



NY GEOTHERMAL ENERGY ORGANIZATION

November 4, 2019

Re: 19-E-0065/19-G-0066 - NY-GEO support for the Joint Proposal

NY-GEO has signed on to the Joint Proposal in case 19-E-0065/19-G-0066. There are several negotiated advances that led us to sign on in support. We greatly appreciated the efforts made by DPS staff, the company and other parties to grapple with the numerous important issues in this rate case.

The issues of most interest to NY-GEO largely arise from New York State's goal under the Climate Leadership and Community Protection Act, as well as New York City's goal under NYC Local Law 97-2019, of reducing carbon emissions 40% by 2030. Switching from fossil fuels to beneficial electrification is a potent way to reach this goal but one that brings several new and complex questions to the table.

Among the advances we see in the Joint Proposal (JP) are the following:

- The establishment of an optional demand-based rate ¹ that should address the "inverse cost shift" identified in NYSERDA's January, 2019 Heat Pump Report. NYSERDA estimated an annual overcharge of \$827 for Con Ed geothermal customers on their electric bills. ²

¹ Joint Proposal pp. 59-60 The Company will establish an optional demand-based rate, which will be available with no cap to (a) existing residential geothermal customers and (b) new residential geothermal customers that meet the Company's requirements for its heat pump program to be launched during 2020. This rate will also be available to up to 5,000 other residential customers, including residential geothermal customers that do not meet the requirements. This rate will be based on the rate structure of Rider Z, Rate IV, and include a \$27.00 customer charge, which reflects the full customer cost set forth in the 2017 ECOS study. The supply component of this rate will assess time-of-use supply for full service customers. In addition, this Optional Demand-Based Rate will be subject to review in the Company's next electric base rate case.

² New Efficiency: New York - Analysis of Residential Heat Pump Potential and Economics -Final Report | Report Number 18-44 | January 2019, p.60

<http://documents.dps.ny.gov/public/Common/ViewDoc.aspx?DocRefId={8DDC3C27-0E29-42BC-8EC7-AE5B52DCBA67}> Accessed 2019 11 04

- The commitment by the company to file a new process for Non-Pipe Alternatives (NPAs) that will include a BCA Handbook for NPAs ³
- The inclusion of a Beneficial Electrification Earning Adjustment Mechanism, under which the Company can be incentivized for carbon emission reductions from increases in heat pump and electric vehicle adoption in its territory. ⁴ Most of the Earning Adjustment Mechanisms in the JP should help the Company recognize the value of geothermal heat pump installations, which will help the Company meet EAM targets, particularly for the peak electric demand and peak gas demand EAMs. Geothermal heat pumps cut demand for gas in the winter, and, as they are exceptionally efficient for air conditioning on the hottest days of summer, they reduce electricity demand on the peak days of summer.
- The provision of a Heat Pump Demand Pilot to allow heat pump customers to better manage whole-home demand. ⁵
- The JP begins the process of grappling with depreciation issues for Company assets that will not remain fully utilized during their projected effective useful life (EULs). EULs are traditionally based on the projected ability of the asset to physically continue to function, and don't take into account rapidly developing regulatory changes that may render them obsolete. An example might be pipelines which are part of a process that produces greenhouse gases targeted to be cut. The JP includes a commitment to file a study "on the potential depreciation impacts of climate change policies and laws on its gas, electric,

³ Joint Proposal pp. 31-32 - The Company will propose for Commission approval, within 180 days of the Commission Order adopting this Proposal, a new process for evaluating and implementing NPAs as substitutions for traditional gas infrastructure projects. The new process would be analogous to the DSIP screening process currently in place for electric. The filing will include, among other things, proposed project suitability criteria, a BCA Handbook for NPAs that will be consistent with the Commission's BCA Order, an incentive proposal, and a plan for implementing the new process.

⁴ Joint Proposal Appendix 23 pp10-21 of 39

⁵ Joint Proposal p. 78: "The Company agrees to develop a Heat Pump Demand Pilot for interested heat pump customers on demand rates to allow them to adjust operation of their heat pumps in response to near real-time usage information, allowing them to better manage whole-home demand. The Company will file its Heat Pump Demand Pilot Implementation Plan under Case 19-E-0065 by July 1, 2020."

steam, and common assets”⁶ The JP also includes a minor acceleration of depreciation that can be built upon as this issue is addressed.⁷

- The inclusion of heat pumps in the Smart Kids curriculum for 5th grade students in New York State.⁸
- The implementation of a multi-phased District Energy Initiative,⁹ including a study and at least 2 projected pilot projects, the first of which is projected to displace the need for installation of new main to replace bare steel/cast iron main, and which would be paid for as a regulatory asset over a 10 year period. The role of utilities in developing and owning geothermal installations is a complex question which raises significant issues that must be addressed. The District Energy Initiative in the JP should develop important data and perspective to begin answering this question.

