COUCH WHITE
COUNSELORS AND ATTORNEYS AT LAW

Couch White, LLP
540 Broadway
P.O. Box 22222
Albany, New York 12201-2222
(518) 426-4600

Amanda De Vito Trinsey

Direct Dial: (518) 320-3432
Telecopier: (518) 426-0376
email: adevito@couchwhite.com

August 30, 2013

VIA ELECTRONIC FILING

Hon. Kathleen H. Burgess
Secretary
New York State Public Service Commission
Three Empire State Plaza
Albany, New York 12223-1350

Re: Case 13-E-0030 – Proceeding on Motion of the Commission as to the Rates, Charges, Rules and Regulations of Consolidated Edison Company of New York, Inc. for Electric Service

Case 13-G-0031 – Proceeding on Motion of the Commission as to the Rates, Charges, Rules and Regulations of Consolidated Edison Company of New York, Inc. for Gas Service

Case 13-S-0032 – Proceeding on Motion of the Commission as to the Rates, Charges, Rules and Regulations of Consolidated Edison Company of New York, Inc. for Steam Service

Dear Secretary Burgess:

The City of New York hereby submits for filing in the above-referenced proceedings its Initial Post-Hearing Brief.

Please contact me with any questions.

Respectfully submitted,

COUCH WHITE, LLP

Amanda De Vito Trinsey

Amanda De Vito Trinsey

ADT/dap
Enclosure
cc: Administrative Law Judge Paul Agresta (via e-mail, w/enc.)
Administrative Law Judge Julia Smead Bielawski (via e-mail, w/enc.)
Active Parties (via e-mail, w/enc.)

STATE OF NEW YORK
PUBLIC SERVICE COMMISSION

Proceeding on Motion of the Commission as to the Rates, Charges, Rules and Regulations of Consolidated Edison Company of New York, Inc. for Electric Service	**Case 13-E-0030**
Proceeding on Motion of the Commission as to the Rates, Charges, Rules and Regulations of Consolidated Edison Company of New York, Inc. for Gas Service	**Case 13-G-0031**
Proceeding on Motion of the Commission as to the Rates, Charges, Rules and Regulations of Consolidated Edison Company of New York, Inc. for Steam Service	**Case 13-S-0032**

INITIAL POST-HEARING BRIEF OF THE CITY OF NEW YORK

Dated: August 30, 2013

COUCH WHITE, LLP
540 BROADWAY
P.O. BOX 22222
ALBANY, NEW YORK 12201-2222
(518) 426-4600

TABLE OF CONTENTS

I. OVERVIEW

The provision of safe and adequate electric, gas, and steam service by Consolidated Edison Company of New York, Inc. ("Con Edison" or the "Company") at just and reasonable rates is of critical importance to the City of New York ("City"). The City is one of the largest consumers of electricity, gas, and steam in Con Edison's service territory, and it seeks to ensure that the rates it pays are fair and reasonable. The City also has a responsibility to its more than eight million residents, as well as the many thousands of businesses within its borders, to ensure that Con Edison's provision of utility services throughout the City is reliable and safe, and that Con Edison's rates for all customers are appropriate and equitable.

Over the past few years, New York City has experienced some of the worst weather events in its recorded history in terms of associated damage and flooding. Due to the impact of climate change, the frequency and severity of future weather events are projected to increase. The City has taken action to assess the condition of all aspects of its infrastructure and ability to serve its constituents. Based on that assessment, the City is moving forward with significant improvements to its infrastructure, practices, procedures, and rules to increase its resiliency[1] to severe weather impacts.

As part of its resiliency planning effort, the City evaluated the resiliency of the utility infrastructure located in New York City and determined that major changes and improvements to Con Edison's facilities, practices, and procedures are needed. In fact, those findings were the impetus for the substantial evidence that the City has submitted in these

[1] As used throughout these rate cases and in this brief, "resiliency" means the ability of a utility system to withstand extreme climate events, and for utility service to be restored expeditiously when outages, whether planned or unplanned, occur.

proceedings to convince the Public Service Commission ("PSC") to require Con Edison to reevaluate how it is investing ratepayer funds, with a new focus on resiliency.

As Con Edison moves forward with addressing the need to increase the resiliency of its infrastructure, it is imperative that the Company be given sufficient funding and flexibility for its resiliency-related projects. As demonstrated by the City's testimony, most or all of the funding can be derived from greater efficiencies in project design, development, and construction, provided that Con Edison's revenue requirements are set at levels commensurate with the Company's projected needs. The City is concerned that evidence submitted by the Department of Public Service Staff ("Staff") relies too heavily on Con Edison's historical level of spending for its recommendations and does not adequately recognize the need for resiliency planning. Consistent with many statements by Governor Cuomo of the need to plan for the future, the PSC should approve appropriate capital spending levels, and give the Company the flexibility to reallocate funds within each business as necessary to allow important resiliency and reliability projects to be undertaken and completed. To address Staff's concerns about under-spending, the PSC should impose stringent reporting requirements and downward reconciliations for under-spending, and it should require Staff to closely monitor Con Edison's performance.

Further, to improve air quality in New York City and reduce the incidence of respiratory ailments, particularly among children, the City has embarked on an ambitious program to eliminate the use of heavy fuel oil for heating purposes. The City's Clean Heat Program seeks to expedite conversions of boilers to cleaner fuels, particularly natural gas. Con Edison has been somewhat cooperative in this effort. However, as set forth in more detail herein, the City respectfully requests that the PSC require a greater level of commitment from Con Edison to support this initiative.

As for other important issues in these proceedings, for the reason set forth below, the PSC should: (1) adopt the depreciation recommendations of Staff and the City, which would reduce the Company's revenue requirements appreciably; (2) adopt fair and equitable rate designs and revenue allocations for all three businesses; (3) reject attempts to impose burdensome and unwarranted electric rate increases on New York Power Authority ("NYPA") customers; (4) reject the proposal to spread the PJM-related transmission wheeling costs to NYPA customers; and (5) adopt a new pricing methodology for non-firm gas customers, who currently are being overcharged. While the economy is recovering, many New Yorkers continue to experience financial difficulties. Therefore, the need for robust low income programs is perhaps more important now than at any other time. The PSC should continue the low income programs at their current discount levels, while providing for full recovery of all related administrative costs. Concomitantly, the PSC should reject Staff's unsupported proposals, which would eviscerate the programs and deny assistance to many needy customers.

In addition to making the utility systems more resilient, there is a need to embrace and support new technologies and concepts, even though they represent a substantial departure from the traditional means of providing utility service. Specifically, the PSC should approve tariff amendments and other changes, as discussed herein, to foster and facilitate the expansion of distributed generation ("DG") and the use of electric vehicles. Microgrids may assist in enhancing system reliability, increasing system resiliency, more efficiently using our natural resources, improving air quality, and combatting climate change. To determine their potential, the PSC should institute a pilot microgrid program in New York City as soon as practicable.

The viability of the steam system continues to be uncertain, and the PSC should take action to help sustain it. First, the PSC should approve Con Edison's proposal to transfer

the Hudson Avenue property, and its unrecovered investment, to the electric business. Second, the PSC should reinstate the Incremental Method to allocate fuel costs for the East River Repowering Project ("ERRP") between the electric and steam businesses. Third, the PSC should modify the steam S.C. 4 rate to remove the unnecessary and inappropriate penalties it imposes on certain steam customers.

Finally, the PSC must exercise greater oversight or closer scrutiny of Con Edison's practices and costs. The record in these proceedings demonstrates material shortcomings in the Company's implementation of the Management Audit recommendations that were not identified by Staff. The record also demonstrates an over-reliance on information and analysis provided by Con Edison and insufficient independent analysis and assessments of the Company's proposals and capital plans. There is a compelling need for a new approach to analyzing the Company's capital spending proposals. While there is a need to balance rate impacts with system needs, simply reducing the Company's revenue requirement requests, as Staff proposes, is not an acceptable or appropriate approach. To be clear, the City is not advocating for rate increases; rather, the revenues provided by the PSC must be spent more wisely, and more scrutiny is needed as to the Company's spending proposals (scrutiny as to the projects undertaken and deferred, not merely the dollars expended historically). Moreover, the spending should be aligned with achieving the State's and City's policy goals, as well as providing the highly reliable and resilient utility service that New Yorkers expect and demand.

For the reasons set forth herein, the City urges the PSC to adopt its positions on the issues in these proceedings, as set forth in the City's direct testimony, the record developed during the hearing, and in this brief. The City also looks forward to continuing to work with the PSC, Staff, Con Edison and other parties to address these important issues.

II. SALES REVENUES

a. – c.

The City takes no position on these issues at this time.

d. The PSC Should Reject the Proposed Steam Weather Normalization Clause

Con Edison asserted that steam sales forecasts vary from actual sales volumes by factors including temperatures that deviate from "normal" conditions. (Muccilo – Steam-D 28; Con Edison Steam Forecasting Panel ["CESFP"]-D 23.)[2] Stating that such variations may increase or decrease Company costs, Con Edison proposed to implement a steam weather normalization clause ("Steam WNC") that would mitigate the financial impact of weather-related deviations from forecast sales "on a real-time basis." (*Id.* at 23.)

The Company's Steam Forecasting Panel explained that, as proposed, the WNC would "recognize variance in weather before customer bills are issued and would adjust the bills before they are rendered." (CESFP-D 23.) As proposed, the Steam WNC would be applied from November through April when heating degree days are outside of a ± 5 percent dead band around normal for the billing period. (*Id.* at 24.)

The PSC should reject the Steam WNC proposed by Con Edison. Initially, the Company's Steam Forecasting Panel claimed that the Steam WNC was not proposed to address a "financial need" and, therefore, the Company did not demonstrate any such need to support its proposal. (CESFP-R 27.) Contrary to this statement, however, the Panel testified that the Steam WNC is being proposed to "mitigate" the "financial impact" on Con Edison of weather-related deviations from the steam sales forecast. (CESFP-D 23; Tr. 423-24.) Moreover, the Panel

[2] Citations herein to pre-filed and direct testimony identify the witness or panel and the page number of the direct (*e.g.*, -D 35) or the rebuttal (*e.g.*, -R 10) testimony. Citations to the transcript are identified as "Tr."; the transcripts for August 1 and 2, 2013 are cited as "Aug. 1, 2013 Tr." and "Aug. 2, 2013 Tr.", respectively.

conceded that the dead band around normal weather was selected to moderate the risk of weather-related sales variations on the Company's steam return on equity. (Ex. 796.) Thus, contrary to the Company's claims, the Steam WNC is proposed largely, if not entirely, to address a financial need.

The "financial need" basis for the Steam WNC is further shown by the Company's concern about shortening the period of "normal" weather from 30 years to 10 years. The Company's Steam Forecasting Panel stated that "anomalous" weather during a particular year would have "dramatic impacts on sales forecasts" if a 10-year period of normal weather is used, whereas the impact of such anomalies would be moderated by the longer, 30-year period that the Company has relied on historically. (CESFP-R 29-30.) Based on this increased financial risk from anomalous weather, the Company concluded that "a Steam WNC is even more important today to protect … the Company from the revenue variations [*i.e.*, financial impact] resulting from abnormal weather." (*Id.*)

The Steam WNC would protect the Company's financial interests by shifting to customers the entire risk of steam sales volatility. Such increased risk would be detrimental to steam customers for two reasons. First, it would introduce substantial cost volatility into steam rates, thereby making it difficult for steam customers to understand, predict, and manage their steam costs. (Gorman-D 34-35.) The Company's Steam Forecasting Panel explained that, if the Steam WNC had been operative beginning in 2010, customers would have: (a) received a $7.7 million refund for the period October 1, 2010 through September 31, 2011 due to colder-than-normal weather; and (b) been surcharged $37.62 million for the period October 1, 2011 through September 31, 2012. (CESFP-D 27.) Importantly, however, customers would not have received

any advance notice that positive or negative adjustments would be made and, therefore, would have had significant difficulty managing their cost of steam. (Gorman-D 37.)

Second, the Steam WNC would discourage investments in energy efficiency. As proposed, the Steam WNC would be based on class average steam usage (Tr. 428), and would operate on a "real time" basis by adjusting bills before they are issued. (CESFP-D 23.) As a result, a customer with very efficient steam equipment would be deemed to have class average usage. (*Id.*) The full benefits of any investment in energy efficient steam equipment would not be reflected in the customer's bill in any month in which the Steam WNC is operative.

Further, although the class average usage is updated from time to time (Tr. 431), it would not resolve this billing problem. There always will be a gap between class average usage, which reflects a diversity of equipment and customers, and the steam usage of an individual customer with equipment that is more efficient than that operated by the "average" customer in the class.[3] An individual customer's usage likely would be a small percentage of the class consumption, meaning that the class average may not change by any material amount when an individual customer installs more efficient equipment. The Steam WNC, therefore, would have the perverse effect of devaluing investments in energy efficiency measures.

Finally, Con Edison's Steam Forecasting Panel attempted to rationalize the Steam WNC by explaining that it would be applied "only" in the months of November through April. (Tr. 433.) This is a meaningless distinction, given that "the Steam Business remains largely seasonal with winter usage equaling that of the other three seasons combined." (Ex. 802 at 31.)

[3] This effect may be particularly pronounced for a new steam customer, whose usage characteristics would not be reflected in the class average for at least one year from the start of steam service. (Tr. 432.)

For the foregoing reasons, the City urges the PSC to decline to adopt Con Edison's proposed Steam WNC in this proceeding.

III. OTHER OPERATING REVENUES

The City takes no position on these issues at this time.

IV. EXPENSES AND CREDITS

The City takes no position on these issues at this time.

V. TAXES OTHER THAN INCOME TAXES

The City takes no position on these issues at this time.

VI. DEPRECIATION

a., c., d.

The City takes no position on these issues at this time.

b. The PSC Should Adopt Staff's Methodology For Negative Net Salvage

Con Edison's method for recovering negative net salvage should be changed because it results in growing reserve deficiencies that are unduly burdensome to customers. Con Edison's proposal on negative net salvage will not address these growing deficiencies and will instead result in larger requests for future reserve deficiency amortizations. The City believes Staff's position is a preferable approach for resolving the negative net salvage reserve deficiencies. If the PSC does not adopt Staff's approach, it should implement the City's proposed approach as a reasonable and more appropriate alternative to the Company's approach.

Negative net salvage results when the projected cost of removing an asset exceeds the projected salvage value. This negative net salvage is charged to the depreciation reserve. Con Edison reports increasing negative net salvage values for its Electric, Gas and Steam Departments. (Arnett-D 3.) These increases are a concern because they are contributing to

growing depreciation reserve deficiencies. Con Edison already has two ongoing amortization accounts for depreciation reserve deficiencies in the Electric Department, and is proposing to establish a third in this case. (*Id.*) Including taxes, these reserve deficiencies have a revenue requirement impact of over $50 million in the Rate Year ("RY"). (*Id.*)

Con Edison's recent net salvage expense has been much higher than the net salvage Con Edison is recognizing in depreciation rates. The record in this case demonstrates that, if the recent net salvage experience were to be recognized in depreciation rates, the electric and steam depreciation expenses and reserves would increase dramatically. (Arnett-D 6; Ex. 145.) For example, in the Electric Department, depreciation expense would have to increase by nearly $730 million, and the reserve deficiency would increase by over $1.2 billion. (Arnett-D 6; Ex. 145, Sch. 1.)

Con Edison's response to its recent experience is to propose conservative increases to the negative net salvage factors for all three Departments. For example, for its largest electric account in terms of gross plant (Electric Account 9562), Con Edison proposes to increase negative net salvage from 55 percent to 65 percent, even though the Company's most recent five year average for this account is over 250 percent negative. (Arnett-D 7.) Because the accruals to cover negative net salvage are not adequate to cover actual costs, Con Edison's approach simply means that, unless the PSC adopts a different method, another reserve deficiency will develop which, in turn, will impose additional, unnecessary burdens on ratepayers. (Arnett-D 11-12.)

In the past, the City has recommended that negative net salvage be recovered as it is incurred using an approach called "pay as you go" ("PAYGO"). The PAYGO approach can take many forms, but the general principle is that "recovery of negative net salvage occurs either

simultaneously with the incurrence of the cost, through an operations and maintenance ("O&M") type allowance, or for some period thereafter, through an amortization." (Arnett-D 8.) Because the PSC rejected the PAYGO approach in the past, the City proposed a different solution in these cases that is based on the approach that gas utilities have used for decades. Specifically, the City recommended that "for any Electric, Gas or Steam Account with a proposed negative net salvage in excess of 50 percent, the amount of negative net salvage that can be charged to the depreciation reserve be capped at 50 percent . . . Any amounts actually spent on salvage above this cap would be charged to O&M at the time it is incurred." (Arnett-D 9.)

In contrast, Staff recommends that the "salvage rates be adjusted to more closely reflect the recent five year average of actual net salvage costs incurred." (Staff Depreciation Panel ["SDP"]-D 14.) This is essentially a PAYGO approach, and the City supports Staff's approach as the preferred option for addressing the Company's growing reserve deficiencies and amortizations. If the PSC rejects Staff's approach, it should adopt the capping approach recommended by the City. As explained by Mr. Arnett, the City's approach shares many of the benefits offered by PAYGO, including controlling the cost of Con Edison's ever-growing reserve deficiency by reducing Con Edison's collection, up front, of high negative net salvage values. (Arnett-D 10.)

Staff's approach is preferable to Con Edison's approach for several reasons: (1) a similar approach has been successful in controlling the depreciation reserve deficiency for the Company's Gas Department; (2) it will reduce the existing reserve deficiency and eliminate the ongoing amortizations, saving ratepayers money; (3) it better promotes intergenerational equity; (4) it does not require the PSC to adopt speculative estimates of salvage values and removal costs far into the future; and (5) it does not require ratepayers to provide an interest-free loan to the

Federal and State Treasuries. Furthermore, Staff's approach has been adopted by the PSC and other regulatory jurisdictions.

The Company spends considerable effort arguing that its method is widely accepted by New York State, other regulatory jurisdictions, accounting regulations, and scholarly texts. Before addressing the substance of Con Edison's claims, it is important to recognize that the PSC has discretion when determining the appropriate method for recovering negative net salvage.[4] Furthermore, all of Con Edison's citations cannot overcome the fact that the "capped" approach, which is a modified version of PAYGO, has been in effect in the Company's Gas Department for decades and has successfully controlled the Gas Department's depreciation reserve deficiency. In addition, Staff correctly notes that the PSC adopted Staff's proposed method for four other investor-owned utilities in New York State, most recently in 2011. (SDP-D 18-19.) Expensing negative net salvage, in a manner similar to that proposed by Staff, has been recognized by both the National Association of Regulatory Utility Commissioners and by regulators in New Jersey and Pennsylvania, where Con Edison's parent operates other utility systems. (CEPTD-R 55-58.) Thus, contrary to Con Edison's claims, Staff's proposal has been a recognized and successful approach for addressing negative net salvage.

Con Edison's methodology is inequitable because it allocates an excessive amount of negative net salvage costs to existing customers, and an insufficient amount to future customers. The methodology is premised on the flawed assumption that negative net salvage must be paid by customers served by a particular asset over the asset's life. Mr. Arnett analogized the practice to "requiring homeowners to cover, through their mortgage payments, the eventual demolition of their new house when it becomes inadequate for the needs of the owners

[4] *See, e.g., Bd. Of Pub. Util. Comm. v. N.Y. Tel. Co.*, 271 U.S. 23 (1926).

wanting to rebuild the home." (Arnett-D 12.) As Staff recognizes, "it is not reasonable to assume that a utility would dismantle all or a large portion of its plant at one time. Therefore, there is little need to accrue salvage costs significantly above current costs for the purpose of funding future retirements." (SDP-D 17-18.) By doing so, "current customers can end up paying for costs that may never be incurred or subsidizing future ratepayers." (*Id.* at 18.) As Mr. Arnett explained, pre-funding negative net salvage only makes sense if the asset has to be removed and the space it occupied cannot be used to benefit future customers, a circumstance that is likely to be rare on the space-constrained Con Edison electric system (and, if it exists, should be demonstrated on a case-by-case basis rather than presumed globally for all assets). (*Id.* at 11-12.)

In rebuttal testimony, Con Edison's Property Tax and Depreciation Panel ("CEPTD") presented an analysis of one account, Account 362 (Station Equipment), and claimed its analysis was evidence that Staff's proposal would not result in the full recovery of net salvage costs over the lives of assets currently in service. (CEPTD-R 88.) On cross examination, the CEPTD Panel acknowledged that this analysis covers plant in service as of 2011, and assumes no new plant will be added after 2011. (Tr. 43.) This is a completely unrealistic assumption and should not form a basis for the PSC's decision. Further, Con Edison's argument is premised on the assumption that actual net salvage will be equal to Con Edison's accrual for net salvage under its current method. (Tr. 39.) At the same time, Con Edison acknowledges that its current net salvage estimates are conservative, and substantially below both the five year average and the lifetime historic average. (Tr. 39-40; CEPTD-R 67-68.) Con Edison thereby ignores the potential for future deficiencies and related amortizations.

Moreover, Con Edison's analysis misinterprets Staff's proposal. As depicted in Figure 4 of the CEPTD rebuttal testimony, Con Edison has fixed the accrual rate at the percentage recommended by Staff *in this case* and applied it to an ever-decreasing plant balance. (CEPTD-R 88.) Such an analysis depicts the accruals under Staff's proposal dropping below actual expenditures. Under a PAYGO approach, with plant being continuously retired and replaced, this would not be the case.

The CEPTD also presents a second analysis that does reflect continuing plant growth. Con Edison argues its analysis shows that, over time, its proposed method "actually results in lower costs to customers compared to the other parties' proposals." (CEPTD-R 32.) For example, in Figure 5 of its rebuttal testimony, the Con Edison PTD Panel depicts a graph (*id.* at 86-87) showing that, in approximately 8-10 years, the proposals advanced by both Staff and the City would result in higher costs to customers and these higher costs will continue indefinitely. (*Id*. at 94.) This analysis shares the same flaws discussed above: (1) it assumes that actual salvage expenditures will equal Con Edison's current, conservative assumptions; and (2) it allows for accruals under Staff's proposal to be lower than actual expenditures. (Tr. 38-39; CEPTD-R 67-68.)

In addition, Figure 5 paints an incomplete picture because it ignores the fact that pre-paying for estimated negative net salvage creates significant adverse tax impacts. The Company's approach requires customers to pay higher income taxes prior to an asset being retired. (Arnett-D 3-5; Ex. 145.) This higher income tax liability is paid by the Company and included in rate base, on which its customers pay a return during each year that the pre-paid income tax remains in rate base. (*Id.*) Because the Company's approach results in the highest immediate cost, the tax liability is greatest as compared to any of the alternatives presented in

these cases. Further, because most of Con Edison's assets remain in service for decades, the carrying costs on tax payments are significant. The CEPTD Panel's comparisons of the various depreciation proposals presented in these proceedings do not incorporate this income tax liability (Tr. 46), and therefore its analysis of costs over time is incomplete and inaccurate and should not be used as a basis for setting negative net salvage rates.

Finally, Con Edison's comparison of total depreciation expense and return from 2012-2050, set forth in Table 12 of the CEPTD Panel rebuttal testimony, is presented in nominal dollars. (Tr. 46.) When evaluating long-term revenue streams, it is accepted practice to recognize a discount rate. When an 8 percent discount rate is included, the Revised Table 12 below demonstrates that the long-term difference between Con Edison, Staff, and the City proposals shrinks considerably:

Revised Table 12: Comparison of Total Depreciation Expense and Return, 2012-2050, Assuming 8% Discount Rate

	Con Edison	Staff	City
As Filed	$5,942,617,340	$6,081,566,618	$6,211,468,842
Difference		$138,949,278.00	$268,851,502.00
With Discount Rate	1,572,679,700	1,575,110,617	1,582,403,372
@ 8.00% Difference		2,430,917	9,723,672

Thus, even assuming all of Con Edison's analyses are accurate but modified by an appropriate discount rate, Revised Table 12 demonstrates that over time there is only a minimal difference in the total depreciation expense and return under Con Edison's, Staff's, and the City's negative net salvage proposals. When actual net salvage experience and tax impacts are recognized, the Staff and City proposals become more attractive, while offering the added benefits of promoting

intergenerational equity and eliminating the growing reserve deficiencies that will need to be amortized in the future.

If the PSC does not adopt Staff's PAYGO approach, it should adopt the hybrid "capping" approach proposed by Mr. Arnett. This "capping" approach essentially employs the method that has been successful in controlling the Gas Department's reserve deficiency, and applies it to the Electric and Steam Departments. As a hybrid of the PAYGO approach, it shares many of the same positive attributes associated with PAYGO, discussed earlier. If Mr. Arnett's proposal is adopted, the electric reserve deficiency will be reduced to within the ± 10 percent tolerance band used to determine whether the booked depreciation reserve is adequate. Moreover, if Mr. Arnett's proposal is adopted, Con Edison's proposal to establish a new amortization of the electric depreciation reserve deficiency would be unnecessary, and the PSC can also discontinue the other two ongoing amortizations.

Overall, Mr. Arnett estimates that his depreciation cap proposal would: "(a) reduce Electric rates by about $5 million (a $100 million decrease in depreciation expense less the $95 million increase in O&M expenses); (b) reduce Gas rates by about $0.4 million (a $2.6 million decrease in O&M expense less the increase in depreciation expense of $2.2 million); and (c) increase Steam rates by about $2.6 million (a $2.8 million decrease in depreciation expense offset by the $5.4 million increase in O&M expense)." (Arnett-D 18-19). Con Edison did not challenge Mr. Arnett's estimates and, in fact, applauded him for including an offsetting O&M allowance to cover any negative salvage forecasted above his proposed caps. (CEPTD-R 44.)

Accordingly, for the reasons set forth herein, the PSC should require Con Edison to adopt Staff's PAYGO methodology for negative net salvage value because it will provide important short-term benefits without adding any additional costs over the long term. If the PSC

rejects Staff's PAYGO approach, it should adopt the hybrid "capping" methodology that provides many of the same benefits as PAYGO.

VII. INCOME TAXES

The City takes no position on these issues at this time.

VIII. COST OF CAPITAL

The City takes no position on these issues at this time.

IX. RATE BASE

a. The PSC Should Adjust Con Edison's Electric Capital Spending Proposals And Take Broader Action To Increase The Resilience Of Con Edison's Infrastructure

i. Con Edison's Infrastructure Investments Should Address Reliability and Resilience Needs, Which Requires Specific Findings Regarding Certain Projects

Historically, the key measure of planning and performance of electric systems has been reliability. (City Policy Panel ["CPP"]–D 19.) The severe and unprecedented impacts to service experienced by customers during Hurricanes Irene and Sandy have illustrated that reliability standards are insufficient to address low probability, high impact events, and there is now a compelling need to more strongly incorporate the concept of resiliency into Con Edison's system designs, infrastructure planning, equipment standards, procurement and construction activities, O&M practices, and storm response procedures.

The concept of resiliency is neither new nor a unique policy to the City. Indeed, the City and State have a shared goal of increasing the resilience of the utility infrastructure in a reasoned, technically sound, and cost-effective manner. (*Id.* at 15.) The State's interests are perhaps best demonstrated by the statements and actions of Governor Cuomo. For example, in

announcing over $500 million in resiliency-related grants to local communities, Governor Cuomo stated:

> After the unprecedented destruction caused by Superstorm Sandy, Hurricane Irene and Tropical Storm Lee, we must build back stronger and smarter than before. Severe weather events are no longer once every hundred years, so our communities must be ready to handle more frequent and intense storms. [We] will provide financial assistance to communities statewide to rebuild and improve our resiliency, as part of the State's ongoing work to ensure that we are better prepared to protect New Yorkers, strengthen facilities and infrastructure, and maintain critical services.[5]

The Governor further recognized the need for resiliency planning through the establishment of the 2100 Commission, and resiliency issues were a primary factor in his institution of a Moreland Commission to investigate Con Edison's and other utilities' Hurricane Sandy-related actions. The PSC has also recognized the need to address utility resiliency, generally, through its institution of Cases 13-M-0047, *Utility Shared Critical Equipment and Supplies*, Cases 13-E-0149, *Utility Scorecard*, and 13-E-0198, *Electric Emergency Plan Review*.

There can be no dispute regarding the need for immediate action to ensure that the resiliency needs of the utility systems are addressed in a timely manner. Although the issues before the PSC involve one-year rate cases, the PSC can and should establish policies and requirements in these proceedings that will guide the Company's present and future actions.[6] The PSC has the authority under PSL §§ 65 and 66 to require Con Edison to make changes to its

---

[5] http://www.governor.ny.gov/press/06102013cuomo-announces-500mil-hazard-mitigation-natural-disasters.

[6] The City acknowledges that a resiliency collaborative ("Collaborative") has been commenced in these proceedings to examine such issues. However, the Collaborative was not instituted by the PSC, and there is nothing in the record which indicates how the results of the Collaborative will inform a decision in these proceedings or whether the Collaborative will continue thereafter. Accordingly, the City is briefing all of the issues raised in its testimony and during the hearing, which encompass short-term and broader actions the PSC should take in deciding these cases.

design standards, practices, and procedures, all of which are items which will impact the Company's activities both during the Rate Year and thereafter. The PSC should exercise its authority to ensure that Con Edison places appropriate emphasis on resiliency in the future by requiring changes in these areas. Failure to do so because these are one-year rate cases would be a mistake that does not serve the best interests of the State, City, or Con Edison's ratepayers.

Resiliency encompasses much more than storm hardening improvements; the concept includes increasing operational flexibility, enhancing situational awareness, and adapting to changing conditions. During a recent meeting of the Collaborative, information was shared that part of Con Edison's system is based on 1940's technology, and another part is 1950's technology. To make its infrastructure more resilient, it is imperative for Con Edison to embrace and incorporate new technologies into its utility systems, as well as practices and procedures that reflect the changing world in which it operates. To that end, the PSC should require Con Edison to begin to comprehensively examine the manner in which it should provide service and to make corresponding changes in its approach.[7] (CPP-D 7.) Examples that have been discussed in these proceedings include expanding the use of DG, the introduction of microgrids, and the deployment of smart grid technologies, such as advanced metering, that can serve multiple purposes.

To increase the resiliency of its systems, Con Edison must factor in potential changes in the frequency, intensity, and duration of major storms and heat waves and other similar events that can have catastrophic impacts on its ability to provide utility services. (*Id.*) Con Edison also must expand the manner in which it conducts planning and designs its systems

[7] This recommendation is arguably outside the scope of the existing Collaborative, but that Collaborative could be expanded to address this topic.

to consider the potential loss of entire substations and other critical facilities, rather than the loss of one or two feeders or other components.

As set forth in the testimony of the City's Policy, Climate Risk, and Electric Infrastructure Panels, the circumstances that the Company presently is confronted with are vastly different than what it has faced in prior rate cases, when the assessment of capital investments was predominately focused on the traditional perspective of accommodating load growth. Now, the Company should be tasked with taking action to adapt its infrastructure to handle a variety of changing climate conditions that will affect its ability to provide reliable service and significantly increase the risk of major service disruptions. These factors include sea level rise and ambient temperature increases. The changing landscape also involves incorporation of new technologies and opportunities on both sides of customers' meters to keep pace with customers' evolving needs and operate with better flexibility. While the City appreciates the steps that Con Edison has taken to provide reliable service to its customers and strengthen its infrastructure, almost all of the Company's capital projects in this rate filing involve adding new layers to its existing practices. A more comprehensive and integrated approach is needed over the long term, where risks are analyzed, resiliency needs are anticipated, and improvements are made over time, rather than just in response to catastrophic events. That is, improving the resiliency of the utility systems should be a key criterion in the design standards and plans for projects undertaken for any reason.

Through its expert witnesses, the City recommended a five-step approach for planning upgrades and designs to improve resiliency, as follows:

- Identify and assess the consequences of system failure;
- Identify and assess locational risk factors;

- Prioritize critical infrastructure locations and needs;
- Develop risk mitigation plans and measures, including capital improvements and storm response procedures;
- Replace, strengthen, and/or duplicate infrastructure based on the foregoing analyses, and implement revised procedures for storm preparation and system restoration. (CPP-D 41-42.)

As explained by its Policy Panel, the City foresees projects being placed in one of three tiers, based on prioritization of critical infrastructure. Tier I projects should include infrastructure that is so critical to either the utility system or New York City that it is essentially too big or important to fail. (*Id.* at 43.)[8] Tier II projects should include infrastructure that, by the nature of its design, location, and consequence of failure, would be deemed an acceptable loss. (*Id.*) Tier III projects would consist of infrastructure that would have primarily localized impacts if lost or damaged but which still should be replaced or upgraded. (*Id.*) The City's Electric Infrastructure Panel discussed both short-term and long-range system improvements that fit within the City's proposed approach. The City respectfully urges the PSC to adopt this approach, or at a minimum, confirm that the Collaborative is authorized to continue to evaluate the City's long-term recommendations.

ii. The PSC Should Reject The Company's Proposed Storm Hardening Surcharge Mechanism

In its testimony and in press releases, Con Edison claimed that it had developed plans for incremental investments of approximately $1 billion for storm hardening projects for its electric, gas and steam businesses over the next four years. (Muccilo Electric-D 3-4.) While the

[8] Consistent with the above discussion, the PSC should direct Con Edison to begin to develop plans for redesigning its electric system so that, in the future, no single substation is so massive or serves so many people that it is considered "too big to fail."

City does not dispute that Con Edison has proposed increases to its spending on storm hardening projects, the Company's claimed expenditures are not fully supported. More importantly, the record in these proceedings does not provide any justification for the storm hardening surcharge mechanism that the Company seeks.

Virtually all of the projects and programs proposed by the Company that are now described as "storm hardening" are actually continuations of existing programs that formerly were considered reliability-based programs. The record contains examples of programs that prove this statement. (*See, e.g.*, Exs. 879, 880, 881, 885, 886, and Tr. 1382-1392.)[9] Indeed, Company witness Mr. Miksad agreed that there was no real difference between a "storm hardening" project and a "reliability" project – they are all capital projects that the Company has identified a need to undertake. (Tr. 1378-1380.)

While Hurricane Sandy was a massive weather event, it was by no means the first hurricane to hit New York City. (Tr. 917-918, 1385, 1438-1440; Ex. 819, 820.) It is irrefutable that the Company had been planning for severe weather events prior to October 2012, and those previous projects never required a surcharge mechanism. (Tr. 1385.) It also was established that the Company has been aware of the potential for major storms and their consequences, and has been considering climate change issues, since at least 2011. (Tr. 1376.) The Company has not established any changed circumstances or new facts in these cases to warrant imposition of the surcharge.

Additionally, Mr. Miksad acknowledged that capital funds are fungible (which he called "the sweep process" [*see, e.g.*, Tr. 1446]). That is, Con Edison can and does reallocate funding as necessary to address changing priorities and needs. In fact, it was established during

[9] Due to the restrictions imposed by the ALJs during the hearing, the City was prevented from fully developing the record on this point.

the hearing that the 2013 storm hardening activities were undertaken by adjusting funding to some projects, deferring or canceling other projects, changing priorities, and reallocating the funds available. (*See, e.g.*, Ex. 874 and Tr. 1425-1426; 1434-1437.) The City does not object to Con Edison having the flexibility to reallocate funds as necessary, subject to meaningful Staff oversight. However, when combined with the other factors discussed below, such flexibility would eliminate any potential need for the proposed surcharge mechanism.

