STATE OF MAINE
PUBLIC UTILITIES COMMISSION

Docket No. 2016-00049

December 15, 2017

PUBLIC UTILITIES COMMISSION
Investigation into the Designation of Non-Transmission Alternative (NTA) Coordinator

ORDER

VANNOY, Chairman; WILLIAMSON and DAVIS, Commissioners

I. SUMMARY

This Investigation was opened to (1) define the role of a Non-Transmission (NTA) Coordinator, (2) develop related processes to procure the NTA services, and (3) determine whether the designation of a NTA Coordinator is in the public interest. The Commission finds that, because the processes required to accommodate the NTA Coordinator framework would be cumbersome and potentially lengthy and expensive, and, because any NTA Coordinator duties would be duplicative of those that the utilities are at least as, if not more, qualified to perform, it is not in the public interest to designate a NTA Coordinator.[1] The Commission finds that the NTA-related policy goals set forth in the Smart Grid Policy Act are more likely to be realized in an efficient and effective manner by removing the incentives in existing rate-setting paradigms that could cause transmission and distribution utilities (T&D utilities) to favor wires solutions over non-wires ones, thus, allowing the utilities to consider all of the options on a comparable basis and pursue the solution that meets reliability needs in a manner that is least cost to ratepayers. The utilities already have the relevant technical and engineering expertise, as well as the best knowledge of and access to information about their systems, and, therefore, they are best suited to perform the roles that would be undertaken by a NTA Coordinator. The Commission directs CMP and Emera to file, within six months of the date of this Order, rate proposals that address the incentive issues by putting wires and non-wires solutions on an equal footing from a rate-making perspective.

II. PROCEDURAL HISTORY

A. GridSolar Petition to Be Designated Smart Grid Coordinator

In December 2013, GridSolar LLC (GridSolar) filed a petition, pursuant to 35-A M.R.S. § 3143(5), requesting that the Commission designate it as the smart grid coordinator for Maine. *Petition for Designation as the Smart Grid Coordinator for the State of Maine and for Approval of GridSolar's Initial Five-Year Smart Grid Implementation Plan*, Docket No. 2013-00519 (Smart Grid Docket). GridSolar's petition broadly defined the services it proposed to provide as the smart grid coordinator, including NTA development, implementation and operation, as well as services related

[1] This case was deliberated prior to the date Commissioner Davis joined the Commission on December 1, 2017.

to rate design, pricing trials, consumer education, market segmentation, and technology.

By Order dated May 11, 2015, the Commission denied the petition of GridSolar, finding that, on the basis of the record, it was not in the public interest to designate GridSolar as the smart grid coordinator to perform tasks outlined in its petition. However, the Commission further stated that "there can be benefits from the presence in the State of a non-utility entity with the relevant expertise and a commercial interest in the successful development of NTAs." *GridSolar, LLC, Petition for Designation as the Smart Grid Coordinator for the State of Maine and for Approval of GridSolar's Initial Five-Year Smart Grid Implementation Plan*, Docket No. 2013-00519, Order at 27-28 (May 11, 2015) (Smart Grid Coordinator Order). The Commission stated that a determination of whether a NTA Coordinator would be in the public interest under the Smart Grid Policy Act would turn on considering whether and how a NTA Coordinator could ensure safe, reasonable, and adequate service at just and reasonable rates. *Id.* at 28 (citing 35-A M.R.S. § 101).

B. Commission Investigation of NTA Coordinator Role and Selection

1. Notice of Investigation

On April 4, 2016, the Commission issued a Notice of Investigation (NOI), opening this adjudicatory proceeding to examine the possible designation of a NTA Coordinator. The NOI provided, among other things, that the purpose of the investigation is to achieve the following: (1) develop the framework for selecting a NTA Coordinator; (2) determine the duties of the NTA Coordinator; (3) determine whether a third party or the utilities should perform NTA Coordinator duties; and (4) address the concept of an Advisory Planning Committee (APC) playing a role in NTA development. The NOI included a concept outline (Strawman), which outlined the roles of the NTA Coordinator, the T&D utility and the APC, and the NTA process for consideration by the parties. The Commission directed that the "end-product of this proceeding will be either the contours of a RFP or that of a rate incentive proposal should the Commission determine that the utility and not a third party should perform the function of an NTA Coordinator." NOI at 4.

On May 12, 2016, Staff convened an initial case conference in which it granted petitions to intervene. The following are parties in this matter:

- Central Maine Power Company (CMP)
- Emera Maine (Emera)
- Office of Public Advocate (OPA)
- Conservation Law Foundation (CLF)
- Efficiency Maine Trust (EMT or Trust)

- GridSolar
- Acadia Center (Acadia)
- Industrial Energy Consumers Group (IECG)

At the initial case conference, Staff raised the possibility of convening an initial technical conference on the issues arising out of the operation of NTA resources and cybersecurity in advance of setting the full litigation schedule in this docket. The parties generally agreed with this concept, and Staff subsequently scheduled a technical conference and issued a series of questions relating to operation of NTA resources for the parties to review in advance of discussing them at the technical conference.

