1	BEFORE THE
2	NEW YORK STATE PUBLIC SERVICE COMMISSION
3	
4	APPLICATION OF HUDSON TRANSMISSION PARTNERS, LLC, for a CERTIFICATE OF
5	ENVIRONMENTAL COMPATIBILITY AND PUBLIC NEED for a 345 KILOVOLT CASE 08-T-0034
6	SUBMARINE/UNDERGROUND ELECTRIC TRANSMISSION LINK BETWEEN MANHATTAN
7	AND NEW JERSEY
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10	EVIDENTIARY HEARING
11	Monday, May 3, 2010 1:00 p.m.
12	Public Service Commission Empire State Plaza
13	Agency 3 Building, 3rd Fl. Albany, New York
14	BEFORE: HONORABLE WILLIAM BOUTEILLER, ESQ.
15	Administrative Law Judge
16	APPEARANCES:
17	FOR THE NYS PUBLIC SERVICE COMMISSION
18	STATE OF NEW YORK PUBLIC SERVICE COMMISSION
19	Department of Public Service Office of General Counsel
20	Three Empire State Plaza Albany, New York 12223-1350
21	BY: DAVID G. DREXLER, ESQ.
22	FOR THE APPLICANT:
23	THE DAX LAW FIRM, PC
24	54 State Street, Suite 805 Albany, New York 12207
25	BY: JOHN W. DAX, ESQ. AMY BUTLER

1	FOR THE NYS DEPARTMENT OF ENVIRONMENTAL CONSERVATION
2	
3	NYS DEPARTMENT OF ENVIRONMENTAL CONSERVATION 625 Broadway, 4th Floor Albany, New York 12233-1750
4	BY: LAWRENCE H. WEINTRAUB, ESQ. BETSY HOHENSTEIN
5	FOR INDEPENDENT POWER PRODUCERS OF NEW YORK
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7	25 Eagle Street
8	Albany, New York 12207-1902 BY: DAVID B. JOHNSON, ESQ.
9	FOR THE NEW YORK POWER AUTHORITY
10	NEW YORK POWER AUTHORITY 123 Main Street
11	White Plains, New York 10601 BY: GARY D. LEVENSON, ESQ.
12	DI. GARI D. HEVENSON, ESQ.
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1 ALJ BOUTEILLER: I want to call case 2 number 08-T-0034. This is the Commission's 3 proceeding pursuant to Article 7 of the Public Service Law concerning an application that was 4 5 filed by the Hudson Transmission Partners to construct a 345 kilovolt submarine/underground 6 7 electric transmission facility running from a point 8 in New Jersey to approximately midtown Manhattan. 9 This hearing began in the middle of last We have been on the record for three days, 10 week. 11 and now this is the fourth day on the record, and 12 this will be, probably, the conclusion of the 13 hearings, and we'll close the record and probably 14 establish briefing dates at the end of today's 15 activity.

16 To get this hearing started I'd like to 17 call for the appearances of the parties present, 18 starting with the applicant.

MR. DAX: Thank you, Your Honor. For
Hudson Transmission Partners, LLC, John W. Dax.

ALJ BOUTEILLER: Thank you very much. If there's no one else at that table, then the first table on my right.

24 MR. WEINTRAUB: Your Honor, for the New
25 York State Department of Environmental

Conservation, Lawrence H. Weintraub and Thomas
 McGuire.
 ALJ BOUTEILLER: Thank you very much.

Mr. Johnson, will you start us out for 4 5 that table? We'll go right around that table. MR. JOHNSON: For Independent Power 6 7 Producers of New York, the law firm of Read and 8 Laniado, LLP, David B. Johnson. 9 ALJ BOUTEILLER: Thank you much. 10 MR. LEVENSON: For New York Power 11 Authority, Gary Levenson. 12 ALJ BOUTEILLER: Thank you. I think that 13 brings us to staff. 14 MR. DREXLER: For Department of Public 15 Service, staff, David Drexler. 16 ALJ BOUTEILLER: Thank you. Is there 17 anyone else who needs to make an appearance? If 18 not, I believe we can begin with the 19 cross-examination from where we left off on 20 Thursday. And if my records are correct, I think

21 we're up to the witnesses being offered by the 22 Department of Environmental Conservation. Counsel, 23 can you call your witness?

24 MR. WEINTRAUB: Yes. I call David L.25 Gardner.

1 ALJ BOUTEILLER: Thank you. DAVID L. GARDNER, 2 having been first duly sworn by the notary public, 3 was examined and testified as follows: 4 5 ALJ BOUTEILLER: Thank you. Please be seated and, for the record, please state your name 6 7 and your business address. 8 THE WITNESS: My name is David Gardner. I work for the Environmental Conservation 9 10 Department, the Office of Climate Change, at 625 11 Broadway, Albany, New York. 12 ALJ BOUTEILLER: If you'll press the 13 button which says "push" and then you can speak 14 very softly. 15 THE WITNESS: Good morning. My name is 16 David Gardner. I work for the Environmental 17 Conservation Department, Office of Climate Change, 18 at 625 Broadway in Albany, New York. 19 ALJ BOUTEILLER: Thank you very much. 20 We'll turn now to your counsel who will assist us 21 in getting your testimony into the record. BY MR. WEINTRAUB: 22 23 0 Mr. Gardner, do you have in front of you a 24 four-page plus cover sheet document entitled "Prepared 25 Testimony of David R. Gardner, PE," that was submitted

1 to the New York State Department of Public Service in 2 the case of Hudson Transmission Partners, LLC, PSC case 08-T-0034 dated March 18, 2010? 3 Yes, I do. 4 Α 5 And did you prepare the questions and answers 0 6 contained therein? 7 Yes, I did. А 8 And if you were to give -- if you were to be asked 0 9 those same questions today as you were then, would you give the same answers? 10 11 А Yes. 12 Do you have any additions or -- additions or Q changes that you'd like to make to that testimony now? 13 14 А No. 15 Thank you, Mr. Gardner. 0 16 MR. WEINTRAUB: I offer up Mr. Gardner 17 for cross-examination. 18 ALJ BOUTEILLER: Are there any exhibits 19 associated with this testimony? 20 MR. WEINTRAUB: Yes, Your Honor. 21 ALJ BOUTEILLER: Before you do that, 22 let's move his testimony. 23 Absent any objection I will instruct the 24 reporter to copy into the record as if given orally 25 today prefiled direct testimony of this witness.

1	(The	testimony	is	included,	as	ordered.)
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BEFORE THE STATE OF NEW YORK PUBLIC SERVICE COMMISSION

In the Matter of Hudson Transmission Partners, LLC PSC Case #08-T-0034 Date: March 18, 2010

Prepared Testimony of:

David R. Gardner, P.E. Office of Climate Change Department of Environmental Conservation 625 Broadway Albany, New York 12233 518-402-8448

- 1 Q. Please state your name and place of employment.
- A. My name is David R. Gardner. I am a Senior Environmental Engineer with the
 Office of Air Resources, Climate Change and Energy, New York State
 Department of Environmental Conservation (DEC).
- 5 Q. Please describe your educational background?
- A. I have both a bachelors and masters degree in Environmental Engineering from
 Rensselaer Polytechnic Institute. I am licensed as a Professional Engineer in
 New York State and the State of Vermont.
- 9 Q. What are the duties of your employment?
- 10 I provide technical support for policy, program and regulation development in Α. 11 addition to providing comment on climate and energy related legislation. 12 Additionally, I co-authored the Climate Brief, a supporting document to the State 13 Energy Plan (Plan). The Plan was approved by the Board on December 15, 2009 14 and served to support Governor Paterson's Executive Order No. 24, signed 15 August 16, 2009 (EO-24), and a New York State specific Climate Action Plan 16 (CAP). Working with the New York State Energy Research and Development Authority (NYSERDA), the Brookhaven National Laboratories and the New York 17 18 Academy of Sciences I have been tasked as part of the Plan's Visioning Group 19 with the framing of a year 2050 look at the ways the State could satisfy the 20 climate goals in EO-24. One of the uses of this Visioning White Paper is to serve 21 as a guide for the Plan's sector-based Technical Working Groups during policy 22 selection and development activities so that policies presented to the Climate 23 Action Council will be amenable to obtaining the long-term, mid-century 80 24 percent reduction goal and not hinder that goal.
- I also serve as a government liaison on the Residential, Commercial, Industry
 and the Power Supply and Delivery Technical Working Groups as established by
 the Climate Action Council to provide information on policy development for the
 CAP. I also routinely sit as a Panel Advisory Committee member on climate and
 energy related projects funded through NYSERDA.
- Q. In the course of your duties with the Office of Climate Change, did you become
 familiar with a proposal by Hudson Transmission Partners, LLC to construct and

1		operate a 660 MW electrical transmission line from PJM service territory to
2		Manhattan (HTP project)?
3	Α.	Yes.
4	Q.	Can you briefly describe the project?
5	Α.	The project is a 660 megawatt (MW) transmission line from New Jersey to New
6		York. It connects New York City to various electric power generating units in the
7		Pacific-Jersey-Maryland or PJM service territory.
8	Q.	What is the purpose of your testimony?
9	Α.	The purpose of my testimony is to provide evidence on whether the HTP project
10		is contrary to New York State policies and plans on energy supply and reducing
11		greenhouse gas emissions inasmuch as it would be connecting to electric
12		generating units in the PJM service territory that have a higher profile of polluting
13		air emissions than emissions produced in New York.
14	Q.	Did you make such an evaluation of the HTP project?
15	Α.	Yes.
16	Q.	What is your evaluation?
17	Α.	The HTP project is contrary to the goals of the adopted State Energy Plan that
18		became effective in November 2009.
19		The HTP project is also contrary to EO-24 which calls for an 80 percent reduction
20		of emissions across all economic sectors in New York State by year 2050.
21		Finally, the project would make the goals of the State Energy Plan and EO 24
22		harder to achieve, and represents a step backward in the achievement of the
23		Plan and Executive Order.
24	Q.	What are conclusions based on?
25	Α.	My conclusions are based on the air emissions modeling results entitled: "Year
26		2013 Results of HTP's Emission Effects on New York and PJM Using Simulation
27		Models." They are attached to my testimony as Exhibit A. These modeling
28		results indicate that CO_2 emissions from the project could increase by as much
29		as 485,058 tons per year. This increase can represent as much as 1.1 % of the
30		total CO_2 from the electricity generating sector (interpolated from forecast CO_2
31		emissions data from the NY electric sector, NYSERDA – June 25, 2009