In addition to being repackaged projects that were originally planned for other purposes, such as replacement of equipment at the end of its life, many of the storm hardening projects proposed by Con Edison are reactionary in nature and limited to addressing a future storm that is identical to Hurricane Sandy. That is, Con Edison's plans did not demonstrate any intent to address the potential for major storm events that have different trajectories, and impacts, than Sandy. The City was heartened by the late development of the Stipulation (Ex. 846), and the Company's new willingness to broaden its planning procedures to incorporate resiliency and new flood models. However, those developments do not support the need for the surcharge mechanism.

Further, the Company has stated that "[t]he surcharge process will be triggered when the optimization and prioritization process would exclude undertaking a storm hardening project within current capital plans. (Ex. 911.) This is significant because one of the key findings of the Management Audit related to deficiencies in Con Edison's approach to budgeting and planning. In response to this finding, the Company developed its capital optimization and prioritization process. (Tr. 1714.) The purpose of this process was to provide a disciplined, probabilistic approach to identifying needs and deploying capital. (Ex. 818.) Accordingly, only projects that were determined to have priority based on this process should be undertaken. Thus,

contrary to Con Edison's proposal, if a storm hardening project is determined not to have priority, it should not be undertaken. Because the Company intends that the surcharge apply only to projects that do not pass muster under the optimization and prioritization process, the concept of the surcharge is not only unnecessary, it is inconsistent with the Company's response to the Management Audit and its allegedly disciplined planning process.[10]

iii. The PSC Should Provide Con Edison With Sufficient Funds And Flexibility To Increase The Resilience Of Its System, Subject To Certain Caveats

While the City opposes the storm hardening surcharge and recommends some changes to the specific projects that Con Edison proposes, the City generally supports the Company's plans to harden its infrastructure and strongly recommends that the PSC include sufficient allowances in the revenue requirements for these projects. While the City disputes the concept of a separate and distinct storm hardening program, the City agrees that Con Edison should take action to protect its facilities and equipment from future climatological events. Such actions not only address resiliency, they are important for preserving system reliability.

Accordingly, Con Edison should not distinguish between "reliability" and "storm hardening" projects. For example the Company has renamed the following, pre-existing

[10] On a related issue, PSL § 66(19) requires the PSC to incorporate findings into its rate order regarding its review of the Company's response to the Management Audit. The record demonstrates that for 2013 storm hardening capital investments, the Company ignored its capital optimization and prioritization process (*see, e.g.*, Ex. 874 and 883 and Tr. 1434-1438) and deferred projects identified as having high priority. In justifying this decision, the Company indicated that it considers factors other than those embedded into the process. (*Id.*) The City respectfully submits that the PSC should reject the testimony of Staff witness Leak regarding the Company's compliance with the Management Audit and find that the Company's decision to depart from the process is inconsistent with the PSC's directives and the Company's response to the Management Audit. *Cf.* Case 08-M-0152, *Comprehensive Management Audit of Consolidated Edison of New York, Inc.*, Order Directing the Submission of an Implementation Plan (issued Aug. 20, 2009). The PSC should require Con Edison to cease future similar transgressions.

"reliability" projects as "storm hardening" initiatives: (a) the Coastal Storm Mitigation Project (operative since at least 2009) (Tr. 1382; Ex. 879); (b) the underground sectionalization program, (Tr. 1384–1385); (c) transmission hardening projects, such as the L-Line Splice, Upgrade to Overhead 345 kV Transmission Structures, and the Re-Conductor Dunwoodie Sprain Brook Transmission Corridor (Tr. 1386-87; Ex. 880, 881); and (d) the Overhead Secondary Reliability program (Aug. 1, 2013 Tr. 114). All of these projects should be continued. However, as noted above, storm hardening projects should not be a separate category of capital projects. To the contrary, the entire concept of a storm hardening plan that is separate and distinct from the capital investment plans should be rejected in favor of a more holistic approach.

While many planned capital projects should continue, it does not appear that Con Edison has properly adjusted its capital investment plans to take into account the storm hardening improvements that it proposed. Rather, it appears that the proposed capital investments and resiliency improvements are proceeding on separate and distinct tracks when they should be merged. (City Electric Infrastructure Panel ["CEIP"]-D 6.) For example, Con Edison's storm hardening proposals include relocating the control room at its East 13th Street substation to a second story elevation. (CEIP-D 7-8.) The City agrees that this project is beneficial, however, Con Edison separately is proposing a number of capital replacements of equipment from the same substation. (*Id.*) The scope of these projects, and their timing, do not appear to have been adjusted to account for resiliency considerations that would avoid the need for duplicative or extra work. (*Id.*) If the existing equipment is no longer capable of performing adequately, the proper response is to move up the timing of the entirety of the substation work, not install new equipment that would need to be removed, relocated, or modified shortly thereafter. (*Id.*)

Another example is Project 8ES4900, the installation of canopies over relay cabinets to preclude deterioration of the cabinets and subsequent equipment damage caused by heavy rainfall. (*Id.* 8-9.) Two of the sites proposed for this work include Fresh Kills and Vernon, which also are listed by the Company as sites for storm hardening. (*Id.*) Because the Company's storm hardening proposals for Vernon and Fresh Kills only address rising water levels, the installation of these relay canopies is still required. (*Id.*) A more comprehensive approach that addresses all types of weather-related and climatological events, such as high winds, flooding, heavy rainfall, and ambient temperature increases, in a chronologically logical manner which prevents investment duplication, should be undertaken instead. (*Id.*)

In addition to merging reliability and resiliency projects, changes are also needed in the Company's approach to making certain improvements. For example, the Company's justification for switch-house replacements is that "[s]erious water leaks have developed in roofs and walls of some of the existing switchgear. The water leaking into the switchgear has caused rust and corrosion conditions within the switchgear. This condition creates a serious possibility of short circuits in the switchgear cubicles." (Ex. 66 at 129.) While the condition of these structures warrants their replacement, there appears to be an absence of any analysis of the root cause of the problem. (CEIP-D 15-17.) If the root cause is poor maintenance standards or practices, replacing the switch houses will not solve the problem. (*Id.*) If the root cause is a flaw in the design or construction of the switch-houses, mere replacements in-kind will not solve the problem, either. (*Id.*) For capital projects involving replacement of deteriorated structures, the PSC should require Con Edison to (i) identify the causes of failure and the most appropriate long-term and cost-effective approach to managing these assets; and (ii) implement that approach. (*Id.*)

As for flexibility, the City agrees with Con Edison that it should be able to reallocate funds as needed to ensure that all priority projects can be completed during the Rate Year (and future years). While the City understands the reasons why Staff first proposed the segregation of capital funds into "silos," the City disagrees that the "silo" concept continues to be appropriate.[11] Rather, with meaningful oversight by Staff, including periodic field inspections, audits, and reporting requirements imposed on Con Edison, the PSC should be able to confirm that authorized funds are properly spent and necessary projects are completed.

iv. The PSC Should Acknowledge, But Not Formally Approve, The Stipulation

The purpose of the Stipulation (Ex. 846) was to ensure that Con Edison: (i) includes within its resiliency plans the most important (*i.e.*, highest priority) transmission substations, some of which were improperly excluded from the Company's initial project list; and (ii) designs and constructs all upgrades and new facilities using the most recent flood data available. While some parties raised concerns during the hearing regarding the Stipulation, all of those concerns lack merit. Most of the concerns relate to the Stipulation's lack of specificity regarding the Collaborative, future years, or revenue requirements. None of those issues were ever intended to be addressed by the Stipulation, so their exclusion does not form the basis for a valid objection to the Stipulation.

[11] Based on the adjustments set forth in Staff's direct testimony and the stated reasons for those adjustments, Staff's review of projects appears to have been predominately focused on comparing the Company revenue requests and capital budgets to its historical expenditures. If program budgets were not spent historically, Staff simply adjusted the Company's rate request based on historic, actual expenditures. This accounting-based approach coupled with the use of spending caps and true-ups does not constitute a meaningful review of the Company's budget. Thus, the record does not demonstrate that Staff considered the need or plans for undertaking additional projects, in particular the storm hardening projects.

UIU witness Johnson raised a concern about utility design standards. Dr. Johnson, however, is not an engineer and has no expertise in utility system design or any other technical area.[12] (Tr. 736.) Therefore, his opinions on the propriety of utility design standards should be given no weight. Design standards are commonplace not only in the utility industry but throughout all industries. Indeed, building codes, fire codes, the National Electric Code, and the National Electric Safety Code are all examples of design standards that are employed on a daily basis by Con Edison, other utilities, engineers, architects, and commercial and residential builders. Dr. Johnson's position that every project should be assessed independently based solely on a purely economic cost-benefit analysis and without regard to any design standards is patently absurd and inconsistent with the law of the State of New York; it cannot be considered reasonable or rational. For example, while Dr. Johnson believes that Con Edison should not adhere to the City's Building Code (Tr. 769-70), Con Edison is required as a matter of law to adhere to it. (*See* NYC Administrative Code Title 27.)[13]

The PSC should take notice of the Stipulation, but it need not take formal action on it. To the City's knowledge, the PSC has never approved or adopted Con Edison's design

---

[12] As one example of his lack of technical competence to provide substantive opinions on the resiliency proposals advanced by the City and Con Edison, Dr. Johnson suggested that the decision to proceed with any infrastructure project should be based solely on an economic cost-benefit analysis. (Tr. 762-763). While Dr. Johnson apparently rejects the concepts of technical feasibility, safety, and need (among others), the PSC has always embraced these and other non-economic principles and concepts in evaluating capital project proposals.

[13] Further, Dr. Johnson and the UIU surprisingly advocate that low-income customers should receive a lesser level of utility service than other customers because of their lesser ability to pay for reliable service. (Tr. 783-786.) The City strongly disagrees that low-income customers should receive lesser quality service because of their economic circumstances, and the City urges the PSC to disregard or reject Dr. Johnson's and the UIU's position as unjust and unreasonable. Moreover, Dr. Johnson's advocacy for such disparate and inequitable treatment renders all of his opinions highly suspect and demonstrates that his positions should be given little to no weight. The PSC's role is to protect all customers, not just wealthy customers.

standards, except to the extent it has adopted regulations to which all utilities are required to adhere.[14] There is no reason for the PSC to adopt the Company's design standards in this case, and doing so could prove problematic. The underlying intent of the Stipulation, with which the City understands Con Edison agrees, is for the Company to adapt its standards over time as new information is developed on rising sea levels, flood zones, heat waves, and other risk factors. However, if the standards are the subject of a PSC Order, Con Edison could change those standards only with express PSC approval. Thus, approving the Stipulation in the PSC's Order would reduce Con Edison's flexibility and potentially inhibit or unnecessarily delay future, desirable (or necessary) design changes.

As for the inclusion of certain high priority substations in the Company's project list, the City's expectation is that Con Edison will be required to operate within whatever revenue requirement the PSC establishes. With few exceptions, the PSC previously has not identified specific projects the Company should undertake. There is no reason for it to do so in the context of the Stipulation. However, the PSC should be pleased to know that, pursuant to the Stipulation, Con Edison is moving forward with strengthening its most at risk and important substations, thereby increasing the reliability and resiliency of the electric system.

v. Con Edison Should Not Rely On Voltage Reductions In Lieu Of Infrastructure Improvements

For the past few years, Con Edison has relied increasingly on voltage reductions in lieu of infrastructure improvements to address system demands. (Con Edison Electric Infrastructure and Operations Panel ["CE EIOP"]-D 79.) Over time, the areas affected by these reductions have increased, as have the number of times they have been implemented. (*See, e.g.*, Ex. 171). The primary reason Con Edison is employing voltage reductions is to respond to the

[14] These regulations are reflected in Con Edison's design standards.

inadequacies of its electric system. (CPP-D 29-30.) In fact, in 2012, Con Edison reduced voltages on five separate occasions due to system events that exceeded the second contingency outside of an extreme heat event.

While the Company states that voltage reductions are an "operational tool for reliability" (Tr. 1475), voltage reductions are not an acceptable alternative to a safe and adequate electric system. To the contrary, voltage reductions can cause major reliability and safety concerns for customers. For example, each time the Company reduces voltage, New York City Housing Authority buildings are affected, and its residents can become trapped in elevators. (Tr. 1476.) Other equipment can also fail. (*Id.*) By way of further example, the City's Department of Environmental Protection operates massive pumps to provide drinking water to the City's residents, businesses, and visitors, and to remove sewage.[15] Although the City cannot definitively correlate voltage reductions to operational problems with those pumps, it is concerned that repeated voltage reductions could shorten the lives of the pumps or cause the pumps to fail. Although Con Edison's research and development department has studied voltage reductions, it has not studied the ramifications of repeated voltage reductions, such as those employed by the Company, on critical equipment such as the electrical pumps described above, nor has it studied the type of reductions employed by Con Edison. (Tr. 1474-1476.)

Moreover, the purported savings associated with these voltage reductions do not justify their use and are insufficient to outweigh their actual and potential consequences to public health and safety. Con Edison estimated the total savings associated with voltage reductions to be approximately $1.0 million over the nine-year period 2012-2021. (CE EIOP-D 80.) Those

[15] Inasmuch as the PSC regulates water companies, it presumably is well aware of the impacts of the loss of water supply on public health and safety. The public health impacts of the inability to remove sewage have been well-documented for centuries.

savings are *de minimis* when compared to the potential harm to public health and safety. Accordingly, the PSC should direct Con Edison to make the approximate $100,000 annual investment needed to avoid the use of such reductions (during the Rate Year and subsequent thereto).

The City also is concerned that the Company's expanded reliance on voltage reductions will have far greater detrimental impacts in the future, and immediate action by the PSC is needed to prevent such impacts. It is undisputed in these proceedings that Con Edison's load is continuing to grow, which will place greater demands on the electric system. The New York City Panel on Climate Change has estimated that by the 2020s, the intensity, frequency, and duration of heat waves could increase substantially. (*Id.*) According to calculations conducted by Con Edison and the City, a one degree Fahrenheit increase in peak temperature conservatively could increase peak load by roughly 175 MW; reflecting humidity in the calculation would increase the peak load even more. (*Id.*)

Without adequate infrastructure in place, Con Edison may not be able to meet this growing peak demand unless it engages in more extensive, and perhaps larger, voltage reductions. In 2006, the PSC, the City, and especially the residents of Long Island City learned first-hand about the severe consequences of substantial load reductions. The City respectfully urges the PSC not to allow the potential for a recurrence of that event, on any scale.

The installation of shunt capacitor banks to provide capacitive reactive compensation/power factor correction would solve the problem of low voltage, and that equipment is relatively inexpensive, easy to install and can be deployed virtually anywhere in the Con Edison network. (CPP-D 29-30.) However, when voltage reduction is continually used as a means of load relief, infrastructure investment is the correct course of action.

Indeed, information developed in the Collaborative shows that more frequent or longer heat waves would lead to significantly increased risk for blackouts. Con Edison's Network Reliability Index model indicates that four networks are particularly at risk for cascading blackouts during extreme heat events. New analysis shows that adding just one more heat wave per year will bring many more networks into the higher blackout risk zone and increase the index risk value by 41%. For these reasons, in addition to requiring the Company to proceed with the load relief projects it plans to defer in favor of voltage reductions, the PSC should investigate whether Con Edison is properly reinforcing and expanding its electric system, and whether that system will be adequate to reliably meet present load and future load growth.[16]

vi. A New Approach Is Needed Regarding The Queensboro Bridge Feeders And Service To Roosevelt Island

The Company's Queensboro Bridge projects present a perfect example of the Company's improper continued reliance on 1940's technology and planning considerations. The Company should be engaging in a broad appraisal of the solutions to the many problems with the feeders attached to the Queensboro Bridge and of the future needs of Roosevelt Island. Because Con Edison will not embrace such a holistic approach on its own, the PSC should step in and direct the Company to do so.

The City, in coordination with Cornell University, private industry, and New York State, is moving forward with plans to add a high technology graduate campus and other facilities on Roosevelt Island, adjacent to the Queensboro Bridge. Because of the anticipated load growth, there is a need for adequate, reliable electricity to serve the Island.

[16] In conducting such an investigation, the PSC should not rely solely on analyses provided by Con Edison. Rather, it should use either the contractor it already retained, or another engineering consultant as appropriate, to independently review the Company's system capabilities and infrastructure expansion plans.

There are six 13 kV, six 69 kV, and six 138 kV feeders attached to the Queensboro Bridge, and most are in poor to very poor condition. (S*ee* Tr. 1448; Ex. 885; Ex. 495 at 20-21.) The 13 kV and 69 kV feeders connect into the East 63rd Street Substation in Manhattan, and the 13 kV feeders present provide service to Roosevelt Island. The Company has had plans to do work on these lines for years, yet those plans have been deferred until at least the Rate Year, and possibly longer. (*Id.*) To serve Roosevelt Island, the Company has proposed to remove and replace the existing 13 kV feeders and add two more feeders. In addition, the Company has also proposed to replace and upgrade the existing 69 kV feeders. However, the Company has acknowledged that replacing and/or upgrading the six 13 kV feeders would not be sufficient to supply the expected load growth on Roosevelt Island. (Tr. 1453-1455.)

Rather than proceed with mere replacements of the existing feeders, the Company should use this opportunity to take a fresh look at the Queensboro Bridge projects to account for the increased load on Roosevelt Island, while simultaneously strengthening this infrastructure against salt, weather, vehicle fires, and climate change. The City recommends that the Company's two projects be combined into a single project in which two of the 69 kV feeders directly serve Roosevelt Island from Queens. (CEIP-D 18-20.) This design should serve the Island's present and projected future needs more reliably, while also reducing the load at the 63rd Street Substation.[17] The 13 kV lines could be maintained as a reliable backup source (redundant power sources are increasingly common on high tech facilities). The City recognizes that this approach would require the construction of a new substation on Roosevelt Island, but

[17] Besides reducing the load at East 63rd Street, another benefit of the alternative plan would be a reduction in the number of feeders traversing the Queensboro Bridge, which Con Edison has stated are difficult and costly to maintain and repair. (Tr. 1449.)

such an approach represents a far more robust and appropriate design than the Company's inadequate plan.

The development of Roosevelt Island will be a source of new jobs and economic development opportunities. It is imperative that the electrical infrastructure be adequate to support and advance these opportunities, rather than be a hindrance to their achievement. Because the Company is unwilling to take the actions necessary to properly plan for the future needs on the Island, and because its approach is likely to be more costly over time, the PSC's intervention is needed. That intervention is best accomplished by a PSC decision revising Con Edison's revenue requirement in this case to reflect the City's proposed modifications to the Queensboro Bridge project. At the very least, the PSC should direct Con Edison to prepare a comprehensive, forward-looking analysis of the alternatives, costs, and benefits of serving the Island while addressing the need for replacement of the Queensboro Bridge feeders.

vii. The PSC Should Engage In An Inquiry Into Con Edison Workforce Issues

Lastly, an important aspect of ensuring that the Company's system is adequately maintained and upgraded is having a competent, reliable, well-trained workforce. While the City does not offer an opinion regarding the appropriate mix of Company employees and contractors, the evidence adduced during the hearing suggests that Staff's review of the Company's compliance with the Management Audit recommendations was inadequate (discussed in more detail, below).

There can be no legitimate debate regarding the benefits, necessity, and importance of having a highly-skilled and trained workforce operating and maintaining the electric system (as well as the gas and steam systems). However, the record generally developed by Local 1-2 and the City on staffing levels and the ability of the Company to timely undertake

and complete projects calls into question whether the Company's workforce is adequately staffed. For example, although the work load is increasing, Exhibit UWUA-2 demonstrated that the size of the workforce has been declining steadily. (*See* Ex. 979.) Although the Company has stated an intention to hire dozens of new workers, the facts do not support the assertions.

The Management Audit recommended that Con Edison perform periodic resource analyses (at least annually). (*See* Ex. 818, XII 53–54.) However, the Company's Electric Production Panel testified that they were not aware of this recommendation, or even of the Management Audit. (Tr. 1146-1147.) The Company's Gas Operations and Infrastructure Panel expressed a similar lack of knowledge of the recommendation. (Tr. 982.) Not surprisingly, both panels also testified that they are not performing the requisite analyses. In further support of the need for a more in-depth review of this issue than has occurred to date, Staff observed that resource availability is a major concern when considering whether the Company has enough manpower to do projects. (Staff Electric Infrastructure Investment Panel ["SEIIP"]-D 64; Aug. 1, 2013 Tr. 148.)

Accordingly, the PSC should commence an investigation into the sufficiency of the Company's workforce and the reasonableness of the mix of Company employees and contractors. The purpose of this investigation would be to confirm that workforce issues are not jeopardizing the Company's provision of safe and adequate service to customers. Additionally, the PSC should reevaluate the Company's implementation of the Management Audit recommendations. Given the admissions by numerous Company employees of their lack of awareness of the Management Audit, and their failure to comply with its recommendations, further investigation by Staff of the Company's compliance clearly is necessary.

b. Gas Capital

i., iii. and v.

The City takes no position on these issues at this time.

ii. Oil To Gas Conversion Costs

1. State And City Policies Encourage Expanded Natural Gas Use

In a separate proceeding, the PSC is exploring ways to help encourage expansion of the natural gas distribution systems in the State.[18] The PSC has identified several benefits from expanded natural gas usage, including reduced costs to consumers, lower emissions of harmful greenhouse gases, enhanced economic development in the State, and improved reliability of gas supply.[19]

The PSC's efforts to promote expanded natural gas service are consistent with the City's efforts to phase-out heavy fuel oil use in New York City. As of January 2011, there were approximately 10,000 buildings in the City burning heavy fuel oil. About 75 percent of these buildings are located in Con Edison's service territory. (Caputo-D 4.)

These buildings, representing one percent of the City's building stock, are responsible for more soot pollution than all of the cars and trucks on New York City's roads. The public health impact from these buildings is severe—many of the neighborhoods in which these buildings are located have some of the highest asthma and air pollution levels in the City. (*Id.*)

---

[18] Case 12-G-0297, *Proceeding on Motion of the Commission To Examine Policies Regarding the Expansion of Natural Gas Service*, Order Instituting Proceeding and Establishing Further Procedures (issued November 30, 2012).

[19] *Id.*

In January 2011, the New York City Department of Environmental Protection issued new regulations to phase out the use of heavy fuel oil in residential and commercial buildings. As noted by City witness Caputo: "In phase one, buildings using No. 6 fuel oil are required to convert to low sulfur No. 4 fuel oil or a cleaner fuel by 2015. In phase 2, all buildings are required to convert to one of the cleanest fuels – natural gas, ultra-low sulfur No. 2 fuel oil, or biodiesel – upon replacement of their boilers or burners or by 2030, whichever is sooner." (Caputo-D 5.) These regulations are expected to save thousands of lives over the next two decades.

To accelerate the transition to cleaner fuels, the City created the NYC Clean Heat Program to "provide building owners and managers with resources to incentivize early action, including a clearinghouse of information on converting to cleaner fuels, technical assistance throughout the conversion process, and an array of financing mechanisms from public and private sources." (Caputo-D 5-6.) As of May, 2013, more than 2,000 buildings have converted to cleaner fuels, reducing soot emissions in the City from heavy fuel oil by roughly 27 percent.

In addition to the substantial environmental and public health benefits from natural gas conversions, oil-to-gas conversions also bring the Company significant additional revenue that can be used to drive down the costs for the Company's entire body of gas ratepayers. For example, the Company initially estimated that from 2014-2016 it would generate approximately $203 million in new delivery revenue from new gas customers converting from heavy fuel oil. (Ex. 159 at 1-2.) Con Edison anticipated approximately $179 million in capital costs for its oil-to-gas conversion program (Ex. 641 at 5); meaning that the new revenues will far exceed the carrying costs on these investments. Oil-to-gas conversions, therefore, represent a significant revenue growth opportunity for the Company.

The Company's Gas Infrastructure and Operations Panel ("GIOP") provided a revised revenue forecast at the update stage of this proceeding that reduced projected revenues from new oil-to-gas customers by 30 percent. (GIOP-R 27.) Even assuming the GIOP's revised forecast is accurate, the GIOP acknowledges that revenues from the oil-to-gas conversion program are greater than the costs. (Tr. 1024.)

2. The PSC Should Require Con Edison To Increase Its Level Of Oil-To-Gas Conversions

The Company estimates that it will convert approximately 50 percent of the heavy fuel oil users in its service territory by 2019. (Ex. 641 at 1.) Given the demonstrated economic and environmental benefits of natural gas conversions, Con Edison should be doing more. Unfortunately, Con Edison has not even assessed whether a higher conversion rate is feasible. (Caputo-D 23; Ex. 159 at 4.) Nevertheless, the Company does acknowledge that there is room for improvement in its oil-to-gas conversion efforts. (*See, e.g.*, Tr. 1060.) The PSC should therefore develop performance metrics, discussed below, that will provide the Company with the proper incentive to expand its conversion efforts.

A. <u>The PSC Should Adopt A Scheduling Metric To Ensure Conversions Are Timely Completed</u>

Once a conversion application is submitted, Con Edison should be providing customers with an assessment of connection options and costs within 20-30 days. Moreover, the Company should provide a binding schedule "that includes, at a minimum, deadlines for the completion of the interconnection work, final inspections, and activation of gas service pending customer commitment." (Caputo-D 32.) If the Company deviates from these timeframes, it should be subject to the revenue adjustments proposed by Mr. Caputo. (Caputo-D 33.)

Although the City acknowledges that there are several reasons a conversion could be delayed (including the City's own permitting process), the PSC should incentivize the Company to eliminate any Company-caused delays. Con Edison expects prospective customers to complete their part of the work in two months and to pay upfront for the Company's part of the work. (Caputo-D 33.) Yet Con Edison admits that the average time to complete a conversion is ten months, while suggesting that some conversions can take over a year, and customers do not have any ability to negotiate with or impose any obligations on the Company. (*See id.* 33-34.) Given the obligations placed on customers, the Company should be required to complete its work within six months of receiving an executed application. If extraordinary circumstances beyond the Company's control result in a delay, then the Company should be able to seek a waiver through a formal filing with the PSC.

B. The PSC Should Assume 20 Percent Yearly Growth In The Number Of Customers And Revenue From Oil-To-Gas Conversions

Con Edison "expects the number of connections in 2013 to increase by about 20% compared to the 2012 level, then remain flat for two years, then decline by one-third for two years, and then decline again by 85%." (Caputo-D 35, *citing* Ex. 159 at 3.) This is not a reasonable projected trend. Part of the problem is that only 25 percent of service requests lead to service connections, yet it does not appear that the Company has conducted any analysis to determine why there is such a large disparity between service requests and service connections. (Caputo-D 35.) Importantly, the Company has the technical capability to perform additional conversions. (Tr. 1027-1031.)

Another problem appears to be the Company's lack of a marketing strategy to recruit new customers. Although the Company claimed that it plans to target 33 percent of the

total heavy fuel oil population in 2013 and 2014 for conversion (GIOP-R 90-91), the GIOP had difficulty articulating the Company's marketing plan to attract these customers. For example, the GIOP stated that the Company only plans to conduct limited customer outreach and that the Company was having internal discussions about its marketing strategy. Further, the GIOP could not provide the budget for these activities. (*See* Tr. 1066.)

To ensure that the Company remains properly motivated to convert heavy fuel oil users, the PSC should assume that the percentage of service connections compared to requests should continue to increase by 20 percent per year. Moreover, the PSC should impute revenue growth each year equivalent to 20 percent growth in the number of customers. This should provide Con Edison with sufficient incentive to pursue new customers and increase the number of conversions.

C. The PSC Should Levy A Revenue Adjustment If Con Edison Fails To Provide Clear And Detailed Cost Information To New Customers

The Company has acknowledged in this proceeding that the information it currently provides to customers is not as clear as it could be, particularly with respect to information concerning payments required from customers. (Tr. 1056-1057.) The Company has further indicated that it only provides detailed cost breakdowns upon request from the customer. According to the Company, this "detailed breakdown" is a simple, eight-line listing of certain costs, with no detail explaining the genesis of each individual line item. (Ex. 141 at 56.) As discussed in Section XII(e)(iv), *supra*, the PSC should require Con Edison to provide more detailed cost estimates.

In addition, the Company should be required to refund any unexpended costs to customers within 30 days after completing its portion of the work. It is unclear what obligation,

if any, Con Edison has to refund this money. Con Edison should be required to communicate its refund policy to customers, and at least twice a year Con Edison should report to the PSC comparing estimated costs to actual costs of connections with an explanation for each variance.

If the Company does not provide a customer with the information as discussed herein, it should be subject to a revenue adjustment in the $5,000 - $10,000 range per customer. (Caputo-D 36-37.) This obligation will provide the Company with appropriate incentive to ensure customers are more informed about the costs they are being asked to pay. Whether the Company incurs an adjustment is entirely within the Company's control.

3. The PSC Should Investigate Con Edison's Oil-To-Gas Conversion Practices To Determine If Customers Are Being Treated Fairly

Mr. Caputo raises two issues in his testimony that require further PSC investigation: (1) whether customers are being asked to pay for system reinforcements; and (2) whether Con Edison is appropriately designating growth areas. First, Mr. Caputo states that, in his experience with the NYC Clean Heat Program, he has seen cost estimates for single customers in the millions of dollars. As noted by Mr. Caputo: "If such substantial reinforcement or expansion of the gas infrastructure is needed to serve a single additional customer, that suggests that the system, itself, is incapable of properly serving load growth. In such circumstances, the infrastructure costs should be socialized because all customers will benefit from such system reinforcements." (Caputo-D 28.)

Con Edison notes that it tries to coordinate system reinforcement work with requests for new connections, and in such circumstances only charges the customer the incremental cost required to connect the customer. (Ex. 159 at 20.) However, if reinforcement work is not scheduled to be performed in the customer's neighborhood for some time, the

customer could be responsible for some or all of the reinforcement work. This could place an undue burden on a single customer to bear costs that will benefit the system as a whole. As a result, the PSC should investigate further whether Con Edison is improperly allocating system-level reinforcement projects to individual customers.

Second, Mr. Caputo notes that he has seen conversion estimates in some parts of the City, particularly in northern Manhattan neighborhoods like Washington Heights, that have been very high. The City is particularly concerned about conversions in these areas because, as noted by Mr. Caputo:

> Childhood asthma rates in northern Manhattan are three times the national average and Washington Heights in particular is one of the five most impacted neighborhoods from PM 2.5 pollution stemming from heavy fuel oil use. Average income levels in the area are also well below the citywide median income. According to the Department of Health, children living in the poorest households are almost twice as likely to develop asthma as those living in the wealthiest households and they make three times as many visits to emergency rooms for asthma-related conditions.

(Caputo-D 21.) Con Edison plans to eventually provide all oil-heated buildings in Manhattan and the Bronx with the opportunity to convert to gas under the Company's Area Growth Program. (GIOP-R 90.) While the City appreciates Con Edison's commitment, the time frame for doing so is unknown, and the Company's plans do not address the immediate needs in some areas. In order to address particularly vulnerable sections of the City's population, "the PSC should direct Con Edison to make upgrades to its backbone gas infrastructure in Washington Heights, as well as heavily impacted areas in the Bronx, which are needed to support load growth." (Caputo-D 21.) Such upgrades would benefit all gas customers, and thus the costs of these system reinforcements should not be charged solely to prospective customers seeking to convert from heavy fuel oil to natural gas.

4. The PSC Should Reject Staff's Adjustments To The Oil-To-Gas Conversion Capital Budget

Staff blindly accepts Con Edison's estimate for the number of oil-to-gas conversions, arguing that converting only half of potential heavy fuel oil users will "mitigate the impact on existing rate payers and maximize benefits." (SGIIP Corrected 15.) Although Staff adopts Con Edison's customer estimate, Staff then argues that the Company's estimated cost per service and cost per foot of main are too high for 2013-2016. As a result, Staff lowered the Company's capital expenditures for oil-to-gas conversions by approximately $25-39 million in each of these years. (*Id.* 19-20.)

Staff's position on the oil-to-gas conversion program should be rejected. First, Staff's acceptance of Con Edison's 50 percent customer conversion target ignores that oil-to-gas conversions produce incremental net revenues. These positive revenues can be used to reduce the cost of service for all Con Edison customers. As a result, if Staff wants to mitigate rate impacts and maximize benefits, it should be encouraging Con Edison to convert more customers. At the very least, Staff should be investigating why 75 percent of potential customers do not become actual customers.

Second, Staff's position is contrary to the State and City policies identified above that encourage expanded natural gas service in the State. Third, if Staff thinks that the Company's capital estimates are too high, Staff should be pushing for more conversions instead of reducing the budget for same. Importantly, Staff's position to reduce the Company's capital budget could actually have the perverse effect of delaying the Company's conversion efforts by, for example, limiting the Company's efforts under its newly-established Area Growth Program. (Tr. 1026-1027.) This would undermine important State and City efforts to expedite

conversions. Staff's adjustments to the Company's oil-to-gas capital budget should therefore be rejected.

iv. The Replacement Of Leak Prone Pipe Should Be Accelerated

Con Edison and the City are in agreement that leak prone pipe within coastal flood zones needs to be removed. In fact, Con Edison recently identified water intrusion into its gas distribution system as one of the "most critical threat[s] to the gas system." (Ex. 814.) Although Con Edison's gas system fared relatively well during Hurricane Sandy, National Grid saw approximately 80,000 gas customers lose service as a result of damage to its system. Protecting Con Edison's gas system will prevent similar outages in the future, and help to eliminate the "long and laborious process of restoring gas, which must be done one customer at a time, ensuring that each and every pilot light is lit in the process. (Post Sandy Enhancement Plan ["PSEP"] at 12). Given the risks posed by this pipe, the PSC should ensure that all leak prone pipe within Category 1-3 flood zones is removed as soon as possible. The PSC should therefore adopt the City's proposal on leak prone pipe removal and direct Con Edison to replace 10 miles of such pipe per year**.**

1. The City's Proposal Is Superior To Con Edison's Proposal

Con Edison proposed a new capital program to target the replacement of bare steel and cast iron low pressure pipe within coastal flood zones. Under its existing leak-prone pipe program, Con Edison replaces pipe according to the results of its Main Replacement Prioritization ("MRP") model, which incorporates several risk factors to determine which pipe should be replaced. The MRP does not include location within the flood zone as a risk factor, so the program does not specifically target pipe located within flood zones.

