STATE OF NEW YORK
PUBLIC SERVICE COMMISSION

At a session of the Public Service Commission held in the City of Albany on November 16, 2017

COMMISSIONERS PRESENT:

John B. Rhodes, Chair
Gregg C. Sayre
Diane X. Burman
James S. Alesi

CASE 17-M-0178 - Petition of Orange and Rockland Utilities, Inc. for Authorization of a Program Advancement Proposal.

ORDER GRANTING PETITION IN PART

(Issued and Effective November 16, 2017)

BY THE COMMISSION:

INTRODUCTION

On February 13, 2017, Orange and Rockland Utilities, Inc. (O&R or the Company) filed a petition seeking authorization for changes to the Company's Low Income program, institution of an energy efficiency program for all ratepayers; implementation of Advanced Metering Infrastructure (AMI) throughout its entire service territory; a framework for non-wires alternative (NWA) projects; and specific funding mechanisms for each of these programs.

O&R's proposed expansion to its energy efficiency program and modifications to the low income credits will not be addressed at this time due to the need for additional input and further review. In this Order, the Commission approves O&R's request to continue AMI deployment in Rockland County, expand the technological scope and functionality of the AMI system

beyond that which was recognized in the 2015 Rate Order[1], and expand AMI deployment into Orange and Sullivan Counties. In addition, the Commission approves the Company's proposed Customer Engagement Plan and NWA framework. The details pertaining to these items, as well as the accepted spending and recovery methods, is discussed in the body of this Order. Finally, the Commission denies O&R's request to implement an AMI Rate Pilot.

O&R AMI BACKGROUND

In the 2015 Rate Order, to facilitate the Commission's grid modernization policies and goals, reduce operating costs, and assist in more timely identification of customer outages, the Commission approved Phase One of O&R's AMI program. Phase One consisted of replacing approximately 116,000 electric AMI meters and 91,000 gas AMI modules for customers in Rockland County over a five year period, which the Company estimated would cost $43.3 million.[2]

In addition, the 2015 Rate Order required the Company to collaborate with Department of Public Service Staff (Staff) and interested parties to develop an AMI Business Plan, which would include a benefit cost analysis (BCA), customer engagement plan, and several other AMI related issues. Further, the Commission articulated that it retained the right to make a further determination on AMI implementation based on O&R's Distributed System Implementation Plan (DSIP). Upon review of the filed DSIP, the Commission could decide to modify or halt

---

[1] Case 14-E-0493, Orange and Rockland Utilities, Inc. – Rates, Order Adopting Terms of Joint Proposal and Establishing Rate Plan (issued October 16, 2015) (2015 Rate Order). In this case, electric rates were set for two years and gas rates for three.

[2] A subsequent endeavor, Phase Two, would include deployment of AMI in Orange and Sullivan counties.

O&R's AMI implementation, in which case all AMI project costs prudently incurred by the Company up to that point would be recoverable by the Company, with the exception of certain costs such as those for acquiring and/or installing any software, hardware or equipment that is ultimately determined to be unnecessary or not meet the requirements as determined at the time the Commission issues its final DSIP Order or earlier.[3]

After the Company's original AMI business case was considered in its 2014 rate case filing, O&R was able to jointly seek out AMI vendors with Consolidated Edison Company of New York, Inc. (Con Edison). The vendor information provided to both companies in the summer of 2015 allowed O&R to compare and contrast the different technology options available. The ability of jointly seeking out different deployment proposals for multiple scenarios from multiple vendors allowed O&R the opportunity to select a vendor who could provide the best cost effective solution. O&R revised its plans for AMI and filed on June 30, 2016, as part of its Initial DSIP, a new AMI Business Plan[4] that added: a new Meter Data Management System; a new Meter Asset Management System; and contractor services for installing meters, headend system[5], gas modules, and communication network equipment.

O&R had originally envisioned a Rockland County deployment to occur over five years but under the updated business plan, the Company anticipates a full-scale deployment to be accomplished in four years by incorporating vendor-

[3] 2014 Rate Plan, p. 17

[4] Case 14-M-0101, Reforming the Energy Vision - Initial Distributed System Implementation Plan, Orange and Rockland Utilities, Inc. (dated June 30, 2016) (Initial DSIP).

[5] The headend system monitors and controls communications with all meters and modules.

provided installers to work in unison with Company personnel during the meter and communication system installation period. The Company began Phase One of the AMI rollout which would replace approximately 116,000 electric and 91,000 gas meters in Rockland County[6], while Phase Two would cover the replacement of approximately 113,000 electric and 45,000 gas meters in Orange and Sullivan Counties. At the time of the Initial DSIP filing, O&R had plans to initiate Phase One deployment of AMI by mid-2017 and have deployment completed for O&R's entire service territory by 2020.

