

STATE OF ILLINOIS  
ILLINOIS COMMERCE COMMISSION

*Next Grid: Illinois' Utility Of The Future Study*

**COMMENTS OF THE PEOPLE OF THE STATE OF ILLINOIS**  
**ON THE DECEMBER 14, 2018 DRAFT REPORT**

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The People of the State of Illinois, by Attorney General Lisa Madigan<sup>1</sup> (“the People”), submit the following comments on the December 14, 2018 Draft Report addressing “Next Grid: Illinois’ Utility of the Future.” The People will limit their comments to a discussion of the NextGrid process and the findings in “Section 8. Concluding Remarks,” at pages 209-211 of the Draft Report.

## **I. INTRODUCTION**

The Draft Report’s Concluding Remarks note the importance of the electric grid, and that cannot be denied. Modern society is deeply dependent on readily available and affordable electricity to power the most humble residence to massive industrial and manufacturing plants. The current grid has been the subject of billions of dollars of upgrades and modernization in the last seven years since the enactment of the Energy Infrastructure Modernization Act, 220 ILCS 5/16-108.5, as discussed in the introductory section of the Draft Report. There has not been any suggestion that the electric grid in Illinois is inadequate.

Over the last decade, utility customers have been asked to play a significantly greater role in paying for the costs of reducing greenhouse gas emissions in the delivery of utility service through new Zero Emission Credit (“ZEC”) payments, as well as the renewable energy portfolio, solar energy subsidy programs and energy efficiency requirements. As the Draft Report aptly notes:

The goals of delivering safe and reliable utility service at rates that “are affordable and therefore preserve the availability of such services to all citizens,” have evolved to include environmental protection, i.e., to reduce pollution and carbon dioxide emissions.

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<sup>1</sup> The Illinois Attorney General’s Office (“AG”) represents the People of the State of Illinois as a matter of right in all utility-related proceedings before the Illinois Commerce Commission (“ICC” or “the Commission”), Illinois courts and other public bodies. 15 ILCS 205/6.5. As a participant in the ICC’s NextGrid Study (“the Report”), the AG contributed to Working Group meetings through discussion, submitted subject matter presentations and the provided comments on draft chapters of the Report.

In addition, the Illinois General Assembly has directed that the ICC “should act to promote the development of an effectively competitive electricity market that operates efficiently and is equitable to all consumers,” and that the state should “encourage the adoption and deployment of cost-effective distributed energy resource technologies and devices”

Draft Report at 110-11. Accordingly, while the cost of utility-provided energy supply has remained relatively low compared to other parts of the country, the cost of electric delivery service has risen steadily since the General Assembly enacted formula ratemaking for electric utilities. 220 ILCS 5/16-108.5.

The utilities’ role in transforming the electric grid must not be evaluated in a vacuum; non-utility, private market participants, who have provided multiple business models for various technologies, must be permitted to weigh in on their role in future grid development and clean energy initiatives to ensure that utility rates are not inflated unnecessarily and the risks and benefits of development are managed by the private sector to the extent possible. Any discussion of expanding the public utilities’ role in Illinois’ societal de-carbonization efforts must examine the costs and benefits of that new investment, and whether monopoly utility rates are the appropriate vehicle for subsidizing those costs. The General Assembly has made clear the obligation that utility rates remain affordable.<sup>2</sup> The affordability of essential utility service should be paramount in any discussion of expanding the utility ratepayer’s role in decarbonizing the electric grid.

As discussed further below, the NextGrid process did not include any examination of costs and benefits of particular investments discussed in the Working Groups, an omission the authors acknowledge in the Draft Report. Yet, the Draft Report goes on to include specific

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<sup>2</sup> A utility’s obligations include the obligation that “the rates for utility services are affordable and therefore *preserve the availability of such services to all citizens.*” (220 ILCS 5/1-102(d)(viii)) (emphasis added).

policy recommendations related to electric vehicle (“EV”) charging stations, battery storage and the need for cybersecurity/customer data protections. Given this critical omission in the NextGrid process, the inclusion of “Conclusions” and “Recommendations” must be limited to areas of further study – not specific endorsements of utility actions or investments.