1		Greenhouse Gas (GHG) Emissions Inventory and Forecasts for the 2009 State
2		Energy Plan).
3	Q.	How would the projected increase in CO_2 from the HTP project be contrary to the
4		State Energy Plan and EO-24?
5	A.	The New York State Energy Plan contains a series of policy objectives for New
6		York State. Among these objectives is to increase the use of energy systems that
7		enable the State to significantly reduce greenhouse gas (GHG) emissions while
8		stabilizing energy costs and improving the State's energy independence through
9		development of in-state energy supply resources. At the same time, Executive
10		Order No. 24 calls for the State to reduce its carbon emissions by 80 percent by
11		the year 2050.
12		Inasmuch as the HTP transmission line relies to one extent or another on electric
13		generating units with a higher carbon emissions profile, the construction and
14		operation of the line contradicts the State Energy Plan goal and the 80 by 50
15		goal. By connecting to the PJM grid, the HTP project would increase GHG
16		emissions by as much as 485 thousand tons per year (according to the
17		modeling).
18	Q.	Can you describe what 485 thousand tons of CO_2 emissions means in relative
19		terms?
20	Α.	It means approximately 85,000 cars on the road for one year, 60,500 light duty
21		trucks or an additional coal-fired steam electric generating unit that burns over
22		200,000 tons of coal annually.
23	Q.	Relatively speaking, is this a large amount of CO_2 ?
24	Α.	Four hundred and eighty-five thousand extra tons of CO_2 emissions per year is
25		consequential in light of the overall goals to reduce CO_2 under the State Energy
26		Plan and EO 24. To achieve the goals set forth in the 80 by 50 Plan, New York
27		will have to reduce greenhouse gas emissions, including those from fossil fuels,
28		from all sectors and from all fuels. Each increase in the amount of CO_2 makes the
29		goal relatively harder to reach. To reduce greenhouse gases by 80 percent by
30		2050 will require New York to develop additional sources of renewable energy or
31		nuclear technologies, distribution network upgrades with energy storage and two-

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1 way communication, and a very large reduction in demand through energy 2 conservation. The increase in emissions accountable to the project will require 3 tightening requirements within New York in other, potentially more difficult and expensive to control sectors, such as transportation or agriculture and waste. 4 5 The increases in use of fossil fuels, resulting from the HTP project would need to be offset by more reductions in other sectors. In other words, the HTP project 6 7 takes New York in the wrong direction insofar as it seeks to meet the goals of the 8 State Energy Plan and EO 24.

9 Q. Are there any other aspects of the State Energy Plan or energy policies of the10 State to which the project is contrary?

11 Yes. The State's Energy Efficiency Portfolio Standard identifies energy efficiency Α. improvement as the primary means for meeting the multiple objectives of the 12 13 State Energy Plan. The State Energy Plan states (2009 State Energy Plan Volume I, Governor David A. Paterson, State of New York, Executive Summary, pp xiii) 14 that "[i]nvesting in end-use energy efficiency, across all sources of energy and 15 16 across all energy-using sectors, is the most economical approach to expanding the State's clean energy economy. In the short-run, investments in energy 17 18 efficiency reduce energy use and bills for participating customers. In the long-run, 19 a significant reduction in electricity demand has been shown to put downward 20 pressure on wholesale electricity prices, reduce price volatility, and reduce 21 emissions of carbon dioxide (CO₂) and other air pollutants..." Understanding the 22 Project as described and modeled enables a shift in the operation of generating 23 units, the subsequent increase of emissions due to that generation shift, and the 24 transmission of the generated electricity into the New York City zone, it is not in 25 harmony with the most economic approach to expanding the State's clean 26 energy economy, namely end-use energy efficiency and the reduction of demand 27 in the New York City Metropolitan Area and the State of New York as a whole... 28 Q. Does this conclude your testimony?

29 A. Yes.

Exhibit A t	to Prefiled	Testimony c	of David	Gardner
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		ត្	CRA - EDC Study	v		Navigant			IRP		p	DPS (full EEPS)		DPS	DPS (without EEPS)	ğ
			Base			Base			Base			Base			Base	
	Pollut-	Change	Emissions	%	Change	Emissions	%	Change	Emissions	%	Change	Emissions	%	Change	Emissions	
Pool	ant	(tons)	(tons)	Change	(tons)	(tons)	Change	(tons)	(tons)	Change	(tons)	(tons)	Change	(tons)	(tons)	Change
NYISO	Nox	(490)	71,636	-0.68%	(1,251)	21,149	-5.91%	(288)	24,593	-1.17%	(1,295)	41,380	(3.1%)	(1,505)	49,094	
	Sox	(353)	70,816	-0.50%	(929)	88,390	-1.05%	(320)	72,415	-0.44%	(1,949)	97,226	(2.0%)	(1,158)	100,118	
	C02	(404,178)	52,819,904	-0.77%	-0.77% (4,072,969)	80,375,429	-5.07%	-5.07% (603,094)	31,773,513	-1.90%	(1,245,413)	43,045,276	(2.9%)	(2.9%) (1,262,561)	49,009,275	(2.6%)
PJM	Nox	1,126	353,261	0.32%	504	373,400	0.14%	347	25,501	1.36%	1,516	343,468	0.44%	1,549	348,340	0.44%
	Sox	1,602	1,105,142	0.14%	2,122	2,893,496	0.07%	1,293	93,855	1.38%	8,538	1,278,684	0.67%	7,791	1,300,549	0.60%
	C02	649,866	515,638,632	0.13%	2,459,527	956,245,175	0.26%	435,186	32,169,174	1.35%	1,730,471	234,573,714	0.74%	1,680,201	238,478,953	0.70%
Total	Nox	636	424,897	0.15%	(747)	394,549	-0.19%	59	50,094	0.12%	221	384,848	0.06%	44	397,434	0.01%
	Sox	1,249	1,175,958	0.11%	1,193	2,981,886	0.04%	973	166,270	0.59%	6,589	1,375,910	0.48%	6,633	1,400,667	0.47%
	CO2	245,688	568,458,536	0.04%	(1,613,442)	0.04% (1,613,442) 1,036,620,603	-0.16%	(167,907)	-0.16% (167,907) 63,942,687	-0.26%	485,058	485,058 277,618,990	0.17%	417,640	417,640 287,488,228	

Navigant numbers assume entire PJM Pool

For IRP, case used is HTP_30_B_A_Y_F (HTP Case) and CC_30_B_A_Y_F (2012 Reference Case)

Notes: DPS (full EEPS)

PJM emissions changes resulting from the HTP line exports to NY are added to NY's emissions with HTP in service

2 CRA (Charles River Associates International) results provide to DPS Staff 6. 16. 2008

3 CRA HTP capacity factor approximately 65%

CRA includes a partial implementation of EEPS similar to NYISO'S 2009 RNA, or approximately 30%

5 For this simulation, NY DPS results reflect EEPS energy reductions

6 NYDPS HTP capacity factor approximately 38%

CRA models entire Eastern Interconnection, whereas, NY DPS models NY, NE-ISO, PJM, with ties to HQ and OH.

Notes: DPS (no EEPS)

PJM emissions changes resulting from the HTP line exports to NY are added to NY's emissions with HTP in service

2 CRA (Charles River Associates International) results provide to DPS Staff 6.16.2008
 3 CRA HTP capacity factor approximately 65%

4 CRA includes a partial implementation of EEPS similar to NYISO's 2009 RNA, or approximately 30%
 5 CRA models entire Eastern Interconnection, whereas, NY DPS models NY, NE-ISO, PJM, with ties to HQ and OH,
 6 NY DPS results <u>do not</u> reflect EEPS energy reductions

7 NYDPS HTP capacity factor approximately 57%

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Year 2013 Results of HTP's Emission Effects on New York and PJM Using Simulation Models

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				Effect	Effect on New York Energy Label for the Various Mod	ork Ene	rgy Labe	I for the V	arious N	Nodels (s	lels (see note 1)				
	CRA - EI	CRA - EDC Study (GE-MAPS)	-MAPS)		Navigant			IRP		NY DPS (DPS (GE-MAPS, full EEPS)	ull EEPS)	NYDPS	NYDPS (GE-MAPS, no EEPS) EEPS)
			%			%			%			%			%
		Base	Change		Base	Change		Base	Change		Base	Change		Base	Change
	Change	Emissions	(see note	e Change	Emissions	(see	Change	Emissions	(see note	Change	Emissions	(see note	Change	Emissions	(see note
Pollutant	(tons)	(tons)	2)	(tons)	(tons)	note 2)	(tons)	(tons)	2)	(tons)	(tons)	2)	(tons)	(tons)	2)
Nox	(362)	72,529		(747)	21,149	-3.53%	65	24,593	0.24%	221	41,380	0.53%	44	49,094	0.09%
Sox	2,744	2,744 72,958		1,193	3.91% 1,193 88,390	1.35%	973	72,415	1.34%	6,589	97,226	6.78%	6,633	100,118	6.63%
CO2	415,414	54,159,755		(1,613,442)	80,375,429	-2.01%	(167,907)	-2.01% (167,907) 31,773,513	-0.53%	485,058	43,0	1.13%	417,640	1.13% 417,640 49,009,275	0.85%

Notes: 1 PJM emissions changes resulting from the HTP line exports to NY are added to NY's emissions with HTP in service.

2 % Change = Total Change (tons) / NYISO Base Emissions (tons)

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Na'd 2/2/10 dps

1 MR. WEINTRAUB: Your Honor, the first 2 exhibits are emission test results which were made 3 part of the original testimony. They were referred to as, I believe, Exhibit A in the original 4 5 testimony, and I have a copy for the reporter. ALJ BOUTEILLER: Okay. The reporter --6 7 I'll simplify her life, if you can just provide for 8 me the exhibits. 9 MR. WEINTRAUB: Okay. 10 ALJ BOUTEILLER: This is two copies of 11 the same thing. 12 MR. WEINTRAUB: They're different exhibits. I mean, they were both attached to the 13 14 testimony. 15 ALJ BOUTEILLER: The one you described 16 for the record is this one? 17 MR. WEINTRAUB: Yes, and this was also 18 attached to the testimony. This is a comparison. 19 ALJ BOUTEILLER: Off the record. 20 (Discussion off the record.) (Exhibit No. 70 was marked for 21 identification.) 22 23 ALJ BOUTEILLER: Counsel, you've 24 represented for the record that two documents were 25 accompanying the prefiled testimony, and we've

1 discussed -- you've identified for the record the first and we'll mark that for identification as 2 Exhibit Number 70. 3 (Exhibit No. 70 was marked for 4 5 identification.) ALJ BOUTEILLER: Can you describe the 6 7 second document? MR. WEINTRAUB: Yes, the second document 8 is a comparison. It's called "Year 2013 Results of 9 10 HTP's Emission Effects on New York and PJM Using 11 Simulation Models." 12 ALJ BOUTEILLER: For identification we'll 13 mark that as Exhibit Number 71. (Exhibit No. 71 was marked for 14 15 identification.) 16 ALJ BOUTEILLER: Are there additional 17 exhibits associated with this witness? 18 MR. WEINTRAUB: Yes. Yes, Your Honor. I 19 have additional copies if anybody -- they were 20 distributed if anybody wants them. The second exhibit --21 22 ALJ BOUTEILLER: I think we're to the 23 third exhibit. 24 MR. WEINTRAUB: The third exhibit is a 25 document entitled "Patterns and Trends, New York