2. Motion to Reform Proceedings

On June 10, 2016, GridSolar filed a Motion to Reform the Proceedings. In its motion, GridSolar asserted that answering the questions to be asked at the June 16, 2016 technical conference was commercially not viable because it would require GridSolar to disclose its intellectual property in developing its NTA Coordinator operations and business plan. GridSolar further stated that because it, unlike CMP and Emera, is not a utility, it cannot recover costs incurred in this proceeding using ratepayer funds. It argued that a protective order would be inadequate because CMP and Emera, who are parties to this proceeding, would have access to its operations plan, business plan, cybersecurity plan, operating algorithms, equipment list, information technology and communications plan, as well as its budget and staffing needs. To alleviate these concerns, GridSolar asserted that the Commission should issue a RFP at the outset of this adjudicatory proceeding, not at the conclusion, and that the bids should be reviewed in camera without the participation of the other parties to this proceeding to equitably protect GridSolar's commercial interests.

Following briefing by the parties, the Examiners issued a Procedural Order, denying GridSolar's Motion to Reform the Proceedings. The Examiners concluded that issuance of a RFP in advance of determining the form and function of the NTA Coordinator is contrary to the (1) May 11, 2015 Order Denying Petition in the Smart Grid Docket, and (2) NOI issued in this proceeding. The Procedural Order gave GridSolar the opportunity to provide further information under protective order and asked the parties to provide proposed schedules. In response to the Procedural Order, several parties filed proposed litigation schedules; however, GridSolar filed a motion asking the Commission to reconsider the Examiners' denial of its request to reform the proceedings.[2]

On September 6, 2016, the Commission denied GridSolar's request for reconsideration. Staff convened a conference of counsel, and the parties participating in

[2] While GridSolar had filed initial comments on the NOI and Strawman, it did not provide any information in response to the Staff's questions.

the conference agreed to a partial schedule that was then set forth in a procedural order.[3]

3. Bench Memoranda, Testimony, and Hearing

On October 20, 2016, Staff issued a Bench Memorandum. The Bench Memorandum set forth the preliminary findings and recommendations of the Staff, including a recommendation for a phased procedural approach. Attached to the Bench Memorandum was a (1) Process Chart and (2) Draft Request for Proposals (RFP) for a NTA Coordinator. Following the issuance of the Bench Memorandum, Staff convened a technical conference on November 16, 2016 on the Bench Memorandum. At the technical conference, CMP raised the issue of whether some types of distribution projects would be screened from NTA consideration because of their lack of suitability for replacement with NTAs. It was agreed that parties would have an opportunity to provide their views on screening for distribution projects. Following discussion and party questions at the technical conference, Staff revised the process chart and issued a preliminary issues list to focus the topics for testimony. Parties and Staff also agreed that there should be only a single phase to resolve the major issues in this matter. Parties were provided an opportunity to comment on the issues list and provide initial views on impediments to collaborative resolution of the issues slated for consideration in the first phase. Staff convened a conference of counsel to finalize the issues list and develop a schedule.

On December 20, 2016, Staff issued a procedural order providing the final issues list, which, based upon party comments, was subsequently corrected by procedural order dated January 4, 2017. Staff also set an initial schedule, and in accordance with that schedule the parties filed testimony on February 3, 2017. Following discovery on the testimony, on March 30, 2017, Staff convened a technical conference on the parties' testimony, and CMP and Emera subsequently filed responses to several oral data requests. A conference of counsel followed, which concluded with direction to the parties to file a joint proposed schedule for the remainder of the proceeding.

On April 11, 2017, the OPA filed a motion requesting that any schedule include a Staff bench memorandum to supplement the October 20, 2016 Bench Memorandum. CLF, Emera and EMT supported the motion. On April 19, 2017, the Examiners granted in part the OPA motion, indicating Staff would supplement the Bench Memorandum but not repeat analysis of issues already addressed.

On April 27, 2017, Staff issued a Supplemental Bench Memorandum, which summarized the findings and recommendations analyzed in the Bench Memorandum and addressed issues that had arisen since the issuance of the Bench Memorandum. On May 5, 2017, Commission Staff convened a conference of counsel to discuss the process necessary for the remainder of the proceeding, and Staff issued the agreed-upon schedule in a procedural order that same day. In accordance with the schedule, the parties filed rebuttal testimony, CMP and the OPA filed proposed revisions to the

[3] GridSolar did not participate in this proceeding after the Commission denied GridSolar's request for reconsideration.

RFP for the NTA Coordinator, and Staff convened a technical conference on the rebuttal testimony on August 2, 2017.