## **II. NEXT GRID PROCESS**

### **A. The Final Report should make clear that the General Assembly and other Policy Makers should not rely on the NextGrid Final Report as their sole basis for making policy decisions.**

By design the NextGrid process was not meant to produce consensus conclusions, directives or a roadmap for policy makers. The NextGrid Draft Report itself states that “The ICC emphasized that its goal was not to drive stakeholders to reach consensus on the many emerging electricity issues facing Illinois.” Draft Report at 1. The Report also notes that “The NextGrid study scope did not include the investigation of the projected costs and benefits of grid modernization investment strategies. A thorough examination of costs and benefits of each proposed initiative is an integral and essential element of its consideration by policy makers and stakeholders as part of the future grid modernization efforts.” Draft Report at 2. Of course, any examination of the utility’s role in enabling grid modernization and desired carbon reduction initiatives must be weighed in light of verified data that present the costs and benefits of utility investment in various technologies and infrastructure investments. Given this critical omission in the NextGrid process, the inclusion of “Conclusions” and “Recommendations” must be limited to areas of further study – not specific endorsements of utility actions or investments.

According to the Draft Report, the Commission’s objectives were to “develop a common knowledge base about grid modernization; identify key issues, challenges and opportunities; explore legal, policy, market-based and technological options for further grid modernization

efforts; focus on how potential changes may impact customers, markets, communities and the utilities who serve them.” *Id.*

As the Draft Report notes, the ICC NextGrid organizers and the University of Illinois at Urbana-Champaign (“UIUC”) identified seven key topics to explore within the scope of the NextGrid study. The identified topics were:

- New Technology Deployment and Grid Integration
- Metering, Communications and Data
- Reliability, Resiliency and Security
- Customer and Community Participation
- Electricity Markets
- Regulatory, Environmental and Policy Issues
- Ratemaking

As noted at page 19 of the Draft Report, each of these working groups met, on average, on four occasions. Working groups provided for only limited discussions, as much of the limited time allotted to each working group was devoted primarily to presentations from invited speakers. Although some interesting discussions took place, there was often little time for questions in response to the presentations, or revisiting presentations at subsequent meetings.

In addition, group discussions were conducted under the “Chatham House Rule” that provides anonymity to speakers. While the Draft Report asserts that this policy would encourage open exchange of views, the OAG believes it instead provides readers of the Report with little insight into the opinions expressed and recorded in this report. For example, if there were participants who believed utilities should play a role in the installation of electric vehicle charging stations, was that point of view presented by the utilities, which have a financial interest

in expanding their rate base investments?<sup>3</sup> The readers of the NextGrid report will never know. In that regard, a summation of viewpoints that emerged on any given topic is incomplete and needs to be subject to further analysis.

### **III. COMMENTS ON THE DRAFT REPORTS CONCLUSIONS AND RECOMMENDATIONS.**

#### **A. Conclusions and Recommendations included in the Final Report should be more limited in scope because the Next Grid process did not meaningfully analyze the costs or benefits to ratepayers and commercial interest of any particular technology or project.**

While microgrids, electric vehicles and other emerging technologies were discussed in the context of utility company investment, the financial impact of these investments on ratepayers, and how such investments impacted overall affordability of essential utility service, was not documented or analyzed in an objective way. Further, there was no real discussion about how the increased costs associated with some of the initiatives would affect the competitiveness of Illinois customers and employers in national and world markets.

The Draft Report notes, “[a] thorough examination of costs and benefits of each proposed initiative is an integral and essential element of its consideration by policy makers and stakeholders as part of the future grid modernization efforts.” Draft Report at 2. Of course, any examination of the utility’s role in enabling grid modernization and desired carbon reduction initiatives must be weighed in light of verified data that present the costs and benefits of utility investment in various technologies and infrastructure investments. Given this critical omission in the NextGrid process, the inclusion of “Conclusions” and “Recommendations” must be

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<sup>3</sup> A utility’s revenue requirement is set using the following formula: Revenue requirement = Operating Expenses + (Rate Base) x (Rate of Return). Accordingly, given the fact that rates are set using a revenue requirement formula that applies a rate of return (profit) on a utility’s rate base (investment), a utility has a financial interest in “growing” its rate base.

limited to areas of further study – not specific endorsements of utility actions or investments. The Draft Report, however, goes beyond such recommendations. Specifically, conclusions include:

*There is very broad interest in active participation to mitigate climate change impacts in every possible way.*

Draft Report at 212. While it is safe to say that all participants are interested in ensuring that utility customers have access to renewable energy, energy efficiency programs and reducing greenhouse gas emissions, the reference to “every possible way” suggests a policy approach that disregards serious cost/benefit analysis. This conclusion should be modified to eliminate the “every possible way” verbiage.