State Energy Profiles, 1994 to 2008," dated January 1 2 2010, prepared by the New York State Energy 3 Research & Development Authority, and this document is referred to in response to an interrogatory from 4 5 Mr. Dax, HTP 1. ALJ BOUTEILLER: So that would make this 6 7 for identification Exhibit Number 72. MR. WEINTRAUB: And I have extra copies 8 9 of this document for everybody. MR. DAX: What's the name of this 10 11 document? 12 MR. WEINTRAUB: "Patterns and Trends, New York State Energy Profiles, 1994 to 2008," dated 13 14 January 2010, prepared by the New York State Energy 15 Research and Development Authority. MR. DAX: Your Honor, is this in the 16 17 nature of -- I'm not sure why this is being offered 18 now as an exhibit. Is Mr. Gardner expanding his testimony or enlarging his testimony in some way? 19 20 I may not object, but it's a little unclear why new 21 exhibits are being offered up with this witness by 22 his own attorney. 23 MR. WEINTRAUB: I can explain, Your 24 The next item we're going to -- we are Honor. 25 proposing as an exhibit is Mr. Gardner's response

1 to Mr. Dax's interrogatory request, and this 2 document that I just described is referenced in 3 that response. ALJ BOUTEILLER: Let's go off the record. 4 5 (Discussion off the record.) ALJ BOUTEILLER: For current purposes 6 7 we're only marking things for identification. 8 We'll mark this as Exhibit Number 72. We'll reserve any objection to this document at the time 9 10 of moving it into evidence. (Exhibit No. 72 was marked for 11 12 identification.) 13 ALJ BOUTEILLER: Do you have further 14 documents you want me to mark, Mr. Weintraub? 15 MR. WEINTRAUB: Yes. If anybody wants a 16 copy of it --17 MR. DREXLER: Yes. 18 MR. JOHNSON: Yes. 19 MR. DAX: Yes. 20 MR. LEVENSON: Yes. 21 MR. WEINTRAUB: Your Honor, the next 22 exhibit is a response to an IR request from Mr. Dax, and it was Mr. Dax's HTP 1. And it's 23 24 response -- the document is entitled "Response to 25 HTP 1, Subject: Testimony of David R. Gardner."

1 It's -- the date of request was March 19, 2010, and 2 the reply date is April 5, 2010. And Mr. Dax had 3 posed some questions to Mr. Gardner as a result of his testimony, his original testimony, and 4 5 Mr. Gardner responded, and we are proposing it as an exhibit. 6 7 ALJ BOUTEILLER: For identification, 8 Number 73. (Exhibit No. 73 was marked for 9 identification.) 10 11 MR. WEINTRAUB: If anybody would like --12 MR. DAX: I want to make sure I have the exact form it's submitted in. 13 14 MR. WEINTRAUB: Sure. Anybody else? 15 Your Honor, the next proposed exhibit is Volume I of the 2009 State Energy Plan, and in this 16 17 connection we would ask that you take judicial 18 notice of the entire 2009 State Energy Plan, but Mr. Gardner refers specifically to Volume I, and we 19 20 have provided paper copies and thought it would be 21 best to make it into an exhibit, unless you think 22 it would be sufficient to make -- just take 23 judicial notice of the entire State Energy Plan. 24 MR. DAX: Applicant would join in the 25 motion to take official notice of the entire plan.

I think that's a no brainer, really, and I don't have any objection to marking specific sections, but we certainly think official notice of the entire plan should be taken.

5 ALJ BOUTEILLER: Okay. So we have two proposals on the table. We have no objection from 6 7 the applicant to taking official notice with 8 respect to the entire State Energy Plan, and now 9 the only question is for the convenience of the 10 record, does it make sense to give an exhibit 11 number to Volume I as you've copied it and provided 12 it. If that makes it easier to make reference to things within the record, we can do that. If it's 13 14 just being a doubling of the efforts, then I guess 15 we shouldn't do it and we should avoid it, but I 16 have no knowledge as to one way or the other as to 17 which way you want to go with these exhibits.

18 MR. WEINTRAUB: Yes. Your Honor, the 19 reason why we copied Volume I is that Mr. Gardner 20 makes extensive reference to it.

ALJ BOUTEILLER: For the convenience of the record, we'll give it the next number in sequence. I believe that's Number 74 for identification.

25 (Exhibit No. 74 was marked for

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1 identification.)
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MR. WEINTRAUB: The next exhibit, Your 2 Honor, is entitled "Climate Change Issue Brief, New 3 York State Energy Plan, 2009, December 2009." We 4 5 would like to offer that up as an exhibit. ALJ BOUTEILLER: For identification, 6 7 Exhibit Number 75. 8 (Exhibit No. 75 was marked for identification.) 9 10 MR. WEINTRAUB: And I have brought extra 11 copies of it. 12 And I believe lastly, Your Honor, we have Executive Order, Governor's Executive Order Number 13 14 24. 15 MR. DREXLER: That one is already in the 16 record. 17 MR. WEINTRAUB: That's already in the 18 record? 19 MR. DREXLER: Yes, it's marked for identification as --20 21 MR. DAX: Mr. Gjonaj's rebuttal 22 testimony. 23 ALJ BOUTEILLER: As long as it's clearly 24 on the record, we don't need to reintroduce it into 25 the record.

1 MR. WEINTRAUB: Okay. If anybody would 2 like, I have lots of copies. 3 MR. DAX: Exhibit 53. ALJ BOUTEILLER: Thank you for the 4 5 clarity on the record. We appreciate that. MR. WEINTRAUB: That's all for 6 7 Mr. Gardner, Your Honor. 8 ALJ BOUTEILLER: Off the record. 9 (Discussion off the record.) 10 ALJ BOUTEILLER: We have your exhibits 11 identified, Counsel. Does that mean that your 12 witness is available for cross-examination? MR. WEINTRAUB: Yes, Your Honor. The 13 witness is available for cross-examination. 14 15 ALJ BOUTEILLER: Thank you very much. Ιs 16 the applicant beginning with the cross-examination? 17 MR. DAX: Yes. Thank you, Your Honor. 18 CROSS-EXAMINATION 19 BY MR. DAX: Good afternoon, Mr. Gardner. 20 0 21 Good afternoon, Mr. Dax. А 22 I wish I felt as crisp and cool as you look. Q 23 А It's a beautiful day. 24 Do you understand the HTP proposed facility to be a Ο 25 connection to the PJM grid and not to particular

1 generating units?

2 Α I understand that the grid consists of generation units and transmission facilities, so the list or whole 3 subset of units would be a subset of the PJM grid, yes. 4 5 But I want to make sure we understand each other. 0 You understand that the Hudson facility proposes to 6 7 interconnect to the grid as opposed to a particular --8 one or more particular units? I guess, no, I do not understand that. 9 А 10 Okay. What don't you understand about that? Ο I understand the host of units that fall into the 11 Α 12 purview of the PJM interconnect as being a subset of 13 the PJM system and, therefore, being connected to the whole PJM would connect to that subset of units. 14 15 Do you understand that the proposed facilities' 0 16 electrical interconnection is at a bus within a 17 substation owned by PSE&G? 18 А I'm not aware of the owner, but I would understand 19 that it would have to be connected to a bus, yes. And that the bus is not in a switch yard related to 20 0 21 a particular generator, is that correct? 22 Α To the best of my knowledge. 23 0 Your counsel has introduced as Exhibit 73 your 24 responses to IR HTP 1. Do you have that in front of 25 you?

1 A I believe I do, yes.

2 0 You state on -- in response to 2B, your response 3 is -- includes the following sentence, and this is at the bottom of page 2, "The only way to ensure that only 4 5 power from renewable resources is conveyed over the project would be to isolate the renewable generating 6 7 sources in the PJM area and tie that system solely and 8 directly into the transmission facility proposed." Do you recall that? 9

10 A Yes.

11 Q Does that remain your testimony today, that that's 12 the only way to ensure that only power from renewable 13 resources is conveyed over the project?

A I would have to say with my limited knowledge of the interconnection that one way would be to have an electrically isolated set of facilities that would be connected, hard wired, that lead feeder, I think, terminology, into this kind of substation or bus. I

19 don't know if it's the only way.

Q Okay. So -- but in discussing that particular way that you've described here, and I think you used the word lead or leader -- do you understand what the phrase "generator lead" means?

24 A Yes, I do.

25 Q What -- can you explain your understanding?

1 Again, it would be an isolated, electrically А 2 isolated generating facility that would drive power through some means and then be fed directly to one 3 4 transmission facility to some end point. 5 And between the generator lead, as you've just 0 described it, and the HTP facility, as you understand 6 7 it to be, do you have an opinion on which provides 8 more -- which type of facility provides more or greater reliability benefits to the importing system? 9 10 I am sorry, I don't. Α 11 Would another way of importing -- or using your 0 12 words, would another way of ensuring that only power from renewable resources is conveyed over the 13 14 project -- would another way be for a user of the 15 project to use the line to shop for renewable resources 16 in the exporting territory? I am unfamiliar with the economic market that that 17 А 18 would occur in. So you don't have an opinion? 19 Q 20 А Not today. 21 You testified that the proposed facility is 0 22 contrary to the goals of the State Energy Plan and 23 Executive Order 24. I believe you state in your 24 testimony that it's certifying -- "certificating this 25 facility would be a step backward in the achievement of

1 the State Energy Plan and the Executive Order." Do you
2 recall that testimony?

A Could you refresh me with a page and line, please?
Q Starting at line 16 there's a question on page 2.
Excuse me. Page 2, line 16 and following through to
line 23.

7 A Yes.

8 Q Now, is your -- are your statements there based on 9 the increased CO₂ emissions that you believe would be 10 attributed to HTP's operation?

11 A In part, yes.

12 Q What's the other part?

13 The State Energy Plan specifically identifies Α 14 in-state energy generation as one of the five 15 strategies to be followed and striven for. It does 16 specifically list interconnections regionally, but 17 those being to Quebec and Ontario, and also for an eastern interconnection offshore wind collaboration or 18 19 potential. It does not specifically state PJM or any 20 connection west.

21 At one point it does warn against a

22 one-size-fits-all federal adoption of wind generation

23 in the midwest with a delivery into the east as it may

24 not be appropriate.

25 Q I'm trying to understand, what in that answer

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1 answers the question of what other parts besides the 2 increase in CO₂ emissions do you base your statements about the project being contrary to the State Energy 3 Plan? 4 5 The physical connection itself into the PJM system. Α So you're not aware -- you're unaware of any 6 0 7 reference in the State Energy Plan to a tie between PJM 8 and Con Ed's system? Can you be more specific? 9 А I'm just asking if you have any awareness of that. 10 0 You're either familiar -- let me -- I'll start over 11 12 with a new question. 13 Are you aware of whether the State Energy Plan 14 includes a reference to a line connecting the PJM 15 system and the Con Edison system? 16 I can't certainly say. I do know that in the А 17 assessments there were a number of -- tons of policies, 18 and in those policy scenarios there were numerous runs 19 of an integrated planning model, and that may have been 20 one of the scenarios run. 21 Is it your -- I believe it's your belief that the 0 22 goal of the State Energy Plan is a reduction of 23 greenhouse gas emissions, is that correct? 24 I think in one of the -- as one of the listed five Α 25 strategies there is a reference to an 80 percent

reduction, but I do not think it was specifically
 listed as a goal.

3 Q So what is it -- what is it identified as if not a 4 goal?

5 A There were some references to infrastructure and to 6 facilities planning that should take into consideration 7 achievement of an 80 percent reduction of greenhouse 8 gas emissions by mid century.