Con Edison initially proposed to replace 16,500 feet of leak-prone pipe within coastal flood zones in 2015 and 2016. (Ex. 168 at 150.) Con Edison estimated that a majority of the replaced main would be cast iron main located in Manhattan, which is the most expensive main for Con Edison to replace. Con Edison initially estimated a replacement cost of $2,000 per foot, for a total program cost of $33.3 million. (*Id.*)

The City responded that Con Edison's proposal is not adequate, particularly because Con Edison identified 185 miles of leak prone pipe within coastal flood zones. To ensure that all such pipe is removed in a reasonable period of time, the City recommends replacing at least 10 miles per year, starting in 2014. (City Gas and Steam Infrastructure Panel ["CGSIP"]-D 20.) Recognizing that the Company will need time to ramp up this program, the City has proposed a target of at least 30 miles within the first three years. (*Id.*)

Con Edison acknowledged that pipe replacements outside of Manhattan are significantly lower than $2,000 per foot, and that cast iron mains in Manhattan comprise less than half of the 185 miles of leak-prone pipe located in flood zones. (*Id.* 21; Ex. 168 at 149-51.) The City therefore provided a conservative estimate of $1,500 per foot for its proposed program. (CGSIP-D 21.)

Importantly, neither Staff nor Con Edison challenged the City's $1,500 per foot estimate. On the contrary, Con Edison's GIOP revised its estimate to $1,650 per foot (Ex. 641 at 229), and acknowledged that the per-mile cost under the City's proposal would be lower than under the Company's proposal. (Tr. 1035.) At the unit cost proposed by the City, Con Edison indicates it can replace three-to-four miles per year in Manhattan using the same funding level of $33.3 million per year initially proposed by the Company. (Con Edison Gas Infrastructure and Operations Panel ["CEGIOP"-R 106.) If funding were increased by another $6.6 million per

year, Con Edison states it can replace five miles per year within flood zones. (*Id.*) This additional mileage results in a unit cost of $1,250 per foot, indicating that Con Edison can achieve economies of scale as it ramps up this program to replace more pipe each year and as it expands replacements to include leak-prone pipe located in boroughs other than Manhattan.

The City acknowledges that its proposal comes with an added cost. In direct testimony, the City's Gas and Steam Infrastructure Panel ("GSIP") estimates that Con Edison will require an extra $75-80 million per year in capital expenses to achieve the City's target of 10 miles per year. As noted by the GSIP, however, this added investment is worth the cost:

> [B]ecause (1) the low pressure system presents one of the greatest risks to the resiliency of the gas system; (2) the cast iron and bare steel mains also present gas safety concerns; (3) Con Edison already has in place a program to replace some of the low pressure system; and (4) there is no certainty as to when the next major storm will hit New York City, we believe that it is in customers' and the gas system's best interests to replace these mains as soon as possible. The replacements will effectively eliminate one of the causes of a weather-related gas outage and significantly improve the resiliency of the gas system. (CGSIP-D 21-22.)

By completing an expedited removal of leak-prone pipe in the flood zone, Con Edison will "effectively eliminate one of the causes of a weather-related gas outage and significantly improve the resiliency of the gas system." (CGSIP-D 22.)

2. Staff's Opposition To This Proposal Should Be Rejected

Staff is alone in arguing that Con Edison should not have an incremental leak-prone pipe program targeting coastal flood zones. If Staff's position is adopted, the PSC will be ignoring one of the most critical threats to the Company's gas system. (Ex. 814). Furthermore, the PSC will miss an opportunity to institute a program that will improve not only the safety of the gas system, but also its resiliency and reliability. (Tr. 1037.)

Instead of an incremental program targeting flood zones, Staff proposes to increase replacements under the existing leak-prone pipe replacement program. According to Staff, the Company should modify its MRP to include risk factors for flood-prone areas and increase the yearly replacements by 10 miles per year in both 2015 and 2016. (Staff Gas Safety Panel ["SGSP"]-D 1-11, 13-14.) Staff's opposition to an incremental program is based on what it considered to be a lack of detail supporting the Company's proposal and the cost of the program, and Staff's opinion that the Company's gas system experienced relatively minor damage from Hurricane Irene and Hurricane Sandy. (*Id.* at 16.)

Before addressing Staff's concerns, it is important to recognize that Staff agrees with the City that all leak-prone pipe in the flood zone should be replaced. (*Id.* at 15-17.) Staff also acknowledges that bare steel pipe tends to be the most susceptible to corrosion and that exposure to salt water, as happened during Hurricane Sandy, can accelerate the corrosion (Tr. 847.) Instead of targeting this pipe directly, however, Staff instead prefers a system-wide approach to address the highest-risk pipe first, regardless of where it is located.

What Staff fails to acknowledge, however, is that Con Edison's Post Sandy Enhancement Plan identifies leak-prone pipe within coastal flood zones as one of the most critical threats to its gas system. (Ex. 814.) Following a review of its own experience and National Grid's experience during and after Sandy, Con Edison concluded that the most appropriate way to harden its low-pressure gas system is to replace low-pressure cast iron and bare steel pipes with new pipes designed for high pressure. (*Id.*)

Surprisingly, the Staff Gas Safety Panel had ***never*** seen Con Edison's Post Sandy Enhancement Plan. (Tr. 856.) Staff is charged with overseeing Con Edison's operations in order to ensure safe natural gas service to millions of customers. Yet the Staff Gas Safety Panel was

not aware of Con Edison's comprehensive plan to serve one of the country's largest and most important natural gas markets, following one of the largest storms on record. Given its lack of knowledge of the pertinent facts and most recent analysis of the issue, the Staff Gas Safety Panel's recommendation regarding leak-prone pipe must be called into question and should be given little weight.

There can be no dispute that the low-pressure system within flood zones is vulnerable to water intrusion, and over time this vulnerability will increase. Furthermore, National Grid's experience during Sandy demonstrates how major storms can exploit this vulnerability and why hardening the system now is important. Just because Con Edison avoided significant impacts to its gas system during Sandy does not mean this vulnerability should be ignored. Rather, the Company should undertake a targeted, aggressive effort to remove this pipe from service as soon as possible.

Finally, the Staff Gas Safety Panel acknowledges that, if its proposal is adopted, there is no guarantee that any leak-prone pipe within the flood zones will be replaced in any given year. (Ex. 125 at 1.) In 2013 and 2014, without any emphasis on coastal flood zones, the Company estimates that its MRP will select only 1,000 feet of main within flood zones. (Ex. 168 at 12). Staff cannot state with any degree of certainty how much additional pipe in flood zones will be targeted if its proposal is adopted, nor can it articulate specifically what new risk factors should be incorporated into the MRP. Under the City's proposal, all 185 miles of leak-prone pipe in coastal flood zones will be removed in less than 20 years. (CGSIP-D 20.) This is far preferable to the uncertainty created under Staff's proposal, and the City therefore respectfully requests that its proposal be adopted by the PSC.

vi. Gas Storm Hardening

Con Edison has explained its plans to invest approximately $100 million to harden its gas system during the period of 2013 through 2016. (Muccilo-D 3-4.) This investment will be focused on three distinct areas: (a) enhanced replacement of leak-prone pipe in flood-prone areas; (b) installation of vent line protection ("VLP") devices in flood-prone areas; and (c) protection of tunnels from flooding and other weather-related impacts. The City's position on the leak-prone pipe program is discussed in detail in Section IX(b)(iv), *supra*. As explained further below, the City supports the VLP device and tunnel hardening programs, subject to a few minor modifications.

Beyond 2016, Con Edison has identified six additional resiliency initiatives that it is evaluating. These programs are discussed in more detail below. In sum, although the City generally supports Con Edison's resiliency efforts for its gas system, the City's primary concern is that Con Edison provide implementation schedules for these longer-term projects as soon as possible.

1. VLP Devices Should Be Installed In All Flood-Prone Areas

Con Edison has funded the development of a new device to prevent water intrusion into service regulators for customers that are located in flood prone areas and have high pressure gas service. As noted by the City's GSIP:

> Con Edison has rightly determined that even with high pressure services, the vents present a safety and operability concern during flooding situations. In addition, having salt water in the vent pipe may eventually compromise the regulator, thus requiring a wholesale replacement of regulators. Con Edison's protection devices should therefore help avoid unnecessary regulator replacements following flooding events.

(CGSIP-D 22-23.) The City's only concern with this program is that it be completed in a timely manner. The PSC should require Con Edison to complete the installations according to the schedule laid out by the Company. By doing so, there would be consequences if the Company fails to achieve this goal, and such consequences should provide sufficient motivation to the Company to adhere to its schedule.

The City is aware of Staff's concerns with the VLP devices, and its experts have discussed such concerns with Staff. Given the operating pressures of the system, the City does not believe that the VLP devices will inhibit the operation of the gas regulators or cause unburned gas to flow into homes or businesses. Therefore, the City does not believe there are any technical impediments to the deployment of these devices. Nevertheless, because this is a new technology, the City supports Staff's proposal that at least five percent of the devices installed be subject to annual testing and inspection. Once it is established that the devices are functioning as intended, and that they are not interfering with the operation of the gas regulators, the level of testing and inspections should be reduced.

Finally, the City acknowledges that the use of these devices will not eliminate the need to conduct inspections of homes and businesses that suffer flood damage before gas service is restored. However, the devices should greatly reduce the likelihood of water getting into the gas system, and they should expedite the ability of Con Edison to restore service after a flood event.

2. Con Edison's Tunnel Hardening Program Should Be Approved

The Company's tunnel hardening program consists of hardening the head houses at five tunnels in 2015 and 2016. Staff was the only party to oppose hardening the tunnel head

houses, and it argued that this program should be considered in the separate Storm Hardening Collaborative. (Staff Gas Infrastructure Investment Panel ["SGIIP"]-D 33-34.)

Staff's position is based on its unreasonable assertion regarding the nature of the Company's supporting documentation. Specifically, in response to City IR 25, dated June 12, 2013, SGIIP indicated that, based on its review of discovery responses and meetings with Company witnesses, Con Edison only has "high level scope and total costs estimates for these projects" (Ex. 812.) In addition, the SGIIP notes that Con Edison did not provide any white papers for this project.

Contrary to Staff's position, on March 25, 2013, the Company provided a Preliminary Update to all parties, and at page 231 of this update the Company included a white paper for the tunnel head house hardening program. On March 6, 2013, the Company also provided a white paper for this program in response to City IR 106. These white papers were provided well before the SGIIP provided its response to City IR 25 on June 12, 2013, and before the SGIIP filed its direct testimony in May 2013. The SGIIP's failure to acknowledge these pre-existing white papers demonstrates that Staff did not conduct a thorough review of this program.

Moreover, the SGIIP's position on the tunnel head houses is not consistent with its position on other capital programs where Con Edison provided white papers with similar detail to that contained in the tunnel head house white paper. For example, the SGIIP acknowledged that it supports two tunnel-related capital programs, the Hell Gate tunnel ladder egress replacement project and the First Avenue Tunnel hardening project, even though Con Edison did not provide detailed engineering for the Hell Gate project.

Furthermore, the SGIIP also was unaware (like the Staff Gas Safety Panel) that Con Edison prepared a Post Sandy Enhancement Plan, or that this Plan identified water intrusion

into tunnels as one of the most critical threats to its gas system. (Tr. 856.) Given the SGIIP's lack of awareness of the Company's white papers, Post Sandy Enhancement Plan, and its lack of first-hand knowledge of the tunnels at issue, Staff's recommendation on tunnel head houses should be rejected.

Similar to the leak-prone pipe replacement program, the head house hardening program targets one of the most critical threats to the Company's gas system. The existing head house structures are constructed of either masonry or sheet metal, and they are not designed to withstand coastal flooding. Staff does not dispute this fact. (Tr. 829.) Because these tunnels often carry infrastructure for all three Con Edison Departments (Electric, Gas, and Steam), protecting these tunnels from water intrusion is critical to avoiding significant damage to utility infrastructure, and resulting customer outages.

Given the vulnerability of the tunnel head houses, the City supports the Company's effort subject only to minor modifications that were not opposed by Con Edison. Specifically, the head houses and flood doors should be designed to the standard of the 100-year base flood elevation plus three feet for flood protection and the City Building Code standard for wind loading. (CGSIP-D 25.) Con Edison provided inconsistent information in multiple discovery responses indicating that the flood doors may only be designed to withstand a Category 2 storm (CGSIP-D 25.) A consistent standard, such as that set forth in the Stipulation, should be adopted, and the Company should use this opportunity to prepare for future events of more severe intensity.

3. Long-Term Resiliency Efforts Should Be Fully Assessed And Implemented, As Appropriate

Con Edison has identified six long-term gas storm hardening efforts that are currently under review, including: installing new isolation valves; hardening regulator stations;

hardening its supervisory control and data acquisition ("SCADA") and remote operated valve communications; and hardening its liquefied natural gas plant. (CEGIOP-D 122-38.) The City supports these initiatives and they should be pursued as expeditiously as possible.

The need for these long-term hardening projects is demonstrated by the loss of 45% of its SCADA points during Hurricane Sandy due to flooding, communications failures, and power failures. (CEGIOP-D 134.) As a result, Con Edison had to send crews to some locations to make sure that system pressures were being maintained and over-pressure protection remained effective. Other utilities have looked beyond traditional common carrier communication methods, and have utilized dedicated radio systems with alternative power sources, or longer-term battery backup with solar power. To the extent it has not already done so, Con Edison should be exploring these options and implementing the most cost-effective and appropriate communications links and backup power supplies.

The Company also stated it is conducting a study, to be completed by the end of the third quarter of 2013, to evaluate reasons for failures at regulator stations due to water intrusion, and to evaluate methods for eliminating these failures. As recommended by the City's GSIP, "Con Edison should proceed immediately with implementation of the resiliency projects identified by the study." (CGSIP-D 34.)

c. Steam Capital

i. <u>Emergent Projects</u>

The City takes no position on these issues at this time.

ii. The PSC Should Require Con Edison To Update Its Steam Storm Hardening Plan To Ensure That It Addresses Resiliency Adequately

The $1 billion Storm Hardening Program proposed by Con Edison includes a proposal to invest $100 million during the period 2013 to 2016 to improve the resiliency of the Company's steam production facilities. (Con Edison Steam Infrastructure and Operations Panel ["CESIOP"]-D 83.) As proposed, the Storm Hardening Program includes projects that, *inter alia*, would eliminate, or mitigate the impact of, water infiltration into the production facilities by installing new and heightening existing moats, installing flood pumps, and relocating equipment (*Id.* at 84.) Although Con Edison proposes to recover its investment of storm hardening measures via base rates through this and future rate filings, the Company also proposes to implement an ill-defined surcharge mechanism to recover costs associated with certain projects "that cannot be timely addressed in rate proceedings or through multi-year rate plans…." (Mucillo – Steam-D 61.)

In Points IX(a) and (b), *supra*, the City addressed many elements of the Company's proposed Storm Hardening Program that are common to all three business units and will not repeat those arguments here. Accordingly, the following positions advanced in those sections are incorporated herein by reference and apply fully to the proposed Steam Storm Hardening Program: (a) Con Edison should integrate resiliency into its planning and design processes; (b) Con Edison should make the capital investments necessary to improve the resiliency of its utility infrastructure, including steam production, transmission, and distribution facilities; (c) Con Edison's resiliency investments should be guided by the design principles described in the Stipulation (Ex. 846), which the PSC should acknowledge, but not formally approve; (d) the City's position regarding the Storm Hardening Collaborative; (e) the proposed

Storm Hardening surcharge mechanism should be rejected; and (f) Con Edison's failure to evaluate the proposed Storm Hardening Program initiatives under its typical capital optimization process.

The City's GSIP reviewed and commented on Con Edison's Steam Storm Hardening Program. As described below, the City's GSIP recommended that Con Edison study certain additional measures that may be taken to improve steam system resiliency.[20] The City respectfully requests that the PSC direct Con Edison to undertake those studies, and to report on the analyses and results of same, as described below.[21] The City also addresses herein a concern regarding Staff's opposition to Con Edison's proposed installation of sluice gates at certain steam production facilities, and regarding the level of capital investment on storm hardening that Con Edison is proposing to undertake.

1. Con Edison Should Study The Feasibility Of Improving Steam System Resilience To Electric And Gas Outages

The City's GSIP explained that steam production facilities can be adversely affected by electric and gas outages. (CGSIP-D 40; Ex. 168 at 30, 32.) The City acknowledges that measures available to improve the ability of steam system assets to operate during such outages may be cost-prohibitive or otherwise infeasible, and that the Company must plan carefully which capital investments it will undertake so as to avoid unduly burdening price-sensitive steam customers. To this end, the City recommends that Con Edison be directed to

[20] Once the most cost effective alternatives are identified for each plant, they should be implemented.

[21] The City's GSIP explained that certain resiliency projects proposed by Con Edison were deficient with respect to the "freeboard" (*i.e.*, the marginal height of wall provided above the design water level that is intended to accomplish design objectives while allowing for uncertainty in a water surface profile) reflected in the project design. (CGSIP-D 38-40.) The Stipulation (Ex. 846) adequately addresses the deficiency identified by the GSIP.

undertake certain studies, as described below, to determine what actions reasonably may be implemented to improve steam system resilience to electric and gas outages.

Steam production facilities rely on electricity for the operation of motors and other equipment, and steam distribution facilities also may be impaired by an electric outage. (CGSIP-D 41; Ex. 168 at 30.) Four steam production facilities have backup generation with a limited on-site supply of liquid fuel that enables continued operation during an electric outage, and three facilities have black start capability that enables the commencement of operations during an electric outage. (CGSIP-D at 41; Ex. 168 at 95.)

Steam system resilience would be improved if all steam production facilities are able to commence or continue operations during an electric outage. (CGSIP-41.) Currently, the extent to which existing capacity that may be available during such outages can satisfy steam load is unclear. (*Id.*) Therefore, the system modifications necessary to satisfy such load during an electric outage are unknown. One such deficiency is known, however – steam customers located near the southern end of the steam system may be particularly susceptible to service interruptions if there is an electric outage, given that none of the steam production facilities located near the southern end of the steam system have black start capability. (*Id.* at 42.) It is likely, however, that the cost of addressing this and all other necessary modifications would be substantial.

The City recommends that Con Edison address these issues by: (a) estimating the cost of adding or improving backup generation and black start capability to each production facility that lacks such equipment; (b) demonstrating the need for, and benefit of, adding or improving such capability; (c) estimating the steam rate impacts associated with the

implementation of such projects; and (d) providing a full report on the results of this analysis and the Company's implementation plan, if any, in its next rate case. (*Id.*)

With respect to gas outages, an instantaneous loss of gas supply may have varying impacts on the steam system, depending on the extent to which supply is diminished. Such impacts may range from low steam system pressure to a complete loss of steam system pressure. (*Id.*; Ex. 168 at 32-33.) Gas supply interruptions could lead to a shutdown of portions of the steam system. (CGSIP-D 42-43.) The information provided in these proceedings, however, is unclear as to whether steam production facilities with a backup fuel source are able to switch fuels seamlessly in order to avoid steam service interruptions if there is a gas service interruption. (*Id.* at 43.)[22]

Also of concern is that steam production facilities with an on-site supply of alternate fuel may not maintain an adequate supply of same after a severe weather event. (*Id.*) For instance, Con Edison's 60th Street and 74th Street Steam Stations have alternate fuel inventories sufficient to maintain operations for only three and four hours, respectively. (*Id.*; Ex. 168 at 94.) Given that the availability of liquid fuels is vulnerable to disruption, as occurred in the aftermath of Hurricane Sandy, and that gas (and electric) outages may persist well beyond four hours, it cannot be assumed that the modest supplies of alternate fuels held at those facilities can be replenished quickly or reliably. (CGSIP-D 43.)

The City acknowledges, however, that increasing the volume of alternate fuels stored at the steam production facilities is not feasible due to the location of those units. (*Id.*) Accordingly, the City recommends that Con Edison develop, and update regularly, contingency

[22] For instance, the 59th Street, 74th Street, and East River Steam Stations use #6 fuel oil. (Ex. 168 at 94.) This type of fuel oil must be heated before it can be used; as a result, if there is an outage or loss of gas without prior notice, switching to the alternate fuel may not be instantaneous.

plans regarding its response to a prolonged gas outage and constraints in the liquid fuels supply chain. (*Id.*)

2. Con Edison Should Study The Feasibility Of Improving The Resilience Of Its Steam Transmission And Distribution Systems

As proposed, Con Edison's Steam Storm Hardening Program focuses exclusively on production facilities. (Ex. 168 at 23.) Although tunnel hardening projects proposed by Con Edison would help protect steam mains that traverse those tunnels, those initiatives are included as part of the Company's Gas Storm Hardening Program, and not the steam program. (*Id.*)[23] Although the City would prefer that Con Edison increase the resiliency of its entire steam system, including the transmission and distribution assets, the City recognizes that such an initiative could require cost-prohibitive capital investments. (CGSIP-D 44.)

It may be possible, however, to improve the resilience of portions of the steam delivery system. To determine whether and how this may be accomplished, the City recommends that Con Edison identify and evaluate options to improve the resiliency of steam mains and reduce the size of system segments affected by flooding. (*Id.* at 45.) Con Edison should include in its next steam rate filing the results and implementation plan, if any, associated with that analysis. (*Id.*) The recommended analysis should include a particular focus on whether valves may be reconfigured or installed to maintain steam delivery service to customers that are unlikely to be flooded during major weather events. (*Id.*) Con Edison also should focus on measures that would improve its ability to communicate remotely with, and control, steam valves. (*Id.*) Both actions, if implemented, would improve the Company's ability to isolate

[23] The Company also is evaluating and/or implementing other projects that are not part of the Steam Storm Hardening Program, but may improve the resiliency of steam transmission and/or distribution systems. (Ex. 168 at 23.)

flood-prone sections of the steam system, thereby moderating the extent of steam service outages during a weather event. (*Id.*)

The City further recommends that Con Edison evaluate options to harden its feeder lines by mitigating water intrusion into manholes serving those lines. (CGSIP-D 46.) Con Edison should undertake cost-effective measures that would make the manholes watertight. (*Id.*) Again, the results and analyses associated with this study should be included in Con Edison's next steam rate case.

As noted earlier, steam customers are price-sensitive and the City recognizes that any cost increases of steam delivery service must be carefully controlled. The studies recommended by the City, however, should not impact steam rates. Most or all of the recommended studies may be conducted by Company personnel and, therefore, would not require incremental funding. (CGSIP-D 46.) Moreover, the recommended studies are necessary to ensure that storm hardening projects are defined appropriately, and that the costs and benefits of each such project have been identified. (*Id.* at 46.) It would be appropriate, therefore, for any costs – including consultants' costs – associated with the recommended studies to be supported by the base rate allowance for resiliency projects that is approved in this proceeding. (*Id.* at 46-47.)

3. The PSC Should Ensure That Con Edison Prudently Manages The Cost Of Implementing The Steam Storm Hardening Program

The revenue requirement included in Con Edison's initial rate filings in January did not reflect the incremental costs associated with that capital program because such costs "were not developed in time to be reflected in the revenue requirement …." (CESIOP-D 91.) The CESIOP stated in its pre-filed direct testimony that the Storm Hardening Program it

described was not a "final plan", and that the "evaluation of storm hardening alternatives is an ongoing effort." (*Id.*)

The Panel explained further that the "projects and programs will continue to evolve and may be modified, accelerated or deferred …." In fact, the Panel's update/rebuttal testimony reflected many material changes in cost components of individual storm hardening projects. For instance, during the period between the filing of initial and reply testimony, projects located at the 74th Station apparently realized a net decrease of approximately $12.0 million in the Rate Year, and projects located at 59th Street apparently decreased by a net amount of approximately $8.5 million in the Rate Year. (CESIOP-R 8-9.)

Notwithstanding those and other changes, the Company's overall estimate of its Steam Storm Hardening Program did not change (the same holds true for the electric and gas programs). (Muccilo – Steam-R 5-6.) Such a result defies reason. Initial capital project cost estimates reflect many uncertainties and, therefore, incorporate a substantial contingency factor which reflects that a project's actual costs ultimately may be significantly higher (or lower) than the initial estimate. The contingency factor is decreased over time as the design and implementation details of a project are finalized.

Here, it must be assumed that initial cost estimates for the resilience efforts would have been less accurate than comparable estimates developed months later, after the projects had been developed more fully. Con Edison developed its proposed capital projects in the immediate aftermath of Hurricane Sandy, while the Company was engaged in a large-scale effort to restore utility service and while a massive effort to repair utility equipment and structures was ongoing. Against that backdrop, Con Edison's claim that the overall resilience costs did not change during the interval between initial and update/rebuttal testimony despite material differences in other

resilience program costs, and the rushed initial preparation of the Storm Hardening Programs and their cost estimates, defies reason.

The lack of any material change in the overall estimated resilience project costs calls into question the adequacy of the Company's estimating process. The City and other interveners do not have either the resources or the expertise to evaluate independently the cost estimates proffered by the Company. It is imperative that Staff diligently audit the Storm Hardening Programs to ensure that project costs are reasonable, and that variance from project estimates and budgets are reasonable and supported fully.

d. Electric Production Capital

i. Emergent Projects

The City takes no position on these issues at this time.

ii. The PSC Should Approve The Company's Electric Production Facility Resilience Projects

Con Edison proposed a number of resilience projects at its electric generating facilities. With one notable exception, those proposals were not controversial. Recognizing the numerous vulnerabilities of its East River Generating Station, Con Edison proposed to install above-ground and underground/underwater barriers, as well as to raise critical equipment above the expected flood level. The goal of these measures is to prevent a future unplanned, storm-related outage at the facility and to expedite the Station's restoration following major storm and flooding events.

The Company's plans constitute an appropriate response to the vulnerabilities identified, and the PSC should provide as part of the revenue requirement the funding necessary to complete the tasks. In doing so, the PSC should reject Staff's meritless criticism of, and associated adjustments to, certain aspects of the proposal.

The Company proposed to add watertight doors or barriers to every ground level opening at East River, to repair the roof to prevent rain infiltration, install sluice gates at the cooling water tunnel openings, install submarine-type doors in underground areas, and add pumps to evacuate any water that collects within the facility. (Con Edison Electric Production Panel ["CE EPP"]-D 40-45; CESIOP-D 27, 84, 87-88; Ex. 717 at 113; CESIOP-R 9; Ex. 662, Sch. 2 at 31, 34.) The Company explained that such tunnels are "one of the primary routes for flood waters" to enter the production facilities, a weakness that caused significant problems during Hurricane Sandy. (CESIOP-R 45.) Con Edison determined that sluice gates would be an appropriate solution because the gates would present a complete barrier to water entry regardless of storm surge elevation. (Id. at 45-46.) Staff challenged the installation of the sluice gates, contending that the Company did not justify this project, and Staff did not understand why the other barriers would not be sufficient. (Staff Electric Production Panel ["SEPP"]-D 25.) In response to Staff's criticisms, the Company provided additional information in its rebuttal testimony, explaining that the cooling water tunnel is "one of the primary routes for flood waters to enter the stations and cause significant damage to critical equipment" (CE EPP-R 23-24.)

Notwithstanding Staff's refusal to accept this additional information as adequate justification for the sluice gates (Tr. 64), the record adduced on this issue is sufficient to justify this work. The record also proves that Staff's position is baseless. Staff conceded that it did nothing to assess the proposal other than review the information provided by the Company. (Tr. 65, 74.) Staff also conceded that none of the proposed measures standing alone could protect the facility from flooding (Aug. 1, 2013 Tr. 65-66), and that emergency pumps should not be used as a primary line of defense for storm hardening this facility. (*Id.*) Moreover, Staff acknowledged

that above-ground barriers could not prevent water intrusion into the facility through the cooling water tunnel. (Aug. 1, 2013 Tr. 67.)

Staff claimed that its objections stemmed from the absence of a cost-benefit analysis and consideration of alternatives. (Tr. 836.) However, Staff acknowledged that it did not receive any cost-benefit analyses for any of the other steam storm hardening projects (i*d*.) and did not dispute any other aspect of the proposed project, even though none of it was supported by a cost-benefit analysis or evaluation of alternatives. (SEPP 24-25; Aug. 1, 2013 Tr. 67.) Thus, Staff's rationale is inconsistent and cannot withstand scrutiny.

More importantly, it does not take any specialized expertise or training to understand that an above-ground barrier cannot protect against storm surges through underground/underwater openings. No specialized expertise is needed to understand that surges seek out the path of least resistance, such as tunnel openings, and that flooding of the East River Station from below can be just as damaging as flooding through open doorways, loading docks, and windows. Further, the PSC is already aware of the damage caused by the storm surge and flooding during Hurricane Sandy at East River Station, and the concomitant need to harden that facility against future similar events.

The barriers being erected around the facility are part of the solution, and the sluice gates are an equally important part of it. Accordingly, the PSC should reject Staff's position and include funding for the entire project in the revenue requirement for the Rate Year.

e. Municipal Infrastructure

The City takes no position on these issues at this time.

f. The Undepreciated Costs Of Hudson Avenue Should Be Transferred To The Electric Department

Con Edison's Hudson Avenue Station served both electric and steam customers in various combinations throughout its 88-year service life. The Company rendered the on-site equipment unusable and retired the plant in place in 2011. (Mucillo – Steam-D 75.) At that time, the equipment and structures had a net book value of $92.3 million, which was recorded solely on the books of the Company's steam business. (*Id.* at 76.)

In these proceedings, Con Edison proposed to transfer those undepreciated costs – together with responsibility for the future cost of demolishing the existing structures – to the Electric Department; the costs then would be reflected in electric rate base and amortized in electric rates over a period of twenty years. (*Id.* at 76-77.) Con Edison explained that such transfer is justified because the Hudson Avenue Station "historically had a substantial connection" to the Electric Department, and the only future use contemplated for that site is to benefit electric customers. (*Id.* at 78-80.)

The City supports Con Edison's proposal for the reasons proffered by the Company, with one exception. Specifically, Con Edison is continuing to incur costs relating to the Hudson Avenue facility (Tr. 1749-50; Aug. 1, 2013 Tr. 11.), notwithstanding that the facility has been rendered inoperable and retired in place. If the proposed transfer is denied or delayed, however, those ongoing O&M costs would remain on the Steam Department books and be allocated to steam customers. (Tr. 1749-50; Aug. 1, 2013 Tr. 12.) Steam customers should not be compelled to pay for ongoing O&M costs associated with the Hudson Avenue Site, which is neither used for the benefit of steam customers, nor held for a potential future use that would benefit steam customers.

Staff and the County of Westchester ("COW") oppose the transfer as proposed by Con Edison. The arguments proffered by those parties are misplaced and/or unsupported and should be rejected by the PSC.

i. COW's Positions Ignore That The Hudson Avenue Station Served Electric Customers For The Vast Majority Of Its Service Life

COW witness Mugrace asserted that (i) the Hudson Avenue Station served and benefitted only steam customers during the final seven years of its service life, and (ii) the anticipated uses of the land described by Con Edison do not require the retired equipment and structures. (Mugrace-D 22-23.) Mr. Mugrace argues that assigning to electric customers any costs associated with such plant would violate principles of cost causation. (Mugrace-R 6.)

The PSC should reject COW's arguments. The Hudson Avenue Station was carried in whole or in part by the Electric Department for the vast majority of its service life, and the allocation of Station costs over time reflected such use. (Arnett-R 2; Mucillo – Electric-D 86-87.) Accordingly, the Electric Department bore cost responsibility for the Hudson Avenue Station while it was dedicated to serving electric customers as well as when that facility served both electric and steam customers as a cogeneration facility. (Arnett-R 2.) Overall, the Electric Department benefitted from and supported the facility during approximately 77 years of its 88-year service life.[24] Nevertheless, Mr. Mugrace argues that electric customers should bear no responsibility whatsoever for the undepreciated costs because the facility was used most recently to serve steam customers only. That argument is unpersuasive, and is inconsistent with PSC

[24] Even during the small portion of its service life that the Hudson Avenue Station operated as a steam-only facility, Con Edison anticipated during that period that the facility may be needed to serve electric customers – the Company was involved in a formal proceeding to examine the construction of a modern cogeneration facility of up to 500 MW. (Arnett-R 2.) Mr. Mugrace ignores this point.

precedent and positions previously advanced by COW; it is also contrary to the principle of cost causation.

In Case 01-E-0377,[25] the PSC approved a Con Edison request for authority to sell certain property, including the Waterside Steam Station site ("Waterside"), to a third party. COW subsequently advocated that the net proceeds arising from the Waterside sale should be "allocated in direct proportion to how" the facility's historic costs were being recovered – 93.1 percent to electric customers, and 6.9 percent to steam customers.[26] The PSC agreed, concluding that COW's proposal would be an "equitable allocation method that insures that the benefits of the Waterside investment flow to those ratepayers that have supported the costs of that investment."[27]

Mr. Mugrace conceded that he had never heard of Waterside or Case 01-E-0377, and that he was unfamiliar with his client's contrary position in that proceeding. (Tr. 382-383.) Further, although the Waterside Order pertained to the allocation of proceeds from the sale of utility property, COW has presented no justification for its inconsistent position that the historic allocation of facility costs should be used to guide the distribution of a benefit, but not an ongoing or future cost arising from utility property. It is clear that COW's position on the proposed Hudson Avenue Station transfer is driven only by its interest in avoiding incremental electric costs by any means necessary, and not by the principles of cost causation as espoused by Mr. Mugrace. Because the Station served electric customers for most of its existence, cost

---

[25] Case 01-E-0377, *Joint Petition of Consolidated Edison Company of New York, Inc. and FSM East River Associated LLC for Authority under Section 70 of the Public Service Law to Transfer Certain Real Property Located at 616 First Avenue, a Portion of 685 First Avenue, 700 First Avenue and 708 First Avenue and for Related Relief.*

[26] Case 01-E-0377, *supra*, Order Approving Accounting and Ratemaking with Modifications (issued August 22, 2008) at 8-9 ("Waterside Order").

[27] *Id.* at 12.

causation principles dictate that electric customers should bear the costs of unrecovered investment and decommissioning. COW's arguments in opposition to the transfer should be rejected accordingly.

ii. Staff Opposition To The Hudson Avenue Station Transfer Is Unsupported

Staff also opposes the proposed Hudson Avenue Station transfer to the Electric Department. Staff argued that Con Edison did not present sufficient information to support the proposal. According to the Staff Policy Panel ("SPP"), Con Edison failed to: (a) specify a definite future use for the entire site in the near term; (b) estimate all potential future costs associated with on-site demolitions, which Staff asserts is necessary for the PSC to "[assess] the level of risk of the transaction"; (c) support assigning such costs to electric customers when the Hudson Avenue Station served only steam customers for the final seven years of its service life; (d) provide an analysis or study in support of its proposal; and (e) justify the transfer of property at book value, rather than fair market value. (SPP-D 29-32.) The Staff Policy Panel recommended that Con Edison be required to conduct a comprehensive study of the proposed transfer that addresses these alleged deficiencies before any Hudson Avenue assets are transferred from the Steam Department. (*Id.* at 32-33.)

Staff's argument that Con Edison must specify a definite, near-term use for the Hudson Avenue site before the transfer may be effectuated is arbitrary and unsupported. The Staff Policy Panel conceded that it is not objecting in these proceedings to the inclusion in rate base of a number of other properties owned by Con Edison that are being held for future use. (Aug. 1, 2013 Tr. 12.) Staff provides neither explanation nor justification for why the Hudson Avenue Station should be treated differently than those other properties.

