only measures that migrated out after PY5 – and therefore the only ones that could affect comparisons between PY5 costs per unit of savings and Plan 3 costs per unit of savings – accounted for only about 20 GWh of savings in PY5 (Com Ed response to NRDC 6.03). That represents only about 8% of the net savings generated by the C&I Incentives program in PY5 (Com Ed Response to NRDC 1.02, Attachment 1). Moreover, those savings were not free. Thus, their impact on comparisons between PY5 costs per unit of savings and Plan 3 costs per unit of savings would be less than 8%.

2. The Company's proposed multi-family program savings is forecast to produce only about 9000 MWh per year of savings in Plan 3. Even if all of the savings from that program came from measures that were captured in the C&I Incentives program in PY5 – and that is clearly not the case – the savings they are forecast to produce would only amount to only about 5% of the savings the Company is forecasting for its C&I Incentives program in the Plan 3 years. Moreover, the Company is forecasting that the savings from its Plan 3 Multi-Family program are three times more expensive than those it will produce from its C&I Incentives program. Thus, it is far from clear that this shift has any material impact on comparisons on the cost per unit of savings, from PY5 to Plan 3 years, in the C&I Incentives program (NRDC response to Com Ed 2.01).

3. The Company estimates that only about 20% of the savings in its PY5 C&I incentives program came from small business customers (response to NRDC 6.04). Moreover, although the Company's small business direct install program is expected to grow substantially, it is still only expected to serve less than 10% of the eligible market each year (NRDC Response to Com Ed 2.01). Put another way, the overwhelming majority of its small business customers – more than 90% in the first year, more than 80% in the second year, and more than 70% even in the third year – could still be served by the C&I Incentives program. Thus, over the three year period we would expect the impact on C&I incentives program savings (relative to PY5) to be less than about 5% (a three-year average loss of 20% of potential small business participants

multiplied by the 20% program savings from such customers yields an approximate loss of 4% savings).

4. The TRM changes to the T12 baseline do not go into effect until more than half way through PY8. They do not affect PY7 at all. However, the 62% average increase in the cost of savings over the three years of Plan 3 is not dramatically skewed towards the last year and a half. Even in PY7 – when the change in T12 baseline would have no effect – the Company is forecasting the C&I Incentives program cost per unit of savings in PY7 to be 54% higher than in PT5 (NRDC Response to Com Ed 2.01).

In summary, the four factors that the Company has suggested would lead to an increased cost per unit of savings in its C&I Incentives program appear to collectively account for no more than about a 20% increase – much less than the 62% average annual increase its plan suggests. If Mr. Neme's proposed 25,000 MWh per year increase in assumed savings for the program was adopted, the program would still cost \$203/MWh.¹ That would still be about 42% more than the \$143/MWh (NRDC response to Com Ed 2.01) that Company actually experienced in PY5. Thus, if anything, Mr. Neme's proposed increased in assumed savings is conservative.

B. Proper accounting for CFL carry-over savings (from previous years)

Although customers install most of the CFLs and other efficient lighting products purchased under a ComEd program during the year they are purchased, nearly 30% are installed in later years. Nevertheless, Com Ed assumed that all CFLs rebated under its residential lighting

¹ This is the result of dividing the sum of Com Ed's C&I Incentives program budget (\$102.3 million) and Large C&I Pilot program (\$15.5 million) – or a total of \$117.7 million (Com Ed Plan p. 3) – by the sum of Com Ed's forecast three year 505,850 MWh savings estimate for the C&I Incentives program (plan p. 3) and Mr. Neme's proposed 75,000 MWh savings increase (\$117.7 million divided by 580,850 MWh = \$203/MWh)

program would produce savings in the year they were rebated (other than the 2% that are assumed to never be installed). While such an approach may be appropriate if the same number of the same types of products was rebated each year, that is not the case here. Company rebated more CFLs in the years from which savings would be carried over from Plan 2 into Plan 3 (an annual average of about 9.3 million over PY5 and PY6) than it is forecasting would be rebated in the years from which savings would be carried out of Plan 3 and into Plan 4 (an annual average of 6.0 million from PY8 and PY9).² Thus, the Company has underestimated CFL savings from its residential lighting program. Mr. Neme calculated that the total underestimate is approximately 19,000 MWh over the three years of the plan, with most of the underestimation occurring in PY9. NRDC Ex. 12-14.

