

## V. Smart Grid Functions

### A. TOU

#### 1. ComEd

ComEd notes that the statutory purpose of this docket is to approve an AMI Plan. It is not a tariff proceeding, nor does anything in Section 16-108.6(c) authorize the creation or modification of a tariff as part of this process. Indeed, EIMA expressly requires that ComEd file a PTR tariff in a separate submission 60 days after the Plan is approved. Even that section, applicable to a future filing, does not require ComEd to file a TOU tariff. Moreover, had the General Assembly meant to require an additional TOU tariff, it could and would have expressly required such a tariff to be filed. It is clear from the drafting of 16-108.6(c) that the legislature only intended to impose upon ComEd's discretion regarding tariff for a PTR tariff only.

According to ComEd, the PUA vests the right to file proposed tariffs, except where a filing is expressly required, within the discretion of the utility. Not only does the Article IX tariff submission procedure refer to the utility filing tariffs, which the Commission then reviews, but the 1997 amendments to the PUA specifically barred the Commission from requiring new tarified services not called for by statute. "The Commission shall not require an electric utility to offer any tarified service other than the services required by this Section..." 220 ILCS 5/16-103(e).

While the law does not require a TOU tariff and ComEd cannot be required to offer such a service, ComEd is not saying that it will not consider voluntarily proposing a TOU rate in the future after discussions with stakeholders. ComEd Ex. 7.0 CORR, 18-19. That, however, is not a topic for the AMI Plan. ComEd argues that the Commission should not step outside the law and purport to order ComEd to file additional service tariffs that are not expressly required by the PUA.

#### 2. CUB/ELPC

CUB/ELPC argues that ComEd's proposed AMI Plan fails to maximize the possible direct customer benefits from deployment of AMI investments associated with changes in energy usage encouraged by the new dynamic pricing programs enabled by AMI. While ComEd is required by the EIMA to offer a PTR within 60 days after approval of this AMI Plan, CUB, ELPC, AARP and the AG all agree that customer benefits can be maximized only if ComEd's customers are offered a full menu of dynamic pricing options, including an additional TOU rate. See CUB/ELPC Ex. 1.0 REV. at 12; AG/AARP Ex. 3.0 at 17-18. AG/AARP witness Hornby offered an example of how a TOU rate would differ from existing rate offerings, and from the PTR required by the EIMA. He testified that under a TOU rate, ComEd would establish on-peak and off-peak periods, and the price for electric supply during on-peak periods would be higher than in off-peak periods. *Id.* at 17. A TOU rate would differ from the existing rate under which the price for supply is the same regardless of when the electricity is used since customers would pay a somewhat higher price for their use during on-peak periods and somewhat lower rates in the off-peak hours. *Id.* at 18. As compared to the existing residential real-time pricing program offered by ComEd, a TOU rate does not

change its prices every hour but instead sets prices for the specific peak and off-peak periods for several months at a time. *Id.* Finally, a TOU rate would differ from the proposed PTR by being applicable in all 8,760 hours of the year, in set peak and off-peak periods, and it would be a predictable price for both blocks. *Id.* The PTR only applies about 15 times a year in periods of 6 hours each, for a total of 90 hours per year. Unlike these other rate design options, the idea behind a TOU is that the peak and off-peak periods would remain stable over time, so customers could become familiar with them and set their major appliances accordingly. *Id.* Mr. Hornby also noted that customers have the ability to save more money over a year by taking service under a TOU rate than by participating in PTR. *Id.*

ComEd has already tested this type of rate design in its AMI Pilot through its Customer Applications Pilot, which tested a TOU rate with an on-peak period of weekday afternoons from 1 pm to 5 pm and all other hours being off-peak. *Id.* A new TOU rate would increase the value of the AMI plan to customers who have the flexibility to shift some portion of their use from peak periods to off-peak periods. *Id.* As ComEd itself admits, TOU rates have proven very popular elsewhere, for example in Arizona, where the Arizona Public Service and Salt River Project have achieved cumulative participation rates in their residential TOU rates of about 51 percent and 28 percent respectively. *Id.*, citing ComEd Ex. 5.02 at 8.

CUB and ELPC believe that the ComEd AMI Plan would be more likely to succeed in achieving these projected benefits if more innovative rate options were included. To ensure that customer and system benefits are maximized, Ms. Horn testified that other dynamic rate structures, including a TOU, should be included in the rollout. CUB/ELPC Ex. 1.0 REV. at 12. A full menu of dynamic pricing options important to deliver benefits to ComEd's customers because it will allow for customers to choose the rate structure which best fits their needs and maximizes their service experience with the utility. *Id.* A full menu also increases the likelihood that any one customer will participate in dynamic pricing, since customers have the ability to change their behavior in ways most conducive to their own consumption needs and habits. *Id.*

ComEd's AMI Plan does address the type of marketing efforts necessary to have successful dynamic pricing programs (AMI Plan at 41); the web-portal functionality required for customers to take advantage of dynamic pricing (*Id.* at 50); the interplay with distributed generation (*Id.* at 68); the interplay with storage (*Id.* at 71); and metrics related to dynamic pricing (*Id.* at 75). The Company claims that while a TOU rate – or indeed, any additional dynamic pricing program, even the PTR mandated by law – is not within ComEd's interpretation of the scope of this proceeding, ComEd agrees the goals of these type of rates (including efficiency improvements, lower costs, and improved energy management) are important ones. ComEd Ex. 7.0 at 18. ComEd has agreed to commence a dialog with interested stakeholders including the Smart Grid Advisory Council concerning a TOU rate. *Id.* at 19. The Commission should require ComEd to include in its next annual AMI Plan update filing a TOU rate based on these discussions.

### 3. City

The City notes that there is no dispute that dynamic rate structures can provide effective ways for customers to save. It is not reasonable that customers who have paid for this new technology could be left without effective dynamic rates that are the means of using AMI data or functions to best effect. ComEd, however, considers this issue outside the scope of the required AMI Plan and questions "whether it is appropriate at this stage in the development of the retail supply market for ComEd to create a new supply service offering." ComEd Ex. 7.0 (Corr.) at 18-19.

ComEd's vague response appears to allude to uncertainty about Commission determinations on the permissibility of such new rate structures. ComEd offered no clearer explanation for its reluctance to provide cost saving rate options for customers. Yet, ComEd's AMI Plan contains no process for making a decision on new rate designs or for seeking a Commission determination on the issue. Customers are disadvantaged by that deficiency because the Commission is constrained in its ability to make clarifying determinations on the issue, if ComEd never approaches the Commission with a rate proposal or some other request for a ruling. In these circumstances, it is not reasonable to excuse ComEd from assuring, in its AMI Plan, the availability of rate options that are necessary for customers to realize promised AMI benefits.

At least some portion of ComEd's reticence in assisting its customers appears to be attributable to its deference to commercial retail suppliers. Since ComEd customers' AMI charges will now pay for advanced metering, retail suppliers will not have to provide that investment to offer dynamic rates. The commercial entities to which ComEd appears to defer have no investment of their own at stake to spur expeditious new services, applications or rate structures. And they are under no obligation to serve all ComEd customers. If the Commission accepts ComEd's proposal to "commence a dialog with interested stakeholders" as an adequate AMI Plan response (and it should not), the City asks that the Commission require a report on the results of such discussions, including specifically any commitments to provide rate offerings that enhance and enable customers' ability to take full advantage of their smart meters.

There is no dispute that dynamic rate structures can provide effective ways for customers to save. See, e.g., ComEd Ex. 3.0 at 5; CUB/ELPC Ex. 1.0 at 12-13. It is not reasonable that customers who have paid for this new technology could be left without effective dynamic rates that are the means of using AMI data or functions to best effect. ComEd, however, considers this issue outside the scope of the required AMI Plan and questions "whether it is appropriate at this stage in the development of the retail supply market for ComEd to create a new supply service offering." ComEd Ex. 7.0 (Corr.) at 18-19.