Moreover, Staff's claim that the future uses for Hudson Avenue described by Con Edison are merely "vague assurances" cannot withstand scrutiny. (SPP-D 32.) The Hudson Avenue site is an 11-acre property located on the East River across from Lower Manhattan with adjoining Con Edison transmission and distribution stations (Arnett-R 5), including the Farragut transmission station that serves both Manhattan and Brooklyn. (CE EIOP-D 138.) The site is zoned for utility use, and the surrounding areas are transitioning to residential uses. (Arnett-R 5.) There are no comparable properties, and selling the site to a third party would be irresponsible regardless of its appraised value. (*Id.*) In any event, Con Edison specified multiple potential future uses for the site, each of which would serve an important role in the Company's electric system. (CE EIOP-D 138-43.)

Staff's second claim that the PSC cannot evaluate the "risk of the transaction" because future costs are indefinite also is unavailing. Staff failed to explain what "risk" should concern the PSC, nor is it clear how the transaction might create or increase risk to electric customers. The Staff Policy Panel conceded that the transfer would amount to an accounting change, and would not be a transaction between unaffiliated parties (*i.e.*, Con Edison and an independent buyer). (Aug. 1, 2013 Tr. 13.)

Third, Staff agrees broadly with COW that the proposed transfer should be denied because Hudson Avenue Station served steam customers only during the last seven years of its 88-year service life. (SPP-D 32.) Staff does not expand on this argument, or explain why the facility's use during 12.5 percent of its service life should dictate whether the undepreciated costs are recoverable from electric customers. This position should be rejected for the reasons set forth in response to COW in Section IX(f)(A), *supra*.

Fourth, Staff's argument that Con Edison failed to support its proposal with a study or analysis is arbitrary and inconsistent with past PSC practice. The Staff Policy Panel acknowledged that it is unaware of any prior instance in which the PSC required a study of the type recommended by the Panel before allowing a jurisdictional utility to shift property between its business units. (Aug. 1, 2013 Tr. 14.)[28] Staff does not provide any explanation or justification for why a new standard should be applied to the proposed transfer in this proceeding.

Finally, Staff claimed that Con Edison failed to justify transferring the Hudson Avenue Facility at book value rather than fair market value because the Company stated only that it complied with the PSC's Uniform System of Accounts for steam corporations. (SPP-D 32.) The regulation at issue was promulgated as 16 NYCRR §463.13. The Staff Policy Panel does not cite to any PSC order or other precedent or authority to support its suggestion that Con Edison had any discretion to do anything other than comply with the PSC's regulations. There is no provision of the Uniform System of Accounts that either allows or requires transfers to occur at fair market value rather than original cost. Moreover, the Staff Policy Panel could not identify any other instance in which property transferred between two business units of one utility subject to PSC jurisdiction was assessed at fair market value instead of original cost. (Aug. 1, 2013 Tr. 13-14.) Significantly, the Panel conceded that the Hudson Avenue Station previously was transferred at original cost from the Electric Department to the Steam Department. (*Id.* at 14.)

[28] Notably, the Staff Policy Panel recommends that steam customers pay for the study, if it is conducted, even though the Panel has no idea how much the study might cost. (Aug. 1, 2013 Tr. 14.) The Panel stated that it does not care about this potential rate impact. (*Id.* at 14-15.)

For the foregoing reasons, Staff's recommendation that Con Edison study the proposed Hudson Avenue Station transfer, instead of effectuating such transfer, is arbitrary, unsupported, and should be denied.

iii. Steam Customers Should Not Be Compelled To Pay For Utility Infrastructure That Is Not Used And Useful

Staff opposes the proposed Hudson Avenue Station transfer unless and until Con Edison completes the broad study recommended by its Policy Panel (SPP-D 33); COW opposes the transfer to electric customers of any such equipment or structure at any time. (Mugrace-R 6.) Accordingly, Staff recommends that the ongoing costs associated with the Hudson Avenue Station continue to be assigned to steam customers until Con Edison has completed the recommended study and the PSC has approved a change in ratemaking treatment of such costs. (SPP-D 33-34.) COW recommends that the full undepreciated costs remain assigned to steam customers forever. (Mugrace-R 6.)

It is beyond challenge that the plant remaining on the Hudson Avenue Station site is neither used nor useful for the benefit of steam customers. (Tr. 1749; Aug. 1, 2013 Tr. 10; Arnett-R 2.) A fundamental principle of utility ratemaking is that customers only should bear the ongoing operation and maintenance cost of utility plant that is used and useful for their benefit. (*See, e.g.*, Mugrace-D 23.) Here, although it is undisputed that the remaining Hudson Avenue Station assets are neither used nor useful for steam customers, and there is no indication whatsoever that the assets (or underlying real property) will ever be used to serve steam customers in the future, Staff and COW argued that steam customers should continue to pay for ongoing costs associated with the Hudson Avenue Station.

This position is inappropriate and inequitable. Steam customers should not be forced to continue paying O&M costs associated with a plant that is neither used nor useful for

the steam business, or held for the future benefit of steam customers. To the extent that proposed transfer of cost responsibility for the Hudson Avenue Station to the Electric Department is delayed or denied, the PSC should exclude those assets from the steam rate base and bar Con Edison from recovering such ongoing costs from steam customers.

g.-l.

The City takes no position on these issues at this time.

X RECONCILIATIONS

The City takes no position on these issues at this time.

XI. REVENUE ALLOCATION/RATE DESIGN

a. Electric

The City's facilities take electric service from Con Edison via the delivery rates charged to the NYPA class. (Stephens-D 2.) The City sponsored the testimony and exhibits of Robert R. Stephens on electric cost-of-service, revenue allocation and rate design issues.[29] For the reasons set forth below, the PSC should adopt the City's positions on these issues.

i. Electric ECOS

The City asserts that Con Edison's electric embedded cost-of-service ("ECOS") study conducted using 2010 data ("2010 Study") is flawed for the following reasons: (1) based on the PSC's order in Con Edison's last electric rate proceeding, the Company should have utilized more recent data in its ECOS study; (2) there is tremendous uncertainty regarding the accuracy of a number of allocation factors used in the 2010 Study; (3) due to such uncertainty and in the absence of more recent data, the PSC should utilize the allocation factors from Con

[29] Mr. Stephens is a Principal with Brubaker & Associates, Inc., energy, economic and regulatory consultants, and possesses considerable experience in utility rate and restructuring matters. (Stephens-D, Appendix A at 1-3.)

Edison's prior ECOS study, which was conducted using 2007 data ("2007 Study"); and (4) if the PSC elects not to disregard the allocation factors used in 2010 Study, it should phase-in the use of such factors by relying on an average of the allocation factors used in the 2010 Study and the 2007 Study.

1. Con Edison Should Have Utilized More Recent Data In Its ECOS Study

For a number of years, there has been considerable controversy regarding the separation in time between the Rate Year and the data utilized by Con Edison in its electric ECOS study. Notwithstanding such controversy, and a PSC order on this issue, Con Edison failed to utilize the most recent data available in conducting its ECOS study, thereby creating increased uncertainty and controversy regarding the results of that study. For the reasons set forth below, this uncertainty supports the use of a larger tolerance band than the ±10% band proposed by the Company.

In Con Edison's 2008 electric rate proceeding, the Company relied on an ECOS study that utilized 2005 data ("2005 Study").[30] In response, concerns were advanced that the 2005 Study was stale and did not warrant the use of a narrow tolerance band for revenue allocation purposes.[31] Con Edison then relied on its 2007 Study in the Company's 2009 electric rate proceeding, which resulted in a multi-year rate settlement.[32] In order to address controversy

---

[30] Case 08-E-0539, *Proceeding on Motion of the Commission as to the Rates, Charges, Rules and Regulations of Consolidated Edison Company of New York, Inc. for Electric Service*, Order Setting Electric Rates (issued April 24, 2009) at 204.

[31] *See id.* at 201-05.

[32] Case 09-E-0428, *Proceeding on Motion of the Commission as to the Rates, Charges, Rules and Regulations of Consolidated Edison Company of New York, Inc. for Electric Service*, Order Establishing Three-Year Electric Rate Plan (issued March 26, 2010), Joint Proposal (dated November 23, 2009).

pertaining to the separation in time between the Rate Year and data utilized in the ECOS study, the settling parties agreed that:

> If the Company files for new base delivery rates to be effective on April 1, 2013, that filing will be premised upon a 2010 ECOS Study. For each year the Company delays in filing for new base delivery rates, the ECOS Study underlying the Company's filing will be premised upon a year that is no more than two (2) years prior to the year in which the filing is made (*e.g.*, if the Company files for new base delivery rates to be effective on April 1, 2014, the filing will be premised upon a 2011 ECOS Study).[33]

The PSC endorsed that provision in its order resolving the rate proceeding:

> [T]he Joint Proposal requires that the ECOS study underlying the Company's next rate filing be based upon data no more than two years prior to the year in which the filing is made. This requirement appropriately addresses concerns about the separation in time between the historical period used for the ECOS study and the rate period. *** We find that these terms are reasonable, appropriate, and are likely [to] reduce future disputes.[34]

Con Edison's reliance on the 2010 Study in this proceeding violates the intent, if not the letter, of the parties' PSC-endorsed agreement. The Company's proposed use of the 2010 Study was premised upon it filing a rate case seeking new delivery rates effective April 1, 2013. Con Edison elected to delay filing its next rate case and is not seeking new delivery rates herein until January 1, 2014. Significantly, however, the Company chose to rely on 2010 data for its ECOS study, and made no apparent effort to update such data to reflect the delayed rate filing.

Con Edison filed the instant rate case on January 25, 2013. Accordingly, the "ECOS Study underlying the Company's filing" should have been premised "upon a year that is no more than two (2) years prior to the year in which the filing is made." Two years prior to 2013 is 2011, not 2010. Accordingly, the 2010 Study should have been based on 2011 data.

---

[33] *Id.*, Joint Proposal at 34.

[34] *Id.*, Order Establishing Three-Year Electric Rate Plan at 34.

Moreover, data from 2011 became available to Con Edison in 2012. (Aug. 1, 2013 Tr. 239.) Thus, Con Edison could have utilized 2011 data in its ECOS study. Clearly, the intent of the parties' agreement, as interpreted by the PSC, was that the data utilized in the ECOS study "be based upon data no more than two years prior to the year in which the filing is made." Furthermore, given Con Edison's capabilities, there is no reason why the data used in the ECOS study must be based on a calendar year as opposed to any 12-month period. Accordingly, even if the Company could not or would not utilize 2011 calendar year data for the study, at a minimum it should have used data from the period September 1, 2010 through August 31, 2011, to at least reflect the eight-month delay in seeking new delivery rates from what had been anticipated.

Instead, due to Con Edison's failure to abide by the PSC's Order and honor the parties' agreement and/or utilize the most-recent data available in its ECOS study, the PSC is being asked to allocate revenues, and set delivery rates for calendar year 2014, and possibly beyond, based on a cost study reliant upon data from calendar year 2010. In fact, the 2010 data does not even reflect in full the rates approved in the Company's last electric rate proceeding. (Stephens-D 12; *see also* Ex. 153 at 146.) As Stephens testified:

> The ECOS study results are predicated on a historic year that is four years removed from the rate year, so the costs do not reflect rate year conditions. In addition, as Con Edison acknowledges … the 2010 period did not even reflect the full impact of the new rates resulting from the prior rate case. This leads to a less than perfect matching of going-forward costs and the costs studied in the cost of service study. These mismatches and moving pieces yield additional layers of uncertainty as to whether the rate classes will impose a level of costs going forward as are reflected in the ECOS study. In general, the more uncertain the cost study results are, the wider the tolerance band should be.

(Stephens-D 12-13.) For the foregoing reasons, Con Edison should have utilized more recent data in its ECOS study.

2. There Is Tremendous Uncertainty Regarding The Accuracy Of A Number Of Allocation Factors Used In The 2010 Study

According to Con Edison's Demand Analysis and Cost of Service Panel – Electric ("DAC"), the 2010 Study shows that the NYPA class has a revenue deficiency of $26.7 million. (DAC-D 28-29; Ex. 464, Table 1 at 1.) Significantly, however, that result is based on, *inter alia*, allocation factors for which, as demonstrated below, tremendous uncertainty exists.[35]

Initially, Con Edison uses a questionable approach to calculate the High Tension system allocator (labeled "D04" in the 2010 Study). As Mr. Stephens explained: "The High Tension system must be able to accommodate the highest demand of the class, no matter when that class demand occurs." (Stephens-D 5.) In calculating class non-coincident peaks used in the D04 allocator, however, Con Edison did not utilize the single-highest hourly or 30-minute demand reading for each class to develop that allocator. Rather, the Company used the average of eight 30-minute demands, which averaging can have a dilutive effect that distorts the ECOS study results. (*Id.*) This approach is inappropriate because "Con Edison, like other utilities, must design its distribution system to meet the maximum loads of its customers, not the average of several peak periods." (Stephens-D 5-6; emphasis in original.)[36] Importantly, the

---

[35] The claimed deficiency for the NYPA class also is impacted materially by Con Edison's proposed use of a ±10% tolerance band for revenue allocation purposes, which, as detailed below is a much narrower than the ±20% tolerance band recommended by the City and the ±15% tolerance band adopted by the PSC in the Company's last fully-litigated electric rate proceeding. Under tolerance bands of ±15% and ±20%, the deficiency purportedly attributable to the NYPA class declines to approximately $10.8 million and $0, respectively. (Stephens-D 23.) Between the claimed deficiency and an allocation of the requested revenue requirement increase, Con Edison's Electric Rate Panel ("ERP") has proposed to increase annual delivery revenues from the NYPA class by approximately $61.6 million. (ERP-D 17.)

[36] In this instance, the use of average demands under-allocates costs to the S.C. 1 class, thereby over-allocating costs to other service classes. (Stephens-D 6.)

misallocation of High Tension system costs can have a material impact on the ECOS study results:

> The High Tension system is the single largest plant in-service cost category on the Con Edison system, comprising over $7 billion of the $18 billion total system plant in-service …. Therefore, the allocation method used has the potential to have a material impact on the cost of service results and potentially skew the allocation of this large cost item among the classes.

(Stephens-D 5.)[37]

The City also has concerns regarding the allocation factors for Overhead ("OH") Services, Underground ("UG") Services, OH Lines – Customer Component, and UG Lines – Customer Component (labeled "S03," "S03A," "C01," and "C02," respectively, in the 2010 Study). (*See* Stephens-D 6-7; Ex. 464, Sch. 1 at 11, 15.) The 2010 Study depicts substantial, unexplained changes in the NYPA class's share of these allocation factors, which share previously was very constant between the 2005 Study and the 2007 Study. Set forth below is a table that summarizes the changes in these allocation factors from ECOS study to ECOS study:

Description	**Allocation Factor**	**2005 Study**	**2007 Study**	**2010 Study**
OH Services	S03	0.07%	0.07%	0.40%
UG Services	S03A	6.75%	6.52%	7.97%
OH Lines – Customer	C01	0.04%	0.04%	0.19%
UG Lines – Customer	C02	2.82%	2.76%	3.71%

(Stephens-D 7.) As Stephens explained: "these allocation factors were relatively stable in the first two cost of service studies actually declining slightly in the 2007 study, but have jumped

[37] A similar, albeit less-impactful, concern also exists with respect to the Low Tension system allocator (labeled "D08" in the 2010 Study). (Stephens-D 5-6.)

sharply, and inexplicably, in the current cost of service study. For example, the S03 and C01 allocation factors are around five times higher than those used in the 2007 study, while the S03A and the CO2 [allocation factors] have increased by 22% and 34%, respectively." (Stephens-D 7-8.)

Although the City's concerns with the 2010 Study are focused predominantly on the NYPA class, the high variability between the allocation factors in the 2010 Study and the 2007 Study – especially in comparison to the relative stability in those factors between the 2007 Study and the 2005 Study – impacts other service classes as well. (*See* Ex. 155 at 1-2.) Con Edison has not justified the high variability shown in the 2010 Study allocation factors. (Stephens-D 9-10.) As Mr. Stephens asserted:

> It would be unusual, and there is no basis to believe, that the cost and number of services to the various customer classes would change this dramatically over this short period. That is why the relative stability between the 2005 and 2007 studies makes sense, and the sharp changes in the 2010 study do not.

(Stephens-D 8.)

One explanation proffered by the Company for the very different allocation factors used in the 2010 Study is that: "New sample points and inputs were used in the services study for the 2010 ECOS." (Stephens-D 9.) Significantly, however, the sampling relied upon by Con Edison creates an additional level of uncertainty with respect to the 2010 Study.

Con Edison's Class Demand Study, which provides critical inputs into the 2010 Study, relies on a sampling of test data for the NYPA class, as well as other service classes:

> Sample test data are used to estimate class demands for Con Edison Service Classification Nos. 1, 2, 5, 8, 9, 10, and the following [NYPA] customer categories: General Small, Traction (CIS Billed), Multiple Dwellings Redistribution, General Large, Multiple Dwelling Space Heating, Transit Authority Substation (CIS Billed), and New York City Public Buildings.

(Ex. 465, Sch. 1 at 1.) The Class Demand Study also indicates that: "NYPA test customers were arranged and stratified by annual consumption." (*Id.*)

In defense of its reliance on sampling in the Class Demand Study, Con Edison's DAC testified that it designs its samples to meet a 90/10 standard:

> Specifically, 90/10 confidence intervals mean that, with repeated sampling, 90% of repeated samples will result in a sample estimate that is within plus or minus 10% of the true population value.

(DAC-R 7.) Of course, pursuant to that standard, 10% of the repeated samples will result in a sample estimate that is outside of ± 10% of the true population value.

The City does not challenge here Con Edison's decision to rely on customer sampling for purposes of its Class Demand Study. The City recognizes that, given Con Edison's unique circumstances, some reliance on sampling probably is necessary and/or cost-effective. Nevertheless, Con Edison's reliance on sampled data introduces a level of uncertainty with respect to its ECOS study that simply does not exist for utilities that rely solely on actual customer data. Interestingly, even Con Edison does not claim that the 2010 Study is more reliable than the 2007 Study. (*See* Stephens-D 9.)

There is tremendous uncertainty regarding the accuracy of a number of allocation factors used in the 2010 Study. As demonstrated above: (1) Con Edison should have utilized more recent data (*i.e.*, 2010 data compared to a 2014 Rate Year); (2) in calculating certain allocation factors, the Company relies inappropriately on an averaging of certain demands instead of the true non-coincident peak demand for each service class; (3) for the NYPA class, a number of the allocation factors in the 2010 Study differ significantly, and inexplicably, from the factors used in the 2007 Study and the 2005 Study; and (4) unlike all or most other New York electric utilities, Con Edison relies extensively on sampled test data, some of which was new for

the 2010 Study, and such reliance adds another degree of uncertainty with respect to the accuracy of the ECOS study results.[38]

3. The PSC Should Utilize The Allocation Factors From The 2007 Study

Due to the large and unexplained variability between the allocation factors used in the 2010 Study and the allocation factors in the 2007 Study and the 2005 Study, the City recommends that the PSC rely on the 2007 Study's allocation factors. As Mr. Stephens testified:

> My primary recommendation is that the allocation factors used in the 2007 study should be used again in this case, because the 2007 allocation factors are more consistent with the 2005 factors used in the prior case and, thus, demonstrate the level of stability that one would expect in these types of allocation factors. Con Edison has not adequately explained or justified the large deviations of the factors in the current case. In the future, if Con Edison is able to adequately demonstrate the accuracy of its survey methods or its results, then revised allocation factors may be considered useful. However, even then, such a large change in the value of the allocation factors should be considered with caution, and perhaps even phased in over the course of two cases. In the meantime, the 2007 allocation factors should be utilized.

(Stephens-D 10.) The City notes that such use of 2007 data would not be unprecedented – Con Edison acknowledged using certain 2007 data for the NYPA class in its 2010 Class Demand Study. (*See* Stephens D-11.)

As detailed above, the City is very concerned with the potential inaccuracy of certain allocation factors from the 2010 Study (*e.g.*, the allocation factors for OH Services, UG Services, OH Lines – Customer Component, and UG Lines – Customer Component) and the impact of such inaccuracy on the NYPA class. For instance, using the ±10% tolerance band

[38] As the PSC is well aware, the electric and gas utilities serving Upstate New York typically do not rely on extensive customer sampling in their ECOS studies. Thus, compared to other ECOS studies that rely on actual customer data, the 2010 Study reflects an additional level of uncertainty, thereby justifying the use of a larger tolerance band in this proceeding.

proposed by Con Edison and opposed by the City discussed below, retention of just those allocation factors from the 2007 Study would reduce the purported NYPA revenue deficiency by almost $6 million, from approximately $26.7 million to approximately $20.8 million. (Stephens-D 12.)

Under the circumstances presented, including (i) the absence of more-recent data, (ii) the tremendous uncertainty regarding the accuracy of a number of allocation factors used in the 2010 Study, and (iii) the inexplicable inconsistency of those allocation factors with the comparable factors from the 2007 Study and the 2005 Study (which are consistent with each other), the PSC should utilize the 2007 Study's allocation factors herein.

4. If The PSC Declines To Utilize The Allocation Factors From The 2007 Study, It Should Average The Allocation Factors From The 2010 Study And The 2007 Study

If the PSC declines to adopt the City's recommendation in full on this issue, it alternatively should average the allocation factors from the 2010 Study and the 2007 Study. As Mr. Stephens explained:

> My secondary recommendation is that, in the event the Commission does not accept my primary recommendation and instead accepts Con Edison's 2010 values for the S03, S03A, C01 and C02 allocation factors for use in the ECOS study here, the dramatic change in the factors should be phased in. They way to do that in this case would be to move the allocation factors for each class one-half the distance between the 2007 allocation factors and the 2010 allocation factors. To illustrate, using the NYPA S03A allocation factors … the revised allocation factor would be 7.25%, which is the average of the 2007 and 2010 allocation factors, 6.52% and 7.97%, respectively.

(Stephens-D 11.) Mr. Stephens also noted that such a phase-in "will make the ECOS study more stable, and will allow for further study and confirmation in the next case." (*Id.*)

ii. Revenue Allocation/Bill Mitigation

The City advances the following three positions with respect to revenue allocation issues: (1) due to substantial imprecision and uncertainty associated with Con Edison's 2010 Study, the PSC should utilize a tolerance band of ±20% for revenue allocation purposes; (2) if the PSC declines to adopt the City's recommended tolerance band, it alternatively should utilize a tolerance band of ±15% for revenue allocation purposes; and (3) irrespective of the resolution of cost-of-service and tolerance band issues, no service class should receive an increase to its delivery rates greater than 1.5 times the system-average increase, with the caveat that this rate moderator could be adjusted in the event the Company's proposed revenue requirement is reduced significantly.

1. The PSC Should Utilize a Tolerance Band of ±20% for Revenue Allocation Purposes

Con Edison proposed to apply a tolerance band of ±10% to the results of the 2010 Study. (DAC-D 28.) Pursuant to such tolerance band: (1) service classes whose rates of return fall within the tolerance band would not be considered "surplus" or "deficient"; and (2) service classes whose rates of return fall outside the tolerance band would be considered surplus or deficient by the revenue amount necessary to bring such class to the upper or lower level of the band. (*Id.*) The use of tolerance bands is an accepted practice in utility ratemaking and is done in recognition that cost-of-service studies necessarily are imprecise. (Stephens-D 15.) For the reasons set forth below, the PSC should utilize a tolerance band of ±20% for revenue allocation purposes in the electric proceeding.

Initially, Con Edison's DAC and the Staff Electric Rates Panel ("SERP") refer to the ±10% tolerance band proposed by the Company as if it were some type of unchallengeable standard. (*See, e.g.*, DAC-D 28; SERP 5.) Importantly, however, different tolerance bands have

been utilized in other PSC rate proceedings, including the last fully-litigated Con Edison electric rate proceeding.

For instance, in Case 02-E-0198, involving Rochester Gas and Electric Corporation ("RG&E"), the PSC based its revenue allocation on an ECOS study with a tolerance band of ±20%.[39] In Cases 09-E-0715 and 09-E-0717, involving New York State Electric & Gas Corporation ("NYSEG") and RG&E, both of those utilities applied a tolerance band of ±20% to the results of their respective electric ECOS studies.[40] In Case 08-E-0539, which was Con Edison's most recent fully-litigated electric rate proceeding, the PSC elected to apply a tolerance band of ±15% to the ECOS study results.[41]

The City contends that a tolerance band of ±20% should be utilized in this proceeding. As Mr. Stephens asserted, "the proper tolerance band should reflect the level of uncertainty created by the cost of service study." As discussed above, there is tremendous uncertainty with respect to the 2010 Study.

Another reason why a larger tolerance band should be utilized in this proceeding is the likelihood of additional problems with the 2010 Study, as evidenced by the fact that the vast majority of service class rates of return inexplicably are outside Con Edison's proposed ±10% tolerance band, as well as the ±15% tolerance band applied in the Company's last fully-litigated rate proceeding. As Mr. Stephens explained:

---

[39] Case 02-E-0198, *Rochester Gas and Electric Corporation – Electric Rates*, Order Adopting Recommended Decision With Modifications (issued March 7, 2003) at 74-75.

[40] *See* Case 09-E-0715, *New York State Electric & Gas Corporation - Electric Rates*, and Case 09-E-0717, *Rochester Gas and Electric Corporation - Electric Rates*, Transcript of Evidentiary Hearings (April 15, 2010) at 378.

[41] Case 08-E-0539, *Consolidated Edison Company of New York, Inc. - Electric Rates*, Order Setting Electric Rates (issued April 24, 2009) at 204-05.

> [T]he last time that a specific tolerance band was adopted, in Case No. 08-E-0539, the band was ±15%. Therefore, one would expect relatively few deviations outside of the ±15% tolerance band by the rate classes in this case, with a 2010 ECOS study. Said another way, Con Edison's approach should provide consistent results that, from case to case, would allow Con Edison to "fine tune" the revenue allocation, resulting in class rates of return that are relatively close to the system average, plus or minus the tolerance band. *** [H]owever, that is not the case here – fully 11 of the 14 classes studied in the ECOS study are outside the ±15% tolerance bandwidth. These significant deviations suggest that either major changes in cost-causation have occurred or that potential problems exist in the cost measurement.

(Stephens-D 18-19.) Mr. Stephens then concluded that because "the majority of Con Edison's assets have been in place for many years, as have its customer classes … the deviations among the class rates of return strongly suggest additional problems with the ECOS study." (Stephens-D 19.)

Mr. Stephens demonstrated that: (1) the proposed use of a tolerance band of ±10% in this proceeding would result in 12 out of 14 service classes being depicted as producing a revenue surplus or deficiency outside of that band; and (2) use of a tolerance band of ±15% still would result in 11 out of 14 classes being outside that band. (Stephens-D 19; *see also* Ex. 464, Table 1 at 1-4.) Mr. Stephens testified that those results change materially, however, if a tolerance band of ±20% is used:

> I have recomputed the results of the Company's study using a ±20% tolerance band and found that 6 of the 14 classes would still be deemed to have revenue surpluses or deficiencies. Although not perfect, having 6 out of the 14 classes with revenue surpluses or deficiencies is certainly a more reasonable and expected result than the 11 out of 14 revealed under the last approved tolerance band, or the 12 out of 14 revealed under the Company's proposed tolerance band.

(Stephens-D 20-21; *see also* Ex. 464, Table 1 at 1-4.) If, as the City recommends, a tolerance band of ±20% is used in this proceeding, "only six classes would be disproportionately affected

by the rate increase in this case, and the impact on those classes would be automatically mitigated because the revenue surplus or deficiency is reduced with the use of a wider tolerance band." (Stephens-D 21.)

Thus, for the foregoing reasons, the PSC should adopt a tolerance band of ±20% for revenue allocation purposes in this proceeding.

2. If the PSC Declines to Adopt a Tolerance Band of ±20%, It Should Utilize a Tolerance Band of ±15% for Revenue Allocation Purposes

Because of the many flaws with the 2010 Study, if the PSC declines to adopt the City's recommended tolerance band of ±20%, it alternatively should utilize a tolerance band of ±15% for revenue allocation purposes.

Mr. Stephens summarized the City's secondary position on this issue as follows:

> Although a ±20% tolerance band is certainly justified and is my recommendation in this case, if the Commission does not use a ±20% tolerance band, it certainly should use a ±15% tolerance band, which is consistent with the most recent approved tolerance band for Con Edison and the larger tolerance band also would account for unexplained ECOS study discrepancies and ameliorate the disproportionate impacts of the increase on the affected customer classes. Under no circumstances should the Commission use the ±10% tolerance band recommended by Con Edison.

(Stephens-D 21-22.) In other words, a more generous tolerance band then ±10% for revenue allocation purposes is needed to avoid undue harm to certain customer classes, including in particular the NYPA class.

3. The PSC Should Cap Class Delivery Rate Increases at No More Than 1.5 Times the System Average Increase Unless Con Edison's Proposed Revenue Requirement Is Reduced Significantly

As part of its revenue allocation, Con Edison proposes to cap class delivery rate increases at 2.5 times the system average. The Company's ERP testified that: "When applying

mitigation measures to the various classes, the Company's underlying approach is that no class will receive a revenue decrease or an increase that is more than about 2.5 times the system increase." (ERP-R 8-9.) Con Edison's proposed cap should be rejected because it fails to mitigate customer rate impacts adequately. Instead, the City recommends that the PSC cap class delivery rate increases at 1.5 times the system average increase, which cap can be relaxed if Con Edison's proposed revenue requirement is reduced significantly from what was requested.

The purpose of caps in this context is to mitigate large rate increases to service classes. (*See, e.g.*, Aug. 1, 2013 Tr. 189.) Con Edison is proposing to increase delivery rates to the NYPA class by approximately 11%, or 1.8 times the system average increase. (Stephens-D 24.) An exhibit sponsored by the Company's ERP depicts a 4.1% increase to the NYPA class, but that calculation includes projected commodity costs, which are not at issue and unaffected by these rate cases. (*Id.*; *see also* Aug. 1, 2013 Tr. 187-88.) The ERP testified that it did not propose any rate mitigation for the NYPA class "because NYPA's share of the increase was close to the system average." (ERP-D 17.) Significantly, however, an increase 1.8 times the system average increase is not "close to the system average;" rather, it is 80% higher than the system average.

The need for meaningful rate mitigation that includes the NYPA class is particularly acute here because, in addition to a still-challenging economic environment, the NYPA class repeatedly has been allocated large, and above-system-average, delivery rate increases, as shown by the following table:

Year	System Average Increase	NYPA Class Increase
2005	5.8%	7.3%
2007	6.8%	10.4%

2008	12.4%	24.0%
2009	14.1%	15.2%
2010	10.6%	12.4%
2011	9.5%	9.5%
2012	5.9%	6.6%
Average	**9.3%**	**12.2%**

(Stephens-D 27.) Thus, out of the last seven electric rate increases implemented by Con Edison, the NYPA class was allocated increases above the system-average six times. As Mr. Stephens pointed out: "One would not expect one rate class to consistently get larger than average increases unless the composition and/or usage patterns of that class or the other classes, changes significantly in each case, sufficient to yield cost differences. There is no evidence that this has been the case." (*Id.*)

The City recommends that the PSC adopt a revenue allocation in this proceeding that caps the increase to any single service class to no more than 1.5 times the system average increase.[42] This approach has been utilized in other rate proceedings. For instance, in Cases 08-E-0887 and 08-G-0888 involving Central Hudson, the PSC applied caps to ensure that no service class was allocated delivery rate increases greater than (i) 1.25 times the system average electric rate increase and (ii) 1.2 times the system average gas rate increase.[43] Similarly, in Case 91-S-1193 involving Con Edison, the PSC limited the base rate increase at issue to 1.25 times the

[42] To the extent Con Edison is granted all or most of its requested electric revenue requirement increase – an outcome the City opposes – a cap lower than 1.5 times the system average increase also might be appropriate.

[43] Cases 08-E-0887 and 08-G-0888, *Central Hudson Gas & Electric Corporation - Electric and Gas Rates*, Order Adopting Recommended Decision With Modifications (issued June 22, 2009) at 52-53.

system average increase.[44] In Case 94-E-0334, also involving Con Edison, the PSC approved a settlement providing that "no class will receive more than one and one-half or less than one-half the overall pure base percentage increase or decrease."[45]

Mr. Stephens also testified that the City's recommended cap on the delivery rate increase allocable to any service class could be reduced under certain circumstances:

> [L]et's assume that due to various adjustments to the proposed revenue requirement, a utility ultimately receives a very small rate increase, such as 1%. Under the approach I have outlined, that would mean that no single rate class would receive an increase greater than 1.5%. However, I don't think it is reasonable to state unequivocally that if a customer class received an increase of 1.6% (which exceeds 1.5%), for example, that rate shock necessarily would ensue. Therefore, it may be appropriate to adjust the rate limiter (in my example, no more than 1.5 times the system average) in the instance of a very small rate increase being granted. If that is done, as with the main criterion, it should be applicable to all classes.

(Stephens-D 25-26.)

Based on the foregoing, Mr. Stephens recommended that: (1) the PSC cap the rate increase that could be allocated to any service class to 1.5 times the system average increase; (2) in the event the proposed system average increase is reduced significantly, the 1.5 times cap could be adjusted such that, for example, if there is a system-average increase of 2%, an increase in delivery rates of up to 4% would be acceptable for any class; and (3) in the event Con Edison's electric revenue requirement is reduced, as recommended by Staff, the PSC should approve a revenue allocation whereby no customer class receives a rate increase; and (4) in any event, any revenue deficiency caused by rate mitigation "should be spread to other service

---

[44] Case 91-S-1193, *Consolidated Edison Company of New York, Inc. - Steam Rates*, Opinion No. 92-29 (issued October 20, 1992) at 11-12.

[45] Case 94-E-0334, *Consolidated Edison Company of New York, Inc. - Electric Rates*, Opinion No. 95-3, Opinion and Order Approving Settlement (issued April 6, 1995), Appendix A at 4.

classes in proportion to their overall revenue requirement, ensuring that such spreading does not, in itself, cause the classes' rates to exceed the criteria outlined above." (Stephens-D 26; Stephens-R 6.)

For the foregoing reasons, the City's positions on revenue allocation issues should be adopted by the PSC.

iii. Rate Design

1. The Voluntary Time of Use ("VTOU") Rates Should Be Modified to Encourage Electric Vehicle Charging

The City is a strong supporter of electric vehicles. For example, in his 2013 State of the City report, Mayor Bloomberg confirmed the City's commitment to plug-in electric vehicles ("PEV") by creating 10,000 electric vehicle charger ready parking spots across the City, expanding what is already one of the largest electric vehicle fleets in the nation, and increasing the use of electric vehicles as taxis.[46] In addition, PlaNYC includes several efforts to promote PEV development in the City, including: (1) incorporating electric vehicles into the City's fleet; (2) streamlining the City's regulations for installing charging stations in homes; (3) working with all stakeholders to facilitate publicly-available charging stations; and (4) collaborating with other major cities to share information and resources.[47]

Con Edison's ERP proposed to modify the Company's existing S.C. 1 VTOU Rate to promote off-peak charging of PEVs. (ERP-D 38-42.) The Natural Resources Defense Council ("NRDC") witness Tonachel demonstrated how customers will respond to this incentive to charge off-peak, and described how PEV-owning customers of San Diego Gas & Electric

[46] Mayor Michael Bloomberg, *2013 State of the City Address* (February 14, 2013), *available at* http://www.mikebloomberg.com/index.cfm?objectid=D46D1B83-C29C-7CA2-FEF9341031963FE9.