The Draft Report further provides:

*There is broad interest in adopting advances in technology to make the grids smarter, to deploy more sensors to improve visibility and situational awareness, to deploy analytics and data with finer granularity to provide enhanced information and to extend the benefits of cleaner and environmentally sensitive electricity by various electrification targets.*

Draft Report at 212. This conclusion is not supported by any reference to a particular Working Group or topic. Here again, its vagueness is troubling for a variety of reasons. First, the reference to “broad interest” is undefined. Given the Chatham Rule policy in place at the Working Group meetings and the implications of not assessing costs associated with “adopting advances in technology,” any claim of “broad interest” rings hollow. As the State of Illinois’ statutory representative of utility consumer interests, the OAG is troubled by such a conclusion. It should be stricken from the Report.

The Draft Report further states:

*Many stakeholders are clamoring for more customer education and training to take advantage of what the modernized grid offers. Indeed, it is clear that many stakeholders are keenly interested in the provision of help to customers to use technology to transform energy into creation of new opportunities.*

Draft Report at 212. Here again, while it may seem intuitive that utility customers are interested in more customer education and training in technology uses, the lack of data to support this conclusion, again, argues against the inclusion of such summary statements in the Report. Data from Ameren and ComEd indicate just the opposite – that a low percentage of customers have subscribed to hourly pricing programs and real-time usage data access. So again, to the extent that policymakers see an assertion that “many stakeholders are clamoring for more customer education and training” without data that supports such an assessment or the identification of said stakeholders, the OAG believes such statements are not an appropriate reflection of the meetings and comments that took place. This conclusion should be stricken from the report.

A conclusion that the OAG enthusiastically supports highlights the importance of further analysis by policy makers *before* new policies for the State are created. The Draft Report states:

*The discussions held by every WG made clear that there are many known unknowns in addition to the unknown unknowns. In virtually every topic area, further studies and investigations need to be undertaken before Illinois is ready to embark on a specific course of action. Indeed, for each issue there is a need for careful and detailed planning of a systematic effort to perform the associated work after the necessary steps are taken to gather the needed knowledge and Illinois-centric information ahead of the selection of a specific approach.*

Draft Report at 213. This recognition that in “virtually every topic area, further studies and investigations need to be undertaken before Illinois is ready to embark on a specific course of

action” is contradicted later in the Report when specific recommendations are provided for three subject areas: electric vehicle (“EV”)-charging infrastructure, the deployment of energy storage resources (“ESRs” – commonly referred to as “batteries”), and customer privacy considerations. As discussed below, these conclusions should be reconsidered and modified in light of the above-referenced limitations in the NextGrid process.

## **B. Specific Recommendations Contained in the Draft Report**

### **1. EV-Charging Infrastructure**

#### **Illinois Policies Concerning Electric Vehicle Charging Infrastructure Are Evolving and Must Recognize The Important Role of the Private Sector and Markets.**

The Concluding Remarks assert that “lack of an adequate EV-charging infrastructure” is a major causal factor in the slow growth in EV sales. However, notwithstanding that assertion, the Draft Report notes that “90% of EV-charging is currently done at home and at work,” calling into question the need for extensive public EV-charging infrastructure. *See* Draft Report at 40.