9 Q In your testimony that we just discussed you say 10 that the HTP project is contrary to EO 24, which calls 11 for an 80 percent reduction of emissions across all 12 economic sectors by year 2050. And then you say "The 13 project would make the goals of the State Energy Plan 14 in EO 24 harder to achieve." What goals do you have in 15 mind where you make those statements?

16 A The State Energy Plan is looking for energy 17 independence and in-state renewable and other energy 18 generation for the energy security. It's also looking 19 at a macroeconomic benefit for jobs and a clean energy 20 economy developing in New York State.

It's looking to reduce the dollars exported out of state for imported electricity by out-of-state generators as well. So for those reasons, and I'm sure there are a host of others that are listed in the energy plan itself, but I think that's a good start.

Do you have your own opinion on whether interregional ties increase the strength of the electric system or decrease the strength of an electric

system? 4

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- 5 Yes, I have an opinion. Α
- What's your opinion? 6 0

7 А I think it's dependent on the system that it is connected to. I think the longer your transmission 8 9 facility, the greater chance for potential critical 10 failure.

11 And are you an electrical engineer? 0

12 Α No, I am not.

13 So is it your testimony, then, that the reduction Q 14 of greenhouse gases is not, per se, a goal of the State 15 Energy Plan?

16 I participated extensively, sitting on the energy Α 17 committee, working group meetings, and there was a lot 18 of discussion between the Executive Chamber, the 19 members and all the stakeholders in whether or not it 20 would explicitly be a goal or not. What came out as a 21 final product is the State Energy Plan that have been 22 adopted was the development of a Climate Action Plan. 23 And I think Executive Order 24 directly falls from the 24 state energy planning process.

25 And what is -- I'm not sure --0

1 MR. DAX: Can I have my question back 2 again? 3 (Whereupon, the following question was 4 read: 5 QUESTION: "So is it your testimony, then, that the reduction of greenhouse gases is 6 7 not, per se, a goal of the State Energy Plan?") 8 That's correct. Α 9 Okay. Is it a goal of Executive Order 24? Ο 10 Yes, it is. Α 11 And there's a relationship between the State Energy 0 12 Plan and Executive Order 24, and that relationship is 13 embodied in the Climate Action Plan; is that a correct 14 analysis? 15 I'm not sure there is a direct linkage there, no. А 16 The -- would you say, in your opinion, that Q 17 Executive Order 24 represents the State's commitment to 18 reducing greenhouse gases? 19 I'm not sure. I didn't write it. Α 20 Ο I'm sorry. What? 21 I'm not sure. I did not craft that document. I А don't know what the intent was. 22 23 0 You're familiar with the document? 24 Yes, I am. Α 25 Q I mean, you're familiar enough with the document

- 1 that you say that this project is contrary to it,
- 2 correct?
- 3 A Seems to me, yes.

Q Is it contrary to it because of the greenhouse gas emissions relationship that you've talked about in your testimony?

7 A Yes.

8 Q Are you familiar with the State Energy Plan -- are 9 you familiar with other parts of the State Energy Plan 10 than the two volumes that your counsel marked for 11 identification today?

- 12 A What volumes do you mean?
- 13 Q Are you familiar with the energy infrastructure
- 14 volume, for example?

15 A Do you mean the assessments volume, Volume II, or 16 the briefs volume, Volume III?

17 Q I'll show you something and you tell me. This is 18 called "Energy Infrastructure Issue Brief, New York

19 State Energy Plan, 2009." Are you familiar with that?

- 20 A Yes. The energy briefs are a part of Volume III.
- 21 Q So you are familiar with it?
- 22 A Yes.

Q I'm going to direct your attention to Section 2.7.3 entitled "Nuclear Power" under the heading "Potential Closure of Indian Point." It starts on page 21 and

1 over to page 22 and ask you if you're familiar with it? 2 Α I'm familiar with it.

- 3 You are? 0
- 4 Α Yes.

5 Do you understand that one scenario that was 0 analyzed in the State Energy Plan development involved 6 7 the complete shutdown of Indian Point nuclear facility 8 by 2015?

9 Yes, that's correct. Α

10 Are you familiar with what the authors of the plan 0 11 calculated would be the impact on greenhouse -- or CO₂ 12 emissions from that shutdown?

13 Α I cannot recall the actual emissions change, no. 14 Do you recall what direction the change was? 0 15 I believe there was an increase. А

16 And do you recall that -- and I'll show it to you Q again if you need to. The section starts out with the 17 18 statement, "The State has opposed the relicensing of 19 Indian Point units 2 and 3," and, I mean, I'm putting a period after that phrase, but it goes on to explain 20 21

- why.
- 22 This is a paragraph about it, yes. Α
- 23 0 You recall that?
- 24 Yes, I do. Α
- 25 Q Now, can I conclude -- is it fair to conclude --

would a logical conclusion from reading this be that there are competing goals or objectives in the State's energy policy, and some go in different directions with respect to greenhouse gas emissions?

5 A No, I don't think so.

Q Do you believe it's -- do you agree that what
appears to be the statement that "The State has opposed
the relicensing of Indian Point," do you agree that the
State has opposed the relicensing of Indian Point?
A I'm not familiar with that, no.

11 Q Do you have any reason to doubt the accuracy of 12 that statement in the State Energy Plan?

13 Other than it was included as a siting issues Α 14 brief, and those briefs were intended -- again, during 15 the State Energy Plan development, it was unsure 16 whether or not they were being included as an 17 attachment or at all or in whole or in part into the 18 State Energy Plan itself. But what the intent of those 19 siting briefs was was to feed and generate discussion 20 and development of the plan which came about in Volume 21 I as the strategies and priorities. So all of those 22 documents were drafted by many authors and then 23 included in whole, basically, as attachments in Volume 24 II and III, and I am not familiar about the validity of 25 that statement or not.

1 Q You don't have any information that tells you
2 whether that statement is valid or not?

3 A I'm sorry. No.

Q Okay. But one -- would you not assume that a statement in the final approved State Energy Plan would accurately represent what it purports to represent? A Yes, I do believe that there were numerous reviewers of the information, and I would hope that it was correct.

10 Q Let's assume that it correctly states the State's 11 position and that when it says the State has opposed 12 the relicensing of Indian Point units 2 and 3, that 13 that's accurate. Can we assume that?

MR. WEINTRAUB: Your Honor, I'm going to object. He's asking the witness to assume that some document is accurate, and he's already testified that he just doesn't have any basis to assume that. It was prepared by different preparers.

ALJ BOUTEILLER: Yeah, I'm troubled by the assumption. I'd be less troubled by the assertion of whether or not he has the knowledge or the facts associated with the claim that the State is opposed to the recertification of Indian Point. Ask him if he has any direct knowledge, please.

1 BY MR. DAX:

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2 0 Do you have direct knowledge of whether the State opposes Indian Point units 2 and 3 relicensing? 3 No, I don't. 4 Α So without that direct knowledge, you're not 5 0 willing to accept that that part of the State Energy 6 7 Plan is accurate in terms of its representation? 8 А I'm sorry. I'm not. 9 MR. DAX: Your Honor, I quess I'm a little at a loss. This witness is offered by DEC 10 11 to speak to the State Energy Plan and the 12 consistency of my client's project with it, but I'm not even -- I'm not even allowed him to ask him to 13 14 accept as an assumption that something else in the 15 State Energy Plan is accurate. I'm not sure -- I 16 mean, it seems like there's a double standard being 17 applied here. He's free to talk about the State 18 Energy Plan to the extent that suits his client's 19 purpose, but I can't ask him about information that 20 might be interesting to my client. 21 ALJ BOUTEILLER: You've been asking the 22 witness about Volume III, and I think you can 23 establish on this record this witness' familiarity 24 with Volume III, his knowledge of Volume III, and

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his views and opinions about Volume III.

None of

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that have you been excluded from doing.

2 You asked him to assume something, and I 3 said I would rather that you obtain his direct knowledge as opposed to making some assumption 4 5 built into your question. Mine was an affirmative ruling, if that's confusing you. 6 7 BY MR. DAX: 8 Were you involved in the preparation of Volume III? 0 I had co-authored, again, this climate -- climate 9 А change issues brief, and I'm forgetting right now if 10 that was in Volume II or Volume III. 11 12 Were you at all involved in the preparation of the 0 13 section that we've just been talking about, the nuclear 14 relicensing? 15 No, I was not. А 16 ALJ BOUTEILLER: Do you know of anyone at 17 DEC who might have been involved in the development 18 of that section? 19 THE WITNESS: At DEC, no. I believe that 20 DPS had authored, with the aid of NYSERDA and maybe 21 another consultant, that section. 22 ALJ BOUTEILLER: Okay. Thank you. Thank 23 you for helping us probe the authorship of that 24 section. BY MR. DAX: 25
Q Just turn to page 2, line 29 of your testimony.
 A Yes.

This is just a clarification. You say there that 3 Ο 4 the modeling results from the model that you referred 5 to -- and the modeling results are attached to your testimony -- "These modeling results indicate that CO₂ 6 7 emissions from the project could increase by as much as 8 485,058 tons per year. This increase can represent as 9 much as 1.1 percent of the total CO_2 from the 10 electricity-generating sector." Do you recall that 11 testimony?

12 A Yes.

Q I'm just looking at the statistic. That 1.1
percent is a representation -- a relationship between
the increase that the modeling shows and the CO₂ now
being produced by the electric-generating sector in New
York State, isn't that correct?

18 In, I think, the response to interrogatory, I have А 19 provided my answer as part of 1C, and it states, "The 20 estimated increase in CO₂ of 1.1 percent is the net change between the New York ISO and PJM systems as 21 22 compared to the emissions of the New York ISO system." 23 0 Okay. And let's go there. You've responded by 24 pointing out your answer in Exhibit 73. You've 25 compared the net change between -- the net change in

1 both systems to the base emissions in the NYISO system itself alone, isn't that correct? 2 3 А Yes. If we did a comparison based upon the entire 4 0 5 systems, both systems together, that 1.1 percent would be much less than 1.1 percent, would it not? 6 7 I quess if you're good at math, then yes. Α 8 0 It's just one of the functions of statistics, isn't 9 it? 10 Right, parts of a hundred percent. Α 11 What did Mark Twain say? There are lies, damn 0 12 lies, and there's statistics? I'm not sure. I haven't read Mark Twain. 13 Α 14 Just -- you don't happen to have Mr. Gjonaj's 0 15 exhibits in front of you, do you? 16 Could you be more specific to the exhibits? Α 17 0 I'll strike that question. 18 Turn to page 4 of your testimony and look at lines 19 2 through 8. 20 А Yes. 21 You say "One consequence of increasing greenhouse 0 gas emissions would be an increased need to look to 22 23 other sources or other sectors to achieve the State's 24 reduction goals," isn't that correct? 25 А Yes.

Q And that -- I believe you said before that the decision not to relicense or a decision by the regulatory bodies not to relicense Indian Point 2 and 3 could have an increase and could result in increased CO₂ emissions, isn't that correct?

A I think what I said, in some of the modeling that
was done, it showed that if those were the assumptions
going in, then that is possible, that there could be an
increase in CO₂ emissions.

10 Q And that type of -- if that's the case, then that 11 would have the same follow-on consequence of putting 12 added pressure on other sectors to meet the State's 13 goals, isn't that correct?