On balance, NY-GEO supports the negotiated Joint Proposal, largely because of the features listed above. We do so without believing the provisions of the JP are strong enough to put Con Ed on a glide path to do its part to help New York State or New York City meet their common goal to reduce CO₂e emissions by 40% by 2030. As a trade association in today’s regulatory environment, however, we believe the positive provisions of the JP are worth supporting.

We do, however want to point out 2 important areas where the JP falls short in our opinion.

⁶ Joint Proposal p. 113: “The Company will file a study with the Commission approximately 15 months after the Commission Order adopting the Joint Proposal on the potential depreciation impacts of climate change policies and laws on its gas, electric, steam, and common assets. The study will include an examination of the potential impacts of climate change policies and laws on average service lives, reserve deficiency/surplus, salvage value, cost of removal, depreciation rates and customer bills and an assessment of the appropriate survivor curve (e.g., h-curves or Iowa curves) to use in the Company’s next base rate filing.”

⁷ Joint Proposal p. 54: “In addition to the depreciation produced by the application of the rates summarized in Appendix 11, an additional amount of depreciation expense will be realized, beginning in RY1, in connection with the recovery of a portion of the electric and gas depreciation reserve deficiency. The recovery will equal \$71.3 million annually for electric and \$8.0 million annually for gas and reflects the reserve deficiency identified in excess of the ten (10) percent tolerance band amortized over 20 years.

⁸ Joint Proposal p. 78 “The Company will include a segment in its Smart Kids curriculum for fifth grade students explaining the fundamental concepts related to air source and ground source heat pumps assuming the addition is in compliance with the New York State Department of Education’s science curriculum for 5th grade students.”

⁹ Joint Proposal pp. 115-118

First, the Climate Leadership and Community Protection Act (CLCPA), passed by the Legislature in June and signed by the Governor in July, includes two important greenhouse gas definitions that render natural gas a more potent greenhouse gas emitter than oil or propane. There is no recognition in the JP, and no inclusion in the metrics of the JP, of these definitions which significantly change New York's energy landscape.

Definition 2 from page 5 of the CLCPA states ¹⁰ :

2. "CARBON DIOXIDE EQUIVALENT" MEANS THE AMOUNT OF CARBON DIOXIDE BY MASS THAT WOULD PRODUCE THE SAME GLOBAL WARMING IMPACT AS A GIVEN MASS OF ANOTHER GREENHOUSE GAS OVER AN INTEGRATED TWENTY-YEAR TIME FRAME AFTER EMISSION.

The International Panel on Climate Change ranks methane, the primary constituent of natural gas, as having 86 times the CO₂e of Carbon Dioxide on a 20-year time scale. This is about triple the CO₂e from methane in the current 100-year time scale used until now in New York State.

At the same time, definition 13 from Page 6 of the CLCPA states¹¹:

13. "STATEWIDE GREENHOUSE GAS EMISSIONS" MEANS THE TOTAL ANNUAL EMISSIONS OF GREENHOUSE GASES PRODUCED WITHIN THE STATE FROM ANTHROPOGENIC SOURCES AND GREENHOUSE GASES PRODUCED OUTSIDE OF THE STATE THAT ARE ASSOCIATED WITH THE GENERATION OF ELECTRICITY IMPORTED INTO THE STATE AND THE EXTRACTION AND TRANSMISSION OF FOSSIL FUELS IMPORTED INTO THE STATE. STATEWIDE EMISSIONS SHALL BE EXPRESSED IN TONS OF CARBON DIOXIDE EQUIVALENTS.

NY-GEO has reviewed data showing the combination of these two definitions renders natural gas to be a worse emitter of CO₂e than oil or propane. We urge the Commission to take the steps it deems necessary to come to its own conclusions on the impact of these definitions. In the meantime, we respectfully request the Commission to provide guidance in the near future on how to use these definitions in rate cases and other proceedings, as well as how to frame the global warming potential of natural gas in public pronouncements and advertising by utilities.

¹⁰ Senate Bill S6599, signed by the Governor 2019-2020 Legislative Session page 5.

<https://legislation.nysenate.gov/pdf/bills/2019/S6599> accessed 2019 11 04

¹¹ Ibid, page 6

Secondly, NY-GEO did not participate in the development of the carbon savings numbers developed as part of Appendix 23 Attachment A. We have not had a chance to do a full analysis of this attachment, but caution that the projected heat pump carbon savings are low compared to our analysis, which corresponds to the numbers adopted in the Orange and Rockland rate case. We believe that \$/CO₂e saved is becoming a crucial metric and caution against using the numbers developed in this case as a precedent.

In closing NY-GEO signs on to this Joint Proposal because on balance we believe it represents several significant advances. These advances are stepping stones in New York's efforts to address climate change while providing affordable clean energy for ratepayers. A clear and inclusive path needs to be developed from these stepping stones.

Sincerely,

A handwritten signature in black ink that reads "Bill Nowak". The signature is written in a cursive, slightly slanted style.

Bill Nowak
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The New York Geothermal Energy Organization (NY-GEO) is a non-profit trade association representing geothermal heat pump (GHP) installers, manufacturers, distributors, drillers, consultants and industry stakeholders from throughout New York State and beyond.