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#### **4. Commission Analysis and Conclusion**

The Company argues that the Commission does not have the authority to require ComEd to file a TOU tariff. While the Commission has clear authority for modifying ComEd's AMI Plan under 16-108(c) of the Act, that authority is much less clear for directing the adoption of a new tariff. Regardless, the Commission finds that the TOU proposal offered by CUB/City and supported by AG/AARP is not workable as currently proposed. This proposal appears to be largely based on the experience of other states that have very different regulatory structures and has not been fully adapted to the specifics of Illinois. The proposal fails to consider several important issues: how the proposed TOU rate would intersect with the Integrated Distribution Company rules that limit ComEd's marketing of new rates and services, the costs involved in marketing (if allowed) a new rate, or how the proposed TOU rate would address capacity costs which have the potential to be a significant portion of energy costs as generation reserve margins decline. Additionally, the Commission notes that the current RRTP program contains a legislatively mandated mechanism for cost recovery of marketing costs and that no such mechanism appears to exist for the proposed TOU program. On exceptions, the IPA and ComEd argue that TOU raises many supply-related complications including a need to significantly restructure the IPA's procurement process.

Despite these failings, suggesting a TOU rate is well-intentioned and the Commission does share the concern of CUB/ELPC and other intervenors that ComEd may not be adequately enhancing and enabling customers' ability to take advantage of Smart Grid functions with its current rate offerings. The Commission desires that a record be developed that addresses these and other issues. Therefore, as described below, the Commission orders the Company to work with the Smart Grid Advisory Council and other stakeholders to develop a proposal regarding increasing the availability and participation in dynamic pricing programs offered by either the Company or alternative retail electric suppliers.

ComEd has agreed to commence a dialog with interested stakeholders including the Smart Grid Advisory Council concerning a TOU rate. The Commission supports that proposal, but suggests that it should not just be limited to considering a TOU rate. It should also consider the extent to which the goals expressed in the Intervenor's proposal can be better met through other means—including rates offered by alternative suppliers, and/or expanding the marketing of the existing RRTP rate. If, after discussion, the Company and stakeholders agree that ComEd should offer a new TOU rate, then the proposal should at minimum fully explain how this TOU rate intersects with the existing competitive retail marketplace including complying with (or modification to) the IDC rules, how the program will be adequately promoted, and how the IPA will

procure power. As part of the next AMI plan update ComEd should report to the Commission the results of the dialog with stakeholders and if a TOU tariff will be proposed. If a TOU tariff is not proposed, the Company should detail what alternative mechanisms will be adopted to use other dynamic pricing approaches to enhance and enable customers' use of smart grid technology.

## **B. PTR Program**

### **1. ComEd's Position**

EIMA establishes the requirements for the AMI Plan, in detail, and as noted above identifies the costs and benefits to be considered. EIMA does not require the AMI Plan to contain a specific PTR proposal, or to specify the terms or details of the PTR program to be put into effect. Indeed, the EIMA expressly defers that question until after approval of the AMI Plan, affirmatively requiring that a proposed opt-in tariff offering market-based peak time rebates to all residential retail customers with smart meters be filed within 60 days after the Commission approves a participating utility's AMI Plan. 220 ILCS 5/16-108.6(g). The law, moreover, requires ComEd to consult with the Smart Grid Advisory Council ("SGAC") on this tariff. *Id.* In accordance with these requirements, ComEd did not propose or include a specific PTR program as part of AMI Plan. Rather, ComEd included in its Plan, and used in the determination of the Plan's costs and benefits, a generic peak time rebate concept that preserves the flexibility of the upcoming proceeding. See Braithwait Dir., ComEd Ex. 5.0; ComEd Ex. 5.02; Braithwait Reb., ComEd Ex. 11.0.

Comverge seeks to have the Commission prejudge in this AMI proceeding with a ruling that the PTR program must use "enabling devices." Comverge Ex. 1.0, 3:13 – 4:11. Comverge, of course, is a vendor of such devices and related services. ComEd argues that its self-interested suggestion should be rejected for four reasons: 1) a ruling now would undermine the Commission's ability to review the terms of the PTR offering in the upcoming tariff proceeding, as provided in the EIMA and it would undermine the statutory SGAC consultation process, 2) it taints upcoming stakeholder process. ComEd has openly stated that it will not only consult with SGAC, but will conduct an open and broad-based stakeholder process concerning its PTR tariff, 3) the evidence in this Docket is currently incomplete and uncertain - Only two interested parties were heard, and ComEd's views were limited to the propriety of raising this issue in the AMI Plan docket and 4) there is no need to rush to judgment - the Commission can specify any equipment requirements in the PTR tariff, when it considers the other particulars of ComEd's PTR offering.

Comverge asserts that the only way to fully maximize benefits is for ComEd to supply enabling technology. Lacey Dir., Comverge Ex. 1.0, 6:15-7:6; Lacey, Tr. 424:4-7. However, ComEd notes, Comverge does no analysis on what the impact of the cost of the enabling technology has on those benefits to support that position

Furthermore, 16-108.6(c) requires that the AMI Plan be consistent with NIST standards for Smart Grid interoperability. 220 ILCS 5/16-108.6(c). It also states that the Plan "should include open standards and internet protocol to the maximum extent possible consistent with cyber security, and shall maximize, to the extent possible, a

flexible smart meter platform that can accept remote device upgrades and contain sufficient internal memory capacity for additional storage” capabilities, functions, and services without the need for physical access to the meter. Id. ComEd argues that Comverge’s position to require enabling technology is not consistent with this part of EIMA.

## 2. Comverge’s Position

Comverge supports ComEd’s AMI Plan, and believes it should be approved by the Commission, with one modification. Specifically, Comverge recommends that the Commission order ComEd to modify the PTR feature of the AMI Plan so that all participants in the PTR program are given the option of ComEd providing them enabling technology designed to directly control their electricity usage during a peak time rebate event.

Comverge explains that PTR without enabling technology requires a residential customer to adjust his or her own electricity consumption manually, by turning off or reducing usage of high-energy appliances such as air conditioning. Enabling technology currently works by allowing remote control of HVAC equipment. Comverge argues that the evidence in this proceeding shows that enabling technology significantly increases customer responsiveness to PTR events, thereby increasing the benefits obtained from PTR by very substantial amounts.

According to Comverge, enabling technology, i.e., programmable communicating thermostats or switches on air conditioning, would increase PTR participants’ average energy usage reductions during peak time rebate events from an estimated 10% to an estimated 30%. These peak load reductions would result in net present value total benefits to all ComEd customers of \$101 million to \$260 million, compared to \$13 million to \$89 million at the 10% peak load reduction potentially achievable by PTR without enabling technology.

In Dr. Braithwait’s analysis, Comverge notes, he assumed that some PTR participants would purchase their own enabling technology because it was not provided by ComEd. Comverge argues, however, that if ComEd provided enabling technology to PTR participants, the benefits of PTR would increase significantly. Comverge witness Lacey testified that, using Dr. Braithwait’s own analysis, the present value of PTR benefits would increase to between \$385 million and \$611 million if ComEd achieved the 30% peak load reduction achievable through enabling direct load control technology. These benefits, Comverge asserts, compare to total costs of only \$169 million to \$236 million to provide enabling direct load control technology to PTR participants.