On August 16, 2017, Staff granted a late petition of Houlton Water Company (Houlton) to intervene in this matter, concluding that its intervention may be beneficial and would not result in unfairness or prejudice to the other parties in light of a requirement that Houlton must take the case as it finds it. In advance of hearing, the parties filed case management memoranda and replies, and on August 31, 2017, Staff convened a case conference and issued a procedural order resolving prehearing matters, hearing procedures, and the post-hearing filing of exhibits. The Commission convened a hearing on September 7, 2017, and parties filed post-hearing briefs.[4] Staff issued an Examiners' Report on October 24, 2017. The Examiners' Report recommended that the Commission seek proposals for a non-utility NTA Coordinator. The Examiners' report also proposed the creation of an Advisory Planning Committee (APC). Exceptions to the Examiners' Report were filed on October 31, 2017.

III. SMART GRID POLICY ACT

The Smart Grid Policy Act (Act) states:

> It is the policy of the State to promote the development, implementation, availability and use of smart grid functions in accordance with this section in a manner that is consistent with applicable standards for reliability, safety, security, and privacy…

35-A M.R.S. § 3143 (3). Smart grid functions identified in the Act include deployment of digital information and control technology, as well as deployment and integration of demand-side and distributed renewable energy and capacity resources.

Many of the functions set forth in the Smart Grid Act are ones that are already in place or are being developed by the utilities. These include the increased use of digital information and control technology to improve the reliability, security and efficiency of the system; deployment of smart grid technologies to monitor and control the system; and providing consumers with timely energy consumption information. These types of functions are becoming increasingly important and prevalent within the electric utility sector.

The specific objectives of the Act that are the subject of this proceeding relate to the deployment of demand-side resources and renewable supply-side Distributed Energy Resources (DER). Specifically, the NTA Coordinator, as envisioned by the Examiners' Report and many parties, would be expected to advance the deployment and integration of demand-side and distributed supply-side resources as alternatives to transmission and distribution projects that would otherwise be developed by utilities to meet system reliability needs, thus, furthering a subset of the policy goals of the Act.

[4] Commission Staff convened a settlement conference on September 15, 2017 and set a deadline of September 22, 2017 for the filing of any proposed stipulation. No party filed a proposed stipulation.

Because the NTA Coordinator as envisioned by the Examiners' Report would be a non-utility entity and not subject to the Commission's oversight authority applicable to utilities, including potential cost disallowances for imprudence, the Examiners' Report lays out a detailed process, including a requirement for Commission pre-approval of NTA projects and individual contracts with NTA resources.

In Docket No. 2013-00519, which was the predecessor to this proceeding, the Commission found that there could be benefits from the presence in the State of a non-utility entity with the relevant experience and a commercial interest in the development of NTAs. This Investigation was opened to define the role of such an entity and to develop related processes to procure the NTA services. Over the course of this Investigation, however, it has become apparent that the required processes needed to accommodate the NTA Coordinator framework would be cumbersome and potentially lengthy and expensive, and that any NTA Coordinator duties would be duplicative of those that the utilities are at least as, if not more, qualified to perform. The utilities have the relevant technical and engineering expertise, as well as the best knowledge of and access to information about their systems. The utilities are best suited for this role and to a certain degree are already doing it.

IV. PUBLIC INTEREST DETERMINATION

Under the Smart Grid Policy Act, and as set forth in the Smart Grid Coordinator Order, the Commission is authorized to designate a NTA Coordinator, if the Commission determines that such designation is in the public interest. *See* 35-A M.R.S. § 3143(5). The parties supporting such a determination envisioned that the NTA Coordinator would advance the deployment and integration of demand-side and distributed supply-side resources as alternatives to transmission and distribution projects that would otherwise be developed by utilities to meet system reliability needs, thus, furthering a subset of the policy goals of the Act.

The Commission finds, however, that the NTA Coordinator framework, as set forth in the Examiners' Report, would likely hinder and not advance the goals of the Smart Grid Policy Act. It would (1) require burdensome processes and (2) reduce Commission regulatory authority over utility investment decisions. As discussed below, the Commission concludes that moving forward with such a designation is not in the public interest. Instead, the Commission finds that (1) utilities should undertake consideration of non-wires alternatives as part of their planning function and (2) the incentive problem sought to be addressed through the creation of a NTA Coordinator should instead be addressed directly through incentive rate proposals.

A. Position of the Parties

Most parties supported the concept of a NTA Coordinator. The justification for a NTA Coordinator has been articulated as a way to offset the presumed disincentives that utilities may have to favor non-wires solutions over wires solutions.

CMP argues that T&D utilities could perform all of the duties that a third-party entity could perform, and could perform them more efficiently than could a third party.

CMP concludes that having a third-party NTA Coordinator is not an efficient use of ratepayer resources in Maine. It states that if there is an incentive problem, it can be addressed through an incentive rate mechanism. Sept. 9, 2017 Tr. at 49.