In his rebuttal testimony, Com Ed Witness Brandt implies that because there is uncertainty about TRM savings values for CFLs for PY7 through PY9 that accounting for CFL carry-over savings in the way that Mr. Neme has is speculative (Brandt rebuttal, pp. 16-17). However, that argument makes no sense. Mr. Neme's approach to estimating CFL carry-over savings used the same savings per CFL assumptions that Com Ed used in its plan. Thus, while Com Ed's approach to estimating CFL savings may be simpler than Mr. Neme's (Mr. Brandt calls its approach the "most straightforward" and the "most practical"), it is clearly not the most accurate. Indeed, Mr. Brandt never claims that Com Ed's approach is more accurate. Nor does he challenge the accuracy of Mr. Neme's estimate of the impacts of properly accounting for CFL carry-over savings. NRDC contends that savings goals need to be based on the most accurate

² Com Ed response to NRDC 3.01a

possible estimates of what can be accomplished. Thus, Com Ed's savings should be increased as Mr. Neme suggests.

C. Re-allocating a portion of an unreasonably high general education and outreach budget

Com Ed proposed spending approximately \$6 million per year over the next three years on general, portfolio-wide, education and outreach, compared to \$4.5 million in PY4 and \$4.4 million in PY5. Such an increase would only be justified if it can help drive customers to specific efficiency programs in the short and medium term or to demonstrably lead to market transformation in the long-term. Where, as here, ComEd is proposing savings goals that are 65% lower than the statutory targets, it is inappropriate to increase general education spending.

Keeping general education spending in PY7 through PY9 at the levels experienced in PY4 and PY5, would result in \$1.5 million in additional funds available each year for generating savings through other programs. If the Company were to use those funds to acquire additional savings at the average program cost per MWh of its proposed portfolio, it would generate approximately 9,000 MWh in savings per year, or 27,000 MWh over three years. NRDC Ex. 1.0, p. 14-15.

D. Re-allocating a portion of an unreasonably high R&D budget

ComEd proposed spending an average of about \$3.6 million on R&D over the next three years. While that figure is similar to the PY4 and PY5 budgets, ComEd has significantly underspent those budgets – spending only \$1.0 million in PY4 and \$1.1 million in PY5. Its highest previous R&D expenditure is \$1.4 million in PY3. Even if ComEd could realistically

spend that much on R&D, it should not do so when it is proposing a plan with tight overall budget constraints and proposed near-term savings goals that are 65% below statutory targets.

If the Company's R&D budget were set at \$1.4 million per year – the most it has ever spent – it would have approximately \$2.2 million per year in additional funds available for program spending. If the Company were to use those funds to acquire additional savings at the average program cost per MWh of its proposed portfolio, it would generate approximately 13,000 MWh in savings per year, or 39,000 MWh over three years. NRDC Ex. 15-16.

E. Re-allocating a portion of portfolio-wide (non-program-specific) labor costs

Com Ed's proposed an average annual portfolio-wide labor budget of about \$4.0 million is roughly double the Plan 2 budget levels. ComEd's argument that this increase is due to headcount increases and correction of a Plan 2 error resulting in Plan 2 payroll costs not being fully reflected does not fully explain the difference. The proposed budget for PY7 to PY9 is still \$0.5 million more than the Company actually spent in PY5, even though both factors are reflected in PY5 actuals³ and even after adjusting the PY5 spending levels to account for inflation.

ComEd is budgeting for a higher non-program head count in PY7 through PY9 than it actually employed in PY5 or than it is currently employing in PY6.⁴ Given that the total budgets for PY7 through PY9 are 2% lower than in recent years, that head count is not justified.

³ Com Ed response to NRDC 4.03.

⁴ Com Ed response to NRDC 4.03.

If the Company's non-program specific labor budget were reduced by an average of \$0.5 million per year (i.e. to levels comparable to PY5, after adjusting for inflation), and it were to instead spend those funds to acquire additional savings at the average program cost per MWh of its proposed portfolio, it would generate approximately 3,000 MWh in savings per year, or 9,000 MWh over three years. NRDC Ex. 1.0, p. 16-17

F. Funding its PY1-PY3 legacy Air Conditioning Cycling participants through other means

Com Ed operates a residential demand response program – or A/C Cycling program. Some of the participants in that program were enrolled using 8-103 funds in Plan 1. Additional participants have been enrolled since then, but the funding for those additional enrollees was provided through base rates.⁵ Com Ed is expecting even more participants to be enrolled in the program during Plan 3, but again the cost of those enrollments will be provided through base rates rather than through 8-103 budgets.⁶ However, the Company is proposing to continue to recover the costs of “maintaining” the participants enrolled in Plan 1 under the 8-103 budgets.