In July 2016, the Company submitted a BCA matrix and BCA Benefit Summary, which outlined a full-service territory AMI deployment.[7] The BCA incorporated the use of the societal cost test and found the net-present value (NPV) of the benefits exceeded the NPV of the costs by $15.6 million. The total capital expenditures for a complete service territory AMI deployment, with expanded technological scope and functionality, was estimated to cost approximately $98.5 million. These costs include O&R's original Phase One cost estimate of $43.3 million, an additional $17.7 million to expand the technological scope and functionality of the AMI system, and $37.0 million to expand AMI deployment into Orange and Sullivan counties.

On July 29, 2016, O&R and Con Edison submitted an Advanced Metering Infrastructure Customer Engagement Plan as a

[6] Rockland County began meter installations in June and have installed 10,000 meters through August.

[7] Case 14-E-0493, Orange and Rockland Utilities, Inc. - Electric Rates and Case 14-M-0101, supra, Orange and Rockland Utilities, Inc. Advanced Metering Infrastructure Benefit Cost Analysis Benefit Summary and Advanced Metering Infrastructure Benefit Cost Analysis Matrix (dated July 29, 2016).

component to their AMI deployment initiatives.[8] As directed by the Commission, the Customer Engagement Plan was developed through a collaborative process with interested parties to provide customers with the knowledge of the benefits and opportunities to enable them to manage their energy usage through AMI. The Company proposes to recover incremental costs of $0.8 million for electric and gas combined for fiscal years 2017–2020 through current surcharge mechanisms.

O&R's AMI Customer Engagement Plan focuses on increasing customer acceptance of AMI; encouraging participation in the benefits of AMI; and, providing cost saving and revenue opportunities for both customers and authorized third party vendors. The proposed customer outreach and education includes four components: Our Energy Future, which provides for territory-wide communications to introduce the concept of AMI deployment and new technologies; Aware, which focuses on customized communications venues for each deployment area to inform customers of smart meter benefits; Informed, which prepares customers about AMI deployment, reemphasizes smart meter benefits and provides energy efficiency options or services to the individual customer; and, Engaged, which continues communications with the customer after installation with interaction opportunities with the smart meter. The Company intends to develop Green Button Connect My Data by the end of 2017 to help O&R customers share and make energy management decisions. In addition, the availability of the data to third

[8] Case 15-E-0050, Consolidated Edison Company of New York, Inc. - Electric Rates, Order Approving Advances Metering Infrastructure Business Plan Subject to Conditions (issued March 17, 2016). Case 14-M-0101, supra, Initial Distributed System Implementation Plan, Orange & Rockland Utilities, Inc. (filed June 30, 2016).

parties through a customer driven authorization process will further customer engagement.

PETITION

Low Income and Energy Efficiency Program

O&R requested, in aggregate, for Fiscal Years (FY) 2018 through 2020, an additional $12 million towards expanding its energy efficiency program, which would be above the current $6.3 million annual allocation to its Energy Efficiency Transmission Implementation Plan. This expansion would include programs for residential and commercial customers with the goal of achieving 22,095 MWh in additional savings. The Company also proposed an energy efficiency program for low income electric and gas customers for an additional annual cost of $4.6 million for three years. O&R proposed that the incremental funding for the additional energy efficiency programs be recovered over a ten year amortization period through the current surcharge mechanism until base rates are reset.

In addition, O&R estimated that it will incur low income bill credits of $8.7 million in FY 2017, $8.1 million in FY 2018, $7.0 million in FY 2019, and $5.8 million in FY 2020. This assumes the Company achieves the forecasted savings from its proposed expanded energy efficiency program and includes the existing levels of low income credits already in rates of $4.5 million. The Company proposed to collect incremental costs for the expanded low income credit program through its Electric Energy Cost Adjustment (ECA) mechanism for electric credits and Monthly Gas Adjustment (MGA) mechanisms for gas credits until base rates are reset.

AMI Project

In the petition, O&R requests Commission authorization to continue AMI deployment in Rockland County, enhance the

technological scope and functionality of the AMI system beyond that which was recognized in the 2015 Rate Order, and expand AMI deployment into Orange and Sullivan Counties. The enhanced technological scope and functionality of the AMI system includes the following customer benefits: "near" real time access to data, voltage management, support for grid modernization initiatives, control of customer-owned equipment; and flexible billing dates. These enhancements would also include management systems for meter data and assets, system integration service, and platforms for mobile web access. In aggregate, the Company estimates the incremental capital investments associated with the AMI implementation to be $74.3 million above what was approved by the Commission in the 2015 Rate Order, which is an overall capital investment of $98.5 million. O&R proposes to track, on a monthly basis, the actual electric and gas AMI net plant balances and compare them to the AMI net plant balance targets included in its current electric and gas rate plans[9]. For any AMI system related capital investments that exceed the levels included in the companies' respective rate plans, O&R requests authority to defer the carrying costs[10] on these incremental capital investments until base rates are reset by the Commission.