14 A If the same set of assumptions that went into that 15 modeling run, that scenario, held true into the future, 16 then I would probably assume that.

17 If it's true that the State was advocating for not 0 relicensing Indian Point 2 and 3, then they would --18 19 the State would be promoting an objective that would 20 have that same consequence, isn't that true? 21 No, I don't think so. I think if you're looking А 22 narrowly at only two occurrences, then that would be 23 true. I think what we're finding with the Climate 24 Action Plan currently underway is that there are many

25 intimate interactions between sectors, both generators,

1 consumers and other sub economic sectors, that you 2 can't just isolate two occurrences and compare them. 3 Q That same complicated interrelationship that you 4 just talked about is also true with respect to a 5 transmission line that connects to a system like the 6 PJM system, isn't that true?

7 A Yes.

8 Q Turn to page 3, lines 5 through 9. Your statement 9 there is that a policy objective of the State Energy 10 Plan is to reduce greenhouse gas emissions "while 11 stabilizing energy costs." Do you recall that 12 testimony?

13 A Yes.

14 Q What do you mean by the phrase "stabilizing energy 15 costs"?

16 I was citing language from the State Energy Plan. Α 17 Ο What's your understanding of what it means? 18 My understanding is that through energy efficiency А 19 and in-state generation, through renewable energy generation, there is a stabilization and/or downward 20 21 trend of electric prices, and it gets fairly complex, 22 to my understanding, beyond that. 23 0 So when you say stabilizing, you're connecting it

25 g so when you say stabilizing, you it connecting it 24 or relating it in some way to a downward trend on 25 energy prices?

A It's related to fuels pricing. It's related to a
 whole host of things.

Q When you use the phrase there as a description of the State policy objectives, what is it about energy pricing or energy costs that you think the State's policy is?

7 A I don't know if I'm going to use the appropriate 8 words, but as far as electricity in the state, the 9 State is looking for safe, reliable power that is 10 affordable to its customers.

Q Does affordable mean -- let me start over. Do you understand or do you have an understanding of what prompted the Power Authority to issue the RFP back in 2005 that my client responded to with the proposal to build this facility, the Hudson transmission facility? A No, I'm not familiar.

Q So you don't know whether trying to achieve access to lower-priced sources of power was amongst the Power Authority's objectives?

20 A Amongst NYPA's objectives?

21 Q Right.

22 A No, I have not seen their objectives written.

Q Turn to page 4, lines 11 through 27. There you talk about the relationship of the project to achieving the State's energy efficiency goals. Do you recall

1 that testimony?

2 A Yes.

3 Now, are you testifying that operation of the 0 4 Hudson facility is inherently -- would inherently 5 conflict with increasing the efficiency with which 6 energy is used? 7 I think indirectly it's counterproductive. Α 8 0 And because? 9 Because you are allowing access to a greater А capacity of electricity. 10 11 Well, okay. How does that --0 12 Α You're increasing supply while potentially either 13 holding demand constant or lowering it. I'm not sure I understand that relationship. 14 0 Do 15 you have -- have you taken any undergraduate economics 16 courses? 17 Α I have -- no. 18 Do you understand the relationship between supply 0 19 and demand? 20 А To some degree. 21 And if you -- is it your testimony that by 0 increasing the supply of power that -- and if you hold 22 23 demand constant that prices go down; is that what 24 you're objecting to? 25 Α No. I don't think I have anything that I'm talking

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1 about economically here.

2 Q Then I need to --

3 MR. DAX: Your Honor, could I have his previous answer reread, the answer in which he 4 5 first explained this testimony and the relationship between my client's facility and efficiency reread? 6 7 ALJ BOUTEILLER: Okay. Let's go off the 8 record and let's work with the reporter. If you can say how many questions back, maybe that might 9 10 help her. 11 (Whereupon, the following questions and 12 answers were read: 13 "QUESTION: Now, are you testifying that 14 operation of the Hudson facility is inherently --15 would inherently conflict with increasing the 16 efficiency with which energy is used? 17 "ANSWER: I think indirectly it's 18 counterproductive. 19 "OUESTION: And because? 20 "ANSWER: Because you are allowing access 21 to a greater capacity of electricity. "QUESTION: Well, okay. How does that --22 23 "ANSWER: You're increasing supply while 24 potentially either holding demand constant or 25 lowering it.

1	"QUESTION: I'm not sure I understand
2	that relationship.")
3	BY MR. DAX:
4	Q Okay. Let's try to start with a new question here.
5	Is it your testimony that the existence of the Hudson
6	facility and its access to PJM markets will result in
7	an increased consumption of electricity in New York
8	State?
9	A I think it provides the potential.
10	Q How does that work? Explain what the potential is
11	and how it would work to increase the consumption of
12	electricity in New York State?
13	A I really don't want to go too far beyond my
14	expertise and simply give opinion. I guess the best
15	way I can say, to the best of my knowledge, the
16	increase in the availability of a product or a good has
17	an indirect measure on its consumption rate.
18	Q What's that indirect measure?
19	A If that supply is not available, then alternative
20	measures are sought.
21	Q Well, let me ask go ahead. I'm sorry.
22	A If that capacity is not available, then demand side
23	or any sufficiency may be an alternative option
24	available.
25	Q So

1 A That's --

2 Q I'm sorry. I don't mean to interrupt again.

3 A Okay.

Q Is it your testimony that if efficiency goals and efficiency policies can't be pursued, if there are -if there are more than adequate supplies of power available; is that your testimony?

8 A I think it makes it more difficult is what I'm9 saying.

10 Q What makes it more difficult?

11 A Because there's no pressure for the efficiency.

12 Q So I think embedded in your answer is that prices 13 the pressure for increased efficiency?

A No. You could relate it to peak load on a hot summer afternoon. If you can release that peak load through energy efficiency on that day through solar panels that have a high coincidence factor for that

18 loading, then you have a system reliability

19 improvement.

Q Explain to me how the existence of the Hudson facility would stop or inhibit the deployment of solar panels.

23 A I don't know if I'm familiar with that.

Q But that's the import -- that is the conclusion you just gave us, that if Hudson is built, it will be --

1 there will be less pressure to install solar panels. 2 Isn't that the import of what you just said? 3 А I think I was saying here that there's less pressure to do demand-side energy efficiency. 4 5 Where does that pressure come from? 0 I'm sorry. Could you --6 Α 7 What's the motivation to install solar panels or to Q 8 do other demand-side measures? 9 I guess there are a lot of motivations depending on А 10 the consumer. What are some of them? Well, let me ask you, would 11 0 tax credits be one of them? 12 13 I assume that that could be a part of something. I А 14 personally wouldn't go out and purchase something just 15 to pay money to get a tax credit for a fraction of that 16 in return. 17 Ο So what would the other reasons be? 18 My own behavior. My own goals personally. If the А 19 State has an energy efficiency goal, it's, I think, 20 very hard, but people are relating that to dollars 21 spent and electrical savings. I think there's a lot of 22 difficulty there in tracking the efficiency, actually. 23 0 And can you tell me how the existence of the Hudson 24 facility would reduce the availability of tax credits 25 or reduce people's personal choices to pursue

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demand-side measures?

2 Α I'm really unsure of the funding and cost recovery. 3 I don't think I could speak to that. You're not -- it's not your testimony, is it, or is 4 0 5 it, that it's the State's policy to maintain higher energy prices to promote conservation? 6 7 I don't think I said that anywhere. А 8 I'm asking. I'm just asking the question. Do you 0 9 understand it to be the State's policy to encourage the maintenance of high energy prices in order to promote 10 11 conservation or efficiency? 12 А I haven't seen that written anywhere, no. 13 Q Would you agree that high energy prices tend to 14 discourage usage of energy? 15 No, not necessarily. А 16 MR. DAX: I have nothing further, Your 17 Honor. 18 ALJ BOUTEILLER: Okay. Who else is 19 cross-examining this witness? Staff, any 20 questions? 21 MR. DREXLER: No, Your Honor. 22 ALJ BOUTEILLER: Any other party have any 23 questions for this witness? If not, you can 24 approach the witness to consider the need for any 25 redirect. You can do it at the table or out in the

1 hall. MR. WEINTRAUB: Your Honor --2 3 ALJ BOUTEILLER: Go ahead. (Discussion off the record.) 4 5 ALJ BOUTEILLER: Let's ask Mr. Weintraub if he has any questions on redirect for this 6 7 witness. 8 MR. WEINTRAUB: Your Honor, yes, the DEC 9 has a few questions on redirect. 10 ALJ BOUTEILLER: Please proceed. 11 REDIRECT EXAMINATION 12 BY MR. WEINTRAUB: 13 Q Mr. Gardner, you were asked by Mr. Dax your 14 understanding -- you were asked by Mr. Dax whether you 15 understood that the HTP line was a connection to the 16 PJM system in general and not to a particular 17 generating unit. Do you recall that question? 18 А Yes. 19 And do you recall your responses? 0 20 Yes. I said that it's connected to a host of А 21 generating units which is a subset of that PJM system. 22 Would you wish to elaborate on that response? Q 23 А I could briefly with some information that was 24 cited in my response to the interrogatories. I'm 25 sorry, I don't have the evidence number. But as of

1 March 31, 2009 the RTO known as the Pennsylvania, New 2 Jersey, Maryland interconnection, PJM, consisted of over 550 member participants employing 1246 generating 3 4 sources with a combined capacity of approximately 5 164,895 megawatts. It has over 56,000 miles of transmission line. And these 1246 generating sources 6 7 consist of a diverse primary fuel mix, including but 8 not limited to approximately 53,000 megawatts of coal, 9 6360 megawatts of distillate fuel oil, 8,030 megawatts 10 of residual fuel oil, 49,730 megawatts of natural gas, 32,380 megawatts of nuclear power, 6,480 megawatts of 11 12 hydro and 915 megawatts of wind.

13 So what I meant as a subset of those systems is, 14 again, here we have transmission lines at high voltage 15 with distribution networks that are substation 16 facilities, circuit protection equipment and whatnot in 17 addition to the generating sources. Now, those 18 generating sources also have a system average carbon 19 intensity. And that's represented a couple different 20 ways by PJM. And in 2009 was 1,137 pounds of CO₂ per 21 megawatt hour. That was the system average intensity. 22 The marginal values were more on the order of 1800 23 pounds per megawatt hour generated. Compared to New 24 York, that's almost twice what our average and marginal 25 carbon intensities are for our generation mix in New

1 York State.

Thank you. Mr. Dax at one point asked if you were 2 0 3 an electrical engineer. Could you describe your qualifications to discuss the PJM electrical system? 4 5 Well, I have a bachelor's and master's in Α environmental engineering, which covers a host of 6 7 things, but more significantly I think my work and my 8 career with the Environmental Conservation Department, 9 I served as an air pollution enforcement engineer in 10 numerous prevention of significant deterioration cases 11 specifically relating to the coal-fired industry in New 12 York State.

I also wrote a mercury control rule for those same coal-fired fossil facilities in New York State. And, again, have participated as co-author of briefs in the State Energy Plan and sit on the power supply and delivery technical working group of the Climate Action Plan that's a current ongoing event.