ComEd plans to bid demand response capacity produced by its PTR program into the PJM capacity market. However, Comverge states, it appears that it will be difficult for ComEd to get capacity payments unless the PTR program includes enabling technologies. Comverge cites the PJM manual for the assertion that PJM requires demand response customers to be able to reduce their load within two hours of notification of an event. Comverge also states that the PJM Capacity Market Manual states that “Providers of Planned Demand Resources must provide a timeline including

milestones, which demonstrates to PJM's satisfaction that the Planned Demand Resources will be available for the start of the Delivery Year." According to Comverge witness Lacey, PJM programs require a certain degree of reliability that can only be achieved with enabling technology. Failure to provide the promised capacity leads to imposition of penalties from PJM.

On the other hand, Comverge notes that demand response capacity from residential customers based on enabling technology has already been successfully bid into the PJM capacity market and has in fact provided the lowest priced capacity in the PJM market. Hence, Comverge argues that ComEd's AMI Plan should be modified to include enabling technology.

In response to ComEd's argument that this is not the proper docket for this discussion, Comverge points out that ComEd used projected net benefits from PTR to increase the net benefits of its AMI Plan. Also, Comverge notes that ComEd witness Braithwait testified that the AMI Plan proposes to install an AMI system and operate a PTR program that is enabled by AMI metering. Indeed, Dr. Braithwait's analysis was incorporated into the Black & Veatch cost-beneficial analysis. Thus, Comverge argues that because ComEd calculates the net benefits of a PTR program and uses those results to argue that the benefits of ComEd's AMI Plan exceed its costs, testimony regarding how to increase the net benefits of a PTR program by hundreds of millions of dollars is also relevant to the AMI Plan and this proceeding.

Comverge argues that PTR participants deliver benefits to all ComEd customers, not just the customers who participate in the program. To the extent the payments ComEd receives from PJM exceed the costs of a PTR program, all customers will have lower electricity charges. Further, Comverge maintains that it is fair and appropriate that the cost of enabling direct load control technology for PTR participants be shared among all ComEd customers. Therefore, Comverge recommends that the Commission approve ComEd's AMI Plan with the modification that ComEd's PTR tariff filing due within 60 days of Commission approval must include an offer of enabling direct load control technology to all PTR participants. The details, such as what specific technology is offered, how it will be offered and marketed to customers, etc., can be resolved as part of the PTR tariff filing. Clearly, Comverge argues, the SGAC and other stakeholders will have an opportunity to weigh in on the critical issues.

### **3. City's Position**

The City states that Comverge's request warrants careful scrutiny. Comverge's request apparently rejects the ISSGC conclusion on the sharing of the costs of accommodating commercial activities. The City asks that the Commission exercise particular care in its decisions on what, in essence, is Comverge's suggestion that the Commission adopt a ratepayer-funded market development for a commercial entity. The City argues that there is no suggestion in Comverge's testimony or its brief that the equipment it proposes to add to the AMI deployment plan - and to customers' charges - could not be sold on its merits instead of being compelled at ratepayer expense.

### **4. Commission Analysis and Conclusion**

Initially, the Commission notes that the Company's AMI Plan and cost-benefit analysis discusses the PTR program and its benefits. Thus, Comverge's discussion is relevant, especially because it raises concerns as to whether those benefits will occur. The conflicting evidence in the record raises questions about whether the identified benefits can be attained from PJM without enabling technology.

The Commission does agree with ComEd, however, that this is not the docket to make decisions on PTR. In the PTR tariff docket, the Commission will be able to give more consideration to the various proposals.

EIMA states that the "utility shall make all reasonable attempts to secure funding for the peak time rebate program through markets or programs at the applicable regional transmission organization." 220 ILCS 5/16-108.6(g). Consistent with this statutory provision and when considered with the testimony of Comverge witness Lacey, it is not out of the realm of reason to explore, if not adopt, enabling technology in the PTR process. Also, the statute states that the AMI Plan should include:

a plan to enhance and enable customers' ability to take advantage of Smart Grid functions beginning at the time an account has billed successfully on the AMI network.

220 ILCS 5/16-108.6 (c)(2). This language certainly seems consistent with enabling technology. It is also not clear to the Commission that requiring enabling technology would violate the interoperability standard, as asserted by ComEd. Indeed, ComEd itself argues that the PTR provision is separate from the AMI deployment and a PTR program does not require AMI to function. Tr. at 440.

It is not obvious to the Commission why the Company should not offer enabling technology if the costs are less than the benefits to be gained from PJM for the load reductions. The Commission recognizes that many questions remain, such as how this would work in conjunction with allowing the market for these devices to flourish. But for purposes of obtaining the benefits envisioned by EIMA, the harm in exploring a Company-offered load control device is not apparent. Accordingly, ComEd is directed to include an analysis of the costs of implementing such a program with its statutorily required PTR filing.

## **C. Distributed Generation**

### **1. ComEd**

ComEd asserts that CUB/ELPC's proposed distributed generation improvements are not relevant to this docket and have nothing to do with the scope of 16-108(c) in relation to the approval of the AMI Plan. Distributed Generation, while defined in 16-108(a) as a benefit to be accrued as a result of implementing the Company's AMI Plan, it is not a requirement to be addressed in the AMI Plan in order for it to be approved. CUB/ELPC admits in its brief that the appropriate venue for this issue to be addressed by re-opening the rulemaking process for interconnection rules. Therefore, CUB/ELPC should do just that, and petition the Commission to re-open that docket. At that time any and all interested parties can join that proceeding and the issue can be properly vetted and flushed out in proper fashion.



## 2. CUB/ELPC

The EIMA expressly calls for benefits from distributed generation to accrue to ComEd's customers as a result of implementing the Company's AMI Plan. 220 ILCS 5/16-108.6(a). ComEd's AMI Plan acknowledges that direct customer benefits will result from AMI deployment due to the increased ability of customers to receive electricity supply from distributed sources. AMI Plan at 66-67. CUB and ELPC agree with ComEd – and the U.S. Department of Energy – that distributed generation can provide a range of direct and indirect benefits to all ComEd customers. CUB/ELPC Ex. 1.0 REV at 14.

However, as CUB/ELPC witness Horn testifies, ComEd's customers are unlikely to maximize the potential from distributed generation investments unless barriers to market entry are removed. *Id.* at 15. Some of these barriers are economic, such as lack of good financing options to address the high up-front cost of renewable energy systems. *Id.* Others are technical, such as the level of study required to connect distributed generation to dense, urban areas and the lack of information about suitable interconnection sites. *Id.*

It is true that Illinois has a set of standardized administrative rules addressing grid interconnection issues. As a part of those rules, different levels of review are required for interconnection to ComEd's distribution grid based on the generating capacity of the customer's system and the location on ComEd's system (that is, whether on a radial feeder or a network grid) to which the customer wants to connect to. The Commission can, and should, address this barrier by re-opening the rulemaking process for interconnection rules with a goal of incorporating well-developed best practices for streamlining approval and interconnection processes.

The Commission should also require ComEd to address the second technical barrier: the lack of information about suitable interconnection sites. While distributed generation may be cost-effective for customers in some places on ComEd's grid, in other places it may not be. *Id.* Currently there is no way for a customer to know whether they are in a good location for a distributed generation project without first evaluating a project, contacting a vendor, preparing an interconnection application, filing that application with ComEd and waiting for a response. *Id.* ComEd can address this problem by publishing information about its distribution grid on its website, for example, showing where the radial grid ends and where the network grid begins - an important distinction because of variations in the interconnection rules. *Id.* Further, ComEd could publish information on customer areas served by feeders that have already reached the threshold of distributed generation capacity necessitating a higher level of study. *Id.*

The environmental and economic benefits of distributed generation described in ComEd's AMI Plan can be fully realized if ComEd and the Commission commit to removing technical barriers that customers face in the interconnection process. *Id.* at 17. Without addressing these barriers, it is premature for ComEd to claim that its AMI Plan will result in benefits from greater integration of distributed generation resources.