ComEd's proposal is not appropriate. There are more than enough peak savings from efficiency programs to meet 8-103 peak savings requirements.⁷ Furthermore, we are at a point in time when the 8-103 spending cap clearly precludes the utility meeting its statutory energy savings targets. Finally, A/C cycling investments appear to fit better under base rates since nearly a quarter of the maintenance costs for Plan 1 enrollees is “return on rate base”.⁸ Thus, as a policy matter, it would seem more appropriate to fund the maintenance of Plan 1 program

⁵ Com Ed response to NRDC 4.02.

⁶ Com Ed response to NRDC 4.02.

⁷ Com Ed response to NRDC 2.03.

⁸ Com Ed response to ELPC 1.33.

enrollees through base rates – just as other A/C Cycling program costs are funded – rather than through limited 8-103 funds.

If Com Ed were to shift funding of the maintenance of Plan 1 A/C cycling participants (\$1.23 million per year) to base rates and spend the freed up funds to acquire additional savings at the average program cost per MWh of its proposed portfolio, it would generate approximately 7,000 MWh in savings per year, or 21,000 MWh over three years. NRDC Ex. 2.0, p. 17-18.

G. Summary

The total impact of all of NRDC’s proposed modifications on Com Ed’s proposed savings goals – including the elimination of Com Ed’s 5% downward adjustment for risk (of not meeting targets) – is an increase by an average of more than 90,000 MWh per year. That would mean a three-year savings target of 0.80% of sales rather than the Company’s proposed 0.68%. NRDC Ex. 1.0, p. 19, Table 3

As noted above, there are still several risk mitigating assumptions embedded in the savings goals. First ComEd has the ability to augment its budget through revenues from PJM’s capacity market (ComEd forecasts that it will receive \$5.14 million from PJM for PY6).⁹ That is a little more than 5% of its proposed average annual budget for PY7 to PY9. In other words, if PJM capacity market revenues just remained at the level from PY7 through PY9, they would provide the same 5% risk relief that Com Ed has suggested it needs. NRDC Ex. 1.0, p. 20. An alternative use of these funds would be to make them available to Com Ed as a financial incentive to shareholders for exceeding savings targets – perhaps on a sliding scale with the

⁹ Com Ed response to NRDC 4.01b

maximum incentive (i.e. all of the PJM market revenues) being earned if the Company exceeds its target by 25% or more. While that use of the funds would mean less direct spending on efficiency measures and programs, if it caused Com Ed to increase the effectiveness of its efforts by more than 5%, the net effect to ratepayers would be positive.

Second, NRDC supports ComEd's request to claim savings generated from its R&D spending towards its goals. Because ComEd did not estimate any R&D generated savings, it will keep all actual savings if the Commission accepts ComEd's proposal. *Id.*

Third, ComEd can leverage successful programs that will be funded through the IPA. For example, if the Small Business Direct Install program achieves its IPA goal and could exceed it with additional funding, Com Ed could fund the acquisition of such additional savings through its 8-103 budget. *Id.*

Fourth, Mr. Neme noted that Com Ed acquired more savings per dollar spent in PY4 and PY5 (combined) than it budgeted in Plan 2 for every single one of its seven biggest programs (which collectively accounted for nearly 90% of its budgeted savings).¹⁰ In other words, Com Ed has some history of being conservative in its estimates of what it can achieve given available budgets – not only at a portfolio level, but for individual programs as well. NRDC Ex. 1.0, p. 20. With respect to the Plan 3 programs, NRDC has flagged two specific examples. First, as noted above, Mr. Neme's proposed adjustment to the Plan 3 savings goals for Com Ed's C&I Incentives program would still leave the program costing 42% more per unit of savings than in PY5, even though the evidence in this case does not support a more than 20% increase. Second,

¹⁰ Com Ed response to NRDC 4.04, Attachment 1.

Com Ed is assuming that the cost per unit of savings from its Residential Appliance Recycling program would increase by 25%. That increase is partly a function of the Company budgeting higher incentives than it has historically used – i.e. a base incentive of \$50 compared to the PY5 base incentive of \$35 and an incentive of \$75 per unit for a portion of each year compared to the increase to \$50 for a portion of the year used in PY5 – even though it is forecasting a nearly 20% reduction in participation. Again, as noted above, NRDC has not proposed adjustments to savings goals to counter these conservatisms.