The Concluding Remarks correctly recognize that “there are many questions to be answered as to the mechanism under which the infrastructure is to be created, impacts on electric rates and the role of utilities.” Draft Report at 210. In assessing these questions, it should be noted, as of December 31, 2017, electric vehicles and electric plug-in hybrid vehicles represented only 0.14% of registered vehicles that in Illinois (15,548 out of 11 million registrations). *See* page 40 of the Draft Report. Further, “the uncomfortable fact of America's early EV adopters is that they skew wealthy. EVs are still more expensive than equivalent gas cars.”<sup>4</sup>

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<sup>4</sup> See <https://www.eenews.net/stories/1060102493>

As noted earlier in these Comments, utilities provide an essential service that must be universally available at affordable prices. If utilities invest in EV-charging infrastructure to incent EV adoption, the result would be that all customers, including low-income and payment-challenged customers, pay for infrastructure that today only the more wealthy consumers use. Moreover, the Draft Report's apparent promotion of a utility role in investing in charging stations fails to assess whether there is, in fact, a need for utility involvement in charging station installation.

The Concluding Remarks should recognize the innovation already being demonstrated by non-utility, private market participants, who have provided multiple business models for EV-charging. The WG-1 Draft Report understates private sector, non-utility activity in providing EV charging service to those customers who want it, and the Concluding Remarks similarly do not recognize the extent of private sector activity.<sup>5</sup>

Currently, non-utility charging options include at least six major options, with EV-owners and EV-charging stations having several sub-options ranging from the type of charge (level 1, 2 or 3) and the fee model (free, subsidized or fee).

1. Home charging using standard service (level 1) or an upgraded outlet (level 2).
2. Charging at businesses at level 1, 2 or 3, free for employees or customers or at a charge;
3. Private charging sponsored by companies such as EVgo or ChargePoint for a fee;
4. Municipal or other public entity charging stations (free, subsidized, or for a fee)
5. Parking lot charging (free, subsidized, or for a fee).
6. Car dealership charging (often free).

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<sup>5</sup> The Draft Report at page 41 includes the following statement, which is repeated in part in the Concluding Remarks at page 210: "So the answer, in part, depends on one's view of the state regulation role in advancing transportation electrification and addressing this 'chicken and egg' dilemma, *especially considering the lack of a working business model for private companies to offer public charging services directly to drivers.* This uncertainty has resulted in a lack of private investment in public charging infrastructure." (Italics added.)

The range of private market EV-charging options should inform policymakers' consideration of the utility's role both to protect and enhance the private market and to assure that utility customers are not asked to subsidize the cost of EV-charging when it can be done effectively by the private market.

Finally, the Concluding Remarks tie the growth of EVs to eliminating "polluting fossil-fuel internal combustion engine vehicles." The elimination of fossil fuel pollution applies to both transportation and generation. The value of shifting traffic from fossil fuels and onto the electric grid requires the recognition that in Illinois about 40% of our energy comes from fossil fuels.<sup>6</sup> Thus, expanded transportation electrification should be preceded by the reduction in the use of fossil fuels for electricity if the goal is to eliminate fossil fuel pollution. In short, the goal of increased electrification in the transportation sector must be informed by an examination of the sources of energy production used to create the increased electric usage. No such assessment was included in the Draft Report. As such, the conclusion should not form a basis for policy change.

## **2. Energy Storage Resources or ESRs**

### **The Call for Legislation on ESR's Is Premature and Inconsistent With the Lack of Consensus that Characterizes the Draft Report.**

The Concluding Remarks appear to suggest adoption of a "mandate for the installation of ESRs" and note the need for "considerable efforts to appraise legislators of the significance of such a legislative initiative and its ramifications." Draft Report at 211. The Draft Report repeatedly notes that there was no consensus on issues, and the conclusion to promote legislation is inconsistent with that conclusion. The Draft Report states that "Illinois is in an excellent

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<sup>6</sup> See EIA State Electricity Profile-Illinois, available at <https://www.eia.gov/electricity/state/illinois/>

position to exert a big push on storage to create sizeable reduction in the price of technology.”

*Id.* As there is no consensus on how that would be done or who the appropriate owners of the technology should be or what specific technology should be advanced, a call for legislation on ESRs is premature and should be deleted from the Final Report.