AMI Customer Engagement Plan and Rate Pilot

The Company also requests approval of its AMI Customer Engagement Plan, which was submitted jointly with Con Edison as

[9] Case 14-E-0493, supra, Order Adopting Terms of Joint Proposal and Establishing Rate Plan, Appendix 8.

[10] The Company proposed to calculate the carrying costs by applying its electric and gas capital true-up rates, currently 13.02% and 12.26% for electric and gas respectively, to the incremental capital investments.

part of the grid modernization proceeding.[11] O&R estimates the cost related to the AMI Customer Engagement Plan to be $600K and $200K for electric and gas, respectively, and proposed the incremental costs of the plan be recovered through the Company's ECA and MGA mechanisms, depending on the source of the expense, and rolled into base rates during the Company's next rate case. In addition, the Company requests an AMI Rate Pilot, which would make demand-based delivery rates available to ratepayers in Rockland County, with baseline data collection to begin in early 2018 and the offer of service to begin in Fall of 2018. O&R estimates the cost of the pilot program to be $4.9 million,[12] and proposes to recover the costs through the ECA mechanism.

Non-Wires Alternative

In its petition, O&R commits to incorporating NWA solutions into its capital planning and to developing and vetting a portfolio of NWA projects before the filing of its next electric rate case. In addition to identifying the projects which may be eligible for deferral or replacement by implementing a NWA project, O&R proposes: (1) to implement an NWA project cost recovery mechanism; (2) modifications to its current Net Plant Reconciliation mechanism to account for NWA projects which offset the need for infrastructure currently in the Company's Net Plant in Service accounts; and (3) reporting requirements. Finally, the Company proposes to implement a financial incentive mechanism which mirrors the NWA incentive

[11] Case 14-M-0101, supra, AMI Customer Engagement Plan (filed July 29, 2016).

[12] O&R is considering a smaller pilot, priced at $3.6 million, or adopting the results of Con Edison's pilot plan to its service territory, but has not committed to either option.

mechanism that the Commission has already adopted for Con Edison in its January 25, 2017 NWA Incentives Order.[13]

1) NWA Project Cost Recovery

The Company proposes to recover its NWA project costs, including a return on such costs at the Company's overall pre-tax rate of return, over ten years and would recover such costs through its ECA mechanism. The Company further proposes to incorporate any unamortized NWA project costs, including the return on those costs, into base rates when the Commission resets its electric base delivery rates.

To the extent that an NWA project results in the Company displacing a capital project reflected in the Average Electric Plant in Service Balances, O&R proposes to reduce such balances to exclude the forecasted net plant associated with the displaced project. Instead of deferring the carrying charge on the reduced Average Electric Plant in Service balances, O&R proposes to apply such carrying charges on the displaced traditional project as a credit against the recovery of the NWA project costs in the ECA mechanism. In the event that the carrying charge on the displaced net plant is greater than the NWA project cost recovery, the Company proposes to defer the difference for the benefit of customers.

2) NWA Reporting Requirements

For each NWA project the Company decides to implement, O&R proposes to submit an implementation plan which includes, at a minimum: (1) detailed measurement and verification procedures, (2) the portfolio of Distributed Energy Resources (DER) to be implemented as part of the NWA project; (3) estimated NWA project expenditures; (4) estimated traditional infrastructure

[13] Case 15-E-0229, Con Edison Targeted Demand Management Program and Incentives, Order Approving Shareholder Incentives (issued January 25, 2017) (NWA Incentives Order).

projects displaced by the NWA project and associated impact on the Net Plant Reconciliation mechanism; and (5) an outreach and education plan. The Company proposes to file an annual update to each implementation plan by January 31 of each year, or more frequently as necessary. In addition to the implementation plan, O&R proposes to submit quarterly reports for each NWA project which detail the program activities and expenditures to date. The Company proposes to include all relevant details of NWA project costs, portfolio in-service dates, incremental costs incurred, operational savings, and any other identified benefits in each quarterly report.

3) NWA Project Categories

The Company proposes to separate NWA projects into two categories, referred to as Large and Small, which were subsequently defined by O&R in its NWA Suitability Criteria filing.[14] Large projects deal with voltages at or above a major circuit or substation level. Small projects deal with voltages at or below the distribution feeder level and with traditional project costs greater than or equal to $450,000. O&R states that Large projects, compared to Small projects, generally require greater quantities of load relief, provide for longer lead times to implement a solution, and generally defer higher-cost transmission and distribution (T&D) infrastructure. The Company proposes similar incentive mechanisms for both Large and Small projects, however, in order to react to shorter project lead times and implement solutions more quickly, the process and incentive calculation for Small projects would be streamlined.

