BENEFIT-COST ANALYSIS: NON-PIPE ALTERNATIVES TO GAS INFRASTRUCTURE REPLACEMENT

November 2025

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Overview

Consolidated Edison Company of New York, Inc. ("Con Edison" or the "Company") has commenced implementing a program of Non-Pipes Alternatives ("NPA") called the Con Edison Electric Advantage ("EA") Program. The goal of the EA program is to eliminate the need for replacing segments of gas mains by providing customers with electric alternatives for all fossil fueled equipment and facilitate disconnecting from the gas system.[1]

Between 2022 and 2025, the Company filed the benefit-cost analysis ("BCA") results for 132 NPAs that were feasible and cost-effective based on the location within the gas distribution system and the number and types of customers connected for service.[2] This filing provides the BCA results for 26 new NPAs the Company identified as having reasonable certainty regarding the implementation costs, and they have been found to be feasible and cost-effective. These 26 additional NPAs will bring the Company's new total from 132 to 158. The Company will continue to identify and evaluate eligible segments of mains for potential NPAs. NPAs identified as cost-effective and feasible will be added to this program on an ongoing basis.

The Company developed a combined suite of offerings to customers including space heating and domestic hot water electrification; fuel switching for gas-connected appliances, such as stoves and dryers; weatherization and other building energy efficiency improvements; and electrical upgrades to accommodate additional load from the new equipment. Each building in

[1] Case 19-G-0066, *Proceeding on Motion of the Commission as to the Rates, Charges, Rules and Regulations of Consolidated Edison Company of New York, Inc. for Gas Serv., et al.,* ("Gas Rate Proceeding") Order Approving Non-Pipes Alternative Projects Amortization Period and Shareholder Incentive Mechanism for Specified Projects (issued and effective June 17, 2022) ("June 2022 Order").

[2] Of the total of 132 Electric Advantage NPAs, 63 gas mains are in the implementation phase, 12 NPAs have been electrified, and 57 NPAs have been replaced or are pending replacement under traditional means as of November 1, 2025.

the list of 26 identified NPAs described above was individually analyzed and modeled based on a set of electric measures expected to meet the existing fossil fuel usage. Based on these models, each NPA provides its own set of net benefits for customers and achieves a societal cost test ("SCT") result greater than one (1.0), indicating that each NPA will provide a cost-effective alternative to a traditional infrastructure approach. The Company has notified Department of Public Service Staff ("DPS Staff") that reasonable cost certainty for these additional EA NPAs has been determined. The Company will submit an Annual Report to provide information on the Implementation Status and achievements of the Electric Advantage NPA Program.

BCA Summary

Table 1: November 2025 Electric Advantage NPAs and BCA summary

Project ID	Total Energy Savings (MMBtu/yr)	Total Benefits (NPV to 2025)	Total Costs (NPV to 2025)	BCA SCT Score	Con Edison Investment (NPV 2025)[3]	Customer Portion of Net Benefits (70% of Net Benefits)	Performance Incentive (30% of Net Benefits)[4]
M007	98.11	$685,996	$293,752	2.335	$327,960	$274,571	$117,673
M024	138.38	$648,902	$580,874	1.117	$648,519	$47,620	$20,408
M042	528.01	$283,037	$199,495	1.419	$168,934	$58,479	$25,062
M046	1535.99	$1,115,185	$1,077,551	1.035	$1,094,851	$26,344	$11,290
M048	212.46	$572,993	$79,728	7.187	$87,259	$345,286	$147,980
Q072	124.09	$101,260	$89,474	1.132	$84,547	$8,250	$3,536
W074	532.02	$543,770	$318,207	1.709	$300,204	$157,894	$67,669
W264	689.50	$302,192	$206,900	1.461	$193,727	$66,705	$28,588
W266	201.48	$221,069	$207,047	1.068	$201,775	$9,816	$4,207
W267	355.47	$295,020	$243,380	1.212	$220,243	$36,148	$15,492
W273	156.36	$141,517	$141,104	1.003	$118,866	$289	$124
W274	240.14	$312,332	$268,235	1.164	$228,457	$30,868	$13,229
W277	119.82	$126,239	$95,887	1.317	$89,011	$21,246	$9,106
W278	417.32	$334,454	$288,530	1.159	$301,647	$32,147	$13,777
W285	111.90	$150,464	$84,494	1.781	$76,053	$46,179	$19,791
W287	236.14	$230,400	$207,478	1.110	$182,788	$16,046	$6,877
W288	432.65	$283,494	$267,635	1.059	$244,644	$11,101	$4,758
W289	157.42	$143,093	$129,287	1.107	$113,972	$9,664	$4,142
W292	158.50	$234,277	$138,741	1.689	$120,499	$66,875	$28,661
W303	199.81	$114,542	$110,980	1.032	$104,626	$2,493	$1,069
W307	101.96	$143,529	$138,791	1.034	$123,082	$3,317	$1,422
W311	149.66	$182,290	$89,624	2.034	$81,932	$64,866	$27,800
W314	170.34	$154,017	$143,732	1.072	$128,310	$7,199	$3,085
W315	111.82	$172,516	$102,610	1.681	$98,053	$48,934	$20,972
W339	80.63	$222,071	$92,599	2.398	$86,234	$90,630	$38,841
X054	702.87	$259,819	$251,665	1.032	$208,339	$5,708	$2,446

[3] Includes planned expenditures for NPA incentives and non-incentive related costs. The incentive and non-incentive costs shown in the Company's BCA model in Table 1 are adjusted to account for regulatory asset treatment of NPA program expenditures and may differ from the program participant incentive costs as a result.