III. Com Ed’s Policy Proposals On Evaluation, Measurement and Verification Are Only Partly Reasonable.

ComEd made four proposals with respect to EM&V policies.

1. That the current process for selecting and managing the independent evaluators continue;
2. That a modified NTG framework be adopted;
3. That NTG evaluations must address both free ridership and spillover; and
4. That the realization rate framework adopted for Plan 2 be continued.

While NRDC agrees with the first and fourth proposals, it has concerns with some components of the other two proposals.

A. Modified NTG framework

1. Elimination of Retrospective Application of NTG

ComEd proposes to eliminate three conditions from the previous NTG framework under which new evaluated NTG estimates could be applied retrospectively: (1) if the market changed substantially, (2) if the program changed substantially, and/or (3) if a program was new.

NRDC agrees with the elimination of retrospective application of NTG estimates in the first and third circumstances. It does not agree, however, with the proposal to use deemed NTG values prospectively even in the event of a significant program design change. Utilities have complete control over program design changes. Therefore they should be held accountable if they make substantial changes. NRDC recognizes that such a test depends upon the definition of “substantial.” Mr. Neme recommended the following test:

Going forward, the answer should be that the change was large enough that the evaluators have a compelling reason to believe that the change is likely to result in a substantial change (e.g. 15 percentage points or more) in the program NTG. A substantial program design change which evaluators do not have grounds to believe would have a substantial impact on NTG estimates would not trigger retrospective application of NTG evaluation results. In other words, I recommend putting some burden on the evaluators to pass judgment on and document reasons for why they believe that the program NTG is likely to change significantly as a result of a design change. They do not currently have that obligation.

NRDC Ex. 1.0, p. 24.

2. Provision of NTG Assumptions By March 1

NRDC supports ComEd’s goal of having the prospective NTGs established before the program year begins on June 1. NRDC believes, however, that the SAG should be more involved in the process than suggested by Com Ed. In rebuttal testimony, Com Ed Witness Brandt suggested that the independent evaluator would propose an NTG for each program and provide an opportunity for the SAG to provide feedback; the evaluator would then make a final decision on what the NTGs should be. While NRDC supports Com Ed’s suggestion that the

evaluators should play a key role in the setting of NTGs, we believe it is appropriate for the SAG to potentially play a more significant role suggested by the Company. Specifically, the SAG should have the opportunity to reach consensus on a prospective NTG value which is informed but not necessarily bound by data and expertise provided by evaluators. If the SAG reaches consensus in a timely manner, that consensus value should be adopted. Com Ed's proposal appears to leave the door open for the evaluators to over-rule a SAG consensus. We support Com Ed's suggestion that the evaluators make the final determination of prospective NTG values only in the event that the SAG cannot reach consensus in a timely manner. This approach would ensure that the prospective NTGs reflect the data, experience and expertise of utilities and other stakeholders, while still allowing for a timely decision. NRDC Ex. 1.0, p. 24.25.

3. Free Ridership

Com Ed initially appeared to propose that all future NTG evaluations must address free ridership and both participant and non-participant spillover. It further proposed that "if an evaluation does not account for spillover, then the free rider effect should also be ignored."¹¹

While NRDC agrees that the NTG adjustments that are applied to programs to produce an estimate of net savings should include the net effects of both free ridership and spillover, that does not mean it is necessary to address both effects in every NTG study. The decision whether to study free ridership or spillover – whether it is one, the other, both or neither – should be made on a case by case basis. The methodologies for studying free ridership and spillover may not be the same and the time for when to study each may differ. For example, it may be best to evaluate

¹¹ Direct Testimony of Michael Brandt, p. 66, lines 1429-1433.

free ridership immediately after a customer makes an efficiency investment, while the best time to assess spillover effects might be a year or more after a program supported efficiency investment. This longer waiting period allows the assessment of the impact of that investment (and related discussions with the utility, its implementation contractors and/or its trade allies) on other investments in the same or other facilities. Mr. Neme gave an example of the advantage of allowing flexibility to combine existing and new studies:

In such an instance, it may be appropriate to initially pair the results of a study of just free ridership in Com Ed territory with an estimate of spillover effects from different sources, perhaps based on studies of similar programs in other jurisdictions, to produce an NTG that covered both effects. A future “spillover-only” assessment in a subsequent year could then be used to update the NTG adjustment factor.

NRDC Ex. 1.0, p. 26.

