INTRODUCTION

On January 7, 2020, Consolidated Edison Company of New York, Inc. (Con Edison or Company) filed a petition to discontinue its Smart AC Kit Program, a component of the Company’s residential- and small commercial-focused demand response program under Rider L, with associated draft tariff amendments for residential room air conditioners. In its petition, the Company states that the Smart AC Kit Program has failed to achieve anticipated results, and requests Commission approval to discontinue the program. The Company cites cost-inefficient program results, proliferating market-based alternatives to the program offerings, and the imminent expansion and development of other Company-administered demand response programs using advanced metering infrastructure.
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(AMI) and Wi-Fi-enabled air conditioner units as reasons for suspending the program.

This Order grants the Company’s petition to discontinue the Smart AC Kit Program. The Company has demonstrated that the program has become cost-ineffective because of changing market conditions, notably the increasing availability and improving technical capabilities of “smart” consumer products that obviate the need for supplemental, ratepayer-subsidized appliance upgrades.

Although the Smart AC Kit option is being discontinued, residential air conditioning as a whole remains fertile ground for providing both peak shaving and reliability-related services through demand response programs, with new options for participation growing rapidly even as this method is removed. The Company notes in its petition that it is planning to expand or develop other residential demand response programs using AMI to allow participation by customers with Wi-Fi-capable air conditioning. Furthermore, the Company also observes that cessation of the Smart AC Kit Program does not prevent the use of this technology in other Company peak reduction solicitations, such as non-wires alternatives projects.

BACKGROUND

The Commission authorized funding for the Company’s Connected Devices Pilot Program in 2009 to support the development of the Residential Smart Appliance Program,\(^1\) a pilot that allowed remote control of curtailable home appliances for demand response purposes by both customers and the Company.

\[^1\] Case 09-E-0115, Con Edison Demand Response Programs, Order Adopting in Part and Modifying in Part Con Edison’s Proposed Demand Response Programs (issued October 23, 2009).
Customers with home air conditioning could participate in the pilot either by using commercially available, Wi-Fi-enabled “smart” units, or by using a smartAC kit\(^2\) offered by the Company to upgrade conventional, noncommunicating air conditioners to Wi-Fi capability.\(^3\) Following a period of growth in smartAC kit enrollment that indicated adequate market potential for program expansion, the Company petitioned the Commission in 2017 to promote the pilot to a full-scale program.\(^4\) The Commission approved that petition and placed the Smart AC Kit Program under Rider L to capitalize on greater penetration of demand response assets available.\(^5\)

**PETITION**

In its petition, Con Edison requests authorization to discontinue offering the Smart AC Kit option under Rider L.\(^6\) Con Edison identifies two reasons why the Commission should authorize discontinuation of the Smart AC Kit Program.

\(^2\) “Smart AC Kit” refers to the program, whereas “smartAC kit” is the name of the equipment provided under the program.

\(^3\) The smartAC kit is a piece of equipment which plugs into a typical wall outlet. A room air conditioner can then be plugged into the smartAC kit to provide communications and remote control capability to an otherwise non-communicating room air conditioner.

\(^4\) Case 17-E-0526, Con Edison Room Air Conditioning Program, Petition of Con Edison Company of New York, Inc. to move a Room Air Conditioning Program to Rider L, Make Changes to Rider L, and Continue Connected Devices Pilot with Modifications (filed August 24, 2017).

\(^5\) Case 17-E-0526, supra, Order Approving Tariff Amendments (issued December 14, 2017).

\(^6\) Customers would still be able to participate in Rider L through the Bring Your Own Thermostat option, which allows the Company to remotely control participants whole-home central air conditioners through a communicating thermostat.
First, Con Edison states that after two years of operation as a full-scale program the Smart AC Kit option under Rider L has underperformed and has yet to be cost-effective since its graduation to full-fledged program status. Con Edison notes that its initial projections indicated that the Smart AC Kit option would become cost-effective once 21,000 smartAC kits were enrolled and operating, however, the Smart AC Kit option has yet to become cost-effective despite having approximately 38,500 smartAC kits installed as of the end of 2019. Following a reassessment of benefits and costs associated with the program in 2019, the Company notes that assumptions used in the Benefit-Cost Analysis model relied upon in 2017 were predicated on more promising expectations of demand reduction achievement per unit, greater continuity of participation from year-to-year which has failed to materialize, and a reassessment of program benefits to reflect the benefits derived from reducing network and system peaks based on when the program was called for events.

Second, Con Edison states that changes in technology and customer preferences favor other demand response devices and programs instead of the smartAC kit. The Company notes that the alternatives to the smartAC kit have been growing rapidly, while customer interest in the smartAC kit has been waning. Con Edison states that customers are rapidly adopting Wi-Fi-enabled room air conditioners,\(^7\) noting that it provided incentives through its energy efficiency program for 2,400 Wi-Fi-enabled room air conditioners in 2017, whereas it provided 23,000 such incentives during 2019. Con Edison further states that it expects this trend in increasing availability and adoption of Wi-Fi-enabled room air conditioners to continue. Conversely, Con Edison notes a marked decrease in customer adoption of the

\(^7\) Wi-Fi-enabled room air conditioners do not require a smartAC kit, but instead have built-in remote control functionality.
smartAC kit, with year-to-year decreases of 20% and 27% between 2017 and 2018, and 2018 and 2019, respectively. Con Edison projects that the smartAC kits will no longer be used by customers as availability of Wi-Fi-enabled room air conditioners increases, and that the smartAC kit itself is no longer appropriate as an offering in an incentive program. Finally, the Company notes that it is planning to expand or develop other demand response programs using AMI that would allow participation by customers with Wi-Fi-enabled room air conditioners, in addition to continuing to offer the Connected Devices Pilot and Bring Your Own Thermostat option.