### **3. Staff**

CUB/ELPC recommends that the Commission re-open the rulemaking process for the distributed generation interconnection rules in order to eliminate barriers to market entry for distributed generation investments. Staff opposes this recommendation because it is unsupported by evidence, is outside the scope of this docket, and the relief CUB/ELPC seeks is more properly sought by petitioning the Commission under Section 200.210 of the Commission's Rules to amend the existing distributed generation interconnection rules.

### **4. Commission Analysis and Conclusion**

The Commission agrees with Staff that the CUB/ELPC proposal is properly addressed through a petition for rulemaking pursuant to Section 200.210 of the Commission's rules, which can be filed at any time. ComEd must comply with the Commission's rules until they are amended and, if they truly are a barrier to development of distributed generation, this should be brought before the Commission with a proper filing, not in this expedited docket. CUB/ELPC does raise a valid point, which is that ComEd's AMI Plan claims the benefits for these potential Smart Grid applications, without actually addressing implementation issues or costs. Plan at 66-69.

The request for a map showing where distributed generation would be good or bad doesn't necessarily require an amendment to a rule, but also cannot be adequately addressed in this expedited docket. ComEd is directed to work with interested parties to implement this and if issues arise, this can be brought before the Commission in a separate filing or as part of the rulemaking.

## **VI. Disconnection**

### **A. Disconnection Assistance**

#### **1. City's Position**

The foreseeable effects of instituting the new billing and remote disconnection capabilities of AMI meters will have human impacts that received insufficient attention in ComEd's AMI Plan. Chicago's significant population of lower income customers -- many of whom may receive meters early in the deployment schedule -- is particularly likely to be adversely affected by the expected increase in disconnections for non payment associated with AMI meters' remote capabilities. In addition, governmental bodies (like the City) that provide human services in the wake of a loss of essential utility services will also be affected. City Ex. 1.0 at 4, 13-14.

ComEd acknowledges the validity of the City's concerns about the planned changes in ComEd's disconnection capabilities, its collection/disconnection practices, and the frequency of actual disconnections. ComEd Ex. 10.0 at 2-4. However, ComEd's proposed revisions to its AMI Plan do not fully address the issues the City identified. ComEd's revisions generally lack the substantive specificity and detail needed to assure that, when the threat and actuality of remote disconnections affect

more customers, the AMI Plan provides for meaningful mitigation of the resulting human impacts. ComEd's implementation of its AMI meter deployment should incorporate programs that help address the adverse human impacts of its AMI deployment, as well as its economic benefits.

ComEd's AMI Plan should detail programs that respond to the effects on customers attributable to its use of the new remote disconnection function of AMI meters. The City detailed several initiatives that it recommends be part of ComEd's revisions. Those possible initiatives included:

- outreach to at-risk customers, using ComEd's customer contacts to inform customers about (and to facilitate enrollment in) available assistance programs;
- using Section 16- 108.5(b-10) funds to assist at-risk or disconnected customers either directly or through human services response entities like the City;
- coordinating its assistance efforts with those of other providers of information and assistance; and
- notification to the City of impending disconnections on a localized basis, so that they can prepare to meet anticipated human services needs. City Ex. 1.0 at 3-4.

With respect to the City's recommendations, ComEd has proposed changes to its disconnection-related customer assistance, by revising its AMI Plan to incorporate routine referrals to various assistance agencies during its collection- or disconnection-related calls to customers. ComEd Ex. 10.0 at 4-5. ComEd also proposes to raise the profile of such information in its responses to calls from customers, as well as on its web site. *Id.* at 5-6.

ComEd plans to maintain its current contact and coordination practices with assistance agencies. A similar continuation of its current approach is what ComEd proposes for its outreach efforts. *Id.* at 5-7. In conjunction with these less aggressive responses, ComEd proposes to "explore new approaches to customer assistance program planning and design, including assistance for customers who have been disconnected, and notification to the City of Chicago regarding impending disconnections on a zip code, or some more other specific, basis." See ComEd Ex. 7.0 at 19-20.

The City is encouraged by ComEd's proposal to consider input from representatives of affected customers and from service providers like the City. However, such cooperative efforts are not as certain to assure needed customer assistance as the inclusion of specific programs in the AMI Plan ComEd's mitigation of disconnection impacts is an issue ComEd does not wish to incorporate in any approved AMI Plan. ComEd witness Harris stated that "While these [disconnection impact] measures are again not part of ComEd's AMI Plan, ComEd agrees to many of them ... and will work with the City to address those concerns." *Id.* at 19-20.

## **2. AG's Position**

AG witness Alexander recommends that the Company be encouraged to make changes in its current procedures, where it is determined to be cost effective, to better target disconnections earlier in the collection cycle and engage and more proactive outreach through electronic communications and telephone attempts prior to sending the field technician for the required premises visit. She noted that there are many potential improvements or reforms that could reduce uncollectible expense and offset the increased costs associated with a premises visit, without relying on remote disconnection to compel immediate payment. The Company's current policies may allow customers to build up large arrears balances prior to disconnection, but that is a function of its current collection policies and decisions about the allocation of resources and how it chooses to deploy field personnel and manage collection activities. The Company's assumption that a vast increase in the volume of disconnections will occur as documented in the Black and Veatch analysis has important safety and health implications that this Commission may want to take into account when considering the proposal to change the current regulation in the Part 280 proceeding. However, in the context of this proceeding, Ms. Alexander urged the Commission to reject that portion of this AMI deployment plan (and cost/benefit analysis) that relies on the use of remote disconnection for nonpayment for residential customers as a means of generating additional revenues or lowering operating expenses. At the very least, there is a need to explore in more detail ComEd's assumptions about the linkage between faster and increased disconnections earlier in the collections cycle, and the direct and indirect implications of this proposal on the ability of residential customers in general and vulnerable customers in particular to obtain and retain affordable and essential electricity service, as discussed in the Annual Milestones and Metrics section below.

## **3. ComEd**

The City requests that ComEd make a commitment to work cooperatively regarding disconnection of customers: "Accordingly, the City recommends that the Commission order that ComEd incorporate its commitment to cooperative action in its AMI Plan." ComEd does not object to this position.

While the City credits ComEd with responding "substantively to City concerns in critical areas of customer education and training," the City asserts that ComEd's Plan lacks sufficient specificity and detail to assure that City customers will receive the effective education/training needed to capture the benefits of AMI technology. ComEd submits that the Plan is sufficiently detailed and complete, and notes that this issue was addressed by ComEd witness Montague. Ms. Montague testified that ComEd will provide practical information and instruction designed to help customers capture energy savings using AMI data. Once a meter is certified and active, a welcome packet will be mailed to each customer including specific, detailed instructions on how to enroll in PTR, how to use web tools. The materials will include practical energy management tips that, coupled with using the AMI data, could lead to bill savings. However, it must be

remembered that ComEd cannot control if or when any particular customer takes action that would actually lead to bill savings.

#### **4. Commission Analysis and Conclusion**

The AMI Plan glosses over the human impact of the increase in disconnections enabled by remote disconnection. Perhaps on a customer-wide basis this will be an economic benefit (and indeed that is how the AMI Plan presents it), but the affected customers would undoubtedly disagree. The Commission, however, must consider all ratepayers and recognizing that today these customers are still connected because of operational constraints does not change the fact that there is an additional societal cost that has not been quantified or considered in the cost-benefit study.

The proposal by the City attempts to mitigate some of this harm and proposes a reasonable plan. ComEd should include in the AMI Plan, with specificity, how it intends to address the City's concerns. The AG's proposal is not concrete, and thus not adopted, but appears to be in accord with that requested by the City.