Thus, Mr. Neme proposed that rather than changing the NTG framework as proposed by ComEd, which is that every NTG *study* must address both free ridership and spillover effects, the Commission should find that every NTG *factor* must reflect expected free ridership and spillover effects. This would allow, for example, the evaluation contractors to occasionally rely upon the experience in other jurisdictions with free ridership or spillover in instances where one or both have not yet been studied in Com Ed’s territory. NRDC Ex. 1.0 p. 27; NRD Ex. 2.0 p. 19. In his Rebuttal Testimony, Mr. Brandt appears to agree with Mr. Neme’s recommendation, stating:

ComEd agrees with NRDC, AG and others that the NTG ratios for each Plan year should take into account the impacts of both free ridership and spillover. In cases where the complexity of the spillover measurement precludes its calculation due to evaluation budget constraints (or for some other reason), ComEd proposes that the independent evaluator estimate an appropriate spillover impact. ComEd believes that this approach is consistent with the proposals made by NRDC witness Mr. Neme and AG witness Mr. Mosenthal.

ComEd. Ex. 3.0 p. 71

IV. ComEd's Proposed Banking Policies Should Be Accepted Only If the Commission Imposes the Limitations In the Order Adopting ComEd's 2nd Plan.

A. Com Ed's proposal to bank savings *within* PY7 through PY9

Based on its position that recent legislative changes allow it to comply with Section 8-103 either 'by meeting the annual incremental savings goal in the applicable year or by showing that the total cumulative annual savings within the 3-year planning period...was equal to the sum of each annual incremental savings requirement...' ComEd proposed the following:

- Unlimited banking of savings over the three year plan period;
- Annual savings goals and spending screens should "be fixed at values set forth in this plan and not subject to revision or recalculation in future years of the plan"; and
- There be a single evaluation docket at the end of PY9.

NRDC supports ComEd's proposal for intra-plan banking because its adoption should have several policy benefits. Using a three year goal rather than a one year goal will give ComEd greater flexibility in managing its efficiency program portfolio and more incentive to consider medium to longer-term benefits. As noted by Mr. Neme:

Under one-year goals, the utility has a strong incentive to invest only in measures and programs that will provide substantial savings quickly. One-year goals discourage alternative investments that might not generate much savings (for a given budget) in the first year, even if they would provide better returns (per dollar spent) over a three year period. Thus, three-year goals align better with ratepayers' interests.

NRDC Ex. 1.0, p. 30.

NRDC also supports ComEd's proposal to fix goals and spending levels over the three-year period because this removes some uncertainty, which should enable ComEd to more effectively follow through on a three year plan.

NRDC does not support, however, ComEd's proposal for a single evaluation docket every three years. Waiting three years prevents a review of progress toward the goal and prevents updating savings assumptions based on on-going evaluation work. Mr. Neme noted that Vermont has the same process supported by NRDC: a three-year savings goal with an annual savings verification process. He testified that the sum of the results of the three annual savings verification processes is then used to determine whether goals were met. NRDC Ex. 30-31.

B. ComEd's Proposal for Inter-Plan Banking

NRDC opposes ComEd's proposal for inter-plan banking. Com Ed is proposing savings targets for Plan 3 years that are 60 to 70 percent lower than the statutory savings goals. That is a fundamentally different situation than existed in Plan 2 where the Company was planning to meet the statutory targets in the first and second years (i.e. PY4 and PY5) and forecasting a much more modest shortfall, relative to the statutory target, for the third year (PY6). If the Company is to be allowed to set savings targets for Plan 3 at levels well below statutory levels due to the statutory spending cap, the lower targets need to reflect what could be achieved within that cap. Thus, either the Company should not be allowed to apply Plan 2 banked savings to Plan 3 goals, or the Plan 3 goals need to be set at levels that are consistent with the amount of Plan 2 banked savings that would be applied to Plan 3 years. Com Ed's proposal is inconsistent with both of

those options. It wants goals that are set well below the statutory targets, based solely on what it estimates it can accomplish in Plan 3 without the use of any Plan 2 banked savings. However, it then wants to be able to use any available Plan 2 banked savings to demonstrate it met those lower targets.

In the rebuttal testimony of Mr. Brandt (pp. 81-83) Com Ed downplays concerns about the ability to use Plan 2 banked savings to meet Plan 3 savings targets. Mr. Brandt notes that though the Company is forecasting that it will have substantial banked savings – nearly 500,000 MWh (Com Ed response to NRDC 2.02) – the Plan 2 order does not allow it to use banked savings to meet more than 15% of a given year’s goal. Moreover, Mr. Brandt suggests that it will “exhaust much of its banked savings in Plan Year 6 in an effort to achieve the statutory energy savings goal” for that year.