[4] Customers receive 70 percent of an NPA portfolio's net benefits, and the utility's shareholders earn 30 percent. The Company recovers the incentive through the Monthly Rate Adjustment after it has been earned, i.e., once the requisite customer sided solutions are operational, as defined in the Petition Order.

Each EA NPA has its own BCA, providing specific benefits at an NPA-specific cost. The result of the SCT and the net benefits for each individual NPA are outlined in Table 1 above.

Table 2 summarizes the net present value of the costs and benefits of all EA NPAs in this batch of NPAs. The Company identified the following benefits associated with pursuing the NPAs over the traditional solutions:

- Avoiding 141,658 dekatherms of gas consumption, saving customers up to $344,593;
- Avoiding 178 dekatherms of peak day gas capacity, with a corresponding customer savings of $172,227;
- Eliminating the need to build the traditional solutions, saving customers up to $7,959,960;
- An increase of 12,337 MWh in electric consumption and an increase of 0.20 MW in peak electric system load, corresponding to a disbenefit of ($1,006,367) in electric system impacts;
- The net avoidance of CO_2 emissions, supporting New York State and New York City CO_2 emission reduction goals and providing up to $296,649 in benefits; and
- Avoiding 14,197 MMBTU of oil, saving customers up to $207,418.

The Company identified the following costs associated with implementing the NPAs:

- $3,994,812 in program participant incentive costs to accelerate market adoption of energy efficiency and electrification;

- $667,891 in incentive costs from other efficiency and electrification programs funded by customers in the specified NPAs;
- The combined incentives allow for customers to pay $0 to participate in this program; and
- $1,185,099 in costs associated with the Company's administration and implementation of the NPA program, for items such as planning, marketing, reporting and payments to independent contractors for quality control, evaluation, measurement, and verification.

Table 2: November 2025 Electric Advantage NPAs: Societal Benefits and Costs[5]

Gas Benefits (NPV to 2025)	Gas Avoided Commodity Costs of Upstream Supply Benefit	$344,593
	Gas Avoided Upstream Capacity Costs	$172,227
	Avoided Gas Main and Service Replacement Benefits and On-System T&D Costs	$7,959,960
Electric Benefits / Disbenefits (NPV to 2025)	Electric Avoided Generation Capacity Cost + LBMP[6] + T&D[7] Costs Benefit	(1,006,367)
Carbon Benefits (NPV to 2025)	Net Avoided CO2 benefits	$296,649
Oil Benefits (NPV to 2025)	Oil Avoided Commodity Costs	$207,418
Total Benefits	**$7,974,480**	
Program Costs (NPV to 2025)	NPA Incentive Costs	$3,994,812
	Other Incentives from Programs Funded by Customers	$667,891
	Con Edison NPA Program Customer Cost	$0
	Con Edison Program Implementation + Administration + EM&V[8] Costs	$1,185,099
Total Costs	**$5,847,802**	
Societal Cost Test (SCT) Score	**1.36**	

[5] Totals may differ due to rounding.
[6] Locational Based Marginal Pricing
[7] Transmission and Distribution
[8] Evaluation, Measurement, and Verification

Appendix A: Traditional Infrastructure Solution - Gas Infrastructure Replacement or Reduction Program ("GIRRP")

Description

The Company's Gas Infrastructure Replacement or Reduction Program ("GIRRP"), formerly Main Replacement Program ("MRP"), is designed to replace or reduce leak-prone gas mains, defined as small diameter (12" and smaller) cast iron, wrought iron, and unprotected steel (pre-1972) mains. Planned main replacement is driven by reasons such as top-ranked risk replacement, methane emissions opportunities, and system planning improvements. The Company utilizes a computer-based probabilistic risk model to prioritize the risk-based planned portion of the replacement program.

Under the Con Edison Electric Advantage NPA program, customers currently connected to a selected main would convert all their gas uses to electricity, eliminating the need to replace the main. NPAs may displace a traditional project subject to the Net Plant Reconciliation mechanism, depending on the estimated timeframe for execution of the traditional capital project. If subject to net plant reconciliation, the deferral of capital projects to implement NPA will reduce the net plant reconciliation target.

Justification Summary

The GIRRP serves an important safety function by mitigating the risk of a gas distribution event. The program mitigates the risk of fire or explosion on the gas distribution system, by abandoning leak prone gas mains or by replacing them with plastic and/or protected steel. These materials are proven to be safer and more resilient. Methane emission reduction will be addressed by focusing on the replacement or reduction of cast iron, wrought iron, and

unprotected steel pipes, which are significant contributors to fugitive methane emissions. This program also mitigates the risk of a significant customer loss event through the proactive replacement or abandonment of low-pressure gas mains within flood zones. This will reduce the likelihood of water infiltration and gas service outages during a flood event or water main break. Emergent main replacement occurs due to conditions such as irreparable leaks, cast iron encroachments, or compromised main conditions discovered by field personnel. Replacement of leak prone pipe also supports the reduction of operations and maintenance costs for leak repair, by replacing gas assets with higher leak maintenance costs, with plastic and protected steel mains which leak at much lower rates.