B. Discussion and Decision

The concept of a NTA Coordinator is rooted in the presumption that utilities and specifically CMP and Emera do not have the incentive to actively develop cost-effective alternatives to investment in transmission and distribution facilities needed to address reliability problems, and that, instead, utilities may have a financial incentive to favor building transmission and distribution facilities given that these investments–assuming the Commission finds them prudent–go into utility rate base and earn a return. In contrast, non-wire alternatives may involve acquisition of demand and supply resources through contractual arrangements, the cost of which, in some cases, might not receive the same type of rate-base treatment as transmission and distribution plant. In the case of transmission, for which rates are set by the Federal Energy Regulatory Commission (FERC), the utilities' financial incentive to favor a wires solution may be even stronger due to the relatively higher return on rate base for transmission investment that is allowed by FERC. Given the cumbersome nature of the processes that would be needed in an NTA Coordinator framework, and the fact that the relevant expertise already exists within the utilities, the goals of the Smart Grid Policy Act will be more effectively and efficiently achieved by addressing the utility incentive problem rather than by creating a new and duplicative entity that would require protracted and expensive processes and proceedings before any NTA could actually be deployed.

1. Multiple Processes Associated with NTA Coordinator

The process developed to accommodate the role of a NTA Coordinator results in a cumbersome decision-making framework. Because each discrete decision to proceed with an NTA and related NTA resources would require pre-approval by the Commission, the NTA Coordinator framework would require a series of adjudicatory proceedings before any NTA could be deployed. These proceedings could be protracted and resource-intensive, particularly if a utility or any other party opposed the NTA Coordinator's proposal.[5] Pursuant to the Commission's administrative rules and procedures, an opposing party would have full due process rights to present evidence and argument in support of its position. Typically, adjudicatory proceedings involve several steps, including the filing of written testimony by the parties, written and oral discovery, formal evidentiary hearings, written briefs and reply briefs, an Examiners' Report, and parties' exceptions to the Examiners' Report; proceedings can take several months or even longer. Although it is impossible to predict how controversial or adversarial the NTA Coordinator processes would be, based on the Commission's experience, there is a risk that, rather than furthering the objectives of the Act, the NTA

[5] In this regard, the Commission notes that the Boothbay Region Pilot, *CMP Request for Approval of Non-Transmission Alternative (NTA) Pilot Project for the Mid-Coast and Portland Areas,* Docket No. 2011-00138, has spanned several years and generated numerous disagreements between the Pilot Project Coordinator and CMP.

Coordinator framework would impede the Act's objectives by introducing the need for these pre-approval adjudicatory processes.

2. Regulatory Authority Over Utilities Versus Contractual Accountability of NTA Coordinator

Under 35-A M.R.S. § 301, utilities are required to provide safe, reasonable and adequate service at just and reasonable rates. In addition, utilities must act in accordance with all other applicable statutory provisions, including the Smart Grid Policy Act. Finally, in the context of required approvals to construct transmission lines, the Commission must review the utility's proposed project and must specifically evaluate the transmission solution against NTA(s) developed by an independent 3rd party, and the Commission is required to give preference to an NTA if it addresses the reliability need at a lower cost to ratepayers. *See* 35-A M.R.S. § 3132-A

The Commission does not discount the concerns raised by the parties over utilities' incentives to choose transmission and distribution investments over possible non-wires alternatives. However, utilities are subject to prudency oversight both at a state and federal level. Therefore, even without an incentive mechanism, the Commission can readily review the reasonableness of the utilities' actions and decisions with respect to wires vs. non-wires solutions, and, on the distribution side, the Commission can disallow distribution costs that are imprudent, including costs for wires solutions that are in excess of the cost of a comparable non-wires solution. This is a significant counterbalance to the financial incentive arguments. At the transmission level, the Commission can participate in FERC rate proceedings and argue for a disallowance of imprudently-incurred costs for a wires option, although, because transmission rates are FERC-jurisdictional and formula-driven, the Commission's effectiveness to ensure a least-cost outcome on the transmission side is muted. As noted earlier, however, certain transmission projects require pre-approval by the Commission and explicit consideration of NTAs.

In contrast, the Commission would not have regulatory authority over the NTA Coordinator. Although the Commission would be required to pre-approve NTAs and resource contracts, it is unclear what remedy the Commission would have if the NTA Coordinator acted unreasonably after such approvals had been received, other than actions that might be undertaken pursuant to the contractual terms of the NTA Coordinator's engagement. Further, reliability failures could result in litigated cases between an NTA Coordinator and a utility making it very difficult to hold utilities accountable for inadequate service, particularly where the Commission has ordered a NTA over the utility's objection. Accordingly, the Commission finds that it can provide greater protection to ratepayers by exercising its regulatory authority over the utilities rather than in the creation of an unregulated entity.