Apparently the Company agrees to work cooperatively and Commission Staff must be included, because the Commission also must be prepared to handle additional consumer complaints resulting from increased disconnections and whatever else AMI deployment might bring.

Accordingly, the following City proposals, which overlap, to some extent, other proposals discussed above, are adopted:

- Detail specific plans to provide for foreseeable effects on low-income customers of the new billing and remote disconnection capabilities of AMI meters, with the same thoroughness and attention to detail for customer-side impacts that ComEd has given to utility-side preparations.
- Provide effective, focused, and proactive education and assistance programs for customers who will first experience the dramatic changes from current disconnection practices, like shorter times between notice and disconnection.
- Provide assistance to local governments providing human services to an increased number of customers suffering a loss of essential utility services.

Specific initiatives should include:

- Targeting customer outreach and education programs to at-risk customers;
- Enhanced communications (through the ComEd call center, proactive collection calls, more informative disconnection notices, and internet use) to facilitate enrollment in available customer assistance programs, including the PIPP and LIHEAP programs;
- Enhanced communications about the availability of ComEd customer assistance programs through similarly enhanced communications channels;
- Section 16-108.5(b-10) energy low-income and support program assistance to aid customers in paying past due arrearages;

- Coordination with other providers of customer education and assistance, such as the Chicago Housing Authority, LAAs, social service agencies, to increase awareness of assistance programs and to explore new approaches to customer assistance program planning and design;
- Section 16-108.5(b-10) assistance to customers (possibly through local government human services departments) who are unable to avoid disconnection; and
- Notify the City of Chicago and other municipalities of impending disconnections on a zip code (or comparable) basis, as permitted by customer information privacy constraints.

These proposals are reasonable, designed to protect customers and should be included in ComEd's modified AMI Plan.

In its Brief on Exceptions, ComEd appears to be most concerned with the requirement regarding the use of Section 16-108.5(b-10) funds. ComEd argues that helping customers who are unable to avoid disconnection violates the statutory requirement that the funds be used primarily to avoid imminent disconnection. The Commission agrees that the primary use of the funds should be to avoid disconnection, however, the Commission also finds it reasonable that a secondary use of the funds can be to assist customers that have just been disconnected to be reconnected. It is not contrary to the statute to help customers whose position is so easily altered with the new abilities of AMI remote disconnection and reconnection.

## **B. Door Knock**

### **1. ComEd's Position**

AARP and the AG have expended a great deal of time and effort discussing whether or not a "door knock" is required at the time of disconnection for non-payment. This issue is being addressed in a pending Commission rulemaking, Revision of 83 Ill. Adm. Code 280, Docket 06-0703. In contrast, this docket "is a special statutory proceeding during which the Commission is called upon to review ComEd's proposed AMI Plan under specific guidelines within 60 days of filing." ComEd Ex. 1.0, 4:87-89. The debate over "door knock" rules is pending elsewhere and the question of when and if a "door knock" is required prior to disconnection for non-payment does not affect, factually or legally, whether the AMI Plan meets any of the statutory criteria for its approval.

Legally, the AMI Plan does not alter the rules governing who may be disconnected for non-payment, when that disconnection can occur, or how fast it can occur. Tr. 192. In particular, while there appears to be disagreement among parties as to whether a "door knock" is required immediately prior to disconnection for non-payment, neither the AMI Plan nor the presence of AMI meters will change that fact. ComEd will comply with the statutes and regulations regarding disconnection, including notice prior to disconnection for non-payment, just as ComEd always has. Tr. 116 – 119. If a "door knock" should be required, ComEd's processes will respect that

requirement, whether an AMI meter is present or not. If a “door knock” is not required, trying to scuttle the AMI Plan is not a means of getting “door knocks” by default.

To underscore the fact that the “door knock” debate does not affect the question of whether to proceed with AMI deployment, ComEd analyzed net AMI benefits under either limiting assumption: a “door knock” is always required or one is never required. That policy decision – no matter the outcome – does not eliminate the benefits attributable to AMI deployment. ComEd Ex. 7.0 CORR, 13. Although requiring a “door knock” significantly decreases the benefits from eliminating a “truck roll” (i.e., sending a physical vehicle to the residence), the net benefits of the AMI Plan remain huge.

Practically, whether a “door knock” occurs is also not controlled by whether the AMI Plan is adopted or AMI meters are deployed. “There is nothing about installing an AMI meter, including an AMI meter with a remotely operable disconnect/reconnect switch, that requires or dictates a decision concerning the conditions under which a customer can be disconnected, when that disconnection can occur, or after what notice.” ComEd Ex. 7.0 CORR, 10. ComEd acknowledges that there are different interpretations of the Commission’s current rule governing notice prior to disconnection for non-payment, but the words of the rule itself – in plain English – do not require the utility to attempt an in-person notification. ComEd does not now require its employees to engage in this risky and often hazardous practice prior to disconnecting a customer, AMI meter or not. ComEd’s current disconnection practice is, in summary, that an eligible customer will receive a telephone call, followed by a disconnection notice, which is then followed by a second telephone call. Tr. 107-108. If no payment is received from the customer, then a field technician is sent to the customer’s location of service where that field technician is required to announce his presence prior to physically disconnecting service. Id. at 109-110. The only potential change is that, with AMI technology, a ComEd employee no longer has to physically be at the meter in order to disconnect service – or to reconnect it. Harris, Tr. 31:4-10. Eliminating the need for a physical presence at the meter will not change whether a door knock occurs. What will change, however, is that all customers will be able to be reconnected faster upon payment.

The AG also argues that ComEd is somehow disregarding “costs” the AG attributes to “the negative customer and societal impacts associated with the increased number of disconnections for nonpayment resulting from remote disconnect capabilities.” AG Br. at 13. The AG’s premise is incorrect, as is its conclusion. As noted above, disconnection for non-payment is lawful and not against public policy. When a customer can be lawfully disconnected is not a policy decision at issue here, and the EIMA itself establishes performance metrics that “are based on the assumptions that the participating utility may fully implement the technology described in [Section 16-108.5(b)], including utilizing the full functionality of such technology and that there is no requirement for personal on-site notification.” 220 ILCS 5/16-108.5(f).

Indeed, the Act itself makes it clear that such costs are not to be attributed to the AMI technology. Section 16-108.6(a) specifically provides that “total cost shall include all utility costs reasonably associated with the Smart Grid AMI Deployment Plan.” 220 ILCS 5/16-108.6(a) (emphasis added). It thereby implements in law the decision that

the social policy debate over disconnection is not the statutorily defined costs to be used in assessing whether the AMI Plan is “cost-beneficial.” The EIMA addresses those issues in other ways, including through significant new and expanded assistance programs aimed directly at the problem. The consequences of lawful disconnection are a social issue, not a “cost” to be artificially charged against AMI.

Finally, the AG mischaracterizes the Health Impact Assessment and its conclusions. The HIA was conducted under the conditions of the Pilot, and it neither considers the benefits of remote connection / restoration, nor does the HIA (or, given its timing, could it have) considered the new assistance programs adopted by EIMA.

AG/AARP contend that a door knock at the time of service disconnection serves “vital public health and safety goals.” AG Br. at 16. But, again, aside from increasing the cost and danger to employees of all disconnections, AG/AARP give no clear picture of how making the process of lawfully disconnecting service slower and more cumbersome aids those customers who should instead receive assistance. AG/AARP also ignore that AMI is part of EIMA, which provides in parallel a significant boost in just that assistance.