UPDATE LETTER

In its letter dated April 15, 2020, Con Edison states that it has negotiated with its vendor to continue customer-facing platform tools through the end of summer 2020, including remote operation of room air conditioners connected with the smartAC kit upgrade. However, the Company will not be able to call demand response events. Moreover, despite the discontinuation of the smartAC kit option, residential customers will be able to continue participating in residential demand response programs using connected room air conditioners through Con Edison’s Connected Devices Pilot, and may also participate in the Rider T Dynamic Load Management programs through an aggregator due to the more widespread availability of advanced metering infrastructure in 2020 and beyond.

8 That is, customers will continue to be able to remotely control their room air conditioners connected to smartAC kits, however, Con Edison will not have the ability to control such devices.
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 February 19, 2020 [SAPA No. 20-E-0008SP1]. The time for submission of comments pursuant to the Notice expired on April 20, 2020. No comments were received.

LEGAL AUTHORITY

Pursuant to Public Service Law (PSL) §§5, 65(1) and (8), and 66(1) and (12), the Commission has the legal authority to review proposed tariff leaves, as well as modify, reject, or approve such filed tariffs. Therefore, the Commission has the legal authority to review the Company’s filing and approve and make effective tariff amendments, as prescribed in this Order.

DISCUSSION

While the Commission does not relish the idea of reducing the number of options available for customers to participate in demand response programs, Con Edison makes convincing arguments for why continuing to provide the Smart AC Kit option is no longer reasonable. Although the SmartAC Kit option under Rider L was upgraded from pilot status in 2017, many of the conditions forecast by Con Edison justifying continuing this option have failed to materialize. As a result of conversations with the Company’s program managers, Department of Public Service staff (Staff) reports that the Benefit Cost Analysis supporting the program submitted in 2017 included assumptions regarding the number of years that customers will use the SmartAC Kit devices, and the amount of load relief provided per device — both the longevity of customer use of devices and the amount of load relief provided have proven to fall far short of the Company’s expectations.
Although room air conditioners continue to represent a significant source of potential demand response capability, the price and availability of in-built connectivity features providing much the same functions as the SmartAC Kit have improved significantly in the intervening years, and customers are adopting these technologies at a faster than anticipated rate. Meanwhile, customer interest in participating through the SmartAC Kit option has decreased by more than 20% per year during 2018 and 2019, despite increased marketing efforts by the Company.

For all of the reasons stated above, the Commission grants Con Edison’s proposal to discontinue the Smart AC Kit Program. Con Edison is directed to inform participants directly by July 1, 2020, through email, bill inserts, or other appropriate forms of communication regarding the status of the program and expectations regarding continued use of the smartAC kits and file with the Secretary to the Commission by July 10, 2020, a letter indicating that customers have been notified of this action. Con Edison shall make a filing in compliance with this order to effectuate its draft tariff revisions to be effective on June 1, 2020, on not less than one day’s notice. Since these tariff amendments are being filed in compliance with this Order, the requirements of PSL §66(12)(b) and 16 NYCRR §720-8.1 regarding newspaper publication of these tariff modifications are waived. Given the fact that the proposed tariff changes were provided in draft format, that public comments regarding the proposed change were solicited through the SAPA notice, and since Con Edison is required to communicate with Smart AC Kit program participants directly, it is reasonable to waive newspaper publication for these tariff revisions.
Although the Smart AC Kit program failed to meet expectations, Staff reports that the Company has identified several key learnings which should be instructive for current and future utility program offerings both at Con Edison and elsewhere throughout the State. First, Staff reports that Con Edison has implemented improved BCA development and review protocols, which has resulted in better controls and new templates for conducting BCA tests across both energy efficiency and demand response programs. Second, Staff reports that Con Edison plans to improve the accuracy of assumptions through the use of customer surveys, and do so earlier in the program development process. Finally, Staff reports that Con Edison plans to use new processes for considering transitioning projects from pilot to program stages, engaging more expertise earlier in that process and providing additional support to program managers implementing such pilot programs.

Despite the discontinuation of the Smart AC Kit option, Residential customers will continue to able to participate in residential Demand Response programs using connected room air conditioners through Con Edison’s Connected Devices Pilot, and may also participate in the Rider T Dynamic Load Management programs through an Aggregator due to the more widespread availability of Advanced Metering Infrastructure in 2020 and beyond.

The Commission orders:

1. Consolidated Edison Company of New York, Inc.’s request to discontinue its Smart AC Kit Program is approved.

2. Consolidated Edison Company of New York, Inc. shall file tariff revisions in compliance with this order to become effective on June 1, 2020, on not less than one day’s notice.
3. The requirements of Public Service Law §66(12)(b) and 16 NYCRR §720-8.1, as to newspaper publication with respect to the tariff filings directed in Ordering Clause No. 1, are waived.

4. Consolidated Edison Company of New York, Inc. shall communicate with Smart AC Kit Program participants regarding program cancellation and remaining smartAC kit functionality by July 1, 2020, and file with the Secretary to the Commission by July 10, 2020, a letter indicating that the participants were notified of this action.

5. 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.

6. This proceeding is closed pending compliance with ordering clauses 2 and 4.

By the Commission,

(SIGNED)           MICHELLE L. PHILLIPS
                  Secretary