**The Incorporation of Energy Storage On The Grid Should Utilize Private Investment and Interconnection to the Grid to the Maximum Extent Possible and Provide Appropriate Treatment for Battery Storage of all Sizes.**

To the extent that the Draft Report addresses energy storage, it should recognize that private investors, generators, and developers as well as the national energy laboratories such as Argonne National Lab, are currently addressing how to develop energy storage technologies and incorporate energy storage into the grid. In order to facilitate those efforts, open, low-cost, and predictable interconnection rules are critical. Yet the Concluding Remarks do not mention the role of the private (non-utility) sector and the need for coordination with the utilities that own the grid. The Concluding Remarks should be modified to recognize the role of the private sector in ESRs.

In addition, Section 4.9 of the Draft Report discusses Electric Energy Storage (Thermal, Battery) and notes the wide range of issues and challenges presented by batteries (including disposal of used batteries, regulatory categories, the role in the distribution system). Draft Report at 129. The discussion also refers to the large range of battery sizes and uses, such as utility scale batteries to complement intermittent renewable resources and small, on-premises batteries that may lead customers to disconnect from the grid. The Concluding Remarks should include a recognition of the range of issues arising from ESRs and refrain from suggesting unspecified legislative action. At most, the Concluding Remarks should simply highlight the many issues raised by this new technology, the role that non-utility actors are playing, and the

need for utilities to adopt policies, such as interconnection policies, that remove barriers and encourage development. Accordingly, the Draft Report's call for legislative action on ESRS is premature and should be stricken.

### 3. Cybersecurity/Customer Data Privacy

#### **The Utility's Obligation to Serve Includes the Protection of Consumer Data Privacy and the Associated Costs of Data Protection Should Be Accounted For in "Smart Grid" Costs.**

"Today, the provision of metering information collection and storage is a service that falls within the definition of *utility service* under Article III of the PUA" with associated costs recovered from all customers through existing rate structures. Draft Report at 57 (emphasis in original). The Draft Report details the many ways in which customer usage data is already being utilized by utility companies: to improve customer service and operations, to detect customer outages, to identify potential theft and reduce unaccounted for energy, to implement demand-side management programs, and to support energy conservation. Draft Report at 55. Smart meter or interval data is therefore an integral component of existing utility infrastructure, financed in large part by the billions of dollars collected from ratepayers over the last seven years through the Energy Infrastructure Modernization Act, 220 ILCS 5/16-108.5. The utility's obligation to protect customers' privacy interests in that data is a concomitant duty under Illinois law. *See* 220 ILCS 5/16-122.

The collection, storage and protection of usage data has always been part of the utility's responsibility to serve its customers and the introduction of smart technologies has not changed that obligation. In fact, as the Draft Report notes, smart grid infrastructure was implemented based on the assumption that the collection of such data was essential to the operation of advanced infrastructure: "[t]he utility communications and controls networks put the 'smart' in

“smart grid.” Draft Report at 60. The Draft Report’s description of future potential uses for data, such as to enable the deployment of DER assets and to serve the marketing needs of retail energy service providers, would necessarily require the collection more data, more granular data and more data reflecting shorter time period of consumption. These increased capabilities would likely require increased investment in network communications even while the new functions serve only a small number of customers.

In spite of the long-standing and on-going obligation to collect and secure customer usage data, the Draft Report’s Concluding Remarks recognize that “...the security of the data collected by smart meters in the AMI can become a new problem that may pose safety issues for a residential customer in case a hacker is able to monitor the residential customer meter data.” Draft Report at 211. The Draft Report also notes that the proliferation of uses for this data will increase system costs. Draft Report at 57. What the Concluding Remarks should draw from its observations on data access is that utilities’ obligation to protect customer data is on-going and the associated costs of that obligation have been accounted for with the vastly increased funding provided to utilities through EIMA. The improved technologies made possible through the EIMA legislation have been designed to enhance utility capabilities to manage and protect customer data, including securing the data from large-scale hacking events. Any analysis of increased costs to address long-standing utility obligations should begin with an assessment of funding already provided as part of Smart Grid investments, including an honest study of what entities will benefit from funding already provided to the utilities, so as to protect not only customer interests in data privacy, but customer interests in minimizing the costs of well-established utility obligations in data collection, maintenance and protection.

**IV. CONCLUSION**

WHEREFORE, the People urge the NextGrid authors to modify their Draft Report consistent with the recommendations provided in these Comments.

Respectfully submitted,

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By: \_\_\_\_\_/s/\_\_\_\_\_

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