Moreover, a deeper examination of AG/AARP’s rationale casts further doubt on its relevance to “door knock” policies, let alone the AMI Plan. AG/AARP’s primary concern is with “vulnerable” customers. It is apparently AG/AARP’s view that somehow on-site notification will reduce the number of disconnections within “vulnerable” populations by identifying when such persons are located at a premises where service is about to be disconnected and, presumably, halting the disconnection process. But, even if a ComEd employee could identify when a “vulnerable” person is present, there is nothing in the Commission’s rules that authorizes a utility to treat “vulnerable” customers in any way differently from the way it treats other customers. ComEd could not justify the higher uncollectible expenses that would result from a policy of not disconnecting service to any household with a young, old, or disabled member – which qualities do not necessarily have anything to do with the ability to pay a bill. Instead, it could face a claim of unlawful discrimination. Moreover, if such a policy were to become law, it would easily be exploited, and the number of uncompleted service disconnections would likely rise dramatically, as would the bad debt costs passed on to other customers, including “vulnerable” customers.

## **2. AG/AARP**

Among the strategies ComEd describes in its Plan is its intention to activate the remote connect/disconnect switch in the AMI meters. The Company’s cost-benefit analysis assigns specific dollar benefits to fewer truck rolls related to remote connections and disconnections, including those made for nonpayment. ComEd Ex. 6.02 at 4-5, 4-6. For example, the B&V cost/benefit analysis assumes a reduction in bad debt of \$695 million over a 20-year period. *Id.* at 4-8. Conspicuously absent, the AG notes, is any assessment of the negative customer and societal impacts associated with the increased number of disconnections for nonpayment resulting from remote disconnect capabilities. With regard to potential “negative impacts,” the B&V report states, “Consumer and public health and safety concerns, as identified in the ISSGG report, are out of the scope of the cost and benefit analysis presented here.” ComEd



Ex. 6.02 at 3-2. Cross Ex. 10, which details the City's concerns about the impact of increased customer disconnections on the City's resources, provides a glimpse of the health, safety and welfare issues impacted by the change in technology.

The Commission's current Part 280.130(d) states that the utility shall attempt to advise the customer that service is being discontinued by making contact "at the time service is being discontinued." See 83 Ill. Admin. Code Part 280.130(d). According to the AG, this important requirement for an attempt at in-person notification is in addition to a requirement that if disconnection cannot be accomplished "during a call made at the customer's premises," the utility shall attempt to leave a notice "at the premises or billing address" informing the customer that disconnection was attempted and their service continues to be subject to disconnection. *Id.*

Both the General Assembly and the Commission have declared that reliable electric service is essential to the health, safety and welfare of the citizens of the State of Illinois. 220 ILCS 5/1-102, 1-102(d)(i); 83 Ill. Admin. Code Part 411.10(a)(3). The AG notes that, in various orders, the Commission has repeatedly emphasized the value it places on retaining a site visit and customer contact at the time of disconnection for nonpayment. See Docket 12-0089, Docket 09-0263.

AARP argues that most importantly, this requirement of personal notification helps to ensure that serious health and safety conditions may be identified on-site and potentially corrected. If the premises visit is eliminated and all notification of disconnections for nonpayment are made in an impersonalized manner (robo-calls and form letters), situations that are dangerous to health and safety will go unnoticed and uncorrected. In addition, certain customers who suffer from physical or mental deficiencies may not be able to fully appreciate the severity of a threatened disconnection in the same way from a robo-call or form letter as through personal contact on their premises.

The AG and AARP presented significant evidence through both expert testimony and cross-examination that revealed (1) an inability by ComEd to discuss with any precision the current and yet-to-be-determined customer notification processes for customer disconnections related to nonpayment, both now and under ComEd's AMI Plan; (2) claims of irrelevance related to AG/AARP calls for Commission guidance on customer notification requirements; (3) ComEd's failure to follow current notice requirements under the existing Part 280 rule related to customer disconnections for nonpayment; (4) the significant health and safety risks associated with the documented increased numbers of disconnections for nonpayment that are expected to occur under a remote disconnection environment; and (5) a troubling nonchalance from the Company about the need to acknowledge and minimize these health and safety risks.

Cross Ex. 1 is the Company's response to an AG data request in which the Company was asked to detail the current notice and operational steps ComEd takes when it disconnects a customer for nonpayment. According to that response, customers who do not pay their bills on time receive a proactive telephone call reminding them of the need to make payment. *Tr.* at 107-108. If no payment is received by ComEd after a certain amount of time, ComEd sends those customers a disconnection notice. *Tr.* at 108. The customer then receives a remote, automated

“field notification call” to notify them that a disconnection order is pending. *Id.* Assuming payment still is not received by ComEd, the revenue management department issues an order to disconnect the customer and sends it to the Field and Meter Services department. *Id.* at 109. Cross Ex. 1 states that the field technician verifies the correct address and, “upon entering the premises, announces his or her presence.” *Id.* Mr. O’Toole clarified that this language reflects a field technician walking onto a customer’s property, but was unclear as to what “announcing his or her presence” specifically referred. He clarified, however, that it this “announcement” of sorts is not a door knock or an attempt at actual customer contact at the time of disconnection. *Tr.* at 110.

The important consumer protection justifications for the current rule are set forth in the record of the pending Part 280 rulemaking docket, Docket 06-0703, and await both a Proposed Order and Commission action. Until that Order is issued, it is imperative to direct ComEd to include a premises visit and in-person customer notification at the time of disconnections for nonpayment in any AMI Plan approved by the Commission, similar to the procedures followed by Ameren. To be clear, ComEd should be permitted to utilize the remote disconnect technology. But the need to retain an on-site customer contact attempt at the time of disconnection remains critical to ensuring the health and safety of ComEd’s most vulnerable customers.

AG/AARP witness Sandel, a Boston-based physician, public health specialist, Associate Professor in Pediatrics and Environmental Health at the Boston University School of Medicine and interim executive director of the National Center for Medical Legal Partnership, testified that remote disconnection capability inherent in AMI presents multiple health and safety challenges for ComEd’s most vulnerable customers. The foundation for much of Dr. Sandel’s testimony is a report called the “Health Impact Assessment (“HIA”) of the ComEd AMI Deployment” (“ComEd AMI HIA”), which was conducted between July 2010 and April 2012 to examine the potential health impacts of AMI deployment based on the ComEd pilot. AG/AARP Ex. 2.0, 2.3.

The chief findings and recommendations of Dr. Sandel’s testimony regarding the ComEd AMI HIA pertain to the consumer protections related to residential electrical service, the need for monitoring of service status and costs for certain groups of households, and consumer education, as well as her own observations as a medical doctor and public health expert on the potential negative impacts of increased disconnections and homelessness associated with ComEd’s proposed remote disconnection practices in its AMI Plan.

Dr. Sandel described how the most vulnerable customers in ComEd’s service territory – the elderly, children under the age of five, people with chronic disabling conditions, the socially isolated, and people for whom English is a second language – will be impacted by the implementation of AMI, particularly in connection with the remote disconnection capabilities inherent in AMI technology through the use of smart meters. She offered her opinion, as a medical professional, regarding the increased risks of unintentional injury and premature death that would result from ComEd’s proposed use of AMI technology for remote disconnection for nonpayment, and how

these risks are amplified as a result of the increased pace of disconnections and the elimination of in-person contacts that ComEd anticipates will be part of AMI.

Dr. Sandel reported that the HIA found that AMI deployment has four major negative health implications for the subgroup of customers that were the subject of the study. Specifically, AMI will impact vulnerable populations in ComEd's service territory through:

- Unintentional injuries and premature deaths from disconnected service;
- Fuel poverty from higher electricity costs;
- Temperature-sensitive conditions made worse by exposure to heat or cold; and
- Health impacts related to the AMI technology itself.