[14] Case 16-M-0411, Distributed System Implementation Plans, Joint Utilities Filing of Utility-Specific Implementation Matrices for Non-Wires Alternatives Suitability Criteria (submitted March 1, 2017).

4) NWA Incentive Calculation

For Large projects, the Company proposes to use a BCA to compare the present value of the net costs and benefits of implementing the NWA versus the present value of the net costs and benefits of building the associated traditional T&D project. These present values would be calculated inclusive of all cost and benefit categories outlined in the BCA Framework Order.[15] The Company would perform its BCA calculations using its BCA Handbook.[16]

For Small projects, as previously indicated, O&R proposes to use a streamlined BCA which would consider a narrower array of costs and benefits in order to advance Small projects more quickly. As proposed by O&R, the streamlined BCA would include the major cost and benefit categories applicable to an NWA project, including avoided carbon dioxide (CO_2) emissions. However, the streamlined BCA would not include non-energy benefits other than reductions in CO_2 emissions, nor would it consider any benefits that might otherwise be realized by implementation of the traditional T&D project. Under each approach, the Company proposes to determine the Net Benefit of employing an NWA by taking the difference between the present value of net costs and benefits of the proposed NWA and the present value of the net costs and benefits of the traditional T&D project.

O&R proposes a multi-step process for determining the incentive the Company would receive for implementing NWA projects. The incentive would be based on a 70% customer/30%

---

[15] Case 14-M-0101, supra, Order Establishing the Benefit Cost Analysis Framework (issued January 21, 2016) (BCA Framework Order).

[16] Case 16-M-0412, Benefit Cost Analysis Handbook, Revised Benefit-Cost Analysis Handbook (submitted August 22, 2016) (BCA Handbook).

shareholder sharing of the Net Benefits calculated by the BCAs. For Large projects, the Company proposes to establish an Initial Incentive based on a 70/30 share of the Net Benefits at the time when the Company has either entered into contracts with DER providers for the entire NWA portfolio, or when the Company and Staff agree that there is reasonable certainty regarding the price of the portfolio of DER. For Small projects, the Company proposes a 70/30 share of the Net Benefits similar to its proposal for Large projects. However, incentive for the Small projects will be calculated on a per megawatt (MW) basis (Initial Unit Incentive). The Initial Unit Incentive will be determined by dividing the Company's proposed 30% share of the Initial Net Benefits by the number of MW to be procured for the NWA project.

Further, to spur the Company to manage and reduce the costs associated with a NWA project, O&R proposes to adjust the incentive throughout its implementation. The Company proposes to share the difference between the total utility cost assumed in the Initial Net Benefits calculation and the actual total utility cost of the NWA project 50/50 with customers to determine the Final Incentive. Therefore, the Final Incentive would equal the sum of the Initial Incentive, and 50% of the cost overruns or underruns of the NWA project. O&R proposes that the Final Incentive be subject to both a floor and a cap, such that the Final Incentive shall neither be less than $0, nor greater than 50% of the Initial Net Benefits.

5) NWA Recovery of Financial Incentives

For Large projects, O&R proposes to begin collecting the Final Incentive from customers once 70% of the MW of DER have become operational. The Company defines operational as DER which have been installed and verified through the Company's measurement and verification (M&V) procedures. For Small

projects requiring more than 1 MW of DER, the Company proposes to begin collecting on an amount equal to the Initial Unit Incentive as each MW of the NWA portfolio becomes operational. For Small projects less than 1 MW, the Company proposes to collect the Final Incentive once the entire NWA portfolio is implemented. O&R proposes to recover the earned NWA project incentives through the ECA mechanism. The Company proposes to amortize the Final Incentive over the course of the remaining deferral period for the traditional T&D project, inclusive of carrying costs on the unamortized balance at the Company's Commission-approved Weighted Average Cost of Capital (WACC).

6) Change in NWA Portfolio MW Amounts

O&R also proposes to modify its incentive in the event that the number of DER MWs required to effectuate the NWA project changes in response to annual reliability needs assessments, which the Company posits would occur relatively infrequently. The Company states that in many cases, changes to the reliability needs assessment would result in either extending or curtailing the length of the deferral period, and would not typically result in a material change in the amount of DER MWs required to achieve deferral.