19 Q Thank you. Mr. Dax questioned you at length about 20 the State Energy Plan. He mentioned the working papers 21 in Volume II, and you had also discussed Volume I, 22 which includes the objectives of the plan. Could you 23 describe the relationship of the plan internally 24 between Volumes I and Volumes II and the other volumes 25 of the plan?

1 Volume I is meant to be the summary of А Yes. 2 thoughts, deliberations, studies, issue briefs and 3 assessments where the State Energy Board has proposed 4 five key strategies in achieving the State's energy 5 objectives. Volumes II and III were papers that were written as prerequisite to the determination of those 6 7 strategies. They covered a host of scenarios, 8 infrastructure assessment briefs, things of those sorts 9 that would be then deliberated upon to come up and 10 formulate the five strategies that are presented in 11 Volume I.

12 So again, Volumes II and III were created and 13 crafted as information input into the State energy 14 planning process. And then key items were either taken 15 or disregarded and -- but all of the information was 16 thought over in the crafting of Volume I, which 17 actually presents the key strategies for the State 18 energy goals.

19 Q Thank you.

ALJ BOUTEILLER: Let me interrupt and ask the witness a question. Is there anything within the documents that we might casually refer to as being the State's energy plan which either explains its composition and details the pertinence or significance of the sets of information it

1 provides? Can I turn to any particular page and 2 find that internally within the documents? 3 THE WITNESS: I'm sorry, Your Honor, no. That was during the course of my involvement 4 5 through -- from the start to finish in the deliberations and the discussions that took place 6 7 in the energy committee working group. 8 ALJ BOUTEILLER: Okay. So public documents are not self-defining? One needs to have 9 some familiarity with the process to understand how 10 11 they interrelate? 12 THE WITNESS: Most likely. 13 ALJ BOUTEILLER: Okay, thank you. 14 MR. WEINTRAUB: That's all, Your Honor. 15 ALJ BOUTEILLER: Mr. Dax. 16 RECROSS-EXAMINATION 17 BY MR. DAX: Mr. Gardner, in response to, I think, the last --18 0 in your last answer to Mr. Weintraub, you said that --19 20 I think you used the word "disregarded" to describe 21 information within the State Energy Plan, Volumes II and III, that didn't make it into Volume I. Am I 22 23 recalling your answer correctly? 24 It might have been a strong word. But -- and Α 25 again, as I had said, all of the assessments and the

1 issue briefs were discussed over and contemplated in 2 crafting. There were a lot of policies recommended by 3 the numerous authors and co-authors of all of those 4 briefs and the work groups, and not all of those 5 policies made it to be a key priority or policy in the 6 final Volume I.

7 Q But if they didn't make it into Volume I, is it 8 accurate to say they were disregarded?

Again, that might have been a strong word to use. 9 А You gave a lengthy response to a question about the 10 0 11 PJM system. What was your database that you were 12 citing from in terms of describing the capacity amounts and different types of technologies or fuels? 13 14 This is from the PJM's -- I quess their own А 15 website, and they put out their capacity, much like our 16 Gold Book. And I'm sorry. I don't have the exact name

17 of that document right now.

18 Q That's okay. So that's -- you're referencing a 19 document from --

20 A PJM product for their capacity load data.

21 Q What period of time was that accurate for?

22 A That was as of March 31, 2009.

Q Okay. It doesn't purport to represent what the system will look like, say, five years from now? A No, not at all.

1 Were you here during the testimony that was given Q by Mr. Shalabi on Thursday? 2 3 А Yes. Do you recall his answers to questions about the 4 0 5 fact that -- his statements that the PJM system has 6 within it transmission constraints? Do you recall that 7 testimony? 8 Yes, I do recall some congestion he had mentioned А 9 from west to east. Do you recall what he said -- what fuel was -- let 10 0 11 me start over. Do you recall the answer he gave when he was asked 12 what fuel was on the margin in the part of the system 13 that the HTP facility will connect to? 14 15 No, I don't recall. А You don't recall him saying that natural gas was 16 Q 17 the marginal fuel? 18 Α No. 19 Q Okay. 20 MR. DAX: I have nothing further, Your 21 Honor. ALJ BOUTEILLER: Mr. Weintraub. 22 23 MR. WEINTRAUB: That's all, Your Honor. 24 ALJ BOUTEILLER: Okay. Then if there's 25 nothing else with this witness, I want to thank you

1 for being here. You are excused. THE WITNESS: Thank you. 2 3 ALJ BOUTEILLER: DEC, can you call your 4 next witness, please? 5 MR. WEINTRAUB: Yes. Your Honor, I call Rob Sliwinski as the next witness. 6 7 ROBERT G. SLIWINSKI, 8 having been first duly sworn by the notary public, 9 was examined and testified as follows: 10 ALJ BOUTEILLER: Thank you. Please be 11 seated. Please state both your name and your 12 business address. 13 THE WITNESS: My name is Robert G. 14 Sliwinski. I work for the Department of 15 Environmental Conservation at 625 Broadway, Albany, 16 New York. 17 ALJ BOUTEILLER: Counsel, can you assist 18 us in getting his testimony and his exhibits into 19 the record? 20 MR. WEINTRAUB: Yes, Your Honor. 21 DIRECT EXAMINATION BY MR. WEINTRAUB: 22 23 Q Mr. Sliwinski, you have in front of you a document 24 entitled "Prepared Testimony of Robert G. Sliwinski, 25 PE, Prepared in the Matter of Hudson Transmission

1 Partners, LLC, PSC case 08-T-0034," dated March 18, 2010. It consists of ten pages plus the cover page. 2 3 Did you prepare the several questions and answers that 4 make up that testimony? 5 Α Yes. 6 If I were to ask you the same questions today as --0 7 that you were asked when you prepared this testimony, 8 would your answers be the same? 9 Α Yes. Do you have any changes that you would like to make 10 0 11 to that testimony? 12 А No. 13 MR. WEINTRAUB: Your Honor, then I also 14 have --15 You also have in front of you a second document 0 16 entitled "Prepared Supplementary and Rebuttal Testimony of Robert G. Sliwinski, PE," also submitted in the 17 18 matter of Hudson Transmission Partners, LLC, PSC case 19 08-T-0034, dated April 8, 2010. It consists of four 20 pages plus the cover page. Did you prepare the several 21 questions and answers that make up that testimony? 22 А Yes. 23 0 And if I were to ask you the questions that appear 24 in that testimony today, would your answers be the 25 same?

1 A Yes.

2 Q Do you have any changes you would like to make to 3 that testimony?

4 A No.

5 MR. WEINTRAUB: Your Honor, at this time 6 DEC also has a number of exhibits that go with that 7 testimony.

8 ALJ BOUTEILLER: First let's deal with 9 the testimony, and then we'll come back to your 10 exhibits. First I want to take up the matter of the prepared testimony, the document consisting of 11 12 ten pages in question and answer format. Absent 13 any objection from the parties present I will 14 instruct the reporter to copy into the record as if 15 given orally today those ten pages of prefiled 16 testimony. 17 (The testimony is included, as ordered.)

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BEFORE THE STATE OF NEW YORK PUBLIC SERVICE COMMISSION

In the Matter of Hudson Transmission Partners, LLC PSC Case # 08-T-0034 Date: March 18, 2010

Prepared Testimony of:

Robert G. Sliwinski, P.E. Bureau of Air Quality Planning Division of Air Resources Department of Environmental Conservation 625 Broadway Albany, New York 12233-3251 518-402-8396

1 Q. Please state your name, position and place of employment. 2 Α. My name is Robert Sliwinski. I am the Director of the Bureau of Air Quality 3 Planning for the Division of Air Resources, New York State Department of Environmental Conservation (DEC). My business address is 625 Broadway, 4 5 Albany, New York 12233. 6 Q. How long have you held this position? 7 I have held this position since January 2007 or for a little more than three years. 8 What other positions have you held at DEC? Q. 9 Α. Before becoming Director of the Bureau of Air Quality Planning, I worked as the 10 Director of the Bureau of Stationary Sources from 2003 to 2007. I was Chief of the Stationary Sources Inventory and Planning Section in the Bureau of Air 11 Quality Planning Section from January 1993 to April 2003. My career with DEC 12 13 dates back to April 1983, and I have held other positions in air quality. 14 Please describe your educational background and your other professional Q. 15 experience? 16 Α. I earned a Bachelor of Science in Forest Engineering at the State University of New York College of Environmental Science and Forestry in Syracuse, New York 17 18 in 1979 and a Master of Engineering in Environmental Engineering from Rensselaer Polytechnic Institute in Troy, New York in 1982. 19 20 Q. What are the duties of your job at DEC? 21 Α. As the Director of the Bureau of Air Quality Planning, I am responsible for the air 22 quality planning efforts in New York State. This includes the State's obligations under the federal Clean Air Act to develop state implementation plans to meet 23 24 national ambient air quality standards (NAAQS); the production of air emissions 25 inventories; and the development of air emissions control programs and 26 regulations to meet other federal mandates and State initiatives. 27 Did those duties include writing any of State's air quality regulations? Q. 28 Α. Yes. 29 Q. Can you describe these regulations? 30 I was the principal author of regulations to control emissions from power plants and other large stationary sources of nitrogen oxides (NO_x) and sulfur dioxide 31

1		(SO ₂) including 6 NYCRR 227-2, Reasonably Available Control Technology for
2		Oxides of Nitrogen; 6 NYCRR 227-3, Pre-2003 Nitrogen Oxides Emissions
3		Budget and Allowance Program; 6 NYCRR Part 204, NO _x Budget Trading
4		Program; 6 NYCRR Part 237, Acid Deposition Reduction NO _x Budget Trading
5		Program; and 6NYCRR Part 238, Acid Deposition Reduction SO ₂ Budget
6		Trading Program.
7	Q.	In the course of your duties, did you become familiar with a proposal by Hudson
8		Transmission Partners, LLC (HTP project) to construct and operate a 660 MW
9		electrical transmission line from PJM service territory to Manhattan (HTP
10		project)?
11	Α.	Yes.
12	Q.	Can you briefly describe the HTP project?
13	Α.	The project is a 660-megawatt (MW) transmission line from New Jersey to New
14		York. It connects New York City to various electricity generating units (EGUs) in
15		the PJM service territory.
16	Q.	What is the purpose of this testimony?
17	Α.	The purpose of my testimony is to show that the operation of the HTP project
18		would result in emissions of SO_2 and NO_x within the PJM service territory that
19		may adversely affect air quality in New York State. These additional emissions
20		upwind of New York State would impede the efforts of New York State to attain
21		and maintain the NAAQS for ozone and particulate matter.
22	Q.	Can you summarize your findings?
23	Α.	If the HTP project is constructed, my conclusion is that SO_2 emissions from
24		EGUs affecting New York State could increase by as much as 6,589 tons per
25		year. At the same time, NO_x affecting New York State could increase by as much
26		as 221 tons per year.
27	Q.	What is your conclusion based on?
28	Α.	My conclusions are based on a record of air pollution modeling results furnished
29		by staff of the Department of Public Service (DPS) entitled "Year 2013 Results of
30		HTP's Emission Effects on New York and PJM Using Simulation Models" (DPS