AARP/AG Ex. 2.1. Dr. Sandel identified the dangers of remote disconnection as having the most significant negative health implications for ComEd's customers. The ComEd AMI HIA report estimates that electrically powered medical devices such as nebulizers and sleep apnea machines are used by an estimated 20% of the low-income households in ComEd's service territory. AARP/AG Ex. 2.0 at 30. Any policy that renders medically necessary equipment inoperative turns nonpayment into a life-or-death situation for the affected customer, especially if it is to be carried out without regard to consumer protections regarding advance notification and in-person contact with the customers.

A more common but no less dangerous potential by-product of remote disconnection is the negative health impact resulting from the use of alternative, risky sources for heating and light, or from the deprivation of all energy sources. The use of candles for light and cook stoves and portable non-electric space heaters (especially unvented models) for heat are linked to increased incidents of asthma, fires, neurological disorders and even death. AARP/AG Ex. 2.0 at 31.

Finally, the health impacts related to temperature-sensitive conditions made worse by exposure to heat or cold are not insignificant. Sandel testified that remote disconnection (as well as under-consumption of electric energy due to financial constraints) can expose at-risk individuals to temperature extremes that can result in illness, hospitalization or premature death related to hyperthermia (heat exposure), hypothermia (cold exposure), or the aggravation of existing health conditions that are temperature-sensitive. AARP/AG Ex. 2.0 at 32.

The ComEd AMI HIA makes five recommendations for Commission action with respect to AMI deployment:

1. Analyze proposed terms of deployment with respect to clearly defined groups and at-risk customers, including analysis of the likely impacts on health and safety.
2. Proposed cost recovery from electric customers should link benefits and costs for vulnerable customers specifically, in addition to linking benefits that are documented and realized for all customers.

3. Proposed time-based pricing programs for AMI should offer incentives for vulnerable households to optimize their use of electricity from the perspectives of health as well as of energy efficiency.
4. The remote connection and disconnection functionality of AMI, especially in the case of involuntary loss of service for nonpayment, must be deployed to promote and not endanger the health and safety of vulnerable customers.
5. Any AMI deployment and programs that seek customer engagement to make use of the new metering and communication system should be accompanied by robust consumer education and outreach to customers to obtain their awareness of and participation in approved programs.

According to the AG, the record is replete with the potential public health and safety concerns that remote disconnect technology brings to ComEd's service territory. It is undisputed that under a post-AMI environment, the number of disconnections for nonpayment will rise significantly. See ComEd Ex. 6.02 at 4-8. ComEd is literally banking on it. For example, the B&V cost/benefit analysis assumes a reduction in bad debt of \$695 million over a 20-year period. *Id.* The AG asserts that the Commission must direct ComEd to take the necessary steps to minimize the health and safety impacts associated with remote disconnection by (1) ordering ComEd to immediately begin complying with Part 280.130(d) and incorporate a site visit and door knock customer notification requirement to its current disconnection for nonpayment procedures.

As noted by AG/AARP witness Alexander, Illinois would not be the first state to require that a utility deploying AMI retain a customer site visit at the time of disconnections for nonpayment. Several states have rejected proposals to eliminate important consumer protections associated with disconnection of service for nonpayment for residential customers in the context of considering AMI deployment and the use of the remote disconnection functionality of this system for both pilots and full scale deployment, including New York, Ohio and Maryland. AG/AARP Ex. 1.0 at 15-17. These states, Ms. Alexander reported, have rejected proposals to eliminate these consumer protections even though such rejection has resulted in lower savings associated with AMI on the grounds that the disconnection of residential customers may result in dangerous health and safety conditions due to the loss of essential electricity service. Indeed, the very foundation of the current consumer protection rules is the notion that disconnection of electricity carries important health and safety consequences.

### **3. Staff's Position**

Staff asserts that because 83 Ill. Adm. Code 280.130(d) is couched in terms that require a site visit before disconnecting service for non-payment, Dr. Brightwell also examined the cost-benefit analysis under the assumption that a site visit would be required to disconnect customers for non-payment as well. *Id.* at 7. Dr. Brightwell was unable to determine exactly the benefits that result from this capability of the AMI meters, but was able to determine that the Plan was cost-beneficial even with a required site visit. *Id.* at 7-8. He determined that the total benefits for Field and Meter Services

were calculated as \$319 million; remote connect/disconnect capability was a subset of those benefits. Id. at 7-8. Since total benefits of the Plan are \$1.2 billion, it must be the case that the Plan is cost-beneficial even if a site visit is required to disconnect service for non-payment. Id. at 8.

#### **4. Commission Analysis and Conclusion**

Although AARP insists that ComEd is in violation of the Commission rules regarding disconnection, the Commission finds that this docket is not the right place to make such a finding. If ComEd is violating the Commission's rules, that is a subject to be explored in a citation proceeding. For the purposes of this docket, it is clear that the additional cost of performing a "door knock," as ComEd defines this, does not on its own cause the AMI Plan to fail the EIMA's cost/beneficial requirement.

Prior to the advent of AMI, ComEd has been limited in making disconnections by the number of available technicians and trucks, the time it took to go to the customer premises, and the ability to access customer meters. With AMI, ComEd will have the capacity to remotely disconnect and reconnect its customers without a premises visit. When specifically addressing the issue of disconnection for non-payment, however, there may be separate policy reasons to be considered. The Commission believes this ability to make remote disconnections can have significant benefits to ComEd and its customers when used for purposes other than non-payment. Nevertheless, the flip side is the potential negative impact on customers caused by increased disconnections for non-payment of vulnerable customers. The Commission observes that there is currently pending a Part 280 rulemaking which is addressing, among other issues, the disconnection provisions of the applicable administrative code. However, the Commission also notes that this rulemaking will not be completed for some time and an implementation period may be required after adoption. In the interim, it is the opinion of the Commission that ComEd must comply with the Part 280 rules in effect regarding the notice that must be given to customers prior to disconnection.

The City's proposal regarding the increased disconnection assistance is helpful in targeting the dissemination of information and resources to economically vulnerable customers, and may prevent some customers from getting to the point of actually being disconnected which is a beneficial function. However, there will still be customers who get to the stage of actually facing disconnection, and the City's proposal does not provide the critical contact for those customers. The Commission must therefore also consider its duty to provide adequate safeguards for customers who actually get to the point of disconnection. The Commission takes note that disconnections that render medically necessary equipment inoperative can turn non-payment into a life-or-death situation for the affected customer. This is more serious if it is to be carried out without regard to consumer protections regarding advanced notification and in-person contact with the customer. More common, but no less dangerous, potential by-products of remote disconnection for non-payment are the negative health and safety impacts that can result from the use of alternative, risky sources for heating and light, or from the deprivation of all energy sources. Overall, the Commission is confident that the Part 280 rulemaking will conduct the appropriate and lawful review of all the issues and arguments related to this important provision.

Consistent with the Commission's determination in ComEd's AMI Pilot Program, Docket No. 09-0263, and most recently Docket No. 12-0089, the Commission agrees with AG/AARP that remote disconnection should occur in a manner that is compliant with current rules. The Commission wishes to make clear that in cases of disconnection for non-payment regardless of the technical capabilities of a meter, the on-site contact and premises visit shall be retained, given the existing language of Section 280.130(d). The Commission continues to believe that Section 280.130(d) is an important consumer protection that can prevent dangerous health and safety conditions due to the loss of essential electricity service. At the present time, this Section requires notice at a premises prior to disconnection for non-payment. As noted earlier, the Part 280 rulemaking is in progress. During the period of time until completion of that rulemaking process, ComEd is required to be in compliance with the existing Section 280.130(d) as it implements this Commission-approved AMI Plan.