While Mr. Brandt is correct that the Commission’s order in Plan 2 would place some important limitations on the amount of Plan 2 banked savings that it would use to meet Plan 3 savings targets, it does not address the fundamental point that Com Ed’s Plan 3 savings targets implicitly assume that there will be no Plan 2 banked savings available. Thus, the use of *any* Plan 2 banked savings to meet *any* portion of Plan 3 goals is problematic.

As Mr. Neme noted in his testimony, “Now that we have reached a point where all annual savings goals are well below statutory savings targets, it no longer makes any sense to allow *inter-plan* banking of savings.” NRDC Ex. 1.0 p. 34.

V. Comments on Staff and Intervenor Proposals

A. REACT's Proposal for a Self-Direct Program to Replace Com Ed's Proposed Large C&I Pilot Program.

The proposal of REACT for a Self-Direct Program for large C&I customers has developed over the course of this proceeding. The final version of the program was presented to NRDC and other intervenors after the hearings in this proceeding. As a result, there has been no opportunity to give that proposal the examination it deserves. NRDC generally supports the concept of a developing a pilot self direct program for large C&I customers, but needs to understand the precise elements of that program. As noted by Mr. Neme:

Self-direct programs for large customers can also be effective at both addressing large customers' needs and cost-effectively achieving substantial energy savings. However, the "devil" is truly "in the details". Some self-direct programs work well; others do not accomplish very much. The difference in results is a function of the specific program design elements.¹²

NRDC Ex. 2.0, p. 4

Because the large C&I self-direct program has been a moving target that is becoming more fixed only days before the filing of this brief, NRDC has not been able to provide any testimony on the current version.

Given these concerns, NRDC recommends that the Commission order that, while it is not approving the large C&I self direct program as it is currently being proposed by REACT, it generally supports the broad principal of a C&I self direct program and that all interested parties should undertake negotiations to determine if agreement can be reached on a program that meets a set of minimum criteria, including but not limited to the rigorous evaluation on the back end,

¹² Chittum, Anna, "Follow the Leaders: Improving Large Customer Self-Direct Programs", ACEEE Report Number IE112, October 2011.

unspent funds going back to into the energy efficiency custom programs and good up-front analysis of cost-effectiveness.

B. Commission Staff Proposals

1. Evaluation of Measure-Level Cost Effectiveness

Even though Ms. Hinman acknowledges that the Commission has applied the cost effectiveness test to utilities' efficiency portfolios and not to individual programs or measures within those portfolios, she recommends limitations on programs that fail a cost effectiveness screening. For example, she recommends that ComEd be required to provide cost effective screening results for all new measures and to limit participating in new measures that fail those screenings to levels proposed in this plan.

As noted by Mr. Neme, this proposal is an attempt by the Staff to micro-manage Com Ed's efficiency planning that would increase administrative costs and inhibit ComEd from obtaining effective long term results. Among the reasons a utility may need to include a measure or program in its portfolio even if it fails a cost effectiveness test are the following:

- It is often important to bundle some measures that fail cost-effectiveness screening with others that pass in order to address customer needs and more effectively promote comprehensive treatment of efficiency opportunities.
- Measures or programs that fail an efficiency test, yet that trade allies and/or individual customers want to promote or install, can be important to helping the utility to "get its foot in the door" and establish relationships that will enable it to more effectively promote many more cost-effective measures in the future.

- The TRC test as currently applied by Illinois utilities is not a balanced assessment of the costs and benefits of efficiency measures because it includes all of the costs but not all of the benefits of a program or measure. If a utility only counts the energy system benefits, it fails to reflect non-energy benefits to consumers such as increased comfort, increased building durability, improved health and safety, improved aesthetics, increased industrial productivity,
- Given that ComEd’s estimate of its portfolio shows a robust benefit-cost ration, there is no danger that Com Ed would promote enough measures that are supposedly not cost-effective to significantly affect the overall cost-effectiveness of its portfolio.

NRDC Ex. 2.0, p. 17-18.