3. Pre-Approval Versus Prudency Review

The NTA Coordinator decision-making framework, as set forth in the Examiners' Report, involves ongoing review of each utility's transmission and distribution capital investment plans by the NTA Coordinator, EMT, and a newly created Advisory Planning

Committee (APC). In the event that a potential NTA were identified, the matter would come before the Commission for review. This process puts the Commission in the role of overseeing and pre-approving capital investment plans, at least in part, which is a role which the Commission has previously rejected. *See, e.g., Central Maine Power Company, Request for Alternative Rate Plan*, Docket No. 2013-00168, Order of Partial Dismissal (August 2, 2013) at 7 ("Detailed long-term capital planning is an activity that, at least in detail, should be left to management subject to prudency review.").

The ongoing review of the capital plans envisioned by the NTA Coordinator framework would weaken the Commission's ability to impose, or argue at FERC for a cost disallowance due to imprudence upon an after-the fact review of a utility's investment decisions. At a minimum, the ongoing review of its plans by the NTA Coordinator, EMT and the APC would give the utility an argument that its investments had been scrutinized before the fact.

4. The Role of EMT

EMT argues that, even without a financial incentive, it could play a major role in furthering the development of NTAs. With or without an NTA Coordinator, EMT has a key role in identifying potential load reductions and advocating for and providing passive efficiency NTA resources. EMT can bring valuable and relevant knowledge regarding the potential for, and systems to deliver, passive efficiency resources within any framework. The Commission cannot conclude, however, that EMT is the entity best suited to perform the overall engineering and technical analysis necessary to assess the feasibility and design of non-wires alternatives. This is a planning function which is fundamentally the duty of the utility that is charged with providing safe and reliable service at just and reasonable rates. The Commission's role is to test the reasonableness of this planning function not to take it away from the utility.

5. T&D Utilities Can Advance the Policies of the Smart Grid Policy Act

The Smart Grid Policy Act clearly contemplates utility involvement in advancing the policies of the Act. For example, smart grid functions listed in the Smart Grid Act include: facilitating the increased use of digital information and control technology; deployment of smart grid technologies, including real-time, automated, interactive technologies; and provision to consumers of timely energy consumption information. Some of these are functions that the T&D utilities are already undertaking.

In addition, many of the monitoring and control functions set forth in the Smart Grid Policy Act are already in place or are being developed by the utilities. Such functions are becoming increasingly important and prevalent within the electric utility sector given the significant growth in penetration of DER.

Further, T&D utilities can incorporate the development of non-wires alternatives into their existing T&D planning processes. For example, CMP states that it has adopted a process to identify NTAs in the context of petitions seeking a certificate of convenience and necessity (CPCN) and that its transmission and distribution planning process "produces an updated list of projects which is constantly re-evaluated due to a

varying number of factors such as economics, system demand, regulation, legislation and standards, rather than a finite and fixed list and schedule for projects." CMP Rebuttal at 7, n. 3.

6. Addressing the Incentive Issue

As noted by the Commission in the Smart Grid Coordinator Order and as envisioned by the Examiners' Report, the NTA Coordinator would have a financial interest in the deployment of NTAs. The reason asserted for allowing such a financial interest would be to ensure that the NTA Coordinator is vigorously exploring and advocating for NTAs. In essence, the NTA Coordinator construct would exchange a known incentive for an unknown/unregulated incentive in the form of a NTA Coordinator that has a financial interest in developing non-wires projects, and not necessarily in developing least-cost reliable service. While it is possible that, with Commission oversight, the NTA Coordinator framework could produce cost-effective non-wires alternatives, the Commission finds that the additional process-heavy structure accompanying the NTA framework may reduce or eliminate any cost savings achieved by the NTA Coordinator-developed non-wires alternative. Further, as discussed earlier, the NTA Coordinator construct puts the Commission into the position of pre-approving utility investment decisions. Finally, the Commission finds that the utilities are capable of developing non-wires alternatives if they are directed to do so. For these reasons, the Commission determines that the utility should undertake the functions envisioned for the NTA Coordinator and that the incentive issue should be addressed directly. Accordingly, the Commission concludes that it is not in the public interest to move forward with the issuance of an RFP for a NTA coordinator. Instead the Commission directs CMP and Emera to file rate proposals that would eliminate the financial incentive that CMP and Emera currently have to favor wires solutions.[6]

V. FINDINGS AND CONCLUSIONS REGARDING DISTRIBUTION AND TRANSMISSION PLANNING

As stated above, the Commission does not find that it is in the public interest to move forward with the designation of a NTA Coordinator and instead will investigate rate proposals that will eliminate or reduce T& D utilities' incentives to favor wires solutions in transmission and distribution planning. In addition to requiring the filing of these rate proposals, the Commission directs CMP and Emera to identify and develop