In the event that the reliability assessment results in the determination that additional DER MWs are needed to achieve the intended deferral of traditional infrastructure, the Company will notify Staff, and increase the DER MWs accordingly. If it is feasible to increase the DER MWs to continue implementing the NWA project, the Company proposes to receive cost recovery of the expenditures incurred in obtaining the additional DER MWs, including carrying charges at its effective WACC, on these deferred costs until recovered from ratepayers. The Company, however, would forego earning any additional incentives related to obtaining the addition DER MWs. O&R

proposes that expenditures related to these additional MWs would not be considered in the calculation of the Difference in Utility DER Costs for calculating the Final Incentive. This process would be the same for both Large and Small projects.

If the Company determines that increasing the number of DER MWs are technically or operationally infeasible, it will then plan to implement a traditional solution. Alternately, if the reliability needs assessment results in the determination that an increased amount of DER within the same NWA area could result in additional opportunities for deferral of traditional infrastructure, O&R proposes to then develop a new NWA portfolio and earn an incentive for that project in the same manner.

In the event that the reliability assessment results in the determination that fewer DER MWs are needed to achieve the intended deferral of traditional infrastructure, the Company will notify Staff, and decrease the DER MWs accordingly, to the extent contractually feasible. O&R proposes different processes for responding to a decreased need for DER MWs for Large and Small projects.

For Large projects, the Company will plan to reduce DER MWs only when the reliability needs assessment demonstrates a consistent downward trend in the amount of MWs needed for load relief that is sustained over a period of at least three years, and which results in a material reduction of 30% or more of the DER MWs which were initially determined to be necessary to effectuate deferral of the traditional infrastructure. For Small projects, the Company will consider each annual assessment, as opposed to requiring a consistent downward trend over the course of three years. However, O&R will only reduce the amount of DER MWs for Small projects when the reliability needs assessment results in a material 30% decrease in DER necessary to effectuate deferral. The Company proposes to

consult with Staff before effectuating any reductions in DER MWs, and would continue to procure the original amount of DER MWs if directed to do so by the Commission.

For both Large and Small projects, the Company proposes to true-up the incentive earned by O&R in the event of a reduction in required DER MWs. O&R would true-up the incentive by converting the Initial Incentive into an Initial Unit Incentive, as previously described for Small projects. The Company would then calculate the difference in utility DER cost on a per-MW basis (Unit Difference in Utility DER Cost). The Final Incentive would be calculated as the sum of the Initial Unit Incentive plus or minus the Unit Difference in Utility DER Cost, multiplied by the reduced amount of DER MWs determined to be necessary. O&R proposes that the Final Incentive determined using this mechanism would be subject to the same cap and floor provisions of 50% of Initial Net Benefits, and $0, respectively. The true-up mechanism would result in both a reduced Final Incentive paid to the Company, as well as a reduced level of required DER MWs operational for the Company to begin collecting the incentive payments.

NOTICE OF PROPOSED RULE MAKING

Pursuant to the State Administrative Procedure Act (SAPA) §202(1), a Notice of Proposed Rulemaking was published in the State Register on May 24, 2017 [SAPA No. 17-M-0178SP1]. The time for submission of comments pursuant to the Notice expired on July 8, 2017. One comment was received from Mr. Douglas Coulter, who asked that the petition be denied due to unspecified health and safety concerns.

DISCUSSION

Low Income and Energy Efficiency Program

O&R's request for the expansion and cost recovery of low income credits and its energy efficiency program does require further review from Staff and input from stakeholders. Therefore, this component of the petition will not be considered at this time.

AMI

The Commission has considered O&R's petition for AMI and is hereby granting approval for the implementation of the project and the Customer Engagement Plan. The AMI project is subject to a $98.5 million cap on capital expenditures. This approval is based on the review of the petition, the AMI Business Plan, the benefit cost analysis, and the Customer Engagement Plan. All of which O&R has worked to refine with input from parties, Staff, the Commission order approving Con Edison's AMI project, and the Commission DSIP Order.[17] The AMI rate pilot is denied and discussed further below.

1) AMI Project

The Commission approves O&R's approach to partner with Con Edison to use a similar AMI system and deployment schedule. This approach allows for cost savings and synergies between both utilities. The Commission finds that the implementation of the enhanced and expanded AMI Project proposed in O&R's petition will enable improved customer service and engagement, increased operational efficiency and performance, provide a foundation for

[17] Case 15-E-0050, Consolidated Edison Company of New York, Inc. - Electric Rates, Order Approving Advances Metering Infrastructure Business Plan Subject to Conditions (issued March 17, 2016). Case 14-M-0101, supra, Order Adopting Distributed System Implementation Plan Guidance (issued April 20, 2016) (DSIP Order).

future technological advancements, cost reductions, and reduce greenhouse gas emissions for O&R's entire service territory. In addition, O&R customers will be able to actively participate in energy markets, control energy use, participate in energy efficiency and demand response programs, and take control of their monthly bill. With the appropriate data systems and web functionality in place, customers will have the opportunity to leverage the interval meter data made available by AMI to evaluate their energy consumption and make informed energy decisions. The integration of back-office applications with the AMI communication network and meters will provide improved outage detection and restoration, and enhance system engineering and planning.