1		model). A copy of the DPS modeling results are attached to my testimony as
2		Exhibit A.
3	Q.	Are you familiar with the type of modeling from which the DPS results were
4		derived?
5	Α.	Yes. It is commonly accepted modeling for predicting generation of electricity on
6		a unit-by-unit basis. One of the many uses for the outputs from the model is
7		associating the air pollution emissions characteristics of the individual EGUs to
8		evaluate the air emissions impacts from a certain set of circumstances.
9	Q.	Did you prepare the DPS results that your conclusions are based on?
10	Α.	No.
11	Q.	Were you able to make any conclusions regarding EGUs in the PJM territory that
12		are likely to be the source of emissions affecting New York State?
13	Α.	Generally, the NO_x and SO_2 emissions in PJM will increase as a result of the
14		addition of the HTP line. The emissions increases will occur in New Jersey,
15		Pennsylvania, Delaware and Maryland.
16	Q.	Can you tell whether New York would be affected by such emissions?
17	Α.	In general terms, yes, but not quantitatively.
18	Q.	How would such increases in SO_2 and NO_x emissions affect New York State?
19	Α.	NO_x emissions transported from upwind areas contribute to ozone and fine
20		particle formation, decreased visibility and acid deposition. Sulfur dioxide (SO_2)
21		emissions transported from upwind areas contribute to fine particle formation,
22		decreased visibility and acid deposition. Increasing emissions in the PJM
23		territory will in New York lead to increased ozone and fine particle ambient levels,
24		decreased visibility and increased acid deposition.
25	Q.	What do you base this judgment on?
26	Α.	I base this on my professional experience and understanding of the phenomenon
27		of air pollution transport. Not surprisingly, air pollution is carried with winds and
28		weather systems to downwind areas where, when added to local air pollution, it
29		can create or contribute to air quality problems. Generally, the closer the source,
30		the greater the individual impact on a downwind area. However, there are very
31		complex mechanisms at work in the formation of air pollution episodes that

1 require further explanation. I will use ozone air pollution for an example in my 2 explanation with respect to long- and mid-range transport scenarios. 3 Long Range Transport - Severe ozone episodes in the Northeast often begin 4 when a high pressure area from the Midwest passes into the middle or southern 5 Atlantic states, where it assimilates into and becomes an extension of an Atlantic 6 (Bermuda) high pressure system. This system, while moving east, picks up and 7 accumulates the air pollution from the areas it passes through. As it moves into 8 the Northeast, sources in the PJM territory and New York add to the air pollution 9 burden. These high pressure systems are ideal for making ozone with vast 10 areas of clear skies and high temperatures and a circulation pattern favorable for 11 pollution transport over long distances (up to and beyond 1000 kilometers). 12 Mid-range Transport – Another transport mechanism known as a low level 13 nocturnal jet can transport air pollution several hundred kilometers. The jet is a 14 phenomenon of higher wind speeds that form just above the stable nocturnal 15 boundary layer a few hundred meters above the ground. It can move air 16 pollution several hundred kilometers overnight from the southwest to the northeast directly in line with the major metropolitan areas from Washington to 17 18 Boston.

19 Other transport mechanisms occur over smaller scales. These include land, sea, 20 mountain and valley breezes and can dominate in some local areas. This 21 phenomenon can sometimes be observed in the Hudson Valley and Highlands. 22 After sunset, the ground cools faster than the air above it creating a nocturnal 23 temperature inversion. This stable boundary layer extends from ground level to 24 only a few hundred meters high. Ozone above the stable layer is cut-off from the ground and not subjected to the removal and destruction forces at low levels. 25 26 Above this layer, higher velocity winds relative to the stable air below can move 27 the air up to several hundred kilometers overnight. Once the pollution is 28 transported into the area, it needs to mix with the ambient air to create ozone air 29 pollution problems. The next morning as the sun heats up the Earth's surface, 30 the nocturnal boundary layer breaks up and the ozone transported overnight mixes down to the surface and combines with local air pollution. By late 31

- afternoon, sunshine and warm temperatures combine to create more ozone
 pollution. Often the ozone transported into an area can be near or above the
 ozone NAAQS leaving an area with no ability to control its fate related to
 attainment of the NAAQS.
- 5 It is important to note that many large EGUs are considered elevated sources 6 because of their tall stacks; they result in emissions being released several 7 hundred feet into the atmosphere. These stacks facilitate the dispersion of 8 emissions locally, but can inject these emissions directly into the level of the 9 atmosphere where transport occurs.

10 The United States Environmental Protection Agency (EPA), in preparing its

- 11 Clean Air Interstate Rule (CAIR), identified Delaware, Maryland, Michigan, New
- 12 Jersey, Ohio, Pennsylvania, Virginia and West Virginia as contributing
- 13 significantly to either ozone or PM2.5 nonattainment in the New York City14 metropolitan area.
- Q. Does New York State have air quality goals that are affected by emissions of SO₂
 and NO_x from EGUs in upwind states?

17 A. Yes.

18 Q. Can you explain New York State's goals?

19 Α. EPA has designated nonattainment areas in New York for ozone and particulate 20 matter. The New York City metropolitan area is nonattainment for both ozone 21 and PM2.5 under the standards set in 1997. The DEC has developed plans to 22 show it will attain the NAAQS in the New York City area. The Buffalo-Niagara Falls, Rochester, Capital District, Jamestown, Watertown and Poughkeepsie-23 24 Newburgh areas are now meeting the 1997 standard for ozone, but the DEC has 25 not developed maintenance plans to show it will continue to attain the standard. 26 EPA has proposed to lower the ozone NAAQS to a level that would put all of 27 these areas back into nonattainment. The DEC will once again be required to 28 develop a plan to reduce emissions so that the areas can attain the NAAQS. 29 In addition, the EPA has proposed to lower the NAAQS for SO₂. This could 30 potentially result in nonattainment in the New York City and Buffalo-Niagara Falls metropolitan areas. New York State also has an obligation to reduce its 31

1		contribution to visibility impairment in downwind Federal Class I Areas (national
2		parks, forests and wildlife refuges). The DEC has developed a state
3		implementation plan documenting how it will meet that obligation.
4		New York State has also been a leader in the control of acid deposition. The
5		Adirondacks are one of the areas in the nation most vulnerable to effects of acid
6		deposition. State legislation, regulation, and advocacy has led to national
7		programs to control acid deposition, but additional NO_x and SO_2 emissions
8		reductions are still needed for the Adirondacks to recover from the effect of
9		decades of acid deposition.
10	Q.	To what extent has New York State achieved its goals of reducing emissions of
11		SO ₂ and NO _x ?
12	Α.	Since 1980, EGUs in New York State have decreased their annual emissions of
13		SO_2 from 474,276 tons to 65,427 tons in 2008 or an 86 % decrease in emissions.
14		Since 1995, annual NO _x emissions from EGUs in New York State have
15		decreased from 120,138 tons to 31,060 tons in 2008 or a 74% reduction in
16		emissions.
17	Q.	How has New York State tried to achieve these goals?
18	Α.	Through a combination of regulation, enforcement and encouragement for the
19		development of in-state renewable energy sources.
20	Q.	Can you tell us about New York State's regulatory efforts?
21	Α.	Yes. The DEC promulgated and implemented 6 NYCRR Subpart 225-1, to limit
22		the sulfur content in fuel. When combusted, sulfur in solid, liquid or gaseous
23		fuels is oxidized and released as sulfur dioxide. This regulation resulted in
24		decreases in emissions of sulfur dioxide from all combustion sources.
25		In 1990, the federal Clean Air Act was amended to include acid rain provisions
26		that required EGUs of a certain type and size to reduce SO_2 emissions through
27		the implementation of a national emissions cap-and-trade program and to meet
28		NO_x emission limits. Enabling regulations for these provisions were developed
29		by the EPA.
30		The 1990 Clean Air Act amendments also required New York State to mandate
31		the imposition of reasonably available control technology on major stationary

1	sources of NO _x in order to achieve attainment of the ozone NAAQS. In
2	response, in 1994 DEC adopted 6 NYCRR Subpart 227-2, Reasonably Available
3	Control Technology (RACT) for Oxides of Nitrogen (NO _x), which required EGUs
4	(among other sources) to meet certain NO_x emissions limitations or provide an
5	alternative emission reduction plan approvable by the DEC.
6	The DEC also adopted 6 NYCRR Subpart 227-3, Pre-2003 Nitrogen Oxides
7	Emissions Budget and Allowance Program, to implement a regional summertime
8	(May through September) NO_x emissions cap-and-trade program aimed at
9	reducing the interstate transport of NO_x and ozone within the northeastern United
10	States. This program was the New York State component of a regional program
11	involving the participation of all the states that make up the Northeast Ozone
12	Transport Region and required further reductions in NO_x emissions from large
13	stationary sources, including EGUs.
14	With the 1998 promulgation of the Finding of Significant Contribution and
15	Rulemaking for Certain States in the Ozone Transport Assessment Group
16	Region for Purposes of Reducing Regional Transport of Ozone [63 FR 57356]
17	(the NO _x SIP Call), the EPA essentially expanded the Northeast program to other
18	eastern states (22 states in all including New York State) in an effort to more
19	effectively limit the interstate transport of ozone and NO_x . During 2000, the DEC
20	adopted 6 NYCRR Part 204, NOx Budget Trading Program, to implement the
21	requirements of the NO_x SIP Call.
22	New York State recognized that the summertime NO_x emissions cap-and-trade
23	program and the federal SO_2 emissions cap-and-trade program were inadequate
24	in dealing with the scourge of acid rain. As a result, the DEC developed and
25	promulgated regulations to further reduce NO_x and SO_2 emissions from large
26	EGUs. These regulations adopted in 2004 6 NYCRR Parts 237, Acid Deposition
27	Reduction NOx Budget Trading Program, and 6 NYCRR Part 238, Acid
28	Deposition Reduction SO ₂ Budget Trading Program, implemented non-
29	summertime (October through April) NO, and year-round SO, emissions can-

- 29 summertime (October through April) NO_x and year-round SO_2 emissions cap-
- 30 and-trade programs.