[6] The strawman accompanying the Notice of Investigation in this docket proposed a stakeholder advisory group that would be administered by the NTA Coordinator. Because it is not proceeding with the NTA Coordinator framework, the Commission does not adopt the proposal to create this advisory group.

non-wires alternatives when cost-effective compared to a wires solution.[7]

A. Requirement to Incorporate Non-Wires Alternatives into Distribution and Transmission Planning.

The Commission has found that the utilities can carry out the policies of the Smart Grid Policy Act and that one of these policies is the development of non-wires alternatives at both the distribution and transmission level. While the Commission will investigate rate mechanisms to reduce or eliminate incentives for T&D utilities to favor wires solutions to reliability needs over non-wires alternatives, Emera and CMP should not wait for the conclusion of the incentive investigation to begin to incorporate non-wires solutions into their distribution and transmission planning to the extent they are not already doing so. Accordingly, the Commission explicitly directs CMP and Emera to begin to incorporate non-wires alternatives into distribution and transmission planning to the extent they are not doing so already.

B. Statutory Authority to Require Non-Wires Analysis For Projects Not Subject To CPCN Requirements

No party questions the Commission's authority to require a NTA analysis for transmission upgrades subject to approval requirements, as set forth at 35-A M.R.S. §§ 3132 & 3132-A, but questions in this docket have been raised as to the Commission's authority to require a NTA analysis for (1) transmission upgrades not subject to CPCN review and (2) distribution upgrades.

1. Position of the Parties

All parties that briefed this issue, except CMP, conclude that the Commission has broad authority to require a non-wires analysis for distribution upgrades and transmission upgrades not subject to CPCN approval.

The OPA explains that the Smart Grid Policy Act defines policy objectives aimed at the electric system as a whole, and that the development and implementation of NTAs at the distribution and local transmission level are therefore required to achieve the goals of the Act. The OPA notes that in the Smart Grid Coordinator Order, the Commission has already interpreted the Smart Grid Policy Act as encompassing the consideration of NTAs in the distribution and local transmission planning process.

CLF contends that 35-A M.R.S. §§ 103 & 1303, which set forth the powers and duties of the Commission, including investigatory authority, broadly subject utilities to the jurisdiction, control, and regulation of the Commission. CLF asserts there is no statutory provision in the Smart Grid Policy Act prohibiting the application of NTA

[7] The Commission does not provide any explicit directions to CMP and Emera regarding how they screen for opportunities to undertake non-wires alternatives as they develop and revise their capital investment plans. However, as part of any prudency review, the Commission may explore whether the utilities have identified cost-effective non-wires alternatives to address system reliability.

analysis at the distribution level, and, like the OPA, notes the Commission has already interpreted the Act as providing for the application of NTAs at the distribution level. Smart Grid Coordinator Order at 8 n.5.

Emera concludes the Legislature provided the Commission express authority to pursue certain grid modernization in the Smart Grid Policy Act, and that, coupled with the Commission's inherent authority to execute its powers and functions, provides the Commission with authority to (1) require utilities to file distribution investment plans and (2) implement a process for the consideration of NTAs in that context.

CMP asserts that the Commission does not have the authority under Title 35-A to require T&D utilities to identify and develop non-wires alternatives for distribution projects. CMP argues that because sections 3132 and 3132-A of Title 35 -A are the provisions relating to Commission approval of transmission lines, and these sections are limited to transmission lines capable of operating at 69 kilovolts or more or that have a projected cost in excess of $20,000,000, the Commission's oversight of particular projects, extends only to projects requiring CPCN approval. CMP also argues that 35-A M.R.S. § 3132(3) and (3-A), which require the filing of line rebuilding or relocation projects and minor transmission line projects limited to transmission lines of 69 kV or more, supports the view that the Commission has no authority to require the filing of distribution investment plans. CMP further argues that the Commission's implied authority is of no impact in this case because the Commission does not otherwise have authority with regard to prospective oversight of distribution plans or plans for transmission not subject to CPCN review. In addition, CMP asserts that before-the-fact review of proposed projects is not appropriate because the Commission has recognized that long-term planning should be left to utility management, subject to after-the-fact prudency review.

Finally, CMP asserts that even if the Commission were to conclude it has the legal authority outside of the CPCN context to review and require NTAs, the Commission should not exercise such authority because CMP has provided safe, adequate, and reasonable service, and requiring prospective oversight of distribution system planning and investments would be costly, and prove unwieldly and cumbersome. CMP Br. at 8.

2. Discussion and Decision

The Commission concludes that a requirement that utilities identify and develop cost-effective non-wires alternatives to (1) transmission projects that are not subject to the CPCN process and (2) distribution projects is allowed by statute and consistent with the policies embedded in the Smart Grid Policy Act. The Smart Grid Policy Act declares that it is the policy of the State to improve the reliability and efficiency of the electric system, reduce ratepayers' costs in a way that improves efficiency, and reduce energy consumption and greenhouse gas emissions. 35-A M.R.S. § 3134(3); Smart Grid Coordinator Order at 5-6. The Smart Grid Policy Act makes clear that its focus on improving the reliability and efficiency of the electric system is not only on one segment of that system, i.e., transmission upgrades subject to CPCN requirements.