NRDC also notes that this Commission recently rejected an attempt by the Commission Staff to penalize Ameren Illinois Co. in a reconciliation case because it continued to fund a program after it had failed a TRC test. The Commission noted in its order that it had stated in a North Shore/Peoples Gas Order in Docket No. 10-0564: “The Commission agrees with the Utilities that Section 8-104 does not require each measure to meet the TRC test, but it does require the portfolio ... to meet the TRC test. The Commission declines to make the finding requested by [the] Staff witness”¹³ The Commission then rejected the argument of the

¹³ *Illinois Commerce Commission On Its Own Motion -vs- Ameren Illinois Company d/b/a Ameren Illinois, Reconciliation of revenues collected under Rider EDR with the actual costs associated with energy efficiency and demand-response plans. Reconciliation of revenues collected under Rider GER with the actual costs associated with natural gas energy efficiency plans. ICC Docket No. 11-0341, Order, Oct. 2. 2013, p. 49.*

Staff that the North Shore/Peoples Gas order is irrelevant because those utilities' programs were based on a different statutory provision than Ameren's programs, stating:

The Commission recognizes that Section 8-104(f)(5) is not dispositive here because Section 8-104 is not directly applicable to AIC's GEE Plan approved in Docket No. 08-0104. However, the Commission believes the objectives and criteria in the section do provide some guidance, and should not be totally disregarded, in determining whether AIC's expenditures on the SB HVAC program in PY 2 should be disallowed as imprudent. In this case, AIC and Intervenors contend, and the Commission agrees, that the program at issue was designed and implemented to encourage and develop participation by customers in a hard-to-reach rate class, which is consistent with the policy goals in Section 8-104(f)(5).¹⁴

In summary, the Commission should reject the Staff's recommendation.

2. Changes to Com Ed's Proposed EM&V Framework

Ms. Hinman proposed 11 different modifications to Com Ed's proposed EM&V framework. NRDC only comments on two of these modifications. The first is that measure-level evaluation research to inform modifications to the TRM should be a high priority. While NRDC agrees that one of the objectives evaluation research should have is to inform potential modifications to TRM assumptions for individual measures, it is not necessarily a "high priority" in all circumstances. Depending upon the program, it may be more important to conduct NTG research, process evaluation or program-level realization rate development. Which has a higher priority is a decision that should be informed by the independent evaluators with input from the utility and SAG stakeholders. NRDC Ex. 2.0, p. 18-19.

¹⁴ *Id.*

Another of Ms. Hinman's proposed changes to Com Ed's proposed evaluation framework is that free ridership be included in NTG factors even if spillover is not. NRDC disagrees with that proposal because both affect the net savings that a program produces. To include one effect but not the other is to bias downwards the estimate of total savings attributable to an efficiency program. As noted above in the discussion of ComEd's proposal to examine both in all cases, in the event that a local study of spillover effects is not available, evaluators can recommend one from another jurisdiction or use their professional judgment, informed by expertise and experience from SAG stakeholders. NRDC Ex. 2.0, p. 19.

3. Definition of "breakthrough equipment and devices"

Ms. Hinman proposes that the Commission define "demonstration of breakthrough equipment and devices" (which ComEd calls research and development or "R&D") to mean "measures or programs in their early stage of development that are subject to substantial uncertainty about their cost-effectiveness during the planning period." NRDC disagrees with that proposal. First, while Hinman testifies that a definition is needed to help ensure that Com Ed does not evade the statutory limit on expenditures for R&D by including such measures in its standard programs, there is no evidence that ComEd has even remotely attempted to do so. Moreover, the definition Ms. Hinman offers could lead to inappropriate, after-the-fact challenges to cost-recovery for measures and/or programs that are later determined to have failed a retroactive cost-effectiveness screening. Mr. Neme noted:

In such cases, Staff and/or other parties could argue that there was "substantial uncertainty" about the cost-effectiveness of the measures or programs, particularly if they were new, and that the measures or programs should therefore have been classified as "demonstration of breakthrough equipment and devices"

(or R&D). If enough money was spent on such measures or programs, they could then argue that the Company exceeded its statutory spending limit on such measures and programs – even if the Company did not consider them part of R&D when it initially planned and began implementing them. That could have a chilling effect on the utilities’ willingness to consider new efficiency measures and/or program concepts, to the detriment of their ratepayers.

NRDC Ex. 2.0, p. 21-22.

Rather than creating such a problem by accepting the Staff’s definition of R&D, the Commission should address the issue of inappropriate allocation of R&D expenditures on a case by case basis.