[47] Drive Electric NYC, *City Initiatives*, *available at* http://www.nyc.gov/html/ev/html/city/city-initiatives.shtml.

Company started programming their vehicles to start charging at midnight, when TOU rates went into effect. (Tonachel 5-6.) Mr. Tonachel also showed that in comparison, customers in Nashville, Tennessee who did not have attractive TOU rates exhibited an entirely different charging pattern, with a load curve that peaked during on-peak evening hours. *(Id.)* The City is confident that with appropriate VTOU rates for Con Edison PEV-owning customers, off-peak utilization of the Company's distribution system will result.

A. The PSC Should Expand Con Edison's Proposed Off-Peak Period

The City acknowledges that the Company's proposed VTOU rate design is an improvement over the existing S.C. 1 VTOU Rate. In particular, the City concurs with introducing a "super peak" period for the four summer months where capacity costs would be recovered, and with treating weekdays and weekends the same. (ERP 40.) The City disagrees, however, with the limited off-peak period of 1 AM to 7 AM proposed by the ERP. Instead, in order to make these rates as user-friendly as possible while avoiding system impacts, the off-peak period should be expanded to 11 PM to 8 AM. (Arnett-D 38-41.) Two other parties, the Utility Intervention Unit ("UIU") and NRDC, concur with the City's position that the off-peak period should be expanded.

Con Edison proposed a 1 AM – 7 AM off-peak period because it is concerned about off-peak pricing beginning close to the S.C. 1 peak period of 8 PM – 11 PM. According to Con Edison, there are several unknowns associated with PEV adoption, and Con Edison is concerned that high adoption rates and clustering of PEV loads could establish new area substation peaks. (Ex. 141 at 129.) Con Edison presented an analysis showing that area substations were at at least 95 percent of their peak loads over a broader period than the existing VTOU on-peak period, ending as late as midnight. (Arnett-D 37-38.)

Con Edison's concerns on new substation peaks are not supported by the evidence in the record. Data provided by Con Edison demonstrates that substation loads decline rapidly after 11 PM. (Arnett-D 38-39.) Further, even if the PSC accepts Con Edison's analysis, area substations should still have adequate capacity to support increased PEV usage in the near future. As noted by Mr. Arnett:

> With an average area substation coincident load of 213 MW (13,189 MW peak, 62 Area Substations per Electric Infrastructure and Operation Panel testimony), the 5 percent cushion is equivalent to about 10.6 MW of load. To erase this cushion, assuming a 1.5 kW load for a Type I home charger, about 7,000 PEVs would have to be added to a specific area substation. If Type 2 chargers become prevalent, at 6.6 kW, there would have to be over 1,000 PEVs served by that area substation. And, these hypotheticals are based on coincident load - the average area substation capacity must be higher than 213 MW because of load diversity. (Arnett-D 39.)

Moreover, an analysis undertaken by Con Edison in 2010 in support of a City study of electric vehicles showed that with off-peak charging the grid could accommodate over 230,000 electric vehicles by 2018 with minimal substation impacts.[48] Although PEV usage is increasing, it is still far from these numbers, and there is still sufficient cushion in area substation peak loads to accommodate the City's proposed off-peak period. Therefore, Con Edison's concern about area substation impacts is premature and is not a reason for adopting Con Edison's shortened off-peak window.

Mr. Arnett also testified that, given the available cushion, Con Edison will have ample opportunity to adjust the off-peak period in the future before PEVs negatively impact the distribution system. (Arnett-D 38-39.) The ERP disagrees and points to the Company's difficulties in phasing out S.C. 1 Special Provision D as evidence that the Company will not be

[48] *PlaNYC*, Exploring Electric Vehicle Adoption in New York City (January 2010) at 16.

able to easily adjust the off-peak period in the future. (ERP-R 28-29.) The ERP does not expand on this comparison, but the implication is that customers will challenge any Con Edison effort to shift the off-peak period. The S.C. 1 Special Provision D phase out problems bear no relevance the proper rate design for the S.C. 1 VTOU rate. The sole focus should be on getting the VTOU rate right - if the Company wants to adjust it in the future, it should bear the burden of demonstrating why the change is needed, just as it does with all rates.

Con Edison also argues that frequent changes to the off-peak period could cause customer confusion. This claim is baseless - Con Edison has not presented any evidence suggesting that changes to the off-peak period will be made frequently. In fact, the 2010 analysis described above suggests it will be at least four years before substation impacts become a concern. Further, given the public interest in promoting PEVs, the PSC should make the VTOU rate as user-friendly as possible. Expanding the off-peak period is a critical step in doing so.

B. The PSC Should Reject Con Edison's Proposed PEV Metering Requirements

The PSC should reject Con Edison's position that a separately-metered PEV charger must be billed under a separate, non-residential account, and not as a submetered option under a residential account. (ERP-R 30.) The Company presented no cost justification for its position, and the City sees no reason why a PEV charger cannot be treated like any other household appliance, even if the charger is submetered.

Mr. Arnett described two potential submetering options for PEV chargers, both of which are relatively simple to implement and both of which would be precluded if the PEV charger has to be separately metered. The first option would use a load device controller, similar to one currently being tested in a pilot program, that would allow Con Edison to separately measure PEV consumption from the whole house. (Arnett-D 41.) This option would be

attractive to homeowners that wish to take advantage of lower PEV off-peak charging rates, but are reluctant to place their entire households on TOU rates. The second option is a program modeled after S.C. 1 Special Provision D, which imposes a modest per month charge for a second meter and a time clock to ensure that the water heater would not operate during peak hours. (Arnett-D 41-42.) A similar arrangement could be implemented for PEVs, and any off-peak consumption would be priced at the VTOU's off-peak rate.

As the NRDC illustrated, separate metering for PEVs imposes significant additional costs on customers, making off-peak charging "unattractive to the vast majority of PEV customers." (Tonachel 4.) Absent adequate cost justification for doing so, Con Edison should not be allowed to foreclose potentially attractive metering options to promote increased utilization of PEVs. Therefore, the PSC should reject Con Edison's position that separately-metered PEV chargers must be billed at the non-residential rate and require Con Edison to develop billing/metering options that will encourage PEV charging.

Finally, if the PSC accepts Con Edison's position on separately-metered PEV chargers, it should adopt Staff's recommendation that Con Edison develop a revised VTOU rate for S.C. 2 customers. Con Edison has refused to propose such an option in this case, arguing that it should not be forced to propose a rate alternative without specific findings to support the rate. (ERP-R 27-28.) Given the Company's refusal, the simplest solution is to reject Con Edison's proposal to charge separately-metered PEV users the non-residential rate and direct Con Edison to develop a new S.C. 2 VTOU rate for its next general rate case; one that provides PEV owners charging off-peak with an appropriate payback on the additional investment for the separate meter.

C. Additional Detail Is Needed On Staff's Proposed Price Guarantee

Staff witness Graves proposes a cap, for one year, on the total bill for residential customers who register their PEVs with Con Edison. (Graves-D 16.) The cap would ensure that customers would pay no more under the new VTOU rate than they would have under the conventional S.C. 1 rate. Staff proposes that the Company collect the price guarantee in a deferral account and that it be recovered from all S.C. 1 customers.

Staff's proposal has merit and will enhance user experience with PEV charging. As noted by the ERP, however, there are several details that need to be flushed out before this proposal can be implemented. The PSC should direct Con Edison to work with Staff and interested stakeholders to implement Staff's proposed rate guarantee.

2. High Tension And Low Tension Demand Charges

NYPA customers generally are served under PASNY Rate 12. Within that rate, customers can receive either High Tension or Low Tension service, with delivery rates that differ accordingly. Customers also can elect Time Of Day or Conventional rates. For Time Of Day rates, for which the demand charge differs over the course of the day and by season, Con Edison has proposed rates which approximate the overall increase to the NYPA class. For Conventional rates, however, the Company has introduced a significant rate design change with respect to the demand charges, proposing to shift material revenue responsibility from High Tension customers to Low Tension customers. (Stephens-D 28-29.) For the reasons set forth below, Con Edison's proposed rate design change should be rejected.

Specifically, Con Edison has proposed that the demand charge for High Tension customers be reduced by approximately 5%, while the demand charge for Low Tension customers be increased by approximately 19%, as set forth below:

Service	Current Demand Charge	Proposed Demand Charge
High Tension	$20.02 per kW	$18.98 per kW
Low Tension	$22.23 per kW	$26.37 per kW

(Stephens-D 29; *see also* Ex. 511, Sch. 4, Table 1.)

This proposed rate design change, if approved, would result in material customer rate impacts. As Mr. Stephens pointed out: "Inasmuch as the demand charge is the major component of the delivery cost for the customers on the Conventional rate, Con Edison's proposed rate design would create widely disparate impacts on customers within the Conventional rate class, depending on whether they take High Tension or Low Tension service." (Stephens-D 29.) Although Con Edison was silent on the magnitude of the customer impacts that would result from this proposed rate redesign, Mr. Stephens calculated that increasing the differential between High Tension and Low Tension demand charges, as proposed, "results in an approximately $19 million shift from High Tension to Low Tension customers." (Stephens-D 30.)

Significantly, however, Con Edison failed to justify its proposed rate design modification. As Mr. Stephens pointed out, Con Edison's ERP only makes two passing references to it (once pertaining to NYPA, the other time pertaining to three classes other than NYPA). (Stephens-D 29; *see also* ERP-D 35, 46.) Although the ERP indicates that the purpose of the rate design change is "to better reflect the differential between high and low tension service as indicated by the 2010 ECOS study" (ERP-D 46), the Panel provides no explanation whatsoever of the alleged differential in High Tension and Low Tension service indicated by the 2010 Study. (*See* Stephens-D 30.) The City also notes that even if this unspecified differential

did exist in the 2010 Study, Mr. Stephens has identified problems with that ECOS study, discussed above, that render the results unreliable.

Interestingly, on rebuttal, the ERP failed to specify or otherwise demonstrate the cost differential that it is attempting to address through the proposed rate redesign. In response to Mr. Stephens' criticisms of the proposal, the ERP testified only that: "We reiterate that the rates presented in our initial filing are intended to reflect the ECOS study indications, as stated in the direct testimony of the Panel." (ERP-R 16.) Merely reiterating its previous, unsupported conclusory testimony, with nothing more, does not rebut Mr. Stephens' pointed criticism, and, in fact, is inadequate to carry the Company's burden of proof with respect to the proposed rate design modification.

Con Edison failed to justify its proposed shift of approximately $19 million in revenue requirement responsibility from High Tension customers to Low Tension customers. Passing references in testimony and a general statement about what purportedly is demonstrated by the 2010 Study – which is flawed – is not enough. Moreover, even if the 2010 Study supports some shift in revenue responsibility, Con Edison has proffered no testimony justifying the substantial magnitude of the rate design changes proposed or the significant customer rate impacts that would result therefrom. Accordingly, the PSC should reject Con Edison's rate design proposal, consistent with Mr. Stephens' recommendation on this issue:

> [M]y recommendation is to reject Con Edison's proposed change to the PASNY S.C. 12 Conventional demand charges due to lack of support in the record and to maintain the differentials in existing demand charges, expanded only by the average rate class increase, if any. If the Commission determines that a larger differential in the Conventional demand charges is warranted, that shift in rates should be phased in over time, with such change in the total delivery charges for the Low Tension customers moderated to no more than 1.5 times the system average increase ….

(Stephens-D 31.)

iv. PJM OATT – The PSC Should Not Allocate Any Costs Of The New Transmission Contract With PJM To NYPA

NYPA supplies electricity to the City and numerous other New York City governmental customers. NYPA delivers the electricity to the Con Edison system, and Con Edison delivers it to the governmental customers. In order to get the electricity to Con Edison, NYPA maintains its own portfolio of transmission contracts and in-City generation. Importantly, the costs of these resources are paid by NYPA's customers – there is no cost sharing with other Con Edison customers.

Staff argues that all customers in New York City benefit from the PJM contract, and therefore the PSC should allocate a portion of the PJM contract costs to NYPA customers. (SEIIP-D 101; ERP-D 27-28.) Staff did not attempt to quantify the value of the benefit provided by the PJM contract, nor did Staff attempt to develop a cost allocation approach to accurately reflect the cost of any benefits in rates. (Aug. 1, 2013 Tr. 17.)

Although the PJM contract may provide reliability benefits to the Con Edison service territory, Staff ignores two critical facts: (1) NYPA also provides significant reliability benefits to the Con Edison service territory; and (2) these benefits are paid for solely by NYPA customers. NYPA witness Liberty provides a comprehensive accounting of the NYPA-provided benefits. Specifically, in order to serve the 2013 estimated load of its governmental customers:

> NYPA's sources of supply include 600 MW of grandfathered Transmission Congestion Contracts ("TCCs") that allow it to purchase part of its customers' energy supply requirements effectively at upstate prices. NYPA also generates power in-City from the 500 MW Combined-Cycle Unit ("CCU"), has contractual rights to all of the power output of the 500 MW Astoria Energy II project ("AE II") and has other miscellaneous supply resources.

(Liberty-D 16.)

The reliability benefits that NYPA and its Governmental Customers provide to all Zone J customers must be considered before any PJM contract costs are imposed on NYPA customers. Staff's position to the contrary "selectively carve[s] out one particular Con Edison resource…for cost allocation to NYPA without considering the same treatment for NYPA's resources that also address reliability needs." (Liberty-D 19.) Mr. Liberty's testimony provides an uncontested factual record demonstrating that reliability benefits provided by these NYPA resources are substantial.

Finally, just because the costs of a similar, expired wheeling service contract with Public Service Electric and Gas Company ("PSE&G") were allocated to NYPA, does not mean that the costs of the PJM contract should also be allocated to NYPA. As described by Mr. Liberty, the decision to allocate the PSE&G costs to NYPA was made nearly 40 years ago in 1975, prior to the inception of the New York Independent System Operator ("NYISO"), under markedly different circumstances than exist today. (Liberty-D 20.) NYPA's role has evolved since then. For example, as required by the 1989 Planning and Supply Agreement between Con Edison and NYPA, "Con Edison bears cost responsibility for its own resources to supply its load, while NYPA bears cost responsibility for its own resources to supply its load." (Liberty-D 15.)

Unless the PSC allocates to Con Edison customers the costs of reliability benefits provided by NYPA, none of the costs associated with the PJM contract should be allocated to NYPA customers. The PJM contract costs should be charged solely to Con Edison's full service and retail access customers through the Company's Monthly Adjustment Clause.

v. MSC/MAC Residual Provisions

The City takes no position on these issues at this time.

vi. The BIR Program Should Be Expanded To Assist Customers Devastated By Hurricane Sandy

Because of the devastation caused by Hurricane Sandy, the City requests that the PSC expand the business incentive rate ("BIR") program, Rider J, to impacted small businesses and non-profit organizations in communities hit hard by Hurricane Sandy. Specifically, the PSC should expand the BIR program, for a limited duration, to cover: (a) small retail businesses (*i.e.*, those with 10 or fewer employees) that have received post-Sandy support from City-sponsored loan and grant programs; and (b) small non-profits (again, those with 10 or fewer employees) in the following areas: (1) Manhattan below Chambers Street and 100-year flood zones on the west and east side up to approximately 42nd Street; (2) East and South Shores of Staten Island from approximately Ft. Wadsworth to Tottenville; (3) the coastal neighborhoods from Sunset Park through Long Island City along the Brooklyn-Queens Waterfront; (4) the Coney/Brighton peninsula plus inundated mainland areas (Gerritsen Beach, Sheepshead Bay, Gravesend) of Brooklyn; and (5) the Rockaway Peninsula plus communities of Broad Channel, Howard Beach, Old Howard Beach, and Hamilton Beach. (Arnett-D 57-58.)

The City recommends that, to be eligible for the expanded BIR program, a customer must have either: (a) received a grant funded with Community Development Block Grant-Disaster Recovery ("CDBG-DR") funds as conferred by the City or a state agency to promote disaster recovery in Con Edison's territory following Hurricane Sandy or otherwise meet the eligibility requirements under Section (A)(1)(a) or (b) of the BIR Rider; or (b) operate as a non-profit organization pursuant to Section 501(c)(3) of the Internal Revenue Code within one or more of the areas identified above. (Arnett-D 58.) Customers would be eligible for the BIR discount for five years up to a maximum of $50,000. (*Id.*) The City recommends using

about 5 MW for this expanded program and that the maximum aggregate benefit under the program be $5.0 million. (*Id.*)

Because the intent of the expanded program is to provide relief that will keep small businesses and non-profit organizations in operation, eligible S.C. 2 customers should not be excluded. (Arnett-D 59.) To achieve this result, the PSC should direct Con Edison to either develop a delivery rate discount unique to S.C. 2, or the existing BIR discount that is applied to the S.C. 9 delivery rate should be applied to the energy charges in S.C. 2. (*Id.*)

While Con Edison supports the City's proposal to expand the BIR program to customers impacted by Hurricane Sandy, Con Edison opposed several aspects of the City's proposal. First, Con Edison opposed the City's request to include non-profit organizations because "BIR should not be used for non-business uses." (ERP-R 40.) During the hearing, however, the ERP acknowledged that certain non-profits already receive BIR funds through the biomedical research set aside. (Aug. 1, 2013 Tr. 196.) Thus, the Company's rationale for excluding non-profits is undermined by its current practice.

In any event, the massive devastation caused by Hurricane Sandy presents an extraordinary circumstance that warrants extension of the BIR program to the non-profits identified by the City.[49] To ensure that the program is not abused, the City has narrowed the potential eligibility zone for non-profits to five specific areas that faced the brunt of Sandy.

Second, Con Edison proposes to exclude S.C. 2 customers from the expanded BIR program. The ERP contends that smaller retail businesses served under S.C. 2 tend to be

[49] During the hearing, the ERP further admitted that it would not be opposed to non-profits receiving BIR discounts if the non-profit received a grant funded by CDBG-DR funds and met all other expanded eligibility criteria. Non-profits are currently not eligible for CDBG-DR funds. (Aug. 1, 2013 Tr. 195-96.) At a minimum, the PSC should clarify that the expanded BIR is available to all customers receiving CDBG-DR funds, including non-profits, in the event that non-profits become eligible for this funding in the future.

more transient than larger ones, and that a large number of small customers provide limited economic growth. The ERP admitted that it had not performed any studies or analyses to support its claim about the limited economic impact from smaller retail businesses, (*id.* at 198) which undermines its position. Small businesses have a powerful impact on the economy as a whole and the devastated areas in particular. Because of their lack of factual support, Con Edison's statements do not form any basis for excluding small businesses. Moreover, the ERP acknowledges that the set aside for biomedical BIR is not fully subscribed, which should dispel concerns that expanding the program to small businesses and other non-profits as recommended by the City will result in a surge in demand for the BIR program.

Third, the ERP argues that including S.C. 2 customers will require Con Edison to develop a revised billing system, and this provides a basis for excluding S.C. 2 customers. Again, the ERP did not provide any studies to determine what level of effort is required to develop an S.C. 2 discount and revise its billing system to implement this discount. (*Id.* at 198.) The PSC should not allow Con Edison to summarily exclude an important group of customers, given the lack of any proof that including the S.C. 2 customers is not feasible or is too costly.

The City's proposal for a temporary BIR-discount program for customers devastated by Hurricane Sandy is limited in scope and time and represents a very measured relief effort. The PSC should therefore adopt this proposal.

b. Gas

i.-iii.

The City takes no position on these issues at this time.

iv. Non-Firm Rate Changes

The City advances the following six positions on interruptible pricing, interruptible rate design, and non-firm revenue sharing issues: (1) delivery rates applicable to interruptible customers should be based on cost-of-service principles; (2) the PSC should reject Con Edison's proposals to increase delivery rates to Rate 1 customers; (3) the PSC should reject Con Edison's proposals to increase delivery rates to Rate 2 customers; (4) the PSC should reject Con Edison's proposal to modify the Sharing Mechanism and, instead, eliminate or reduce substantially the Company's financial incentive to maximize revenues from interruptible customers; (5) the PSC should reject Con Edison's proposed "Gas Transmission Reinforcement Charge"; and (6) the PSC should reject Con Edison's proposal to eliminate its temperature-controlled interruption option outside the context of a rate proceeding.[50]

The City sponsored the testimony and exhibits of Michael P. Gorman on interruptible pricing, interruptible rate design, and non-firm revenue sharing issues.[51] For the reasons detailed below, the PSC should adopt the City's positions on these issues.

---

[50] As explained by its Gas Non-Firm Services Panel ("GNFSP"), Con Edison provides interruptible gas service under S.C. 9 and S.C. 12. (GNFSP-D 6.) Interruptible customers are segregated into two groups: (1) interruptible customers taking service under S.C. 9, Rate B, and S.C. 12, Rate 1 ("Rate 1 customers"); and (2) off-peak firm customers taking service under S.C. 9, Rate C, and S.C. 12, Rate 2 ("Rate 2 customers"). (*Id.*) S.C. 9 is for delivery-only service, whereas S.C. 12 is for bundled sales and delivery service. (*Id.*) Rate 1 customers and Rate 2 customers collectively are referred to herein as "interruptible customers." While revenues from interruptible customers generally are applied for the benefit of firm customers, revenues from Rate 1 customers also are subject to sharing with Con Edison's shareholders pursuant to the Company's non-firm revenue sharing mechanism ("Sharing Mechanism"). (GNFSP-D 19-22.)

[51] Mr. Gorman is a Managing Principal with Brubaker & Associates, Inc., energy, economic and regulatory consultants, and possesses extensive experience with respect to cost-of-service and other issues. (Gorman-D, Appendix A at 1-3.)

1. Interruptible Pricing Should Be Based On Cost of-Service Principles

Con Edison's GNFSP testified that its "first goal" in proposing changes to interruptible delivery rates "is to enhance the benefits to firm customers resulting from the Company's interruptible services." (GNFSP-D 9-10.) In this context, enhancing benefits to firm customers is synonymous with increasing revenues from interruptible customers. (Tr. 274.) Significantly, however, Con Edison's objective of benefitting firm customers without regard to, or at the expense of, interruptible customers is not just and reasonable. (Gorman-D 5.) Instead, for the reasons set forth below, delivery rates applicable to interruptible customers should be based on cost-of-service principles, similar to other types of gas service.[52]

A. Interruptible Customers Provide Substantial Benefits to Firm Customers

In evaluating the optimal pricing regime to apply to Con Edison's interruptible customers, the PSC should recognize and account for the substantial benefits that such customers provide to firm customers and the gas system as a whole.[53]

Interruptible customers help maintain system reliability for the benefit of firm customers. When the system is constrained, and load needs to be reduced, Con Edison has the ability to interrupt interruptible customers. As the Staff Gas Rates Panel ("SGRP") testified, "there is a benefit to firm customers of having interruptible customers exiting the system whenever necessary." (SGRP 29.) Similarly, Mr. Gorman testified that:

> Interruptible customers can be interrupted during Con Edison's peak day and peak hour system demands. When this occurs, Con

[52] Interruptible customers comprise a substantial portion of Con Edison's gas system. There currently are over 900 interruptible customers and collectively they account for deliveries of approximately 260 million therms annually. (Tr. 271-72; Ex. 160 at 16.)

[53] Thanks to the existing Sharing Mechanism, addressed *infra*, Rate 1 customers also currently provide substantial benefits to Con Edison's shareholders.

> Edison is able to supply gas to customers that are taking firm service because it can elect not to deliver service to its interruptible customers. Hence, the existence of interruptible customers on the system improves Con Edison's ability to reliably provide firm service.

(Gorman-D 9.)

Second, interruptible customers improve the load factor of Con Edison's gas system, thereby providing economic benefits to firm customers. Mr. Gorman explained that:

> By increasing the volume on the system, without contributing to the peak hour or peak day demands, Con Edison's load factor improves. With an improved load factor, Con Edison is able to spread its non-peak day or peak hour costs over more customers. This results in a greater or more optimal utilization of the system and a lower cost to all customers on the system.

(Gorman-D 14; *see also* Ex. 160 at 15.)

Third, interruptible customers help to reduce costs to firm customers through the avoidance of certain infrastructure projects. Con Edison's system is not designed to serve interruptible customers during the peak periods and, in fact, its gas system lacks the capacity to serve interruptible customers on a firm basis. (Tr. 277.) Thus, absent the ability of interruptible customers to be interrupted, Con Edison would need to undertake an expansion of its system, and a material portion of the costs of such expansion would be recovered from firm customers. (Tr. 278-79.)

Fourth, interruptible service can be utilized to support the mutual State and City goals of encouraging distributed generation ("DG") and combined heat and power ("CHP") resources within the City. (Gorman-D 15.) Mr. Gorman testified that: "Customers considering DG and/or CHP may improve the economics of a self-generation device if they are able to take interruptible service, lower their delivery cost, and use alternative fuels or modified operating procedures to support their energy needs during a Con Edison interruption." (*Id.*)

Finally, it is important to note that, under the *status quo*, Con Edison's shareholders are eligible to receive substantial financial benefits via the Sharing Mechanism. For instance, during the most recent rate year for which information was available, Con Edison realized $78,112,447.31 in non-firm revenues. (Ex. 581 at 45-46.)[54] Pursuant to the Sharing Mechanism, Con Edison was authorized to retain: (1) 100% of such revenues between $53 million and $58 million; and (2) 25% of such revenues above $58 million. (*See* GNFSP-D 20; *see also* SGRP 29-30.) Thus, during that rate year, shareholders realized over $10 million in incentives under a Sharing Mechanism that overcharges interruptible customers (*i.e.*, 100% of $5 million plus 25% of $20,112,447.31).

Thus, the PSC should recognize that interruptible customers provide substantial benefits to firm customers (and, pursuant to the existing Sharing Mechanism, shareholders).

B. Basing Interruptible Delivery Rates On Alternate Fuel Prices Is Inequitable And Inefficient

Con Edison sets interruptible delivery rates based on alternate fuel prices and in a manner that maximizes benefits to firm customers. The Company's GNFSP testified that:

> When alternate fuel prices are competitive, interruptible delivery rates are set in a manner to make the delivered price of gas competitive with the prices of alternate fuels. When alternate fuels are not competitive, interruptible delivery prices are set in a manner that maximizes benefits to firm customers while maintaining interruptible delivery rates that are no greater than firm rates on an annual basis.

(GNFSP-D 13.) Alternate fuel prices have not been competitive with gas prices for quite some time and the existing, substantial price disparity is projected to remain in effect for the foreseeable future (certainly for the Rate Year). Under these circumstances, maximizing benefits to firm customers is synonymous with maximizing rates to, and revenues from, interruptible

[54] Such non-firm revenues include revenues from, *inter alia*, Rate 1 customers. (*Id.*)

customers, without regard to the costs those customers impose. (Tr. 274.) However, the current approach to setting interruptible delivery rates is inequitable and inefficient. Instead, the PSC should set interruptible delivery rates in accordance with cost-of-service principles, similar to other types of gas and electric service.

It is inequitable to establish delivery rates to firm customers based on cost-of-service principles, but to eschew such an approach for interruptible customers. It also is patently unfair to set interruptible delivery rates in a manner designed to benefit firm customers (and shareholders) at the expense of interruptible customers, particularly given the substantial benefits that interruptible customers provide to firm customers. Finally, it is inequitable, and inefficient, to set rates for interruptible delivery service based on the price of alternate fuels that bear no relation whatsoever to Con Edison's cost of providing such service. Instead, as Mr. Gorman testified, interruptible delivery rates should be based on Con Edison's costs:

> Encouraging customers to make economic decisions should include a choice between firm and interruptible services. Cost-based prices will create economic price signals that encourage the full utilization of Con Edison's distribution system. This will in turn help to lower Con Edison's cost of service to both firm and interruptible customers. Hence, pricing of interruptible customers should recognize the benefits such customers provide to the system and to firm customers. Pricing for interruptible service should be based on Con Edison's cost of service and not on an artificial alternate fuel-based pricing that is designed solely to benefit firm service customers and Con Edison's shareholders without regard to fair treatment of interruptible customers.

(Gorman-D 6.)[55]

There can be no real dispute that compared to firm delivery service, interruptible delivery service constitutes an inferior service. Yet, under the current pricing approach, firm

[55] Ironically, Con Edison has proposed a new minimum monthly charge for Rate 1 customers based on its purported costs.

customers are accorded cost-based rates while interruptible customers, who impose much-lower costs on the system, inequitably are subject to pricing that typically is well above cost-of-service and often set equal or very close to the price of firm delivery service. As Mr. Gorman explained: "Pricing interruptible customers at a price equal to firm service is inappropriate in and of itself because the level of service, by definition, costs less to provide." (Gorman-D 12.)

Furthermore, pricing interruptible service at rates comparable to firm service provides an economic disincentive to choose interruptible service because such pricing comparison fails to account for the customer costs incurred by interruptible customers:

> The choice between taking firm and interruptible service is linked to the cost savings associated with interruptible service relative to firm service, and includes the costs a customer must incur to be an interruptible customer. Customers that take service on an interruptible basis typically must invest in energy assets or operating procedures that allow them to switch fuels to maintain energy supply during interruptions. Hence, interruptible customers incur a cost to be interruptible.

(Gorman-D 13.) On cross-examination, Staff agreed that customers incur costs in order to be interruptible, such as procuring alternate fuel supplies, and owning and maintaining equipment to burn alternate fuels. (Tr. 365-66.) Staff also could not identify any incentive to being an interruptible customer if forced to incur such costs while paying interruptible delivery rates that are comparable to firm delivery rates. (Tr. 367.)

Thus, delivery rates for interruptible service should be based on the cost of providing such service. Mr. Gorman explained how that cost should be calculated herein:

> Con Edison's cost of providing interruptible service is in many ways comparable to that of firm service, with one significant difference. Interruptible customers do not contribute to peak hour/day demand, and therefore should not be allocated any portion of delivery transmission/distribution costs allocated on peak hour/day demand. Interruptible customers, however, should

> be allocated a portion of all other costs incurred to provide the interruptible service.

(Gorman-D 18.) Mr. Gorman then presented cost-based interruptible delivery rates derived from Con Edison's own cost-of-service study. (*See* Gorman-D 19-20; Exs. 164, 163, 162 and 161.) Importantly, the cost-based interruptible delivery rates recommended by the City can be implemented without necessitating any change to firm delivery rates. (*See* Gorman-D 22, 32-33.)

C. Circumstances Have Changed Materially Since Opinion No. 94-26 Was Issued

In opposition to cost-based interruptible delivery rates, Con Edison relied on Opinion No. 94-26. (*See* GNFSP-R 5-6.)[56] The City acknowledges that in Opinion No. 94-26, the PSC ruled that utilities "should have a great deal of discretion to set the prices of their own services to non-core customers … so that they are comparable to the prices of the alternatives available to those customers."[57] Opinion No. 94-26 was issued almost 19 years ago, however, and circumstances have changed materially, thereby warranting adoption of a different regulatory approach with respect to the pricing of interruptible delivery service in New York City (and possibly the rest of the State).

Initially, the price of gas has declined dramatically compared to the price of alternate fuels. Mr. Gorman testified that: "[a]lthough the Commission's past practice may have been to adopt interruptible rates that were based on the cost of alternate fuels, specifically the cost of oil, this practice is no longer supportable given the development of significant new

---

[56] Case 93-G-0932, *Issues Associated with the Restructuring of the Emerging Competitive Natural Gas Market*, Opinion No. 94-26, Opinion and Order Establishing Regulatory Policies and Guidelines for Natural Gas Distributors (issued December 20, 1994).

[57] *Id.* at 26. The PSC also ruled that the prices of non-core services, including interruptible transportation, should be capped at the core service (in this case, firm transportation) that otherwise would be taken. *Id.*

natural gas supplies." (Gorman-D 6-7.) Mr. Gorman testified further that: "In the past, the price of natural gas was generally thought to be related to oil prices, presumably because the two are thought to be substitutes in consumption and complements in production. . . . The relevant point is that natural gas prices and oil prices are no longer linked." (Gorman-D 7.)

Importantly, the extremely large price disparity between gas and oil is projected to continue for the foreseeable future. Con Edison forecasts oil prices to remain three to four times higher than comparable natural gas prices between 2013 and 2016. (*See* Ex. 160 at 25.)[58] The Company also indicated that: "[c]urrent market conditions favoring gas over oil have persisted for the past several years and appear to be sustainable at least for the foreseeable future." (Ex. 581 at 24.)

Staff acknowledged that, to the extent there is a much-larger differential between gas and oil prices now as compared to when Opinion No. 94-26 was issued, such differential could make a difference in determining how best to price interruptible service. (Tr. 369.) The SGRP testified that based on the recent change in commodity pricing, "there can be situations where it may not be appropriate to continue setting interruptible prices like we have in the past." (Tr. 370.)

The decline in gas prices vis-à-vis oil prices not only is significant, it is historical. For instance, in 1994, the year in which Opinion No. 94-26 was issued, gas and oil prices were approximately the same on an energy-equivalent basis. (Ex. 790 at 1.) Importantly, however: "Relative to the price of oil, natural gas prices have been falling steadily since early 2006, and are now [*i.e.*, as of March 21, 2013] almost 80% cheaper than oil on an energy-equivalent basis."

---

[58] Con Edison provided the following forecasts, each on a dollars-per-dekatherm basis: (a) Henry Hub Gas prices for 2013-2016 of $4.00, $4.30, $4.64 and $5.09, respectively; and (b) West Texas Intermediate Crude Oil prices for 2013-2016 of $16.38, $15.70, $15.30 and $15.19, respectively. (*Id.*)

(*Id.*) Similarly, in January 2001, the delivered gas-to-oil price ratio was approximately 1.8. (Ex. 791 at 3.) As of January 2013, however, that ratio had declined to approximately 0.2. (*Id.*) Thus, during a recent 12-year period, gas went from being approximately 80% more expensive than oil to being approximately one-fifth the price of oil. While 2001 represents the height of gas prices compared to oil over the last two decades (*see* Ex. 790 at 1), the current price discrepancy appears unprecedented and certainly warrants modification of PSC policies regarding the pricing of interruptible delivery service.

There also are other important changes in circumstances since Opinion No. 94-26 was issued. For instance, in the past year, the PSC instituted Case 12-G-0297 to determine ways of encouraging the expansion of natural gas service within the State. In instituting the proceeding, the PSC noted that natural gas is much lower-priced than alternatives:

> As of October 30, 2012, the spot market of natural gas was $3.42 per dekatherm (Dt) and, on an energy equivalent basis, the price of No. 2 home heating oil, the most common alternative to natural gas, was $22.28. Current projections from the federal Energy Information Administration (EIA) indicate that this relationship is expected to continue for a considerable period.[59]

The PSC also noted that "[u]se of natural gas that displaces oil or coal consumption will result in lower overall emissions."[60] Particularly relevant here, the PSC ruled that "[g]iven the significant changes in the natural gas industry, and the potential economic and environmental advantages of natural gas, it is appropriate to revisit the issues related to the natural gas system."[61]

Given these significant changes, and the economic and environmental benefits of increased reliance on natural gas, the time has come for the PSC to change the pricing of

---

[59] *See* Case 12-G-0297, *supra*, Order Instituting Proceeding and Establishing Further Procedures (issued November 30, 2012) at 3.