To achieve and possibly expand these benefits, and to prevent obsolescence over the life expectancy of AMI, continuous upgrades when needed should be included in the design, contracts, and maintenance practice of the AMI system. Therefore, as part of the AMI metrics, O&R is to file annual reports to provide information regarding AMI system upgrades and improvements. In addition, value engineering should be used to determine how future additional benefits can be achieved from AMI with minimal incremental cost.

2) AMI BCA

On July 29, 2016, the Company filed a revised AMI BCA Benefit Summary and AMI BCA Matrix with the Commission.[18] This filing reported that the net benefit/cost to society (based upon the Societal Cost Test), associated with the Company's implementation of its AMI proposal, has a net present benefit

[18] Case 14-E-0493, Orange and Rockland Utilities, Inc. - Electric Rates and Case 14-M-0101, supra, Orange and Rockland Utilities, Inc. Advanced Metering Infrastructure Benefit Cost Analysis Benefit Summary and Advanced Metering Infrastructure Benefit Cost Analysis Matrix (dated July 29, 2016).

value of $15.6 million. The Societal Cost Test was performed on the benefits and costs related to full AMI system deployment across Orange and Rockland's entire New York service territory. The benefit cost ratio was 1.17, which provides support for the implementation of this project since the benefits exceed the costs.

Staff reviewed the Company's model and sought further details on the filing. Staff found that the benefit assumptions made by the Company appear conservative in comparison to Con Edison, which could result in higher savings than O&R originally forecast. Additional benefits from time varying pricing and energy monitoring were not quantified by the Company but could provide customers benefits over the life of the meters. Staff updated the WACC used in the model to compute the net present value to the currently approved after-tax WACC found in Appendix 1 of the Company's current Joint Proposal. Assumptions for energy cost and environmental benefits were also updated to reflect the most recent forecasts for those values. These changes lowered the NPV of benefits; however, the benefit cost ratio remains above one at 1.12. The Commission finds that the revised benefit cost ratio also provides support for the implementation of this project, especially considering all feasible benefits that have not been quantified by O&R.

3) AMI Cost

If the actual electric or gas AMI net plant balances exceed the AMI net plant targets established in the Company's current rate plan, the Company is allowed to defer the revenue requirement impact of the amount above the AMI net plant targets, net of any cost reduction benefits realized during that period until base rates are reset by the Commission. The revenue requirement impact will be calculated by taking the incremental amount above the AMI net plant targets, net of any

cost reduction benefits and applying the current electric and gas capital true-up rates.[19] The deferral would be offset by the revenue requirement impact of the accumulated deferred income taxes associated with the incremental net plant.[20] O&R will not be allowed to defer the revenue requirement impact if during that period its actual return on common equity exceeds its allowed return on common equity (i.e. it is over-earning). In the event that recovering the revenue requirement amount above the AMI net plant targets, net of any cost reduction benefits, results in the Company being below its allowed return on common equity, O&R can defer the revenue requirement impact up to its allowed return on common equity. O&R is required to make an annual filing, concurrently with the annual earnings report and annual net plant reconciliation, that includes a detailed itemized breakdown of the following information: amount of AMI expenditures incurred during that period, amount of cost reduction benefits realized during the period, a comparison of the electric and gas AMI net plant balances to the AMI net plant targets, and an earnings computation for the period.

Further, to ensure that the benefits of AMI deployment materialize, we are implementing a cap on the capital expenditures associated with the AMI project. The capital expenditures will be capped at the Company's estimated AMI project cost of $98.5 million. In addition, all costs associated with this project are subject to further review in O&R's next base rate proceeding.

---

[19] Case 14-E-0493, supra, Order Adopting Terms of Joint Proposal and Establishing Rate Plan, Appendix 9 (i.e. 13.02% and 12.26% for electric and gas respectively).

[20] The pre-tax WACC will be applied to the accumulated deferred income taxes to determine the amount.

AMI Customer Engagement Plan

The Company's request for approval of its AMI Customer Engagement Plan, submitted with Con Edison in July 2016, is granted. The Customer Engagement Plan is aligned with O&R's AMI deployment plans and provides customers with knowledge of and access to AMI benefits. This coordination is critical for customers to be provided with the tools to better manage energy usage, enroll in energy efficiency programs, interact with third party vendors especially with the use of Green Button, and have the opportunity to use innovative services and products. Customer outreach and education is also integral to successful dynamic pricing and DER programs. The Commission agrees with O&R's plans to have targeted customer outreach and education during the AMI pre-deployment, deployment and post-deployment phases. Continual outreach and engagement of customers after AMI deployment have concluded allows for customer benefits to materialize.