4. Flexibility to Change Programs

Ms. Hinman states that Com Ed should be required to notify the Commission in writing of any changes it plans to make to its efficiency programs after they are approved, even if the changes would affect the budgets of individual programs by less than 20%. NRDC disagrees with that recommendation because requiring ComEd to notify the Commission of any change, regardless of size, would add administrative costs to ComEd and create unnecessary work for the Commission. It would also inhibit ComEd from having an effective portfolio. As stated by Mr. Neme:

A good utility program manager is responsive and adapts quickly to market feedback. For some programs, that could mean changing rebate levels, changing marketing tactics and/or making other changes, potentially several times a year. Being required to notify the Commission of every such change for every program the utility administers – no matter how small – would not only add to the Company’s administrative costs, but could slow the Company’s adaptation to market feedback or, worse still, could become a disincentive to change programs at all.

NRDC Ex. 2.0, p. 21.

5. NTG Framework

NRDC's comments on ComEd's proposed new NTG framework are contained in the section of this brief addressing ComEd's proposal. The Commission Staff's response to that proposal has some elements with which NRDC agrees and some with which it disagrees.

First, Ms. Hinman provided a detailed timeline for the SAG to reach consensus. Second, she suggests that if the SAG cannot reach consensus the alternative would be to apply an NTG that is the average of the NTG evaluated for the two previous program years. Third, Staff do not appear to contemplate the need for un-deeming a NTG when a program design changes significantly.

NRDC agrees with the need to address the possibility of lack of consensus within the SAG and generally supports Ms. Hinman's key steps and deadlines. NRDC does not agree, however, with her proposal in the event of lack of consensus. Ms. Hinman proposes that in such cases, the NTG that would go into effect would be the average of the two previous years' evaluated NTGs. The problem with that proposal is that the second year average may not be known until well into the program year. Mr. Neme provided an example:

For example, if there was no consensus by March of 2014 regarding a deemed NTG for PY7 (which starts June 1, 2014), then the NTG that will be applied to the program will be the average of the evaluated NTGs for PY5 and PY6. The PY5 evaluation result could be available by March of 2014. However, the PY6 evaluation would not be available until well into PY7. Thus, under Staff's proposal, the NTG that would be used for PY7 will not be known until much of the program year has passed – i.e. way too late for the information to affect the utility's plans for that year. As a result, the utility would incur risk regarding its ability to meet its savings target that is beyond its control or ability to address.

NRDC Ex. 2.0, p. 23

NRDC also disagrees with the premise of the Staff's proposal. Staff witness Dr. Brightwell states that it is inappropriate to rely on NTG ratios developed years ago in a changing market because it would "provides too much certainty to the affected utility to the detriment of its ratepayers".¹⁵ NRDC does not agree with either of the assumptions made by Dr. Brightwell as the basis for his opinion. He testified that utilities will react in a positive fashion to the knowledge that they face the risk of a retroactive application of an evaluated NTG and that the Staff's recommendation favors ratepayers. Mr. Neme provided an example of ComEd's expenditures on its CFL program to that show that there is no such incentive. That program had such a high kWh savings per dollar that even a retroactive application of a lower NTG would not have changed ComEd's investment incentives and if ComEd had spent less on CFLs as a result of the risk of a lower NTG, ratepayers would have been worse off. NRDC Ex. 2.0, p. 24-25.

Dr. Brightwell and Ms. Hinman also testify that the threat of the application of an uncertain NTG will give the utility an incentive to agree to a consensus deemed value.¹⁶ NRDC disagrees with that assessment because it only focuses on ComEd's incentives. It is also necessary to consider the impact on other parties' willingness to achieve consensus. Adoption of the Staff's proposal would place a veto power in the hands of all other parties, any one of which could force the use of retrospective application of NTGs by taking extreme positions on proposed deemed NTG values and refusing to compromise. NRDC Ex. 2.0, p. 26.

As noted above in NRDC's response to ComEd's proposal, when consensus within the SAG is not possible, the best alternative would be to make the independent evaluators the

¹⁵ Brightwell direct testimony, p. 16, lines 306-310.

¹⁶ Brightwell direct testimony, p. 19, lines 372-376; Hinman direct testimony, p. 37, lines 842-846.

arbiters of what the deemed savings value should be, using their own professional experience and information gained from the SAG discussions. The Staffs proposal is therefore unnecessary and could do more harm than good if accepted.

VI. CONCLUSION

For the reasons stated above, NRDC recommends that the Commission make the changes suggested in this Initial Brief.

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Respectfully submitted,
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CERTIFICATE OF SERVICE

I HEREBY CERTIFY that a copy of Natural Resources Defense Council's Initial Brief has been served upon the parties reported by the Clerk of the Commission as being on the service list of this docket, on the 13th day of December, 2013, by electronic mail.

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