[60] *Id.* at 4.

[61] *Id.* at 8.

interruptible delivery service within Con Edison's service territories.[62] Accordingly, the PSC should adopt cost-based interruptible delivery rates in this proceeding, consistent with the recommendations of City witness Gorman.

If the PSC declines to adopt interruptible delivery rates based on cost-of-service principles, then, at a minimum, it should direct Con Edison to conduct a study examining the benefits provided by interruptible customers, how those benefits should be reflected in delivery rates, and the possible, future transition to cost-based interruptible delivery rates. While not endorsing cost-based interruptible delivery rates at this time, Staff recognized that "there should … be an incentive for being an interruptible customer." (SGRP 28.) The SGRP testified that:

> We recommend that the Company be ordered to conduct a study to quantify the value/benefit of interrupting interruptible customers and that the benefit be reflected in their interruptible rates and the annual revenue reconciliation. This study should be filed with the Commission within six months from the effective date of the issuance of the Order in this proceeding.

(SGRP 29.)[63]

Additionally, if, despite the evidence demonstrating the need for an immediate change in non-firm pricing, the PSC only orders the aforementioned study, intervener parties should be able to participate in determining the scope of the study. Staff has indicated that it has no objections to such participation. (Tr. 375-76.) Such participation is especially important given the stated goal of the study and Con Edison's position opposing the study and asserting that interruptible customers provide no benefits to firm customers. (*See* GNFSP-R 37, 42-43.)

---

[62] Staff acknowledges that there are increased environmental concerns with respect to the burning of alternate fuels compared to when Opinion No. 94-26 was issued. (Tr. 372.)

[63] The SGRP also testified that the proposed rate increase to Rate 2 customers further justified undertaking such a study: "The revenue that Rate 2 customers provide is a benefit to firm customers and easily quantified, but the benefit/value of being interrupted is not as easily quantifiable. Rate 2 customers have been interrupted multiple times in each of the past five heating seasons." (SGRP 37.)

The City is concerned that absent party input, any study conducted will be biased and/or of little worth.

2. The PSC Should Reject Con Edison's Proposals To Increase Delivery Rates To Rate 1 Customers

Con Edison advances three proposals with respect to Rate 1 customers that, collectively, would increase delivery rates to those customers. First, Con Edison proposes to impose a new minimum monthly charge on Rate 1 customers. (GNFSP-D 11-12.) Second, the Company proposes to implement a new block rate structure for Rate 1 customers. (GNFSP-D 11-13.) Third, Con Edison proposes to implement a minimum annual volume threshold of 100,000 therms for new Rate 1 customers. (GNFSP-D 17-18.) For the reasons set forth below, the PSC should reject Con Edison's proposals and, instead, implement cost-based delivery rates for Rate 1 customers.

Con Edison's proposed minimum monthly charge for Rate 1 customers is $216 and $170 for residential customers and non-residential customers, respectively. (GNFSP-12.) The charge purportedly is based on the Company's costs.[64] Con Edison asserts that the charge is "designed to recover the costs associated with maintaining a customer on interruptible service." (GNFSP-D 11.)[65] Because the Company is not proposing any change to the volumetric delivery rates for Rate 1 customers or how those rates are calculated, the introduction of an incremental minimum monthly charge represents a rate increase to those customers. Moreover, the Company

---

[64] Ironically, while Con Edison opposes the City's position that the PSC adopt cost-based interruptible delivery rates, the Company relies on cost-of-service principles in an effort to justify its proposed minimum monthly charge.

[65] Specifically, the GNFSP testified that: "The minimum monthly charge is set based on a) a fixed component designed to recover costs associated with administering interruptible service (personnel, billing, meter reading, systems); and b) the minimum volume of 250 therms priced at the tail block rate of the otherwise applicable firm rate structure." (GNFSP-D 12.)

has presented no evidence that the revenues produced currently from Rate 1 customers are insufficient, thereby necessitating the need for a new minimum monthly charge.

Surprisingly, Con Edison chose not to rely on its own cost-of-service study to calculate the proposed minimum monthly charge. (*See* Tr. 281-85.) The Company's GNFSP conceded that the proposed charge is based on "independent assessments of the various tasks that are implemented to administer the interruptible program and estimating the costs associated with that. *It has nothing to do with the embedded cost of service study.*" (Tr. 284; emphasis added.) In fact, however, the types of costs upon which Con Edison relies to justify the proposed minimum monthly charge are contained within its cost-of-service study, where they are allocated to firm customers. (*See* Tr. 263-66, 281-84.) Clearly, to the extent Con Edison is allocating certain costs to firm customers for purposes of setting rates, and also proposing to base a new minimum monthly charge to Rate 1 customers on the same costs, there is a strong potential for a double-recovery. (Tr. 263-66.)[66]

While Staff supports, in concept, the introduction of a minimum monthly charge for Rate 1 customers, it opposes the charge proposed by Con Edison and, in particular, the inclusion of 250 therms in its calculation. The SGRP testified that:

> The monthly minimum charge should capture costs incurred by the Company to maintain service of interruptible Rate 1 customers. The additional component of 250 therms priced out at the tail block rate of the otherwise applicable firm rate is not consistent with a fixed charge, and should not be included in a mechanism to directly assign fixed costs incurred by the Company to serve the interruptible Rate 1 customers.

[66] The PSC should recognize that Con Edison possesses a strong financial incentive to shift revenue recovery from firm customers to Rate 1 customers because revenues from the latter group of customers are subject to the Sharing Mechanism and may benefit shareholders. (Tr. 285-86.)

(SGRP 24.) Instead, the SGRP recommended that the minimum monthly charge be inclusive of the first three therms only, and also be phased-in over three years to mitigate rate impacts. (SGRP 24-25.)[67]

The City does not oppose implementation of a minimum monthly charge for Rate 1 customers as part of a transition to cost-based delivery rates, but, similar to Staff, contends that Con Edison's proposed charge is excessive. (Gorman-D 21-22.) In fact, the $216 and $170 minimum monthly charges proposed by Con Edison for residential and non-residential customers, respectively, are much-higher than comparable charges for firm customers. (*Id.*) As Mr. Gorman testified:

> Con Edison's cost of service study shows that the monthly customer charge for S.C. 2 Non-Heating firm customers is $99/month. This charge includes an allocation of peak day and peak hour transmission and distribution costs. Because interruptible customers do not contribute to peak hour and peak day demands, I would expect the monthly charge for interruptible customers to be less than $99/month customer charge as it has proposed for its S.C. 2 Non-Heating customers.

(*Id.)* Thus, Con Edison's proposal to increase the minimum monthly charge for Rate I customers should be rejected.

Con Edison also has proposed to implement a new block rate structure for Rate 1 customers. (GNFSP-D 11.) The various block rates would not be cost-based. Rather, the stated purpose of the Company's proposal is to increase its flexibility to charge higher rates to Rate 1 customers for the benefit of firm customers (and shareholders). (*See* GNFSP-D 13-15.) Staff supports a block rate structure for Rate 1 customers, but recommends adoption of an additional block, encompassing the next 247 therms after a minimum monthly charge inclusive of three

[67] Ironically, like Con Edison, Staff apparently supports reliance on cost-of-service principles to calculate a minimum monthly charge for Rate 1 customers (but, inconsistently, opposes cost-based volumetric rates for such customers).

therms (as opposed to the Company's proposal to include 250 therms in the minimum monthly charge). (SGRP 25-26.)

While the City opposes Con Edison's proposals to increase delivery rates to Rate 1 customers solely to maximize benefits to firm customers (and the Company's shareholders), it does not oppose the concept, and future use, of a declining block rate structure that is consistent with cost-of-service principles. Mr. Gorman testified that:

> Declining block rate structures typically reflect the differences in cost between serving small, medium and large customers. As such, the declining block methodology generally is consistent with setting rates based on cost of service. Since Con Edison has not provided full details of its cost of serving interruptible customers, it is difficult to establish an accurate declining block rate structure for interruptible customers. Nevertheless, the interruptible rate structure should reflect Con Edison's cost of service for different sizes of customers.

(Gorman-R 6.) Mr. Gorman concluded that "[b]ecause of the significant variation in size of customers taking interruptible service from Con Edison, a declining volumetric rate block structure is appropriate and reasonable." (Gorman-R 7.)

Finally, Con Edison has proposed a new minimum annual volume threshold of 100,000 therms for new Rate 1 customers. (GNFSP-D 17-18.) In support of that proposal, the GNFSP testified that "[h]istorically, customers using less than 100,00 therms per year provide minimal benefit to the System when interrupted (GNFSP-D 17.) The City opposes the Company's proposal. It is overly restrictive and could prevent customers from choosing interruptible service unnecessarily. (Gorman-D 25.) Moreover, the City disputes the lack of benefits claimed by Con Edison. Mr. Gorman testified that:

> While a single customer may not provide benefits to the system, many customers on the system that are capable, willing and interested in interruptible service can in the aggregate produce significant system conservation and utilization of efficiencies.

(Gorman-D 26.) Accordingly, the PSC should reject Con Edison's proposed minimum annual volume threshold for new Rate 1 customers.

On behalf of the City, Mr. Gorman developed cost-based delivery rates for Rate 1 customers. Those rates were derived directly from Con Edison's cost-of-service study with adjustments to reflect the elimination of peak day and peak hour allocations to Rate 1 customers who are interruptible and should not be allocated such costs. (Gorman-D 19-20; *see also* Exs. 165, 164.) Mr. Gorman then increased the cost-based volumetric delivery rates by a modest amount (*i.e.* 0.3%) to produce rates slightly above cost-of-service for Rate 1 customers that, importantly, produce "the same revenue that Con Edison has as an offset to its firm cost of service." (Gorman-D 22-23; *see also* Ex. 163 [setting forth the City's proposed delivery rates for Rate 1 customers].) Thus, the PSC can implement delivery rates for Rate 1 customers only slightly higher than cost (*compare* Ex. 163 *with* Ex. 164) without creating any need to modify firm delivery rates.[68]

For the foregoing reasons, Con Edison's proposals to increase delivery rates to Rate 1 customers should be rejected. Instead, the PSC should adopt delivery rates for Rate 1 customers consistent with the City's recommendations herein.

3. The PSC Should Reject Con Edison's Proposals To Increase Delivery Rates To Rate 2 Customers

Con Edison proposes to implement substantial delivery rate increases for Rate 2 customers. Rate 2 customers are large-use customers that take firm gas service from Con

[68] Long-term, the City supports interruptible delivery rates that truly are cost-based. For purposes of these proceedings, however, the City recommends rates for Rate 1 customers that modestly are higher than cost solely to enable the PSC to adopt cost-based interruptible delivery rates without necessitating any need to modify delivery rates for firm customers.

Edison, with the proviso that they can be interrupted for no more than 30 days during each winter period. For the reasons set forth below, the PSC should reject the Company's proposals.

Rate 2 customers currently may enter into terms of service of one, two or three years, to which the following delivery rates are applicable:

Term of Service	**Current Rate**
One Year	8.0 Cents per Therm
Two Years	7.5 Cents per Therm
Three Years	7.0 Cents per Therm

(GNFSP-D 15.) The applicable delivery rate is reduced by 1.0 cents per therm for monthly usage in excess of 500,000 therms. (*Id.*) Con Edison proposes to: (a) eliminate multi-year terms of service; and (b) increase the delivery rates charged to Rate 2 customers to 11.5 cents per therm; and (c) retain the 1.0 cents per therm rate reduction for monthly usage exceeding 500,000 therms. (GNFSP-D 16.) Those rate increases are *not* reflected in Con Edison's proposed revenue requirement. (GNFSP-D 23.)

The delivery rate increases proposed by Con Edison for Rate 2 customers are exorbitant. In its rebuttal testimony, the GNFSP testified that "[t]he Company's proposed increase to 11.5 cents per therm represents increases of 7.6% and 7.7% for monthly usage up to 500,000 therms and monthly usage above 500,000 therms, respectively." (GNFSP-R 9-10.) Significantly, however, the GNFSP's calculations are misleading because they include the projected cost of the gas supplies, which are outside the scope of the gas rate case. (Tr. 289.)

The examination of Con Edison's delivery rates and a comparison of current and proposed delivery rates should be limited to those rates, and not obfuscated by the insertion of commodity costs intended to mask or minimize the impact of the Company's proposals. When

the commodity costs are stripped away, the incredible impact of the Company's proposal is revealed. Set forth in the table below are the percentage delivery rate increases proposed by Con Edison for Rate 2 customers:

Term of Service and Monthly Usage	**Current Rate**	**Proposed Rate**	**Percent Increase**
One Year; Less Than 500,000 Therms	8.0 Cents per Therm	11.5 Cents per Therm	**43.75%**
One Year; More Than 500,000 Therms	7.0 Cents per Therm	10.5 Cents per Therm	**50.00%**
Two Years; Less Than 500,000 Therms	7.5 Cents per Therm	11.5 Cents per Therm	**53.33%**
Two Years; More Than 500,000 Therms	6.5 Cents per Therm	10.5 Cents per Therm	**61.54%**
Three Years; Less Than 500,000 Therms	7.0 Cents per Therm	11.5 Cents Per Therm	**64.29%**
Three Years; More Than 500,000 Therms	6.0 Cents per Therm	10.5 Cents Per Therm	**75.00%**

(*See, e.g.,* Tr. 289-90.)

According to Con Edison, the proposed delivery rate increases to Rate 2 customers are intended to approximate the rate increases to firm delivery rates since the inception of the Rate 2 rates. (GNFSP-D 16.) Significantly, however, those firm delivery rates were increased by approximately 66% over a 20-year period, not in a single rate proceeding. (GNFSP-D 15.) Thus, Con Edison's proposal simply tramples the principles of rate moderation and rate gradualism. Moreover, Con Edison has failed to present any evidence demonstrating

that Rate 2 customers are not producing revenues in excess of the cost to serve them or otherwise linking the proposed rate increases to cost-of-service principles.[69]

Staff also opposes Con Edison's proposals for Rate 2 customers. The SGRP testified that:

> We recommend eliminating multi-year contracts, establishing a fixed, flat rate of eight cents per therm and continuing the one cent per therm discount for monthly usage in excess of 500,000 therms. Current contracts should be grandfathered until their expirations.

(SGRP 34.) Compared to Con Edison's proposed rate of 11.5 cents per therm, Staff contends that its 8.0 cents per therm rate is "more appropriate" and helps to avoid potentially-significant and highly-variable rate impacts depending upon the timing and the grandfathered term of a Rate 2 customer's contract. (SGRP 35-36.) While Staff's Rate 2 position is far superior to Con Edison's proposal, it is not a substitute for cost-based rates.

The City opposes Con Edison's proposals to increase delivery rates to Rate 2 customers, and also disagrees with the Company's justification that such rates should be increased based solely on prior increases to firm delivery rates and/or the cost of alternate fuels. As Mr. Gorman summarized:

> Simply increasing interruptible rates to reduce the price differential that exists between interruptible and firm rates is not a valid cost justification for changing this rate. *** [I]nterruptible customers impose fewer costs on the system, and this is particularly true for the larger customers served under this rate. Con Edison's interruptible rates should track its cost of service and not be based on the price of alternate fuels.

[69] It is noteworthy that prior to this proceeding, Con Edison never sought to increase the delivery rates charged to Rate 2 customers. (Tr. 290-91.)

(Gorman-D 29-30.) In this case, a $78 monthly minimum charge and a volumetric charge of 7.5 cents per therm would constitute cost-based delivery rates for Rate 2 customers. (Gorman-D 30-32; *see also* Ex. 162.)[70]

Mr. Gorman recommended that a more detailed cost-of-service study be conducted for Con Edison's Rate 2 service:

> A more detailed and complete cost of service should be completed by Con Edison in order to improve the accuracy of this interruptible service cost-based rate. Until that is performed, I recommend the Commission reject Con Edison's proposal and retain the existing … volumetric rate structure [for Rate 2 Customers] along with a customer charge of $78 per month because the evidence in this case indicates that [the rates for Rate 2 Customers] already [are] above Con Edison's cost of service, and Con Edison has not provided any persuasive reason to increase these rates.

(Gorman-D 32.) Importantly, the City's position on delivery rates for Rate 2 customers can be adopted without necessitating any charge to firm delivery rates. (Gorman-D 32-33; *see also* Ex. 161.)

For the foregoing reasons, Con Edison's proposals to increase delivery rates to Rate 2 customers should be rejected. Instead, the PSC should adopt cost-based delivery rates for Rate 2 customers consistent with the City's recommendations herein.

[70] The volumetric charge could range between 7.0 cents and 8.0 cents per therm and still be consistent with cost-of-service principles. (Gorman-D 31.) Such variation could be used to maintain the existing 1.0 cents per therm reduction for monthly deliveries over 500,000 therms.

4. The PSC Should Reject Con Edison's Proposal To Modify The Sharing Mechanism And Instead Eliminate Or Reduce Substantially The Company's Financial Incentive To Maximize Revenues From Interruptible Customers

Con Edison's gas revenue requirement reflects a $53 million imputation attributable to non-firm revenues. That imputation is used to reduce the revenue requirement applicable to firm customers. The Company is subject to the Sharing Mechanism which operates as follows:

Non-Firm Revenues	Regulatory Treatment
$0 to $33 million	Con Edison retains 100%. To the extent revenues are less than $33 million, Con Edison may defer and recover 100% of that shortfall from firm customers.
$33 million to $58 million	Con Edison retains 100%. To the extent revenues are greater than $33 million and less than $58 million, Con Edison may surcharge firm customers for 80% of the shortfall below $58 million.
Over $58 million	Con Edison retains 25% and the remaining 75% is credited to firm customers.

(GNFSP-D 20; *see also* SGRP 29-30.) Con Edison proposed that the Sharing Mechanism largely be retained, subject to a single modification that revenues in excess of $58 million be shared on an 80% customers/20% shareholders basis. (GNFSP-D 21.)[71] The PSC should reject Con Edison's proposed modifications to the Sharing Mechanism and, instead, eliminate or reduce substantially the Company's financial incentive to maximize revenues from interruptible customers. (*Id.*)

[71] The modification was advanced in light of Con Edison's expectation that revenues from Rate 1 customers will increase if its proposals are adopted. (*Id.*) Revenues from Rate 2 customers, although used to benefit firm customers, are not subject to the Sharing Mechanism. (*Id.)*

In response to Con Edison's proposal, Staff recommended that the Sharing Mechanism be modified as follows: (1) the imputation level for the benefit of firm customers be increased from $53 million to $58 million; (2) Con Edison retain all revenues up to the $58 million, and be responsible for any revenue shortfalls below that level; and (3) the Company retain 20% of all revenues in excess of $58 million. (SGRP 31.) Staff justified its position as follows:

> In the last two rate years, under Case 09-G-0795, the Company collected an average of $73.0 million in non-firm revenues. The last five full rate years, including three under Case 06-G-1332, the Company collected an average of $64.8 million in non-firm revenue. Firm customers should continue to benefit at a level that would be expected historically.

(SGRP 32.) Staff's position on the Sharing Mechanism, while appropriately less lucrative for Con Edison's shareholders, also should be rejected.

In evaluating the reasonableness of the Sharing Mechanism, including the $53 million imputation level that Con Edison proposed be retained, the PSC should be aware that non-firm revenues have exceeded that imputation level for the last five years for which such information is available:

Rate Year	**Total Non-Firm Revenues Subject to Sharing**	**Amount Above $53 Million Imputation Level**
Case 06-G-1332, RY1	$56,460,342.70	$3,460,342.70
Case 06-G-1332, RY2	$59,069,824.31	$6,069,824.31
Case 06-G-1332, RY3	$62,520,509.58	$9,520,509.58
Case 09-G-0795, RY1	$67,873,578.73	$14,873,578.73
Case 09-G-0795, RY2	$78,112,447.31	$25,112,447.31

(Ex. 581 at 45-46.) Thus, in the most recent year depicted, non-firm revenues subject to sharing exceeded the $53 million imputation level by over $25.1 million, or in excess of 47%.

Moreover, Con Edison is projecting a significant increase in revenues from both types of Rate 1 customers:

Rate Year	S.C. 12, Rate 1	S.C. 9, Rate B
Case 09-G-0795, RY2	$6,259,959.79	$15,539,928.39
Case 13-G-0031, RY1	$10,661,000.00	$19,183,000.00
Case 13-G-0031, RY2	$12,342,000.00	$19,183,000.00
Case 13-G-0031, RY3	$13,857,000.00	$19,266,000.00

(*Id.* at 46 [depicting historic revenue levels related to Case 09-G-0795]; *see* Ex. 789 [depicting projected revenue levels]; *see also* Tr. 298-300.)

The benefits accruing to Con Edison's shareholders under the existing Sharing Mechanism are excessive, particularly with respect to Rate 1 customers. Given the extremely-large price disparity between gas and fuel oil prices, Con Edison has unprecedented, and unchecked, power to increase delivery rates to Rate 1 customers with very little, if any, risk of lost revenues due to customers burning oil. Indeed, given pricing disparities between fuel oil and natural gas, it is questionable whether Con Edison should receive any financial incentive for maximizing revenues from Rate 1 customers, particularly when it results in rates for those customers that inequitably are well above the cost to serve them.

The Sharing Mechanism provides Con Edison with an inappropriate financial incentive to charge Rate 1 customers delivery rates that are well above cost-of-service, thereby providing the Company's investors with the opportunity to earn more than a fair return. (Gorman-D 11.) As Mr. Gorman explained:

> Rate 1 interruptible service should be a cost-based rate. In setting rates, Con Edison is provided a fair return on its investment in its transmission and distribution rate base, and no further consideration is needed or appropriate. Therefore, interruptible customers, like firm customers, should pay a price that provides

> Con Edison a fair rate of return on the investments in utility plant and equipment used to provide them service. Accordingly, Con Edison should no longer be allowed to retain a percentage of interruptible rate revenues.

(Gorman-D 24.)

For the foregoing reasons, the PSC should reject Con Edison's proposal to modify the Sharing Mechanism and, instead, eliminate or reduce substantially the Company's financial incentive to maximize revenues from interruptible customers.

5. The PSC Should Reject Con Edison's Proposed "Gas Transmission Reinforcement Charge"

Con Edison proposes to implement a "Gas Transmission Reinforcement Charge" of 5.0 cents per dekatherm on five electric generators and its own Steam Department. (GNFSP-D 23-25.) The PSC should reject the Company's proposed charge.

Con Edison argues for institution of the Gas Transmission Reinforcement Charge, in addition to the delivery rates paid by affected customers, to "capture an appropriate contribution from the Power Gen community, on a per dekatherm basis, which recognizes the capacity benefits realized by them from infrastructure projects." (GNFSP-D 25.) The Company also argues that "[g]enerators make substantial use of the Company's gas transmission infrastructure and benefit from ongoing Company investments in that infrastructure." (GNFSP-D 26.) The proposed charge is projected to generate $7.5 million in revenues, which would be used to reduce the cost of future gas system enhancements to other customers. (*Id.*)

Con Edison has failed to justify its proposed Gas Transmission Reinforcement Charge. Con Edison neither claimed nor demonstrated that the targeted customers fail to make adequate contributions to the Company's infrastructure projects through existing delivery rates. The proposed charge clearly is not based on the cost of providing gas service to electric

generators. (Gorman-D 33.) Additionally, the specific charge proposed, *i.e.*, 5.0 cents per dekatherm, "is arbitrary and not based on any Con Edison cost of service study." (*Id.*)

Con Edison simply has singled-out a limited subset of customers for an unjustified and arbitrary surcharge incremental to delivery rates. The Company is not aware of any other New York gas utility that implements a similar charge. (Tr. 303.) Additionally, the proposed charge, if authorized, could result in rate and price impacts on steam and electric customers (many of which also are gas customers) that could more than offset the $7.5 million in revenues that the Company seeks to realize for future gas system enhancements.

For instance, Con Edison's Steam Department, to the extent it pays the proposed Gas Transmission Reinforcement Charge, would seek to recover those costs from steam customers. (Tr. 304.) Such an outcome would increase the cost of steam service at a time when steam sales are declining and there is growing pressure to reduce steam rates. (*See, e.g.*, Gorman-D at 42-45.) Mr. Gorman urged that "[d]iscretionary cost increases that do not improve steam delivery service or reliability should be avoided to the greatest extent practicable." (Gorman-D 44.) Similarly, if the proposed charge is authorized, the subject electric generators can be expected to reflect this added cost in their wholesale bids, which likely will lead to higher electricity prices for Con Edison's electric customers. (Tr. 304-306.)

Staff, among others, agreed with the City that the proposed Gas Transmission Reinforcement Charge should be rejected. Staff pointed out that Con Edison's "gas system is designed to meet the needs of firm customers, not interruptible customers," and that the subject electric generators are interruptible customers that already provide a benefit to firm customers "by taking gas delivery and contributing to non-firm revenues, but exiting the system when necessary." (SGRP 39.)

For the foregoing reasons, the PSC should reject Con Edison's proposed Gas Transmission Reinforcement Charge.

6. The PSC Should Reject Con Edison's Proposal To Eliminate Its Temperature Controlled Interruption Option Outside The Context Of A Rate Proceeding

On April 25, 2013, Con Edison submitted a tariff filing to eliminate the temperature control option. (*See* Ex. 792.) In that filing, Con Edison compared historical interruptions for temperature control and notification customers for the past four winters. The comparison indicates that temperature control customers were interrupted 148% more hours than notification customers. (*Id.* at 3.) Con Edison acknowledges that, if this recent history continues, the Company would realize more non-firm delivery revenues without the temperature controlled option. (Tr. 324.)

In other words, Con Edison is seeking to eliminate its temperature controlled interruption option outside the context of this general rate proceeding, using a separate tariff filing. (GNFSP-D 16.) This option allows interruptible customers to choose to be interrupted automatically using a temperature-sensing device, as opposed to interrupting in response to a notice from Con Edison. According to Con Edison, eliminating the temperature controlled option would "not constitute an adjustment to rates …." (GNFSP-R 55-56.)

The Company's proposal should be rejected because eliminating the temperature control option only should be considered within a general rate proceeding, where all proposed and resulting changes in revenues and expenses can be reviewed at the same time. (Gorman-D 27-28.) Elimination of the temperature controlled option could impact the Company's cost-of-service, as well as the revenues produced by interruptible customers, and, therefore, should not be considered outside of a rate proceeding.

Eliminating the temperature controlled option, therefore, has a direct impact on gas rates because it likely would result in increased non-firm revenues available to offset firm rates or reduce non-firm rates. Such elimination also could impact Con Edison's cost-of-service upon which interruptible delivery rates should be based. Furthermore, even if the PSC authorizes continuation of the Sharing Mechanism in some form, this additional non-firm revenue should be considered when setting the appropriate imputation level and sharing allocation. Thus, contrary to Con Edison's position, eliminating the temperature controlled option would constitute an adjustment to rates and/or revenues and, therefore, such an adjustment only should be considered within the context of a general rate proceeding.[72]

c. Steam

i. Emission Allowances Recovery Mechanism

The City takes no position on these issues at this time.

ii. The S.C. 4 Rate Should Be Modified

There are two problems with Con Edison's S.C. 4 Back-Up/Supplementary Service steam rates. First, as currently designed, S.C. 4 unnecessarily penalizes customers for using the steam system for cooling purposes and for DG. Second, Con Edison recovers too may costs through the S.C. 4 Contract Demand charge. Unless the PSC modifies Con Edison's proposed S.C. 4 rate design, S.C. 4 rates will continue to "impose unnecessary costs on, and discourage the development of, … DG in the Con Edison service territory, a result that would be

[72] As set forth in the City's comments in Case No. 13-G-0186, Con Edison's tariff filing should be rejected for two reasons: (1) the proposed elimination of the temperature controlled option only should be considered in the context of a general rate proceeding; and (2) the Company failed to address the PSC's reasons for rejecting a similar proposal in 2012. *See* Case 13-G-0186, *Tariff Filing by Consolidated Edison Company of New York, Inc. Proposing Revisions to Interruptible Service Options Contained in its Gas Tariff Schedule, PSC No. 9-Gas*, Comments of the City of New York (dated July 1, 2013) at 2-5.

at odds with important State and City policies designed to advance DG opportunities." (Arnett-D 28-29.)

1. The S.C. 4 Rate Unnecessarily Penalizes Customers For Using Steam For Cooling Purposes

S.C. 4 rates consist mainly of three charges: (1) the Contract Demand charge; (2) a usage charge; and (3) a customer charge. The S.C. 4 Contract Demand charge is set equal to the highest maximum demand, in Mlb of steam per hour, of a customer during the hours of 5 AM to 6 PM weekdays, November through April.

For customers with on-site DG, that utilize steam for cooling purposes during the months of November through April, their peak steam demand for cooling purposes can exceed peak steam demand for heating purposes. Under the current rate design, such customers can be forced to pay higher Contract Demand charges based on their peak cooling load even though it is peak heating load, and not peak cooling load, that drives Con Edison's investment in its steam distribution system.

For example, during a warm April day, the demand on Con Edison's steam distribution system is well below the system's peak demand. The peak demand of the steam system occurs during the winter months when it is cold outside and customers are utilizing steam for heating purposes. If a customer's peak load happens to occur on this warm April day, in an hour when the steam system is not being fully utilized, no additional distribution or production facilities are needed to accommodate that customer's peak load. This hypothetical customer's cooling requirements should not be used in determining its S.C. 4 Contract Demand.

The PSC has previously determined that cooling loads should not drive demand charges for steam customers. In Case 05-S-1376, the PSC approved demand billing for S.C. 2

and S.C. 3 steam customers.[73] Con Edison proposed a winter period for the Demand Charge of November through April. After more data was developed on bill impacts, the PSC and Con Edison realized that the proposed winter period would have a significant bill impact on steam customers using steam air conditioning in November and April. As a result, the PSC modified the winter period for S.C. 2 and 3 customers by removing November and April, recognizing that "significant bill impacts on steam cooling customers would be contrary to the [PSC's] policy of promoting steam air conditioning and reducing demand on the electric system during peak periods." (2008 PSC Steam Order 6.) The Staff Steam Rate Panel recognized that this policy should apply equally to all steam customers, including S.C. 4 customers. (Tr. 228.)

One S.C. 4 customer with on-site DG, Vornado Realty Trust, already petitioned the PSC to fix the S.C. 4 peak period, noting that its use of steam for cooling purposes in November and April could increase its Contract Demand charges by approximately $300,000 per year. (Arnett-D 30.) The City supported Vornado's petition, noting that it identified "a key barrier to the wider dissemination of CHP and clean DG facilities…."[74] Although the PSC denied Vornado's petition, the PSC noted that the issues raised by Vornado were better suited to a rate case proceeding. (*Id.*)

Consistent with the PSC's direction in the Vornado Order, in its direct testimony in these proceedings, the City explained why the PSC should modify the S.C. 4 rate design. In rebuttal, Con Edison claimed that the City's proposal results in rates that "do not reflect the cost of facilities needed by the Company to stand ready to accommodate a customer's higher needs during the shoulder months, whether for heating or cooling." (Viemiester-R 16.)

---

[73] Case 05-5-1376, *Consolidated Edison Company of New York, Inc. – Steam Rates, Order Regarding Tariff Filing* (January 2, 2008) ("2008 PSC Steam Order").

[74] Case 12-5-0147, *Petition of Vornado Realty Trust*, Comments of the City of New York (April 23, 2012) at 2.

It may be true that in some cases localized investment in the steam distribution system would be needed in order to accommodate a larger cooling demand. As noted by City witness Arnett, these investments would be for facilities specific to the customer, like meters and services. (Arnett-D 31-32.) Even if these on-site costs did arise, they would be fully recovered on an average basis from all similarly situated customers in their customer charges. The customer charge currently recovers "class average Customer Costs, including Billing, Services, Meters, Installations on Customer Premises and the costs of the Minimum Grid, which encompass nearly all of the costs that are specific to the individual customer." (Arnett-D 31.) Larger S.C. 4 customers are currently paying over $83,000 per year in customer charges. (Steam Tariff, Leaf 93.) These high customer charges ensure Con Edison is recovering customer-specific costs from the customer, and not from other ratepayers.

Con Edison also attempts to distinguish the S.C. 4 Contract Demand charge from the S.C. 2 and 3 Demand Charge. According to Con Edison, an S.C. 4 customer "reserves" a portion of the steam system through its Contract Demand charge "that can be employed at any time to back-up or supplement the customer's steam requirements between the hours of 5 AM to 6 PM weekdays, November through April," while S.C. 2 and 3 customers are simply reacting to a price signal. (CESRP-R 8.) If S.C. 2 and S.C. 3 customers can avoid usage during the 6 AM to 11 AM weekday periods from December through March, then Con Edison reasons that it can avoid additional investment in steam system capacity. (CESRP-R 8.) This distinction misses the point – Con Edison will always have ample steam distribution system capacity to meet peak cooling demand of S.C. 4 customers. Con Edison's "reservation" argument makes sense only if an S.C. 4 customer peaks during the winter, when the system as a whole is peaking.

It simply does not make any sense to penalize S.C. 4 customers for using steam for cooling purposes. To remedy this problem, the PSC should either: (1) direct Con Edison to measure the Contract Demand for S.C. 4 based on the same four month, five hour period as the Demand charges for S.C. 2 and 3 customers (December – March, during the hours of 6:00 AM – 11:00 AM); or (2) clarify that the S.C. 4 Contract Demand will be based solely on steam used for heating, and not cooling, purposes.

2. Too Many Costs Are Recovered In The S.C. 4 Contract Demand Charge

According to the Company's Steam ECOS study, the Contract Demand charge for all steam customers is designed to recover 100 percent of the demand portion of the distribution system plus 40 percent of demand-related production costs. (Ex. 724 at 6.) In rebuttal, Con Edison indicated that S.C. 4 customers are limited in number and dispersed throughout the distribution system, and this is why S.C. 4 rates were designed to collect 100 percent of distribution demand costs through the Contract Demand Charge. Including 100 percent of demand-related distribution costs in the Contract Demand Charge assumes that Con Edison must build its entire steam distribution system as if every S.C. 4 customer was taking its full contracted amount on the peak hour. This is an unreasonable assumption, particularly if Con Edison is setting Contract Demand Charges based on peak cooling loads when the steam system has ample capacity available.

The PSC should ensure that S.C. 4 rates are fair and reasonable. If the Contract Demand Charge is overstated, then the rate design is contrary to several important State and City policies encouraging broader DG deployment, including New York State's Energy Plan and PlaNYC 2030. Moreover, "an unduly high S.C. 4 rate could compel DG developers to exit the

steam system by installing redundant steam generation, a truly bizarre result for a system that can ill-afford to lose large existing customers." (Arnett-D 36.)