In regards to cost recovery, the Company's proposal to recover any incremental costs through the Company's ECA and MGA is denied. However, as long as recovery of the incremental costs does not cause the Company to over-earn during the period in which the costs are incurred, the Company is allowed to defer these costs until base rates are reset by the Commission.

4) Alternate Rates

The Company proposed AMI Rate Pilot is denied. O&R can take full advantage of the information gained from the rate pilots being implemented in Con Edison's service territory, specifically those in Westchester County. Con Edison's customers in Westchester County can serve as a suitable group to benchmark and gain insight on the response Rockland County customers might have to demand based delivery rates in the residential service classes. This would allow O&R to receive

sufficient alternative rate structure information at no or significantly less cost.

O&R should use the information gained from Con Edison's rate pilots and benchmarking of other utilities to create innovative rate structures such as demand-metered delivery rates, hourly supply pricing, peak rebate pricing, or other time-and-location-sensitive designs.

Non-Wires Alternative

The Commission finds the general framework of the Company's proposed NWA cost recovery and incentive mechanisms to be reasonable, as it mirrors the NWA cost recovery and incentive mechanisms it recently approved for Con Edison in its most recent Con Edison Rate Order[21] and in the NWA Incentives Order. Consistent with the NWA Incentives Order, the Commission is requiring several modifications to further improve O&Rs NWA projects and incentives development process.

1) NWA Projects

In regard to NWA project development, while passing the Societal Cost Test shall continue to be the primary metric for determining continuation of development and implementation of an NWA project, the Company must be cognizant that the ultimate purpose of implementing NWA projects is to save customers money by avoiding or deferring the building of utility infrastructure. Therefore, in selecting the NWA solution, the Company should seek to maximize customer bill savings and minimize customer bill impacts.

2) NWA Incentive Mechanism

The NWA incentive mechanisms are well suited to allow O&R to pursue cost-beneficial NWA projects, continue to find

[21] Case 16-E-0060, Con Edison Electric Rates, Order Approving Electric and Gas Rate Plans (issued January 25, 2017).

opportunities for cost reductions as such projects are implemented, and for providing the Company with a meaningful incentive to seek out NWA opportunities. O&R's filing lacked a proposal for adjustment of the NWA incentive mechanism in the event that the NWA project is ultimately unable to defer or eliminate the associated infrastructure project as originally anticipated. Therefore, the Commission adopts for O&R the NWA Incentive Mechanisms structure approved for Central Hudson Gas and Electric Corporation[22] and in the NWA Incentives Order. Recovery of any incentive, if applicable, will be halted, without requiring a refund of amounts collected to date, if at any time it is determined that continuing the NWA project is operationally or technically infeasible.

Additional checkpoints throughout the NWA development process are required, which is consistent with the incentive mechanism approved for Con Edison in the NWA Incentive Order. The checkpoints provide additional transparency to the NWA development process. The Company shall make a filing with the Secretary to the Commission when it determines it has reasonable certainty as to the costs of the NWA portfolio instead of only consulting with Staff. Second, in the event that an increase or reduction in the MW of DER portfolio is warranted, the Company shall file an updated implementation plan and BCA for that NWA project. O&R shall also update its implementation plan and BCA in the event that the length of the deferral period for the traditional infrastructure related to each NWA project is modified. In addition, the Company shall file a detailed operating procedure illustrating all applicable steps for

[22] Case 14-E-0318, Central Hudson Gas & Electric Corporation - Electric Rates, Order Implementing with Modification the Proposal for Cost Recovery and Incentive Mechanism for Non-Wire Alternative Project (issued July 15, 2016).

calculating financial incentives for both Large projects and Small projects, as well as a detailed accounting procedures for the recovery of earned incentives, within 30 days of the effective date of this Order. O&R's initial and updated implementation plans and BCAs, as well as the operating and accounting procedures, shall be filed under Case 17-M-0178 and the case number associated with the utility's latest electric rate plan.

3) NWA Project and Incentives Cost Recovery

The Company's proposals to modify its Net Plant Reconciliation mechanism to apply the carrying costs of displaced net plant toward NWA project cost recovery is adopted. The Company's NWA project cost deferral and amortization will put NWA project expenditures and investments in traditional utility infrastructure on equal footing, and the proposed modification to the Net Plant Reconciliation mechanism will ensure that customers will be protected from paying for both an NWA project and for the capital project it is displacing.

