

NYC Energy Infrastructure Long Term Plan Review

prepared by London Economics International LLC for SourceOne Energy Solutions,
The Durst Organization, and the New York Energy Consumers Council

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In order to achieve public policy objectives as set out in the Climate Leadership and Community Protection Act (“CLCPA”) and other State and local mandates, the New York State electric transmission grid and gas infrastructure will need to evolve to allow new resources and technologies to come online. This is especially true in New York City (“NYC”), which presents unique challenges given the city’s large electric load, its current overwhelming reliance on fossil fuel generated power, and the difficulty siting large-scale renewable generation locally.

These factors present particular challenges for the Consolidated Edison Company of New York, Inc. (“ConEd”) as it works to support the transition to renewable energy mandated by the CLCPA. Doing so will require ConEd’s system to accommodate the retirement of older peaking power resource, electrification-driven load growth, distributed energy resources, offshore wind resources, and power injection from high-voltage direct current (“HVDC”) projects bringing renewable supply into NYC.

While these changes are coming quickly, this report finds that ConEd’s planning and level of preparedness is not yet aligned with the State’s public policy objectives. These inconsistencies could ultimately impact electric reliability, add costs to ratepayers, and delay the attainment of the goals of the CLCPA.

Specific challenges that must be addressed include:

Capital investment forecasts must address the electric infrastructure needs identified to meet decarbonization objectives

ConEd has not published detailed planning studies or capital investment forecasts contemplating the combination of supply and demand changes in NYC required to meet State decarbonization objectives. These changes include significant electrification load, near term retirement of older fossil-fueled generation resources, and interconnection of large quantities of new utility-scale and distributed clean energy resources. **If not properly addressed, the combination of these changes could create reliability issues and slow down the attainment of public policy objectives.**

The NYC system needs to accommodate significant quantities of new clean energy resources

ConEd’s long-range planning has demonstrated that the transmission system in NYC offers limited available points of interconnection for new resources, such as contracted Tier 4 HVDC projects or offshore wind resources, and many of the interconnection points that exist today will require substantial upgrades to make the interconnecting generation deliverable to load

customers. Since these resources are imminent, **it is important for ConEd to comprehensively plan for all these changes to avoid delaying resource interconnections and make efficient use of ratepayers' money.** It will also be crucial for ConEd's plans to **appropriately consider non-wire solutions that complement transmission infrastructure investments and avoid unnecessary spending which would result in even higher costs to ratepayers.** Such non-wire solutions should include portfolios of distributed energy, storage resources, demand response, and energy efficiency projects.

Natural gas infrastructure investments need to be consistent with the forecast of declining gas usage

While natural gas currently represents a significant source of energy for many buildings, ConEd is forecasting declining gas usage over time in response to State and local decarbonization objectives. However, ConEd continues to anticipate aggressive capital spending on its gas system over the next ten years. Several proposed measures in the New York State legislature seek to require ConEd to plan for the elimination of gas service, and a recently enacted NYC law effectively implements a ban on natural gas combustion in certain new buildings in the coming years. In light of these clear signals from policymakers, ConEd should re-examine these planned investments and include consideration of non-pipeline alternatives to help **ensure a reliable gas network while meeting the State decarbonization targets and avoid investments which may result in stranded assets in the future.**