XII. OTHER ISSUES

a. Performance Mechanisms - The PSC Should Not Eliminate The Performance Metric For Over-Duty Circuit Breaker Replacements

The number of over-duty circuit breakers in Con Edison's electric system has been a concern for many years. Because the Company was not giving appropriate attention to eliminating this problem, the PSC instituted a performance metric requiring Con Edison to replace at least 60 over-duty breakers each year.[75] Although Con Edison has achieved that target each year, the concerns with over-duty circuit breakers continue and the need to eliminate them is as pertinent today as it was in 2004-2005. (*See* CEIP-D 20-22.)

Notwithstanding the large number of over-duty breakers that still exist (approximately 1,200), Con Edison proposed to eliminate the metric relating to such breakers from the Company's reliability performance mechanism. (CE EIOP-D 355-359.) The basis of this proposal is that other technologies have been developed which serve similar purposes as the breakers with respect to the interconnection of DG facilities. (*Id.*) Con Edison's justification falls short, and its own testimony demonstrates that there is no reason to eliminate the metric.

While it is true that there are new technologies which address fault current problems, DG developers would not need to employ such equipment but for Con Edison's failure to properly maintain its infrastructure and ensure that its circuit breakers are operating within their design parameters. Also, Con Edison's justification ignores the safety concerns with over-duty breakers, which was explained by the City and unrefuted by Con Edison, Staff, or any other

[75] Case 04-E-0572, *Consolidated Edison Company of New York, Inc. – Electric Rates*, Order Adopting Three-Year Rate Plan (issued March 24, 2005) at 50-51, 114 and Appendix I, 49-51.

party. (CEIP-D 21-22.) Further, Con Edison stated that regardless of this metric, it plans to continue to replace at least 60 over-duty breakers per year. (CE EIOP-D 357.)

Staff's position on this matter is inherently inconsistent and makes no sense. Staff acknowledges that before the metric was instituted, Con Edison was replacing very few over-duty breakers, and that elimination of the metric could lead to a reversion to a low replacement rate. (DPS Reliability Performance Mechanism Panel ["RPM"]-D 20.) Staff also asserted that "[h]aving over a thousand over-duty breakers on its system places Con Edison's electric system at a higher risk level. (*Id.*at 21.) Staff also recommended that if there is a multi-year rate plan, the metrics should remain in place. (*Id.* at 21-22.) However, with no explanation or justification, Staff accepted the Company's proposal for purposes of a one-year rate case. (*Id.*)

In deciding this issue, the PSC should look to the facts and explanations offered by Staff and the City as to the reasons for the metric. The PSC should also look to the fact that Staff recommends continuation of the metric when viewed over a multi-year period. This evidence clearly outweighs Staff's inconsistent, unsubstantiated, and illogical support for removal of the metric for the Rate Year. Moreover, the fact that Con Edison plans to replace at least 60 over-duty breakers during the Rate Year demonstrates that continuation of the metric should not have any impact on the Company's operations, flexibility, or financial condition. For all of these reasons, the PSC should reject the removal of the over-duty breaker metric from the reliability performance mechanism.

b. Electric Only Issues

i. Distributed Generation

New York State policy is to promote the growth of DG because DG provides enhanced reliability, energy efficiency, reduced emissions and avoided investment in

transmission and distribution resources. The City supports the expanded use of cost-effective, energy efficient DG. For example, the City has established a goal of developing 800 MW of clean DG within the five boroughs in order to provide up to 10 percent of the greenhouse gas emissions reduction necessary to achieve the City's goal of reducing municipal greenhouse gas emissions 30 percent by 2017.[76] To achieve that goal, the City is developing its own clean DG projects, in addition to supporting the structure for private DG development.[77]

At the end of Con Edison's last rate case, the PSC established a DG collaborative to identify barriers to DG development and solutions in order to remove those barriers and expand DG opportunities. Two identified barriers, gas infrastructure costs and steam back-up rates, are addressed in Sections XII(c) and XI(c), respectively. Two other identified barriers, electric standby rates and the interconnection process, are electric-related and discussed in this section. This section concludes with a brief discussion on the important role that microgrids can play in making the grid more resilient while also promoting DG development.

1. The PSC Should Institute A New Proceeding To Examine Electric Standby Rates

Con Edison's electric standby rates were developed pursuant to Opinion No. 01-04.[78] The electric standby rates include a customer charge, contract demand charge and, as-used daily demand charges.

The amount of revenues recovered through each charge is based on a cost allocation methodology that resulted from a 2003 settlement in Case Nos. 02-E-0780/02-E-0781

---

[76] *See* PlaNYC 2030: A Greener, Greater New York (dated April 2011) at 113, *available at* http://www.nyc.gov/html/planyc2030/html/theplan/the-plan.shtml.

[77] For example, the City, acting on behalf of its Department of Correction, is in the final pre-construction phase for a high-efficiency 15 MW CHP plant on Rikers Island.

[78] Case 99-E-1470, Opinion No. 01-04, *Opinion and Order Approving Guidelines for the Design of Standby Service Rates* (issued October 26, 2001).

"that delineates what percentage of the demand charge is deemed 'local,' and thereby collected via the contract demand charge, and what percentage is 'shared' costs, thereby collected via the as-used demand charge." (Stephens-D 40.)[79] The methodology was based on a Company cost of service study (*id.* at 41), and resulted in the following matrix, which was submitted as Appendix A to the Joint Proposal in Case Nos. 02-E-0780/02-E-0781:

Appendix A			
Local vs. Shared Allocation			
For Con Edison Standby Service			
January 23, 2003			
Standby Service Rate Design			
Percent of Contract Demand / Percent of As-Used Demand			
	Secondary Customers	Primary Customers	128 kV & Above Customers
Secondary	75% / 25%		
Primary	25% / 75%	75% / 25%	100% / 0%*
Substation	0% / 100%	50% / 50%	100% / 0%*
Transmission	0% / 100%	0% / 100%	25% / 75%
*Includes only 138 kV facilities for "138 kV & Above" Customers			

The matrix is based on cost of service data that is now more than a decade old. Without further study, there is no way to determine if the delineation of "local versus shared" allocations for the contract demand and as-used demand charges are still accurate or appropriate.

As a result, the PSC should, at a minimum, open a new proceeding to examine the accuracy of the matrix and the Company's electric standby rates. Con Edison should be directed

[79] *See also* Cases 02-E-0780 and 02-E-0781, *Proceedings on Motion of the Commission as to Orange and Rockland Utilities, Inc.'s and Consolidated Edison Company of New York, Inc.'s Electric Tariff Filings to Establish a New Standby Service in Accordance with Commission Order Issued October 26, 2001 in Case 99-E-1470*, Order Establishing Electric Standby Rates (issued July 29, 2003) at 6-7.

to perform an updated cost of service study "with enough granularity that a reasonably accurate cost to serve standby customers can be gleaned." (Stephens-D 42.)

This review of standby rates should include an examination of the annual electric O&M charge which is an annual charge on DG customers imposed by General Rule 20.2.1(A)(2) of Con Edison's electric tariff. The O&M charge is equal to 12.1 percent of the total capital costs of interconnection for the DG project, including the costs of delivery system reinforcements, and must be paid by the DG customer in monthly installments equal to one-twelfth of the annual charge. The O&M charge is supposed to cover property taxes and O&M expenses associated with the DG project. Con Edison proposes in this case to increase the O&M charge to 12.7 percent.

Con Edison recognizes this charge is often a concern for DG developers. As noted by City witness Stephens, "[t]he O&M Charge is often unknown until late in the interconnection process, and does not appear, when charges are finally established, to have a clear correlation to the actual property tax and O&M expenses of the DG project." (Stephens-D 33.)

2. Con Edison's Proposals On Standby Rates Should Be Rejected

Con Edison responded that the standby rate matrix does not need to be revised, and argued that it proposed changes to standby rates since the matrix was adopted. Con Edison asserted that it recently expanded a tariff commonly known as "Special Provision E" to allow larger campus-style customers to interconnect a DG ahead of the meter. (CE EIOP-R 140-41.) This new tariff is commonly referred to as the "Campus Style Tariff."

Con Edison's recital of the history of the Campus Style Tariff is misleading, at best. Like many of the DG initiatives for which Con Edison now claims credit, the Campus

Style Tariff was only developed after Con Edison was ordered by the PSC to the develop it. (Tr. 1494; *see also* Bourgeois-D 23.) Its opposition to re-examining standby rates is just one example of how the Company can act as a barrier to further DG development. The recent past contains several other examples.

In June, 2011, Con Edison attempted to modify Special Provision E to impose higher costs on DG customers.[80] Several DG proponents, including the City, opposed Con Edison's efforts.[81] No one supported Con Edison. In August, 2011, the City filed a petition with the PSC for a waiver from the size limitation in Special Provision E for its Rikers Island facility.[82] In November, 2011, OBP Cogen, LLC, the operator of the DG plant at One Bryant Park, filed a complaint with the PSC because Con Edison inappropriately charged OBP Cogen nearly $300,000 in Contract Demand charges.[83]

In November 2011, the PSC issued an order in Case 11-E-0299 rejecting Con Edison's attempted modification to Special Provision E and directing Con Edison to develop the Campus Style Tariff. This order effectively resolved the Rikers Island petition in the City's favor, and OBP Cogen's complaint in its favor. Although the results of Case 11-E-0299 and the other, above-described proceedings were mostly positive for DG, they demonstrate that considerable time and effort was required in order to secure advances for DG from Con Edison.

Furthermore, the Company acknowledges that standby rates need to be revised from time to time. Here, the Company has selected one element of standby rates that it thinks

---

[80] Case 11-E-0299, *Tariff Filing by Consolidated Edison Company of New York, Inc. to Revise Provisions of Standing Service for Retail Access,* Tariff filing (June 2, 2011).

[81] *See, e.g.*, Case 11-E-0299, *supra,* Comments of the City of New York (dated, September 16, 2011).

[82] Case 11-E-0469, *Petition of the City of New York* (dated August, 2011) (In comments filed on September 14, 2011 and October 12, 2011, Con Edison opposed the City's petition).

[83] Case 11-E-0610, *Complaint of OBP Cogen, LLC* (dated November 9, 2011).

should be eliminated – the customer option to set the Contract Demand. (CE EIOP-D 369-71.) Certain standby customers have the option to set their own Contract Demand or allow the Company to set it.[84] If the customer sets the Contract Demand, the customer is subject to significant penalties if its monthly maximum demand exceeds its Contract Demand.[85] For example, if the customer exceeds its Contract Demand by 20%, the Company imposes a penalty that effectively assumes the customer had the higher Contract Demand *for the previous two years*.[86] Con Edison is therefore mistaken when it claims that the Contract Demand does not provide an incentive for the customer to control its operations (CE EIOP-R 144) – the existing penalty is a huge incentive not to try to "game" the Contract Demand.

The City also notes that standby service customers of other New York electric utilities possess the option to select their own contract demand, subject to financial penalties for exceeding the selected level.[87] The City is concerned that eliminating this option, thereby allowing Con Edison to potentially select higher contract demands than that needed or desired by standby service customers, could be detrimental to efforts to promote DG: "[i]ncreasing Contract Demands so that they do not reflect the Customer's anticipated mode of operation, including load management, will not promote the efficient operation of DG units and will impose higher fixed costs on DG projects." (Stephens-D 39.)

---

[84] This option is not available to Special Provision E and Campus Style customers.

[85] There is no penalty for an exceedance if the Company sets the Contract Demand, although the Contract Demand is always ratcheted up to the higher monthly maximum regardless of who sets the Contract Demand.

[86] PSC No. 10 – Electricity, Tariff Leaf No. 164.

[87] *See, e.g.*, Central Hudson, PSC No. 15 – Electricity, Tariff Leaf No. 272.4; NYSEG PSC No. 120 – Electricity, Tariff Leaf Nos. 290-91; RG&E, PSC No. 19 – Electricity, Tariff Leaf Nos. 244-45.

Without presenting any supporting documentation, the Company justifies its proposal by accusing certain DG customers of gaming the system by setting their Contract Demand too low and managing on-site operations to avoid an exceedance. (CE EIOP-D 370.) As Mr. Stephens testified, however:

> I am not aware of a history of abuses by customers underestimating their Contract Demands. . . . [I]n responses to CPA IRs-084-086, Con Edison confirms that in all the months since the inception of standby service, by all of the customers, there have been only eight (8) instances of customers exceeding their Contract Demand, of which only five (5) were significant enough to incur penalties. These limited instances do not establish evidence of abuse or even frequent occurrence. In any event, absent any evidence of a series of abuses, we can assume that standby customers do their best to accurately set their Contract Demand.

(Stephens-D 38.)

Con Edison has not provided adequate justification to support its proposal to eliminate the customer option to set the Contract Demand. The City respectfully requests that the PSC reject this proposal so that an additional barrier to DG is not created.

3. The PSC Should Eliminate The Single Customer Limitation From The Campus Style Tariff

Con Edison's Campus Style Tariff requires all of the campus-style standby customer accounts to be established under a single customer name. The City respectfully requests that the PSC eliminate the single customer limitation. As demonstrated by Mr. Stephens, there are protections that can be put in place to shield the Company from billing disputes among multiple customers. (Stephens-D 44.)

The Company claims that waiving this limitation could expand remote net metering benefits to conventional DG projects that are not necessarily available to renewable

resources. This argument is flawed for two reasons. First, unlike renewable resources utilizing remote net metering, any new DG would still need to be located at or near the DG project site, meaning the DG must be proximate to all customers utilizing the DG output.[88] Second, the PSC has already approved at least one similar interconnection arrangement where more than one customer utilizes the output from a single DG.[89] Given the State's policy in favor of expanded DG development, eliminating the single customer limitation is a natural extension of the Campus Style Tariff.

4. The PSC Should Ensure That Con Edison Is Taking Sufficient Steps To Encourage The Development Of Microgrids

NYSERDA has defined microgrids as:

> [S]mall-scale distribution systems that link and coordinate multiple distributed energy resources (DERs) into a network serving some or all of the energy needs of one or more users located in close proximity. DERs include distributed generation (e.g., solar photovoltaic, small wind installations, small engines, combustion turbines and fuel cells), energy storage technologies, and power system control devices. In a microgrid, such DERs are linked together with multiple local energy users by separate distribution facilities (i.e., wires and pipes) and managed with advanced metering infrastructure, communications, and automated control systems.

(Arnett-D 46.) Microgrids offer several important benefits that have been acknowledged by both the State and the City. In recent addresses, both Mayor Bloomberg and Governor Cuomo have promoted microgrid development, especially for critical care facilities. (*Id.* at 47.)

Con Edison's EIOP claims the Company's networked system effectively consists of "64 'micro' networks throughout the City that are geographically separated and supplied by different area substations." (CE EIOP-R 139.) This claim is erroneous – as the Company's

---

88 PSC No. 10 – Electricity, Tariff Leaf No. 157.1.

89 *See, e.g.*, Case 07-E-0802, *Burrstone Energy Center LLC*, Declaratory Ruling on Exemption from Regulation (issued August 28, 2007).

EIOP acknowledged during the hearing, the intent of microgrids is to be self-sustaining and operate independently of the grid, and that microgrids generally contain a generation source of some kind (usually renewable or DG). (Tr. 1497-98.) The EIOP further acknowledged that the Con Edison networks do not necessarily contain a generation source. (Tr. 1497.) In other words, the EIOP acknowledged that Con Edison's networked system does not consist of a series of microgrids.[90]

Because the State and the City have both called for expanded microgrid development, the PSC should require Con Edison to report on how it is encouraging microgrid development. Under recent legislation, NYSERDA is required to consult with the PSC to develop recommendations regarding the establishment of microgrids, particularly in locations like New York City that suffered severe damage as a result of Hurricane Sandy and other recent severe weather events. (Arnett-D 49.)

NYSERDA's report is due March 29, 2014. The PSC should direct Con Edison to file a plan with the PSC within 60 days of the issuance of this NYSERDA report, detailing how Con Edison will implement the findings of the report. The plan could include the development of one or more pilot programs. In the alternative, Con Edison can explain why it cannot implement those findings. Parties then should have 30 days to comment to the PSC on the Con Edison proposal.

5. Con Edison's New DG Guide For Projects Over 2 MW But Less Than 20 MW

Con Edison is developing a new guide for DG projects greater than 2 MWs and less than 20 MWs ("New DG Guide"). There are standard interconnection processes applicable

[90] To clarify confusion created during the hearing, the existence of a transmission line into a network does not suffice to make it a microgrid.

to DG projects less than 2 MWs and greater than 20 MWs.[91] Con Edison agreed to develop the New DG Guide based on collaborative discussions that took place in 2011-2012. The New DG Guide has time frames that the Company's Electric, Gas, and Steam Departments normally follow when processing applications for "mid-sized" DG projects.

The City repeatedly has asked Con Edison to include the New DG Guide in its tariffs. Without being included in the tariff, it is not clear that Con Edison has any obligation to abide by the time frames in the New DG Guide. Nor is it clear what remedies a customer may have if Con Edison deviates from the specified timeframes. In contrast, the PSC's regulations provide clear enforcement rights in the event Con Edison does not abide by its tariff.[92]

Con Edison has refused the City's request regarding the New DG Guide, arguing that there might be an administrative burden if it needs to constantly update the New DG Guide. As explained by Mr. Arnett, "[t]he City does not anticipate numerous changes to the New DG Guide and, in any event, the process to submit a tariff change is not administratively burdensome, and Con Edison is well-versed in submitting such changes." (Arnett-D 46.) Any claimed administrative burden simply does not outweigh the need for DG customers to have a remedy in the event Con Edison deviates from the provisions of the Guide.

The PSC should ensure that this New DG Guide is meaningful by providing potential DG customers with some degree of certainty regarding interconnection timeframes. For these reasons, the PSC should require Con Edison: (1) to revise its electricity tariff to state that DG projects between 2-20 MW will be processed pursuant to the New DG Guide; and (2) to include the New DG Guide as a tariff addendum.

---

[91] *See* PSC No. 10 – Electricity, Tariff Leaf Nos. 158-59 (less than 2 MWs); New York Independent System Operator, Open Access Transmission Tariff, Attachment X (greater than 20 MWs).

[92] *See* 16 NYCRR §§ 8.1, 12.4.

ii. Line Losses

Con Edison's electric, gas, and steam systems each experience line losses. In each system, some energy is lost during the transmission and distribution of electricity, gas, or steam. Because Con Edison's rates contain true-ups for actual fuel costs, ratepayers ultimately bear the burden of these losses. Recognizing that Con Edison can exert some control over line losses, Con Edison's Gas and Steam Departments contain incentive mechanisms to encourage Con Edison to control or minimize line losses.

Inexplicably, Con Edison has no electric line loss incentive mechanism, even though electric line losses cost ratepayers hundreds of millions of dollars each year and there are steps Con Edison can take to reduce electric line losses. (Tr. 1489-90; Arnett-D 19.) The PSC should therefore impose a line loss incentive mechanism on the Electric Department. (Arnett-D 23.)

1. The PSC Should Establish An Electric Line Loss Incentive Mechanism

According to a 2008 report prepared by Con Edison, electric line losses are 6.64% of the net generation and purchase. Although the value of these losses varies with fuel costs, in 2007 dollars these losses had a value of $446 million. (Tr. 1489-90.) As explained by City witness Arnett, while some of these losses are unavoidable, Con Edison can exert some control over electric line losses and should therefore be provided with reasonable motivation to do so.

In rebuttal testimony, the CE EIOP criticized Mr. Arnett, arguing that he failed "to offer any examples of system design or operational advances for reducing electric line losses, much less any that have been proven to be cost effective in reducing electric line losses." (CE EIOP-R 97.) Yet, the Company conceded that there are changes in system operations or design that Con Edison can implement to reduce electric line losses. (Tr. 1490-91.) Given the

Company's acknowledgement that there are steps it can take to reduce electric line losses, it should, at a minimum, be investigating whether they are cost-effective and technically feasible.

The Company's 2008 Report specifically identified two line loss reduction techniques for non-network systems - phase balancing and capacitor addition - that may be cost-justified on line loss reduction alone.[93] Not surprisingly, the Company failed to address these two promising measures. (CE EIOP-R 99.)

Not all line loss projects will be cost-justified, and any actions should be based on detailed technical and financial analyses. Nevertheless, electric line losses cost Con Edison ratepayers hundreds of millions of dollars each year, and there may be cost-justified measures that Con Edison can take to reduce this unnecessary cost. Because Con Edison refuses to even investigate potential electric line loss reduction measures, and instead asks the PSC for a larger capital budget before it will consider pursuing line loss reduction efforts (CE EIOP-R 101), the PSC should ensure that Con Edison is properly incentivized to reduce electric line losses.

Con Edison also complained that customers can impact the overall line loss level, but this complaint ignores that ratepayers are already required to shoulder additional cost responsibility for line losses they cause through the Reactive Power Tariff.[94] Moreover, reducing line losses is not just about saving money. The Company agrees that, in addition to saving money, reducing line losses results in environmental benefits in the form of lower CO_2 and other greenhouse gas emissions. (Tr. 1490.) Thus, reducing electric line losses is a viable avenue to further important State and City environmental and climate change policies.

---

93 Case 08-E-0751, *Proceeding on Motion of the Commission to Identify the Sources of Electric System Losses and the Means of Reducing Them*, Con Edison Report on Electric System Line Losses (December 24, 2008) at 24.

94 PSC No. 10 – Electricity, General Rule 10.11.

For the reason set forth above, the City requests that the PSC establish an electric line loss incentive mechanism based on a target of 5.9 percent, which is equal to the Company's most recent five year average line loss percentage. (Arnett-D 23-24.) Using the Company's line loss proposal for its Gas Department, the City recommends a dead band equal to two times the standard deviation (0.2 percent). (*Id.*) This would establish a potential earning zone of ± 0.4 percent, with outside limits at 5.1 percent and 6.7 percent. (*Id.*) The maximum incentive or penalty using a 0.4 percent spread and a Rate Year supply cost of 10.3 cents per kWh (see City IR 638) would be approximately $23.7 million. (*Id.*; Ex. 141 at 139.) The City recommends a 65% : 35% (shareholder : ratepayer) split of the gain or loss, in order to set the incentives at a level similar to that in place for the Company's Gas Department. (*Id.* at 24.)

iii. Aggregated Building Data

The City takes no position on these issues at this time.

c. Gas Only Issues

i.-iii.

The City takes no position on these issues at this time.

iv. Oil to Gas Conversion Program

See Point IX(b)(ii).

v. 100 Foot Rule

The City respectfully requests two specific adjustments to the 100 Foot Rule: (1) if the credit from adjusted gas revenues exceeds the surcharge amount, Con Edison should credit the excess to the customer's account and carry the credit over to reduce future surcharges; and (2) the PSC should clarify that, whenever more than one customer is connected to a main extension, the material and installation costs that will be paid by the Company will include the

costs and expenses relating to 100 feet of main multiplied by the total number of customers being connected contemporaneously. (Arnett-D 52-59.)

1. Excess Surcharge Credits Should Carry Over From Year To Year

The Company's Gas Tariff provides an offset to any surcharge equal to 50 percent of adjusted gas revenues that Con Edison realizes from all customers served by the new gas main. The credit cannot exceed the surcharge; thus, under the existing provision, a customer must forfeit any credits that exceed the amount of the surcharge. If a customer's gas usage is high enough in a certain year to fully offset any surcharge, and would technically produce a negative surcharge, that customer should not have to forfeit credits. Rather, those excess credits should carry forward and be used to offset any future surcharges. (Arnett-D 52.)

The Company argued that this proposal is not consistent with the PSC's regulations, specifically 16 NYCRR Part 230. (GIOP-R 118-19.) This argument ignores language in Part 203 stating that these regulations prescribe the "minimum obligations of gas corporations," and that each utility tariff can extend the minimum obligation to the extent any changes are cost-justified.[95]

The City is not asking for Con Edison to provide cash refunds to new gas customers. Rather, the City is simply asking that, if a customer uses enough gas in one year to offset any surcharge and technically produce a negative surcharge, the customer should be allowed the benefit of that excess usage should the customer's usage decline in a subsequent year. The PSC has already expressed concern about utility companies only satisfying the minimum Part 230 obligations. (Arnett-D 54.) This change offers an ideal opportunity for the PSC to signal that it is serious about encouraging new gas expansion.

---

[95] 16 NYCRR § 230.2(f).

2. The PSC Should Conform Con Edison's Approach To The 100 Foot Rule To The Approach Taken By Other New York State Utilities

The City's second recommendation clarifies that the 100-foot customer entitlement is additive and any unutilized entitlement can be transferred anywhere along the same main extension and accrue to other customers whose connections will exceed 100 feet. (Arnett-D 52.) For example, assume three customers require a total main extension of 400 feet. customer 1 needs 70 feet, customer 2 needs 90 feet, and customer 3 needs 240 feet. Under the current tariff, customer 1 pays nothing, customer 2 pays nothing, and customer 3 pays for 140 feet. Under the proposed revision, customer 1 still pays zero, customer 2 pays zero, but customer 3 pays only for 100 feet of main.

Without providing any supporting documentation, Con Edison argued that adopting the City's proposal could "result in existing firm rate payers subsidizing additional expansion." (GIOP-R 120.) Further, Con Edison erroneously suggests on rebuttal that it is the PSC's "long-standing practice" to apply a revenue test to customers located beyond 100 feet from an existing main. (GIOP-R 120.) It is the City's understanding that other utility companies in this State interpret the 100 foot rule differently than Con Edison, and adopt the approach recommended by the City. There is no indication that firm customers of these utilities are inappropriately subsidizing new customers.

Finally, the Company recently submitted a tariff filing to establish the Area Growth Program, which would provide no-cost gas infrastructure connections to customers located within certain Company-identified Area Growth Zones. While the City supports this effort subject to certain modifications, it is still concerned about potential customers that are not fortunate enough to be located within an Area Growth Zone. The City's requested change to the

100 foot rule would apply to all new customers and should help reduce interconnection costs for customers outside such zones.

vi. Other Gas Tariff Changes

The City also submitted testimony requesting two tariff changes with respect to new gas main and service extensions: (1) the Company should be required to provide customers with a more detailed cost breakdown for new infrastructure; and (2) the Company should be required to update customers when other customers hook up to new mains. (*Id.* at 55-56.)

1. The Company Should Be Required To Provide Customers With A More Detailed Cost Breakdown For New Infrastructure

The Company's policy is to provide supporting documentation regarding the surcharge calculation only upon request by the customer. (S*ee* Ex. 141 at 57.) The "supporting documentation" consists of one sheet of paper with eight line items, and these line items do not provide meaningful information on the significant costs imposed on customers seeking new gas service. For example, in the "Cost Breakdown" example provided by Con Edison, one of the line items is titled "Labor" and equals nearly $100,000. (Ex. 141 at 56.) Con Edison should know the labor rates and estimated man-hours for the project, and there is no reason to withhold this information from customers. (Tr. 1072.)

Con Edison claimed that it offers to meet with a customer to explain the cost breakdown, and this should provide the customer with enough information. If the Company already has the ability to explain the breakdown to the customer, there is nothing preventing the Company from putting this information in writing. Requiring the Company to provide a more complete breakdown of its new service estimates will provide additional accountability for the

Company and provide customers with a much clearer understanding of what they are paying for.[96]

2. The Company Should Be Required To Update Customers When Other Customers Hook Up To New Mains

The Gas Tariff does not specify any level of notice when a new customer connects to a main funded by other customers. (Arnett-D 55-56.) The City recommends semi-annual monitoring of new gas facilities being funded by a surcharge. In response, the Company agreed to conduct annual reporting as long as its obligation is limited to "new firm gas customers who had to contribute to the cost for extending a new gas line where one previously did not exist." (GIOP-R 121.)

The City can accept annual reporting but the extra limitations requested by the Company are unreasonable. The Company acknowledged that gas lines already exist in virtually every part of the Company's service territory. (Tr. 1073.) Thus, the Company's proposed limitation would effectively nullify its proposed reporting obligation, and it should therefore be rejected. Instead, the new reporting obligation should apply to all new gas lines where at least one customer is contributing to the cost of extending a new line or rebuilding existing infrastructure.

Second, the Company's reporting obligation should include non-firm customers. Current rules require non-firm customers to fund the cost of new gas main and service lines. Accordingly, Con Edison should report on this new infrastructure so customers, the PSC, and the Company can evaluate whether the rule needs to be revisited. For example, if new firm

[96] As noted above in Section IX(b)(ii)(2)(B), the number of customers seeking and committing to become gas customers is very low – only about 25 percent follow through. The City believes that the lack of cost transparency is one reason prospective customers decline to pursue gas service.

customers are routinely tapping off mains paid for entirely by interruptible customers, the PSC may want to consider new tariff provisions that lessen the cost responsibility burden put on interruptible customers.

d. Steam Only Issues

i. Steam Variance

Con Edison annually incurs tens of millions of dollars of fuel costs to produce steam that is dissipated by thermal losses and other factors and, therefore, never delivered to customers. Con Edison estimates that such variance-related fuel costs will exceed $25 million for the Rate Year. (Ex. 141 at 62.) The PSC previously addressed steam variance by adopting an incentive mechanism to promote Company actions that reduce thermal and other line losses.[97] The steam variance incentive mechanism allows a range of annual steam losses (the "dead band") within which Con Edison receives neither a penalty nor a reward.[98] The Company retains or pays 10 percent of the cost of steam that exceeds the dead band, and customers retain or pay the remaining 90 percent of steam costs that exceed the dead band.[99]

Despite periodic updates to the dead band thresholds, Con Edison has earned a financial reward in six of the eight years in which the steam variance incentive mechanism has been operative. (Ex. 141 at 66; Ex. 682.) This annual windfall for Con Edison has been driven, in part, by the fact that annual steam variance has decreased by approximately 19 percent since 2005. (Ex. 682.) It is apparent, therefore, that the thresholds embedded in the incentive mechanism again have become stale and should be updated.

---

97 Cases 03-S-1672 *et al., Consolidated Edison Company of New York, Inc. - Steam Rates* (issued September 27, 2004) ("2004 Steam Rate Order") at 32, Ordering Clause 1 and Joint Proposal, Section I(C)(2)(v).

98 P.S.C. No. 4 – Steam, Tariff Leaf No. 54.

99 *Id.*

Accordingly, the City proposed that the steam variance incentive mechanism be reset to reflect recent system performance, and made comparable to the gas line loss incentive mechanism. Specifically, the City noted that steam variance averaged about 3,700 MMlbs over the five-year period ending September 31, 2012, with a standard deviation of about 200,000 Mlbs. (Arnett-D 22.) Accordingly, City witness Arnett recommended that the steam variance dead band thresholds be updated by adopting the recent five-year average loss level as the centerpoint of a dead band that extends two-standard deviations (*i.e.*, ± 400,000 Mlbs) above and below the average (*i.e.*, 3,330 MMlbs to 4,100 MMlbs). (Arnett-D at 22-23.)[100] Mr. Arnett also recommended that the thresholds be adjusted annually to the latest five-year average to ensure that stale targets are not allowed to remain in place indefinitely. (*Id.*) Mr. Arnett proposed to cap the potential gain or loss under the steam incentive mechanism at losses equivalent to two standard deviations above and below the dead band (*i.e.*, 2,900 MMlbs to 4,500 MMlbs), for a maximum gain or loss of about $2.6 million. (*Id.* at 23.) Mr. Arnett recommended that 65 percent of any gain or loss realized under the steam incentive mechanism be allocated to shareholders, and 35 percent to customers. (*Id.*)

Con Edison opposed any change to the steam variance incentive mechanism. Con Edison's Steam Fuel Panel ("CESFP") argued that actual historic variance levels do not indicate similar performance in the future. (CESFP-R 8.) The Panel claimed that there is little that the Company can do to reduce steam variance, and that there are no actions the Company can take

[100] The Staff Steam Rate Panel ("SSRP") proposed to update the dead band by applying an 80 percent confidence interval above and below the most-recent five-year average annual steam variance. (SSRP-D 18.) This would result in a narrower dead band than that proposed by the City, meaning that Con Edison would be more likely to realize a gain or loss under the incentive mechanism. The City acknowledges that such dead band would provide a stronger incentive than the current thresholds for Con Edison to reduce steam variance and, therefore, would not object if the dead band is updated as recommended by Staff.

that would be cost-effective when evaluated "solely on the basis of" an impact on steam variance. (*Id.* at 4.) The Panel criticized the City and Staff for not providing an analysis demonstrating how the Company may improve steam variance, as well as the City's proposal to conform the steam and gas loss incentive mechanisms, citing certain differences between the gas and steam systems as purportedly justifying the status quo. (*Id.* at 7-8.)

Con Edison's objection to any update to the steam variance mechanism rings hollow. It is noteworthy that the Company previously opposed updates to the variance dead band for similar reasons but, after the dead band was updated, it was able to reduce steam losses to the point where it was able to earn a financial reward.[101] Indeed, the Company's ability to earn a reward every year demonstrates that the mechanism must be updated so that it will promote improved performance. It is noteworthy in this regard that the updated thresholds proposed by the City would not be punitive, or unduly burdensome on Con Edison. Steam system variance has not exceeded the upper dead band threshold recommended by the City since 2007. (Ex. 682.) It is clear, therefore, that the Company's real interest in opposing variance incentive mechanism updates is to preserve a revenue stream.

The Company's claim that there are no options to reduce steam variance is belied by the record, the CESFP acknowledged that Con Edison has undertaken a variety of actions during the past three rate years to improve steam variance, that such actions have yielded improvements in steam variance, and that all such actions will be continued during the next three rate years. (Ex. 141 at 75-77; Tr. 499-500.) The Panel acknowledged that Company initiatives may yield synergistic benefits, including reduced line losses, and that such synergies are considered when the Company is evaluating options to reduce variance. (Tr. 505.) This broader

[101] Case 07-S-1315, *Consolidated Edison Company of New York, Inc. - Steam Rates*, Rebuttal Testimony of John Catuogno – Steam (dated March 18, 2008) at 11-14.

analysis was omitted from the Panel's testimony, which focused exclusively on whether potential measures would be cost-effective when evaluated solely for the purpose of reducing steam variance. (CESFP-R 4.) Notably, the variance reductions realized from the Company's ongoing projects apparently were "synergistic" benefits arising from programs implemented for purposes other than (or in addition to) improving steam variance. (Ex. 141 at 75-76.)

The Company's assertion that changes to the variance incentive mechanism should be rejected because neither Staff nor the City provided an analysis demonstrating how variance may be reduced is inapposite. The steam variance incentive mechanism is intended to promote improvements in variance levels or, at a minimum, to ensure that annual line losses do not increase. It is the Company's responsibility in the first instance to investigate what actions it may take to reduce steam variance, regardless of whether such measures are undertaken for the sole purpose of improving variance or variance reductions are a synergistic benefit of measures undertaken to achieve some other primary purpose. The City and Staff properly have noted that the variance dead band is stale and needs to be adjusted if it is to function as intended, and not to reward the Company for preserving the status quo. In response, however, the Company provided only unsupported statements, without any study or other factual information to establish that variance gains cannot be realized.