The Commission denies the Company's request to recover the NWA project costs and associated incentives through the ECA mechanism. As recently adopted for the Value Stack Tariff in the Value of DER Proceeding we expect cost recovery to better match cost causation and "beneficiaries pay" principles.[23] While recovering costs through the ECA would be expedient in order to provide cost recovery and opportunities for incentives on a rapid basis, there is a mismatch in long-term use of the ECA mechanism since it is charged to customers on an energy-basis, but NWA projects are generally demand-based. Therefore, as part of the Company's next base rate proceeding, O&R should

[23] Case 15-E-0751, Value of DER Proceeding, Order on Net Energy Metering Transition, Phase One of Value of Distributed Energy Resources, and Related Matters (issued March 9, 2017).

propose a cost recovery mechanism for both NWA project costs and earned incentives that better matches NWA cost recovery with cost causation and "beneficiaries pay" principles.

In order to ensure that the Company does not have a disincentive to pursuing beneficial NWA projects, the Company will be allowed to defer both NWA project costs and related incentives, irrespective of the Company's earnings level, until base rates are reset by the Commission[24]. Allowing the Company to defer NWA costs without an over-earnings test removes any financial disincentive for the Company to pursue NWA opportunities. Allowing the Company to recover the NWA project costs is intended to make the Company indifferent between pursuing NWA projects and investing in traditional capital infrastructure. Disallowing recovery of NWA project costs or incentives could result in the Company deciding to either delay implementing NWA projects until it can recover such costs, potentially harming the viability of NWA projects with tight implementation timeframes, or deciding not to pursue an otherwise-beneficial NWA project at all. Thus, under the circumstances, allowing O&R to defer NWA project costs and incentives, net of traditional amounts included in rates, will provide the necessary regulatory certainty for the Company to pursue NWA opportunities.

The Commission orders:

1. Orange and Rockland Utilities, Inc.'s Advanced Metering Infrastructure (AMI) project is approved, subject to a cap on capital expenditures of $98.5 million, and as discussed in the body of this Order.

[24] Carrying costs on the deferred NWA project costs, net of tax, will accrue at the pre-tax WACC.

2. Orange and Rockland Utilities shall file an annual report with the Secretary to the Commission that details all AMI related upgrades and improvements, as discussed in the body of this Order.

3. Orange and Rockland Utilities shall make an annual filing with the Secretary to the Commission, detailing an itemized breakdown of all AMI expenditures, cost reduction benefits, actual and target electric and gas AMI net plant balances, and earnings computations, as discussed in the body of this Order.

4. Orange and Rockland Utilities, Inc.'s Advanced Metering Infrastructure Customer Engagement Plan is approved, however, its proposal to recover incremental costs through the Company's Electric Energy Cost Adjustment (ECA) and Monthly Gas Adjustment is denied, as discussed in the body of this Order.

5. Orange and Rockland Utilities, Inc. Advanced Metering Infrastructure rate pilot is denied as discussed in the body of this Order.

6. The non-wires alternative (NWA) incentive mechanism structure approved for Central Hudson Gas and Electric Corporation and in the NWA Incentives Order is approved for Orange and Rockland Utilities, Inc. as discussed in the body of this Order.

7. Orange and Rockland Utilities, Inc. shall make a filing with the Secretary to the Commission when it determines it has reasonable certainty as to the costs of the NWA portfolio as discussed in the body of this Order.

8. Orange and Rockland Utilities, Inc. shall file with the Secretary to the Commission an updated implementation plan and benefit cost analysis for that NWA project in the event that an increase or reduction in the megawatt-hour of distributed energy resource portfolio is warranted or in the event that the

length of the deferral period for the traditional infrastructure related to each NWA project is modified as discussed in this Order.

9. Orange and Rockland Utilities, Inc. shall file with the Secretary to the Commission an operating procedure for the calculation of non-wires alternative financial incentives, within 30 days of the effective date of this Order, as discussed in the body of this Order.

10. Orange and Rockland Utilities, Inc. shall file with the Secretary to the Commission a detailed accounting procedure for the recovery of non-wires alternative project costs and financial incentives, within 30 days of the effective date of this Order, in accordance with the discussion in the body of this Order.

11. Orange and Rockland Utilities, Inc. proposal to recover the NWA project costs and associated incentives through the ECA mechanism is denied.

12. Orange and Rockland Utilities, Inc. shall file with the Secretary to the Commission under Case 17-M-0178 and the case number associated with the Company's latest electric rate plan, all updated non-wires alternative implementation plans and benefit cost analysis, in accordance as discussed in the body of this Order.

13. In the Secretary's sole discretion, the deadlines set forth in this order may be extended. Any request for an extension must be in writing, must include a justification for the extension, and must be filed at least one day prior to the affected deadline.

14. This proceeding is continued.

By the Commission,

(SIGNED) KATHLEEN H. BURGESS
Secretary