## **VII. Authority to Modify**

### **1. City**

ComEd's brief focuses on the narrow statutory requirements of section 16 108.6 of the Public Utilities Act ("PUA"). 220 ILCS 5/1-101 et seq. Staff's recommended approval of ComEd's AMI Plan is based on a similar review of the plan. The customer representatives, including the City, focused on the Commission's authority to modify ComEd's filing and on proposed modifications. They explained the need for changes in some areas and suggested ways ComEd's AMI Plan can be improved to achieve the objectives of section 16-108.6. In most instances, the findings and legal conclusions of other parties are consistent with, and often support, the AMI Plan modifications recommended by the City.

ComEd's position is that its AMI Plan, as amended in its rebuttal testimony, meets the minimum statutory requirements and, therefore, must be approved. The City does not challenge ComEd's assertion that its Plan complies with those threshold requirements. The City, however, is focused on further advancing the statutory and Commission objectives respecting AMI deployment and on the customer benefits to be gained if the City's recommended modifications are adopted. ComEd supports these objectives.

The first substantive sentence of ComEd's brief succinctly describes the pertinent objective – capturing the potential benefits of this new technology for customers. In its brief, ComEd stated "The General Assembly recognized the huge potential benefits to customers and society of an Advanced Metering Infrastructure ('AMI')." ComEd Br. at 1. The first paragraph of the AMI Plan's Vision Statement (reproduced at page 3 of ComEd's Brief) focuses on how such benefits could be achieved through AMI infrastructure. There, ComEd stated "The network of advanced meters and communication systems can collect and distribute timely and accurate information to customers and other parties, expanding customer choice, empowering customers to take advantage of new, energy and money saving technologies." Id. at 3.

The Commission has spoken similarly about achieving maximum customer benefits from AMI and Smart Grid deployments. The Commission has even raised the

possibility of the possibility of initiating regulatory proceedings (if necessary) “to consider any appropriate actions to take in order to ensure the full realization of the consumer, environmental and societal benefits of the aforementioned grid modernization programs.” Final Order, Docket 11 0772, Apr. 4, 2012 at 29. The City’s recommended changes to ComEd’s AMI Plan are calculated to make it more likely that those goals are met, by being able to capture -- fully -- the potential benefits of smart meters and other AMI infrastructure.

The City agrees with the well-supported interpretation of PUA section 16 108.6 articulated in the brief of CUB/ELPC. CUB/ELPC Br. at 5-6. That interpretation of the statute supports broad Commission authority to modify the AMI Plan. Such authority is consistent with actual achievement of the goals articulated in section 16-108.6 and with the Commission policy aims described above. In this proceeding, the Commission can advance its stated policy that AMI and Smart Grid deployments be designed to maximize customer benefits.

CUB/ELPC argue that already “the ICC has proactively taken on its proper role to maximize benefits from Smart Grid investments.” Id. at 6. CUB/ELPC point to the portion of the Commission’s Order in Docket 11-0772, where, when considering the performance measurements at issue in this case, the Commission stated that it “strongly encourage[s] all parties to work together to find ways to ensure that customers receive the maximum benefits of the proposed investments.” Final Order, Docket 11 0772, Apr. 4, 2012 at 29. The legislative objectives support broad Commission authority, in “approving or approving with modification” ComEd’s proposed AMI Plan, to achieve the statutory goals. Consistently, several parties propose that the Commission modify ComEd’s proposed AMI Plan to increase, and to make more likely, the potential AMI benefits realized by ComEd customers.

The City, the Illinois Attorney General (the “AG”), and CUB/ELPC also conclude that the Commission has continuing authority to make further changes in the AMI Plan. Indeed, the purpose of the performance measurements ComEd accepted as amendments to the AMI Plan is to identify changes needed to improve realization of customer benefits. Reviewing AMI plans under a new statute is a novel task for the Commission. There should be no expectation that all implementation issues (and the answers) will be identified in advance of the first implementation step. The Commission has reached the same conclusion about its authority and stated its readiness to exercise that authority to make changes where required.

## **2. CUB/ELPC**

ComEd’s AMI Plan, even as modified, should not be understood to be complete and sufficient for the life of the AMI deployment. CUB/ELPC Ex. 1.0 REV. at 21. Smart grid deployment and its resulting benefits is an area of evolving interest – one where changing technology, market characteristics, regulatory requirements, emerging applications and locally unique conditions will continue to shape the landscape in real time. Therefore, the approval of this plan should be seen as the beginning, not the end, of the Commission’s involvement and interest in ComEd’s smart grid deployment. The types of tracking measures agreed to by ComEd will help facilitate annual reviews and stakeholder discussions which can continue to develop and refine trackers for smart

grid functions as the salience of the various functions, and the particular challenges relevant in ComEd's service territory, become clear over time. *Id.*

### **3. Commission Analysis and Conclusion**

The EIMA's requirement of an AMI Plan is not as limited as ComEd would have the Commission find. When taken as a whole and as modified herein, ComEd's plan can be approved. As modified, it is a Smart Grid Advanced Metering Infrastructure Deployment Plan, with a strategy that is consistent with developing a cost-beneficial Smart Grid, which enhances and enables customers' ability to take advantage of Smart Grid functions with metrics that enhance consumer benefits and avoid possible harm from Smart Grid AMI deployment.

The EIMA specifically allows the Commission to modify the AMI Plan. The modifications contained herein further the statute's goal to bring the benefits of smart grid to the People of Illinois and to also monitor the effect of these new technologies on the State's most vulnerable residents. Without monitoring, there would be no basis for action in the future, if needed. The Commission retains jurisdiction over this AMI Plan and the ability to modify it in the future to ensure that the benefits continue. Not only to be satisfied that ComEd will do what it says it will do here, but also that AMI is deployed consistent with evolving Smart Grid principles over time.

A modified AMI Plan as described herein must be filed within 21 days of Commission adoption of this Order.

### **VIII. Findings and Ordering Paragraphs**

The Commission, having reviewed the entire record, is of the opinion and finds that:

- (1) Commonwealth Edison Company is an Illinois corporation engaged in the transmission, sale, and distribution of electricity to the public in Illinois, and is a public utility as defined in Section 3-105 of the Act;
- (2) the Commission has jurisdiction over Commonwealth Edison Company and the subject matter herein;
- (3) the facts recited and conclusions reached in the prefatory portion of this Order are supported by the record and are hereby adopted as findings of fact;
- (4) on April 23, 2012, Commonwealth Edison Company filed with the Commission its Smart Grid Advanced Metering Infrastructure Deployment Plan after consultation with the Council and after the evaluation report in the Commission-approved AMI Pilot Program had been issued, consistent with Section 16-108.6(c) of the Act;
- (5) the AMI Plan meets the statutory requirements of a Smart Grid strategy and is cost-beneficial under Section 16-108(c) of the Act, and the AMI Plan is approved conditioned on inclusion of the modifications as set forth in this Order;



- (6) Commonwealth Edison should file a modified AMI Plan within 21 days of the date of this Order.

IT IS THEREFORE ORDERED by the Illinois Commerce Commission that Commonwealth Edison Company's Smart Grid Advanced Metering Infrastructure Deployment Plan as modified herein, complies with the requirements of Section 16-108.6 of the Act and is hereby approved.

IT IS FURTHER ORDERED that Commonwealth Edison is directed to file a modified AMI Plan with 21 days of this Order.

IT IS FURTHER ORDERED that all motions, petitions, objections, and other matters in this proceeding which remain unresolved are to be disposed of in a manner consistent with the conclusions herein.

IT IS FURTHER ORDERED that, subject to the provisions of Section 10-113 of the Public Utilities Act and 83 Ill. Adm. Code 200.880, this Order is final; it is not subject to the Administrative Review Law.

By Order of the Commission this 22<sup>nd</sup> day of June, 2012.

(SIGNED) DOUGLAS P. SCOTT

Chairman