The CESFP also opposed the City's recommendation that the steam variance incentive mechanism be made comparable to the gas loss incentive mechanism. According to the Panel, such changes are inappropriate because steam and natural gas have different physical properties that are reflected in how line losses occur. (CESFP-R 7.) The Panel's narrative on this point, however, neither explains nor justifies why such differences should be reflected in the line loss incentive mechanisms.

Finally, the CESFP forecasted that steam variance will increase over the next three rate years to levels not realized since 2008. (*Compare* Ex. 141 at 62 *with* Ex. 682.) The forecast is inconsistent with actual variance levels realized over the last four years, and the Panel provided no analysis purporting to explain or justify the alleged reversal of prior steam variance results. Absent record evidence establishing one or more specific factors that may cause variance to increase as predicted by the Panel, the forecast should be rejected as a self-serving projection that highlights the Company's real interest in preserving an annual revenue stream.

For all the foregoing reasons, the steam variance incentive mechanism should be updated as recommended by the City or, in the alternative, by Staff.

ii. Steam Business Development

The City takes no position on these issues at this time.

e. Customer Operations Only Issues

i. AMR/AMI - The City Supports The Use Of Smart Metering Technology For The Management Of Outage Data

When an outage occurs, Con Edison predominantly relies on customer notifications, input from its crews and field inspectors, and substation-level data. As was demonstrated during the Long Island City outage, Hurricanes Irene and Sandy, and other smaller events, there is clearly a need for improvements to the manner in which the Company tracks the status of its electric and gas systems, particularly its distribution systems. One source of improvements would be the use of smart metering technology. (CEIP-D 38–40.)

Smart meters provide customers the ability to closely monitor their electric and gas usage, which in turn should facilitate an ability to reduce usage generally and during peak periods in particular. Another functionality of smart meters is that they provide real-time information to Con Edison. While this functionality is important for metering and billing

purposes, it provides a second benefit in that it allows Con Edison to know at any point in time whether electricity or gas is flowing to the meter. The Governor, PSC, Moreland Commission, and 2100 Commission have all identified communications during outage event as an area in need of significant enhancement.

The large scale deployment of smart meters would be very costly, and it is unnecessary for purposes of monitoring the status of the utility systems. Rather, the deployment of such meters in key locations, or in a statistically appropriate number of customer premises in each network or geographical area, as appropriate, should be sufficient. Additionally, while smart meters can provide continuous data to Con Edison, the City's understanding is that this option can be deactivated. Rather, the Company need only maintain the two-way communication links to the meters and the ability to "ping" the meters to determine whether electricity or gas is flowing.

During the hearing, the Company stated that it is developing a pilot program that uses smart metering technology for this very purpose. (Tr. 1431–34; 1918–20.) This pilot program should provide valuable information regarding the viability of this concept and the ability of the Company to improve its situational awareness during outages and recovery operations. Moreover, the use of smart meters should allow for improvements in the Company's coordination with City and other governmental officials at the state, regional, and local levels and in the implementation of local and state emergency response plans.

For all of these reasons, the City views the Company's plans as a positive development for outage response and recovery and urges the PSC to support the Company's plans by providing funding for this pilot program.

ii. Low Income Programs

Due to economic conditions, changes to the underlying qualifying programs, and other reasons (Noel-D 6-7), the number of Con Edison customers who are eligible for low income benefits has increased substantially since the last rate case, which has resulted in the structure of the low income programs becoming a contentious issue. The need for robust low income programs was well stated by Staff. (*See* Staff Consumer Policy Panel ["SCPP"]-D 6-7.) However, although Staff acknowledged the need for these programs, it recommended changes that could eliminate benefits for perhaps hundreds of thousands of current program participants. (SCPP-D 6-19.) The City respectfully urges the PSC to continue its longstanding support for Con Edison's low income programs and reject the proposals for material changes to the programs.

1. Electric Low Income Program

Based on the last match conducted by the City, the number of qualifying customers for the electric low income program has increased to approximately 430,000 persons, an increase of 15% over the base set in the last electric rate case. City witness Noel explained that this number is not expected to change in the near future (Noel-D 7), a position that has not been refuted by any other witness in these proceedings. Staff agreed that the discount level set in the last case, $8.50 per month, should continue. (Tr. 1836.) However, the funding level set in the last case is simply not sufficient to provide this level of discount for all of the program participants.[102] The City therefore respectfully requests that the PSC increase the funding level

[102] Staff acknowledged that it did not consider information regarding the actual number of program participants when it submitted its direct testimony, even though it was aware of this information, and that its position has since changed regarding the appropriate level of funding. (Tr. 1834-1836.)

from $38.25 million to $43.86 million (subject to continuation of the provisions for reconciling the monthly funding to actual program participation levels, which may vary from the average).

2. Gas Low Income Program

Similar to the electric program, the number of qualifying customers for the gas low income program has increased, but Staff chose to disregard this information. (Tr. 1837.) Compounding this error, although Staff was aware that the number of eligible S.C. 3 customers had increased by 20% to 30,000, it proposed to increase the discount for such customers but not the funding level for the program. (Tr. 1837-1838.) The PSC should correct Staff's mistakes and increase the funding level to ensure that all eligible customers are able to receive the full benefits of the program.

For the gas low income program, Staff and Con Edison recommended that Medicaid be eliminated as a qualifying program. In making this recommendation, neither Con Edison nor Staff conducted any reasonable analysis of the impact of its recommendation, and neither has any idea how many customers may suddenly be denied the same low income benefits they have received for over a decade. For example, although the PSC is a strong supporter of, and very active with, the Low Income Forum on Energy ("LIFE"), and although Staff's witness is intimately familiar with the analytics LIFE uses to measure the burdens imposed on low income customers, such as the home energy affordability gap (which measures the difference between affordable and actual energy bills), she conducted no analysis of the gap applicable to Medicaid recipients. (Tr. 1828.)

Further, while Staff claimed that virtually all Medicaid recipients participate in other qualifying programs (Tr. 1829), Staff offered no factual basis for this assertion, and it is amply refuted by Ms. Noel. (Tr. 1974.) In considering this issue, the PSC should give far more

weight to the testimony of City witness Noel. As the Executive Deputy Commissioner of the New York City Human Resources Administration ("HRA") in charge of Emergency Intervention Services (Noel-D 1, 2), Ms. Noel is clearly knowledgeable about the qualification requirements of the program she administers. Ms. Noel stated that Staff's assumption lacked merit because of the different eligibility requirements for Medicaid and other programs. (Tr. 1974, 1977-1978.)[103] Moreover, the primary "goal" driving Staff's recommendation was to harmonize the electric and gas programs. (Tr. 1922; SCPP-D 14.)

The City submits that helping needy customers should take priority over harmonizing the electric and gas programs, and that the PSC's goal should be to ensure that low income customers receive a reasonable amount of assistance. In this case, because there is no record evidence supporting the merits of the proposal to eliminate Medicaid as a qualifying program, and because the evidence demonstrates that some current program recipients will lose their low income benefits (and neither Con Edison nor Staff performed any impact analysis whatsoever), the PSC should reject this proposal in its entirety.

If the PSC decides, notwithstanding the lack of evidentiary support, to take away the low income benefit now received by Medicaid recipients, the PSC should reject Staff's ill-conceived proposal that Con Edison be mandated to send letters to its customers stating that the customers should apply to HRA for other low income benefits. Because Con Edison does not know whether the customers would be eligible for such benefits, it could be creating false expectations, with potentially adverse consequences, if the customers' applications are subsequently denied (an issue Staff did not even consider, Tr. 1840-1841). Accordingly, if the

[103] There is nothing in the record regarding the "charts" Staff's witness claims to have reviewed (Tr. 1829-1830), and it is clear from Ms. Noel's statements that Staff's witness could not have properly interpreted or understood whatever she reviewed.

PSC decides to remove Medicaid as a qualifying program, the PSC should take full responsibility for its action and direct Con Edison to advise its customers of that decision, nothing more.

3. Administrative Cost Recovery And Program Ramifications

In the last round of Con Edison rate cases, the City and Westchester County identified a problem in the manner that the matches of Company to social services databases were being performed. Due to federal and state privacy laws, the City and County determined that they must conduct the matches and make initial contacts to the individuals identified before any information could be provided to Con Edison. (Noel-D 12.) There is a cost associated with this process, and given the lateness in the proceedings that the issue was identified, the City agreed, ***on a temporary basis only***, to cover the administrative costs associated with the match.

In these proceedings, the City is seeking to have its administrative costs recovered from the program funding. Con Edison was silent on this issue, and other parties, such as the UIU, supported the City's request for recovery of the expenses (Collar-R 8-10), forecast at $7,500 per 10,000 HRA clients contacted. (Noel-D 16.)[104]

Based on a vague statement that the Public Service Law ***may not*** allow for such recovery (SCPP-D 19), Staff asserts that the PSC should not allow Con Edison to cover the City's administrative costs. Staff goes further, claiming as a concern that the City (HRA) would not use the funds provided for this purpose. (*Id.*) This claim is preposterous considering the sole purpose of HRA is to assist needy individuals. Nevertheless, in response to the concerns raised, the City is willing to seek recovery on an after-the-fact basis, with its request supported by

[104] Only HRA clients identified who are not already Con Edison program recipients are contacted. Based on recent matches, the City estimates that the annual cost will be approximately $37,500. (Noel-D 16.)

appropriate documentation. This procedure would ensure that there is an audit trail, and that the funds provided are directly related to this purpose.

Moreover, while the City is not aware of any provision of law that would prohibit the cost recovery sought herein, it notes a significant inconsistency in Staff's position. Staff claims here that Con Edison funds cannot be used to recover costs incurred by a third party not under the PSC's jurisdiction. However, in this case, Con Edison is seeking recovery of millions of dollars for gas odorization and heating equipment that would be owned and operated by the Transco interstate pipeline. (Con Edison Gas Pipeline Facilities Panel ["GPFP"]-D 1-21.)

There, Transco would be providing an essential service to Con Edison that is not part of Transco's business or needs (GPFP-D 3-4, 6); here, the Con Edison low income programs are indisputably not HRA programs. They are neither imposed, administered, or funded by HRA, and they have no bearing at all on any HRA programs. (Tr. 1975.) There, the equipment is needed to comply with legal requirements (GPFP-D 10); here HRA must make initial contacts to the matched clients to comply with legal requirements. (Noel-D 12.) There, Con Edison's customers would pay Transco $37.7 million in capital costs plus $200,000 per year in O&M costs (GPFP-D 12); here, HRA is seeking reimbursement of about $37,500 per match. There, Con Edison claims that all customers should pay these costs because the projects affect the gas used by all customers (GPFP-D 14); here, the PSC has long held that low income programs benefit all customers and all customers should pay the costs of such programs.

Staff submitted no testimony in opposition to Con Edison's Transco proposal, and it did not challenge any aspect of the GPFP testimony at the hearing. The circumstances of the two matters are strikingly similar, and Staff's apparent acceptance of the Transco arrangement demonstrates that its assertions regarding payments to third parties lacks merit.

The inconsistency of Staff's position is further demonstrated by other Staff Consumer Policy Panel recommendations. For example, Staff is unwilling to support the expenditure of about $37,500 per year to help about 50,000 of the neediest of Con Edison's customers via funding the match, but it supports Con Edison spending $38,000 to provide information to 600 owners of electric vehicles on how they can reduce their electric bills. (SCPP-D 36; Tr. 1851-1853.) The City is not opposed to the electric vehicle education program, but cites to it to highlight the inconsistency of Staff's positions. Staff also would spend more than two and a half times as much ($100,000) on a study that "explores the attributes of customer service that utility customers most want and expect." (SCPP-D 34.) The City respectfully submits to the PSC that the attributes low income customers most want is to be able to afford their utility bills and maintain electric and gas service and, therefore, a portion of the $100,000 study expense should be used to support the low income programs.

Finally, Staff suggests that if the City's funding request is rejected, Con Edison should limit the size and scope of the low income programs to only those eligible customers it can directly identify. However, Staff has no idea how many customers Con Edison could directly identify, or even a sense of the order of magnitude of the affected customers. (Tr. 1843-1844.) The City has not studied this issue, but based on its general knowledge of the composition and size of the various low income programs, Staff's proposal could result in the removal of a substantial number of current program recipients; perhaps 50% or more.[105]

There can be no legitimate dispute regarding the continued needs of Con Edison's low income customers for the benefits provided by the low income programs. As noted above,

[105] As part of the match, HRA informs Con Edison of individuals who should be removed from the program, as well as those who should be added. Without a match, Con Edison would be required to remove all individuals that it could not directly verify as being eligible.

the PSC has long recognized and supported these programs, and there is no record evidence or other factual information the PSC could point to or rely upon to justify making substantial reductions to the size and scope of the programs. Staff's position on the administrative costs would jeopardize tens of millions of dollars of benefits to hundreds of thousands of current program recipients because of $37,500 in administrative costs. Its position is neither reasonable nor defensible. Moreover, there is no provision of the Public Service Law that would prohibit the reimbursement request sought by the City; if the PSC were to deny the City's request, it must also deny the Transco odorization and heating proposal. To act otherwise would be arbitrary and irrational.

For all of the foregoing reasons, the PSC should continue the electric and gas low income programs, subject to the modifications discussed by Ms. Noel, reject the Company's and Staff's proposed modifications to the gas program, and authorize Con Edison to reimburse the City for its out-of-pocket expenses related to the database matches.

iii. Mandatory Hourly Pricing

The City takes no position on these issues at this time.

iv. Billing Issues

The City has two billing-related concerns: (A) excess distribution charges; and (B) cost estimates for service entrance work.

1. Con Edison Should Be Required To Provide More Information On Excess Distribution Charges

The City requested more information on excess distribution charges, which are imposed when a customer requests multiple service installations. (Arnett-D 62.) The charges cover the maintenance and property taxes on the excess facilities and can be paid as a lump sum or as annual payments as long as service is being provided to that location. However, Con

Edison's tariff has no formula or language specifying how the excess charge or the lump sum alternative is calculated.

In response to the City's concern, the Company's EIOP set forth the Company's formula for calculating the lump sum payment and offered to include the formula in the tariff. (CE EIOP-R 103-104.) While the City appreciates the EIOP's offer and recommends that it be placed in the tariff, it is still incomplete.

The tariff should also specify that, upon request, Con Edison must provide the customer with the basis for each input to the lump sum formula, in particular the "annual payment" input that Con Edison will use as the basis for the lump sum charge. Customers should know how maintenance and property tax costs, which can be substantial, are calculated. For example, the City pays approximately $400,000 per year in such costs. (Arnett-D 62.) Given the amount of money customers are asked to pay, Con Edison should have no objection to producing supporting documentation for these costs. Similarly, the tariff should also require Con Edison to offer the customer the lump sum or the annual payment option.[106]

2. The PSC Should Limit Increases In Con Edison's Cost Estimates For Service Entrance Work For Two Years

Con Edison's cost estimates are generally fixed for six months. City witness Mr. Arnett identified two recent NYC Department of Parks and Recreation ("DPR") projects where the Con Edison cost estimate increased substantially after six months. In rebuttal testimony, the Company's EIOP recognized "that the City's bidding process may take longer than six months." (CE EIOP-R 104.) The Company offered to limit price quote fluctuation for City service

[106] It should be noted that, at this time, the City does not challenge the Company's proposal to fix the cost of capital in the formula at 10 percent.

entrance work to ± 10% after six months and before one year for price quotes up to $100,000. (*Id.*)

The City appreciates Con Edison's offer but requests one modification to harmonize the time period with governmental procurement timeframes. Specifically, the City requests that Con Edison's price quote for City service entrance work be guaranteed for one year, with an option to extend the quote for an additional year subject to a maximum 10% increase. The procurement process at DPR, and other City agencies, typically takes nine months on average. A one-year fixed price will cover the time it takes for that process to occur and a 10% increase is manageable and predictable. If adopted, this process would take away much of the cost uncertainty associated with these projects. Although the $100,000 cap is not ideal, or justified, the City can accept this limitation as most of the affected projects will be under this cap.[107]

v.-ix.

The City takes no position on these issues at this time.

f. – i.

The City takes no position on these issues at this time.

j. Management Audit

The Company's Management Audit Panel asserted that the Company has achieved virtually all of the recommendations and directives arising from the management audit

[107] Subsequent to the conclusion of the hearing, the City and Con Edison began discussions of a mutually acceptable resolution of this issue. The City is optimistic that it will be able to resolve this issue with the Company before a decision in this case and that PSC action will not be necessary. The City will keep the PSC apprised of progress on this matter.

completed in 2009 by the Liberty Consulting Group ("Management Audit").[108] (Con Edison Management Audit Panel ["CE MAP"]-D 7.) Staff witness Leak supported the Company's position. (Leak-D 9.) However, the record demonstrates that at least some of the recommendations have not been satisfactory addressed, and it raises a more general question as to the veracity of the Company's assertions. In fact, the admissions of numerous Con Edison witnesses during the hearings that they were unaware of the Management Audit recommendations and had not implemented them calls into question the effectiveness of the entire Audit and the compliance monitoring performed by Staff. Accordingly, the PSC should conduct a more in-depth review of the Company's Audit and compliance with the Audit and take appropriate action based on the results of that review.

i. Long Range Planning

Two of the Management Audit recommendations were for the Company to: (i) improve its planning process; and (ii) develop a comprehensive 20-year master plan for its electric system. (Ex. 818 at A-2.) These recommendations were developed as a result of findings that criticized the Company's credibility due to its inability to express a long-term vision for its system. (Ex. 818 at II-4), and that there is a need for Con Edison to instill greater confidence in regulators and customers that it is protecting health and safety and providing adequate service. (Ex. 818 at II-5.)

Since the issuance of the Management Audit, Con Edison has released long range plans for each of its utility systems. However, one critical consideration—the impact of climate change—was missing from all of these plans. This omission calls into question whether the plans were developed properly.

[108] Case 08-M-0152, *Comprehensive Management Audit of Consolidated Edison of New York, Inc.*, Order Directing the Submission of an Implementation Plan (issued Aug. 20, 2009).

Before any of the long range plans were developed, Hurricane Katrina demonstrated the potential scale of weather-related events on utility infrastructure in metropolitan areas. During the period the plans were developed (2010-2012), a number of major storms directly impacted the New York City area. Moreover, since 2008, Con Edison has participated in the New York City Climate Change Adaptation Task Force, the purpose of which is to develop strategies to improve the City's infrastructure against climate change. (Tr. 917.) However, none of the long range plans discuss the effects of climate change on the Company's infrastructure or business practices.[109]

The record shows that the Company and its Board of Directors were aware of these effects (*see, e.g.,* Ex. 819). Indeed, on September 14, 2011, the Board received a presentation addressing the risks of a hurricane hitting New York City. (Ex. 820.) More importantly, the presentation discussed how the Company's response to major storms and hurricanes was perceived to be "below expectations." (*Id.*) Furthermore, members of this Panel acknowledged the impact of severe storms on its infrastructure, now. (Tr. 917-918.) In other words, although the Company had been experiencing the effects of climatological events and that future conditions were expected to be worse (*i.e.*, more severe), the Company failed to properly consider the climatological issues in any of the long range plans.

The Company's actions fall short of what should be considered a reasonable response to the Management Audit. Therefore, the PSC should direct the Company to revise its

[109] Although the Company's Management Audit Panel claimed that climate change was considered in the capital plans discussed in the Integrated Long Range Plan (Tr. 919–920), there is nothing stated in that document which supports the Panel's claims. Inasmuch as the Plan discusses the important factors affecting the Company's future infrastructure needs, the City submits that climate change considerations would have been identified and discussed if they truly were a material factor in the Plan.

long range plans to expressly incorporate climate change considerations and their effect on the Company's capital and operational plans.

ii. Audit Report Savings

The Management Audit Panel identified numerous savings that the Company characterizes as directly attributable to the Audit Report. However, several of these items cannot be directly linked to any Audit Report recommendation, so the PSC should exclude them from the analysis it is required to undertake under Public Service Law § 66(19).

First, the retirement of the Hudson Avenue boilers (CE MAP-D 41, 53) has no relationship to the Management Audit. (*See* Ex. 818.) Staff acknowledged this fact, and any representation to the contrary should be ignored. (Tr. 932.) Second, fuel savings related to the conversion of the 59th Street and 74th Street Generating Stations from #6 fuel oil to gas (*see* CE MAP-D 41; Leak-D 14) are unrelated to the Management Audit. In fact, these conversions were contemplated two years before the Management Audit was completed. (*See* Ex. 822, Ex 818 at X-4, X-11.) Although this discrepancy was not identified by Staff, it is beyond dispute that these savings have nothing to do with the Audit.

iii. Resource Analysis

Finally, the Management Audit called for quarterly or semi-annual comprehensive resource analyses for all business units. (Ex. 818 at XII-53–XII-54.) One of the purposes for these analyses was to lower the number of contractors used by the Company, with concomitant savings to customers. (*Id.*) The Company asserted that it has implemented a Virtual Enterprise Modeling model and designated a workforce planning analyst to manage and develop data reports responsive to this recommendation. (Ex. 491 at 260.) However, this model seemingly

neglects to account for tracking the number of contractors used, which was the very purpose of the recommendation.

Not only has the Company not addressed this recommendation, when questioned during the hearing, several Company witnesses professed a profound lack of awareness of the existence of such a recommendation and confirmed that the Company is not performing the analyses. (Tr. 982, 1146-47.) Accordingly, there is no factual basis in the record for Staff's conclusory statement that the Company has satisfactorily addressed the recommendations of the Audit.

k. East River Repowering Project

As required by the 2009 Steam Rate Order, Con Edison submitted a proposal to phase-in the Above-Market Method of allocating East River Repowering Project ("ERRP") fuel costs between steam and electric customers.[110] The PSC approved Con Edison's proposal with modifications, noting that its decision to phase-in the Above-Market Method ultimately would shift to steam customers incremental ERRP fuel costs of at least $21.6 million.[111]

In its 2009 Steam Rate Order, the PSC stated that it would reconsider the phase-in to address "unanticipated situations."[112] In the Implementation Order, the PSC affirmed that parties may litigate in these proceedings the issue of which methodology (*i.e.*, the Incremental

---

[110] Cases 09-S-0794 *et al.*, *supra*, Compliance Filing of Consolidated Edison Company of New York, Inc. Regarding the Allocation of East River Repowering Project Fuel Costs (dated December 31, 2012) ("ERRP Compliance Filing"). Con Edison subsequently provided additional information regarding the estimated amount of above-market ERRP costs. (Cases 09-S-0794 *et al.*, *supra*, Supplemental Compliance Filing of Consolidated Edison Company of New York, Inc. [dated March 15, 2013] [hereinafter, "Supplemental Compliance Filing"]).

[111] Cases 09-S-0794 et al., *supra*, Order Approving Compliance Filing with Modifications and Denying Request for Reconsideration and Motion for Consolidation (issued May 20, 2013) at 8-9, ("Implementation Order").

[112] 2009 Steam Rate Order at 116.

Cost Method or the Above-Market Method) should be applied to the allocation of ERRP fuel costs on a prospective basis.[113] In so ruling, the PSC explained that parties advocating for a return to the Incremental Cost Method should explain why the balancing of factors set forth in the 2009 Steam Rate Order should be modified.[114] The City here responds to the PSC's invitation to describe why the 2009 Steam Rate Order should be modified.[115]

Con Edison included in its ERRP Compliance Filing the factors that justified the PSC's longstanding reliance on the Incremental Cost Method. The City agrees with those arguments, which remain valid today and are consistent with positions previously advocated by the City.[116] In this proceeding, the City Policy Panel explained why Con Edison's steam system is important to the City's energy policies and goals, and how it enables the Company to avoid electric and gas infrastructure investments that would increase the rates paid by electric and gas customers. (CPP-D at 67-70.) These considerations provide further support for the PSC to reinstate use of the Incremental Cost Method of allocating ERRP fuel costs, which the City explains below should be done in order to address recent developments in Con Edison's steam business.

As described further below, the PSC should revisit the balancing of factors underlying the allocation decision in its 2009 Steam Rate Order to address two "unanticipated situations" that have developed since that Order was issued. First, steam load has eroded since the 2009 Steam Rate Order was issued, and is forecast to continue declining. The continued loss

---

[113] *Id.* at 12.

[114] *Id.*

[115] ERRP issues were not included in the ALJ's Common Outline for briefs and, therefore, the City has created a new subsection here.

[116] ERRP Compliance Filing (in which Con Edison summarizes the numerous arguments supporting reinstatement of the Incremental Cost Method); Cases 09-S-0794, *supra*, Reply Brief of the City of New York (dated July 14, 2010) at 2-11.

of steam load underscores the need to avoid discretionary steam cost increases – such as the implementation of a new cost allocation method – that may catalyze the exodus of customers from the steam system.

Second, Hurricane Sandy devastated New York City, causing prolonged utility outages throughout the City. The storm highlighted the pressing need to harden the City's utility infrastructure against future climate events, and Con Edison responded with a proposal to invest approximately $100 million in capital projects that will improve the resiliency of its steam system. These resiliency projects are needed, but they will put upward pressure on steam rates. To avoid a series of annual steam rate increases that may be unsustainable, the PSC should help control steam costs by reinstating use of the Incremental Cost Method of allocating ERRP fuel costs.

i. Current Trends On The Steam System Were Unanticipated When The 2009 Steam Rate Order Was Issued

Since the 2009 Steam Rate Order issued, there have been worrisome trends on the steam system that are consistent with the concern previously noted by the City that increased customer exodus from the steam system may trigger a "death spiral," where ever-growing costs are concentrated on a shrinking customer base, ultimately threatening steam system viability. Recent sales figures confirm that steam load continues to erode. The weather-adjusted steam peak load declined from 10,160 Mlb/hr. during the 2007/2008 Winter Period to 9,240 Mlb/hr. during the 2011/2012 Winter Period. (Ex. 160 at 2.) In contrast, the steam revenue requirement reflects system capacity to serve a maximum load of 11,688 Mlb/hr. (Ex. 168 at 107.) This load

decrease has been reflected in steam sales, which declined by 9 percent over a ten-year period ending 2011. (Ex. 802 at 36.)[117]

The Company does not anticipate that steam load or sales will rebound. Con Edison projects that steam send out will remain relatively flat through 2018 (Ex. 742), and that peak demand may remain flat or degrade materially through 2031. (Ex. 802 at Fig. 2-3.) There has not been a corresponding reduction in Con Edison's revenue requirement during this period and, therefore, the revenue requirement has been spread over a steadily-diminishing customer base. The impact from this concentration of costs is magnified by each steam rate increase.

The minimum system load also has eroded, a decline that is forecast to continue and may place upward pressure on steam rates. During the period 2008 to 2012, minimum steam system load declined from 1,285 Mlb/hr. to 1,061 Mlb/hr., and Con Edison anticipates that the minimum load will continue to decline through 2017. (Ex. 160 at 11-12.) Significantly, Con Edison responds to minimum system load below certain thresholds as follows: (a) if system load decreases below 1,250 Mlb/hr., then the Company may curtail either one unit from the Brooklyn Navy Yard ("BNY"), or an East River unit; (b) if system load decreases below 1,150 Mlb/hr., then the Company may curtail both BNY units or an East River unit; and (c) if system load decreases below 1,050 Mlb/hr., then the Company will curtail an East River unit. (Ex. 160 at 13.) Any such curtailments may increase steam costs because Con Edison would incur: (a) contractual payments owed to BNY if the Company curtails either or both units from that facility; (b) increased fuel costs associated with cycling of the East River units; and (c) increased costs associated with replacing steam produced from the East River units with steam produced

[117] According to Con Edison, "[a]pproximately 71% of this decline came from reduced air conditioning usage during the summer season." (*Id.* at 37.)

by higher-cost, higher emission units dispatched to compensate for the East River units.[118] In its Supplemental Comments, Con Edison asserted that these incremental costs could be material and, if incurred, would be communicated through higher steam bills.[119]

Against this backdrop, the City notes that it is well-established that steam customers are sensitive to the cost of steam delivery service. (Gorman-D 42.) Even if Con Edison strives to control costs and limit future rate increases, there can be no doubt that the cost of steam service will continue to increase. During the course of these proceedings, for instance, Con Edison revised its initial proposal to reduce steam delivery rates by approximately $5.6 million to instead propose a delivery rate increase of approximately $10.8 million (*i.e.*, a net change of approximately $16.4 million). (Mucillo – Steam-R 6.)

The concern that steam price increases must be controlled if the system is to remain viable is not mere idle speculation. According to Con Edison, its customers "are telling [the Company] that higher prices are a catalyst for them to leave the system." (Ex. 802 at 30.) Con Edison has acknowledged that it is a "challenge … [to] continue to provide steam in today's competitive market. Customer self-supply [*i.e.*, on-site generation] ***is a viable and economic alternative*** for many of Con Edison's existing Steam Customers." (*Id.* at 25; emphasis added.) Significantly, the top 450 steam customers (*i.e.*, about 26 percent of total customers) account for 75 percent of Con Edison's steam revenues (Ex. 802 at 44), and may include many of the customers that are most likely to choose steam alternatives.

---

[118] Cases 07-M-0548, *Proceeding on Motion of the Commission Regarding an Energy Efficiency Portfolio Standard*, Supplemental Comments of Consolidated Edison Company of New York, Inc. on the impact of Combined Heat and Power on the Steam System Minimum Load (dated October 17, 2012) at 3 ("Supplemental Comments").

[119] Supplemental Comments at 3.

The cost of steam delivery service is likely to increase over time as (i) the Company makes necessary capital investments to maintain safe, reliable service, (ii) various cost elements are increased by inflation, and (iii) the Company implements programs mandated by law, regulation, or other authority. In addition to steam rate increases responsive to those changes, the increasing concentration of a growing revenue requirement on the remaining steam customers will further degrade the competitiveness of Con Edison's steam delivery service. In light of these trends and considerations, which were unanticipated when the 2009 Steam Rate Order was issued, it is imperative that the PSC avoid mandating discretionary cost increases, such as abandoning use of the Incremental Cost Method in favor of the Above-Market Method.

ii. The Need For Significant Resiliency Investments Was Unanticipated When The 2009 Steam Rate Order Was Issued

As Hurricanes Irene and Sandy and Tropical Storm Lee made clear, the steam system is vulnerable to weather events. Major storms, and the surges and flooding that may be associated with same, can disrupt the production, transmission, and distribution of steam. (GSIP-D 35.) Steam production facilities may become inoperable if critical equipment is submerged. (*Id.*) Con Edison's steam system is vulnerable to water contact and condensate formation, conditions that can lead to a water hammer or other catastrophic failure of steam mains. (*Id.*) The result can be devastating for steam delivery service. Additionally, Hurricane Sandy disabled four of Con Edison's six steam production facilities, thereby resulting in a loss of approximately 87 percent of the system's maximum production capacity. (*Id.*)

Con Edison has proposed a capital program of approximately $100 million to improve the resilience of its steam infrastructure, thereby increasing the likelihood that future weather events will result in shorter and/or less extensive utility outages. (*See, e.g.*, CESIOP-D

83.) This proposed investment is part of a larger capital program intended to improve the resiliency of Con Edison's electric, gas, and steam infrastructure.

The resiliency program proposed by Con Edison is substantial, and incremental to its general capital investment plan. City witness Gorman explained that the revenue requirement impact associated with this program will be material, and will increase steam rates. (Gorman-D 41.) Nevertheless, the investments are necessary to ensure that Con Edison's utility systems can withstand future climate events, and were unanticipated when the PSC issued its 2009 Steam Rate Order.[120]

The PSC noted in that decision the "fundamentally different effects" of cost allocation and the obligation to incur new costs.[121] There, the PSC acknowledged that steam customers may be more likely to exit the steam system in response to rate increases than the PSC had assumed.[122] The PSC explained that, if such exodus does quicken, then it would be "far easier" to modify an allocation of existing costs than it would be to change "new capital costs which must be paid in any event."[123] The PSC is presented with exactly such choice in these proceedings.

The loss of load trends described above will yield higher rates as more steam costs are spread over fewer customers. (*Id.* at 44.) The increased spending that Con Edison must undertake to harden the steam system will only exacerbate the impact on steam rates. (*Id.*) These two unanticipated circumstances compel the PSC to revisit the balancing of factors that

[120] As described above, the City agrees that a significant capital investment is necessary for this purpose, although the City disagrees with certain aspects of Con Edison's proposal.

[121] 2009 Steam Rate Order at 117.

[122] *Id.*

[123] *Id.*

led to its conclusion that Con Edison should phase-in the Above Market Method, and to reinstate reliance on the Incremental Cost Method.

iii. The Choice Of Cost Allocation Methodologies Should Not Be Based On Current Gas Prices

In the Implementation Order, the PSC explained that parties advocating for reinstatement of the Incremental Cost Method should explain why the PSC should refrain from implementing the Above Market Method "when the underlying costs" (*i.e.*, natural gas) are less than anticipated in the 2009 Steam Rate Order.[124]

Mr. Gorman explained that, notwithstanding current natural gas prices, the Above Market Method of allocating ERRP fuel costs "would result in millions of dollars of additional costs being borne annually by steam customers;" over time, "those millions of dollars will become tens of millions." (Gorman-D 45.) Natural gas prices are volatile, and it is impossible to predict with accuracy how long they may persist at current levels. After examining the unanticipated load losses and incremental capital spending described above, Mr. Gorman concluded that steam customers cannot afford the cost increases that would result from implementation of the Above-Market Method despite current gas prices, which may not persist. (*Id.*)

Finally, the PSC noted in its Implementation Order that the bill impact arising from implementation of the Above Market Method would be mitigated by fuel cost savings associated with the gas addition projects at the Company's 59th and 74th Street steam production facilities.[125] Those projects should not be used to justify reliance on the Above Market Method. Steam rates are higher because Con Edison invested approximately $109 million to enable those

[124] Implementation Order at 12.

[125] Implementation Order at 9.

conversions, and the fuel cost savings associated with those projects are projections that may or may not be realized. (Gorman-D 45.) In short, the PSC should not assume that natural gas prices may not increase, or that the estimated fuel cost savings associated with the gas addition projects will materialize fully, in deciding whether to shift $21.6 million or more of incremental fuel costs to steam customers.

XIII. CONCLUSION

For the reasons set forth herein, the City respectfully requests that: (a) the PSC adopt its positions in these proceedings; (b) modify the Company's revenue requirements, tariffs and procedures consistent with the City's recommendations; (c) reject all inconsistent positions advocated by other parties; and (d) take all other actions, or require Con Edison to take actions, necessary to implement the City's recommendations.

Dated: August 30, 2013
Albany, New York

Respectfully submitted,

Kevin M. Lang

Robert M. Loughney, Esq.
Kevin M. Lang, Esq.
Michael Mager, Esq.
Amanda De Vito Trinsey, Esq.
Adam Conway, Esq.
S. Jay Goodman, Esq.
COUCH WHITE, LLP
Counsel for The City of New York
540 Broadway
P.O. Box 22222
Albany, New York 12201-2222
(518) 426-4600