The Commission does not agree with CMP's argument that because certain transmission upgrades require Commission approval under 35-A M.R.S. §§ 3132 and 3132-A, Commission oversight over transmission and distribution planning is limited to projects that require such approval. CMP's argument fails to consider the scope of the Smart Grid Policy Act, which includes both distribution and transmission, and that Title 35-A is to be interpreted and construed liberally to enable the Commission to accomplish the purpose of that Title. 35-A M.R.S. §§ 101, 104. Indeed, the Legislature has vested the Commission with all implied and inherent powers under Title 35-A which are necessary and proper to execute its powers and functions otherwise specified in Title 35-A. *Id.* § 104. Finally, the Commission is not requiring any pre-approval of projects other than those specifically requiring pre-approval under Title 35-A.

Reading these provisions of Title 35-A M.R.S together, the Commission concludes it has the authority to require utilities to identify and develop cost-effective non-wires alternatives to distribution projects and transmission projects that are not subject to CPCN approval. This interpretation of the Smart Grid Policy Act is in keeping with achieving the stated policy goals of the Act, and is supported by the implied and inherent authority the Legislature has vested in the Commission to fulfill its duties under Title 35-A.

C. T&D Utility Ownership of NTA Resources

Houlton is the only party to contest that T&D utilities may own NTA resources under 35-A M.R.S. § 3204(6). Houlton argues that T&D utility ownership, operation, or financial interest in NTA resources that include generation components by T&D utilities is not authorized by 35-A M.R.S. § 3204(6), which provides that the Commission may allow an investor-owned T&D utility to have an interest in generation assets to the extent the Commission finds it is necessary for the T&D utility to perform its obligations as a T&D utility in an efficient manner. Houlton asserts that the exception to the prohibition on generation assets is narrow and only authorized in instances where ownership is necessary and the most efficient alternative to ensure safe and reliable service. Ownership and control of generation in the context of NTA resources, it contends, would allow utilities to reenter the generation supply market. Emera and CMP disagree with Houlton arguments,[8] stating that they have owned or currently own generation assets for the purpose of providing system reliability, and such ownership has had no negative impact on the competitive market. Ownership of NTA resources, based upon a Commission determination that the NTAs are necessary for the efficient operation of the utility system, they assert, would be no different than prior instances of utility-owned generation assets under 35-A M.R.S. § 3204(6), because NTAs are designed and intended to meet system reliability needs.

[8] The OPA, EMT, and CLF also support utility ownership of NTA resources which are necessary for a utility to perform its obligations in an efficient manner. 35-A M.R.S. § 3204(6).

The Commission agrees with the parties' arguments in support of utility ownership of NTA resources under 35-A M.R.S. § 3204(6). The purpose of section 3204(6) is to allow utilities to have an ownership interest in generation to the extent that the ownership interest is necessary for efficient grid support. The NTA process seeks to determine the most efficient means to resolve reliability needs, and there is no evidence in this record to suggest that T&D utility ownership of NTA resources, if such ownership is necessary for the efficient operation of the grid, would undermine the competitive generation market.[9] Accordingly, the Commission concludes there is no statutory prohibition on T&D utilities owning, operating, or having a financial interest in NTA resources in the context of NTA proceedings.

D. Fully Functional Transmission and Distribution Planning Model

In Rebuttal Testimony, the OPA introduced the concept of requiring the T&D utilities to implement fully functioning local transmission and distribution engineering model. The OPA describes a fully functioning engineering model as follows:

> A fully functioning engineering model, such as CYME software, is populated with all of the system elements including, but not limited to, substations, transformers, conductor size, reclosers and relays. It will also contain customer load data. A fully functional model would be one in which both a present system (as currently exists) can be modeled and analyzed, and projected load growth can be inserted into the model, and each circuit and component can be analyzed against future loads or known conditions. The model inputs include known and forecasted loads for 10 to 15 years into the future.

[9] In support of its argument, Houlton cites *GridSolar, LLC*, *Petition for Finding of Public Convenience and Necessity and Related Approvals for the GridSolar Transmission Reliability Project*, Docket No. 2009-00152, Order (Dec. 31, 2009), asserting the Commission has already concluded NTA resources cannot be owned and operated by a utility. In that matter, the Commission denied GridSolar's request for a CPCN to build and operate a solar project, concluding GridSolar's project was a generation facility and not a transmission plant, and thus no CPCN was necessary under 35-A M.R.S. § 3132. The Commission did not, however, as argued by Houlton in the instant matter, conclude utilities could not under appropriate circumstances own and operate generation pursuant to 35-A M.R.S. § 3204(6). Rather, the Commission stated:

> Obviously, [subsection 3204(6)] recognizes that, in some circumstances, a T&D utility may achieve a necessary grid reliability benefit at a lower cost by installing a generating facility rather than building a new transmission line. Therefore, the Legislature makes it clear that lower cost should prevail, even if it means the utility must own a generating facility, and section 3204(6) provides an exception to the generation ownership prohibition.

