

**BEFORE THE NEW YORK STATE
PUBLIC SERVICE COMMISSION**

**Proceeding on Motion of the Commission)
as to the Rates, Charges, Rules and Regulations) Case 16-E-0060
of Consolidated Edison Company of New York,)
Inc. for Electric Service)**

**Proceeding on Motion of the Commission)
as to the Rates, Charges, Rules and Regulations) Case 16-G-0061
of Consolidated Edison Company of New York,)
Inc. for Gas Service)**

**DIRECT TESTIMONY OF PROFESSOR MICHAEL B. GERRARD
ON BEHALF OF PACE ENERGY AND CLIMATE CENTER**

May 27, 2016

1 **I. Identification and Qualifications**

2 **Q. Please state your name and business address.**

3 **A.** My name is Michael Gerrard. My business address is Sabin Center for Climate Change
4 Law at Columbia Law School (Sabin Center), 435 West 116th Street, NY, NY, 10027.

5 **Q. On whose behalf are you testifying?**

6 **A.** I am testifying on behalf of the Pace Energy and Climate Center (Pace).

7 **Q. By whom are you employed and in what capacity?**

8 **A.** I am employed by Columbia University as a Professor of Law and as the Faculty Director
9 of the Earth Institute. I am also Senior Counsel at the law firm Arnold & Porter.

10 **Q. Please summarize your qualifications.**

11 **A.** I teach courses on environmental law, climate change law, and energy regulation, and am
12 the faculty director of the Sabin Center for Climate Change Law. I am also Chair of the
13 Faculty of Columbia University's Earth Institute. From 1979 through 2008 I practiced
14 environmental law in New York, most recently as partner in charge of the New York
15 office of Arnold & Porter LLP. Upon joining the Columbia law faculty in 2009, I became
16 Senior Counsel to the firm. My practice involved trying numerous cases and arguing
17 many appeals in federal and state courts and administrative tribunals, handling the
18 environmental aspects of numerous transactions and development projects, and providing
19 regulatory compliance advice to a wide variety of clients in the private and public sectors.
20 I am also a prolific writer in environmental law and climate change, and have twice
21 received the Association of American Publishers' Best Law Book award for works on
22 environmental law and brownfields. I have written or edited eleven books, including
23 Global Climate Change and U.S. Law, the leading work in its field (second edition
24 published in 2014, co-edited with Jody Freeman) and the twelve-volume Environmental

1 Law Practice Guide. Among my other books are The Law of Clean Energy: Efficiency
2 and Renewables (2011), The Law of Adaptation to Climate Change: U.S. and
3 International Aspects (2012) and Threatened Island Nations: Legal Implications of Rising
4 Seas and a Changing Climate (2013). Since 1986 I have been an environmental law
5 columnist for the New York Law Journal. My resume is provided as Exhibit MG-1.

6 **Q. Have you previously testified before the New York State Public Service Commission**
7 **(“the Commission”)?**

8 **A.** Yes.

9 **II. Introduction and Summary**

10 **Q. What is the purpose of your testimony in this proceeding?**

11 **A.** I am testifying to encourage the Commission to require the Company to perform, and to
12 authorize full recovery of the costs of completing Consolidated Edison of New York,
13 Inc.’s (“the Company” or “ConEd”) Climate Change Vulnerability Study, recommended
14 by the Storm Hardening and Resiliency Collaborative in its December 2014 report and
15 endorsed by the Commission. *See* Case 13-E-0030, Order Approving Electric, Gas and
16 Steam Rate Plans in Accord with Joint Proposal, at 71 (Feb. 21, 2014).

17 **Q. Please summarize your testimony.**

18 **A.** As the Commission has recognized, electric utilities should anticipate as best they can the
19 changes to historic patterns of coastal storms, heat, and wind that are expected to attend
20 global climate change. The Climate Change Vulnerability Study is an important tool with
21 which ConEd can better anticipate such changes. In spite of this, the Commission has
22 deferred its approval of the costs of performing the Study from the prior rate case to this

1 one case, and has instructed ConEd to seek other funding sources. This wrongly
2 undermines progress toward completing the Study.

3 III. Value of the Climate Change Vulnerability Study

4 **Q. Has there yet been a comprehensive study of ConEd’s vulnerabilities to the impacts
5 of climate change?**

6 **A.** No. Although federal, state, and city agencies, and others, have examined some of the
7 impacts of sea level rise and other effects of climate change, no one has yet conducted a
8 comprehensive examination of the ways in which the electricity infrastructure maintained
9 by ConEd is vulnerable to climate change impacts. *See* Storm Hardening and Resiliency
10 Collaborative Phase III Report, at 119–20 (Sept. 2015). This gap helps explain why the
11 Commission has itself acknowledged the Study’s importance and urgency. *See* Case 13-
12 E-0030, Order Adopting Storm Hardening and Resiliency Collaborative Phase Two
13 Report Subject to Modifications, at 22 (Feb. 5, 2015) (“While the Commission
14 recognizes that the science of climate change is developing and the Climate Change
15 Vulnerability Study is a substantial undertaking for the Company, it must be available for
16 the Commission’s use by March 2019 (five years after the issuance of the 2014 Rate
17 Order).”).

18 **Q. What benefits will result from this Study?**

19 **A.** This Study will enable ConEd to better comply with the Commission’s instruction in its
20 2014 Rate Order, “We expect the utilities to consult the most current data to evaluate the
21 climate impacts anticipated in their regions over the next years and decades, and to
22 integrate these considerations into their system planning and construction forecasts and
23 budgets.” Case 13-E-0030, Order Approving Electric, Gas and Steam Rate Plans in

1 Accord with Joint Proposal, at 72 (Feb. 21, 2014). In addition, by highlighting risks and
2 costs that ConEd should consider and work to avoid through its near- and long-term
3 planning, design, and procurement decisions, the Study will yield two chief benefits.
4 First, it will provide information about risks and costs that might otherwise remain hidden
5 until they are revealed in the form of operational inefficiencies, equipment failures, or
6 other adverse results of a mismatch between the circumstances ConEd has planned for
7 and the circumstances it actually faces. And second, it will thereby help ensure system
8 reliability even as the climate changes.

9 **Q. Are the costs of the Study reasonable and likely to be outweighed by its benefits?**

10 **A.** In short, yes. The bids ConEd has received to complete the Study range from \$1.4 million
11 to \$4 million; while this range is not definitive of what ConEd will ultimately pay, it
12 illustrates the likely approximate cost of Study completion. Such a price is reasonable
13 given the scale and complexity of the task. Furthermore, the Study's benefits can be
14 expected to at least justify that cost and at most to substantially outweigh it. Consider that
15 as ConEd has begun implementing its plans for reconfiguring and installing submersible
16 transformers and isolation switches on coastal network segments, it has discovered
17 various reasons to revise those cost estimates—in some instances up, in others down—by
18 tens of millions of dollars. *See* Storm Hardening and Resiliency Collaborative Phase III
19 Report, at 13–20 (describing plans and tabulating cost updates). The Climate Change
20 Vulnerability Study can be expected to reveal factors and considerations that inform
21 design changes with cost implications of at least this scale—that is, cost implications an
22 order of magnitude greater than the cost of the study itself. The Study can therefore be
23 expected to yield benefits that outweigh its costs.

1 Q. Does this conclude your pre-filed direct testimony?

2 A. Yes.