Id. at 6. The Commission is not persuaded that any prior Commission precedent cited by Houlton suggests utilities cannot own and operate NTAs upon Commission findings and conclusions that such ownership is in accordance with 35-A M.R.S. § 3204(6).

OPA Br. at 11.

OPA states that a fully functional engineering model is necessary for an efficient process of evaluation and implementation of NTAs because "long-range system planning correlates future load levels, plant investments, and system design, [and] [i]t ensures that the location and magnitude of system additions and the review of alternative solutions, including NTAs, are examined." *Id*. OPA's witness, Mr. Booth estimated that the cost of implementing such a model would be in the range of $150,000 to $250,000.

CMP asserts that the cost of implementing a fully functional engineering model would be significantly more expensive and argues that the OPA has not demonstrated any need to justify a fundamental change in how CMP performs its system planning. Emera states that it has not estimated the costs of implementing the type of modeling advocated by the OPA, but notes that "the cost could significantly exceed the estimate provided by the OPA of $150,000 because the estimate does not include for example, the costs of GIS mapping for unmapped portions of the system or updating and repopulating the model each time a study is run." Emera Br. at 9.

While the OPA's proposal may have merit in the long-term, the Commission will not require CMP and Emera Maine to implement a fully functional engineering model for the distribution and local transmission system at this time. The Commission notes that the functionality sought by OPA may be possible to add to the distribution operating software that CMP states it is planning on installing in the 2020 timeframe. Tr. at 44, Sept. 7, 2017. Further, the Commission finds that the cost of implementing such a model cannot be determined with accuracy on the basis of this record. Nor is it clear, at this time, that such a model is necessary for NTAs to be identified. The Commission is reluctant to require CMP and Emera to incur significant expenditures without certainty regarding need and cost.

VI. CONCLUSION

The Commission finds that it is not in the public interest to designate a NTA Coordinator. In particular, the Commission finds that the NTA-related policy goals set forth in the Smart Grid Policy Act are more likely to be realized in an efficient and effective manner by removing the incentives in existing rate-setting paradigms that cause T&D utilities to favor wires solutions over non-wires ones, thus, allowing the utilities to consider all of the options on a comparable basis and pursue the solution that meets reliability needs in a manner that is least cost to ratepayers. The Commission directs CMP and Emera to file, within six months of the date of this Order, rate proposals that address this incentive issue by putting wires and non-wires solutions on an equal footing from a rate-making incentive perspective.

Accordingly, the Commission

ORDERS

1. That CMP and Emera are directed to identify and develop cost-effective non-

wires alternatives to T&D investments, consistent with the body of this Order, and

2. That CMP and Emera are directed to file, within six months of the date of this Order, rate proposals that address incentives by putting wires and non-wires solutions on an equal footing from a rate-making incentive perspective.

Dated at Hallowell, Maine, this 15th day of December, 2017.

/s/ Harry Lanphear

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Harry Lanphear
Administrative Director

COMMISSIONERS VOTING FOR: Vannoy
Williamson

NOTICE OF RIGHTS TO REVIEW OR APPEAL

5 M.R.S. § 9061 requires the Public Utilities Commission to give each party to an adjudicatory proceeding written notice of the party's rights to review or appeal of its decision made at the conclusion of the adjudicatory proceeding. The methods of review or appeal of PUC decisions at the conclusion of an adjudicatory proceeding are as follows:

1. Reconsideration of the Commission's Order may be requested under Section 11(D) of the Commission's Rules of Practice and Procedure (65-407 C.M.R. 110) within **20** days of the date of the Order by filing a petition with the Commission stating the grounds upon which reconsideration is sought. Any petition not granted within **20** days from the date of filing is denied.

2. Appeal of a final decision of the Commission may be taken to the Law Court by filing, within **21** days of the date of the Order, a Notice of Appeal with the Administrative Director of the Commission, pursuant to 35-A M.R.S. § 1320(1)-(4) and the Maine Rules of Appellate Procedure.

3. Additional court review of constitutional issues or issues involving the justness or reasonableness of rates may be had by the filing of an appeal with the Law Court, pursuant to 35-A M.R.S. § 1320(5).

Note: The attachment of this Notice to a document does not indicate the Commission's view that the particular document may be subject to review or appeal. Similarly, the failure of the Commission to attach a copy of this Notice to a document does not indicate the Commission's view that the document is not subject to review or appeal.