1		In 2005, the EPA issued the Rule to Reduce Interstate Transport of Fine
2		Particulate Matter and Ozone (Clean Air Interstate Rule); Revisions to the Acid
3		Rain Program; Revisions to the NOx SIP Call; Final Rule [70 FR 25162] to
4		address the interstate transport of ozone and particulate matter precursor
5		emissions – NOx and SO ₂ . The Clean Air Interstate Rule was implemented
6		through NOx and SO2 emissions cap-and-trade programs. In 2007, the DEC
7		promulgated 6 NYCRR Parts 243, CAIR NO _x Ozone Season Trading Program, 6
8		NYCRR Part 244, CAIR NO _x Annual Trading Program, and 6 NYCRR Part 245,
9		CAIR SO ₂ Trading Program, to meet this federal mandate.
10		In 2006, the DEC promulgated mercury emissions controls for coal-fired power
11		plants in New York State. As a result, starting in 2010 existing coal-fired power
12		plants in New York will be collectively limited to emitting no more than 746
13		pounds of mercury each year. In 2015, each facility will be required to meet an
14		overall mercury emission rate of 0.6 pounds per trillion Btu, which represents an
15		approximate 90% reduction from uncontrolled levels. The DEC has also been a
16		party to several legal actions against electricity generating companies in New
17		York State and upwind states over their failure to install and operate appropriate
18		emissions controls in violation of the new source review provisions of the federal
19		Clean Air Act. These actions have resulted in settlements and a court decision
20		that will likely reduce emissions from EGUs. Specifically, as a result of these
21		legal actions, in Western New York the Huntley Station and Dunkirk Station
22		power plants owned by NRG Energy were required to reduce emissions by 81 $\%$
23		for NO _x and 87 % for SO ₂ from 2002 levels by the end of 2013.
24		In other actions, the State has also been attempting to reduce emissions of SO_2
25		and NO_x through the State Energy Plan, the Renewable Energy Portfolio and the
26		Energy Efficiency Portfolio. I believe that my colleague, David Gardner, will be
27		presenting testimony on these initiatives in the context of reducing emissions of
28		CO ₂ .
29	Q.	Have the other States that contribute to our air quality problems implemented

Q. Have the other States that contribute to our air quality problems implementedsimilar air pollution control regulations?

1	A.	No, not all of them. While New Jersey's fleet of EGUs has a comparable
2		emissions profile, in 2008 Pennsylvania's EGUs emitted nearly three times the
3		NO_x and six times the SO_2 per unit of electricity generated. In 2008, Maryland's
4		EGUs emitted two and half times the NO_x and more than seven times the SO_2 .
5		In Delaware, it was nearly three times the NO_x and five times the SO2. For
6		Virginia, it was more than twice the NO_x and three times the SO_2 and EGUs in
7		Ohio emitted more than three times the NO_x and five times the SO_2 . Maryland
8		and Delaware have implemented programs that will reduce their emissions in the
9		future and while the federal CAIR program will have some effect on the
10		emissions profiles in the other states, these programs are not expected to make
11		up the entire difference between the EGU-control programs here in New York. In
12		fact, the Department is currently engaged in a regulatory update to the NO_{x}
13		RACT regulations that will require further emission reductions from EGUs,
14		especially in the New York City metropolitan area.
15		Another concern for New York State is the amount of mercury emitted from coal-
16		fired EGUs in upwind States. While New York, Delaware and New Jersey have
17		implemented strict mercury emissions controls on its coal-fired EGUs,
18		Pennsylvania's rule was overturned in State court and it and other upwind States
19		are waiting for the federal control program, which is not expected to be
20		implemented until at least 2016. It should be noted that coal represents about
21		50% of the generation in the PJM territory as opposed to 13% of the generation
22		in New York State in 2008.
23	Q.	If SO ₂ emissions are now down from 474,276 to 65, 428 tons, what percentage
24		of an increase would operation of the HTP Project indicate?
25	Α.	According to the DPS model, the HTP Project would add 6,589 tons of SO_2
26		emissions per year, which represents about 10% of the current New York State
27		EGU emissions
28	Q.	What is this level of emissions equivalent to?
29	Α.	It would be a greater amount of emissions than a new 660 MW coal plant
30		operating at 85% capacity, which would emit about 3,700 tons of SO_2 in a year.
31		Thus, the HTP emissions are equal to nearly two 660 MW coal plants.

- As the State's chief air quality planner, do you have an opinion whether the HTP project should be certificated based on the DPS model results? These potential emissions increases could have detrimental effects on the air quality in New York State. New York State has been working diligently to control air pollution to protect public health and the environment, including regulating emissions from fossil fuel fired power plants. A project of this nature would seem
- at the same time, permit facilities that impact air quality in New York State to
 increase production and cause air pollution that will impair our ability to meet our
 air quality goals. Since DEC can only regulate sources within the boundaries of
 New York State, this, in turn, could cause the DEC to require even stricter
 controls on in-State sources, including additional controls on power plants, to

to skirt the environmental controls being placed on New York State facilities and,

meet our air quality goals. For these reasons, I would oppose this project at this
 time. If this project is certificated, perhaps a mechanism to offset the emissions
 increases could be developed so that its air pollution impact could be somehow
 mitigated.

17 Q. Does this conclude your testimony?

18 A. Yes, it does.

Q.

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Exhibit A	to	Prefiled	Testimony	of	Rob	Sliwinski
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		ត្	CRA - EDC Study	v		Navigant			IRP		p	DPS (full EEPS)		DPS	DPS (without EEPS)	Ś
			Base			Base			Base			Base			Base	
	Pollut-	Change	Emissions	%	Change	Emissions	%	Change	Emissions	%	Change	Emissions	%	Change	Emissions	%
Pool	ant	(tons)	(tons)	Change	(tons)		Change		(tons) Change	Change	(tons)	(tons)	Change	(tons)	(tons)	Change
														1		
NYISO	Nox	(490)	71,636	-0.68%	(1,251)	21,149	-5.91%	(288)	24,593	-1.17%	(1,295)	41,380	(3.1%)	(1,505)	49,094	(3.1%)
	Sox	(353)	70,816	-0.50%	(929)	88,390	-1.05%	(320)	72,415	-0.44%	(1,949)	97,226	(2.0%)	(1,158)	100,118	(1.2%)
	C02	(404,178)	52,819,904	-0.77%	-0.77% (4,072,969)	80,375,429	-5.07%	-5.07% (603,094)	31,773,513	-1.90%	(1,245,413)	43,045,276	(2.9%)	(2.9%) (1,262,561)	49,009,275	(2.6%)
														_		
PJM	Nox	1,126	353,261	0.32%	504	373,400	0.14%	347	25,501	1.36%	1,516	343,468	0.44%	1,549	348,340	0.44%
	Sox	1,602	1,105,142	0.14%	2,122	2,893,496	0.07%	1,293	93,855	1.38%	8,538	1,278,684	0.67%	7,791	1,300,549	0.60%
	C02	649,866	515,638,632	0.13%	2,459,527	956,245,175	0.26%	435,186	32,169,174	1.35%	1,730,471	234,573,714	0.74%	1,680,201	238,478,953	0.70%
		}			12421		0 100/	5	E0 00 4	7C10	1)1	010 100	0.06%		101 100	001%
	C 04	1 2/0	1 175 058	011%	1 103	2 081 886	0 0.4%	570	166 270	0 20%	6 2 2 9	1 375 910	0 48%	EEU 9	1 400 667	0 47%
	002						0.0									
	C02	245,688	568,458,536	0.04%	(1,613,442)	0.04% (1,613,442) 1,036,620,603	-0.16%	(167,907)	-0.16% (167,907) 63,942,687	-0.26%	485,058	485,058 277,618,990	0.17%		417,640 287,488,228	

Navigant numbers assume entire PJM Pool

For IRP, case used is HTP_30_B_A_Y_F (HTP Case) and CC_30_B_A_Y_F (2012 Reference Case)

Notes: DPS (full EEPS)

PJM emissions changes resulting from the HTP line exports to NY are added to NY's emissions with HTP in service.
 CRA (Charles River Associates International) results provide to DPS Staff 6.16.2008

3 CRA HTP capacity factor approximately 65%

CRA includes a partial implementation of EEPS similar to NYISO'S 2009 RNA, or approximately 30%

5 For this simulation, NY DPS results reflect EEPS energy reductions

6 NYDPS HTP capacity factor approximately 38%

CRA models entire Eastern Interconnection, whereas, NY DPS models NY, NE-ISO, PJM, with ties to HQ and OH.

Notes: DPS (no EEPS)

PJM emissions changes resulting from the HTP line exports to NY are added to NY's emissions with HTP in service

2 CRA (Charles River Associates International) results provide to DPS Staff 6.16.2008
 3 CRA HTP capacity factor approximately 65%

4 CRA includes a partial implementation of EEPS similar to NYISO's 2009 RNA, or approximately 30%
 5 CRA models entire Eastern Interconnection, whereas, NY DPS models NY, NE-ISO, PJM, with ties to HQ and OH,
 6 NY DPS results <u>do not</u> reflect EEPS energy reductions

7 NYDPS HTP capacity factor approximately 57%

sap a lata par

Year 2013 Results of HTP's Emission Effects on New York and PJM Using Simulation Models

				Effect	Effect on New York Energy Label for the Various Mode	ork Enei	rgy Labe	I for the \	arious N	Nodels (s	lels (see note 1)				
	CRA - EL	CRA - EDC Study (GE-MAPS)	-MAPS)		Navigant			IRP		NY DPS	DPS (GE-MAPS, full EEPS)	JII EEPS)	NYDPS	NYDPS (GE-MAPS, no EEPS) EEPS)
			%			%			%			%			%
		Base	Change		Base	Change		Base	Change		Base	Change		Base	Change
	Change	Emissions	(see note	Change	Emissions	(see	Change	Emissions	(see note	Change	Emissions	(see note	e Change E	imissions	(see note
Pollutant	(tons)	(tons)	2)	(tons)	(tons)	note 2)	(tons)	(tons)	2)	(tons)	(tons)	2)	(tons)	(tons)	2)
Nox	(362)	72,529	(0.5%)	(747)	(0.5%) (747) 21,149	-3.53%	59	24,593	0.24%	221	41,380	0.53%	44	49,094	0.09%
Sox	2,744	2,744 72,958	3.91%	1,193	88,390	1.35%	973	1.35% 973 72,415	1.34%	6,589	97,226	6.78%	6,633	100,118	6.63%
CO2	415,414	54,159,755	0.77%	(1,613,442)	80,375,429	-2.01%	(167,907)	31,773,513	-0.53%	485,058	43,045,276	1.13%	417,640	1.13% 417,640 49,009,275	0.85%

<u>Notes:</u> 1 PJM emissions changes resulting from the HTP line exports to NY are added to NY's emissions with HTP in service.

ALEXY ASSOCIATES, INC. (518) 798-6109

2 % Change = Total Change (tons) / NYISO Base Emissions (tons)

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Ma'd 2/2/10 dps

ALJ BOUTEILLER: Next you identified on the record supplemental or rebuttal testimony offered by this witness consisting of a total of four pages. Absent any objection I will instruct the reporter to copy into the record as if given orally today what the witness has prepared as being his supplemental and rebuttal testimony. (The testimony is included, as ordered.)

New York State Department of Environmental Conservation Office of General Counsel, 14th Floor

625 Broadway, Albany, New York 12233-1500 Fax: (518) 402-9018 or (518) 402-9019 Website: www.dec.ny.gov



April 8, 2010

Hon. William Bouteiller Administrative Law Judge New York Public Service Commission Three Empire State Plaza Albany, New York 12223-1350 By E-mail

> Case 08-T-0034, Application of Hudson Transmission Partners, LLC for a Re: Certificate of Environmental Compatibility and Public Need for 345 kV Submarine/Underground Electric Transmission Link Between Manhattan and New Jersey; Ruling regarding litigation schedule

Dear Judge Bouteiller:

Attached is DEC's supplementary and rebuttal testimony. Betsy Hohenstein will hand deliver a paper copy tomorrow.

Sincerely yours,

aurene A. Weentruit

Lawrence H. Weintraub Assistant Counsel

ec: Service list and DEC hearing staff
BEFORE THE STATE OF NEW YORK PUBLIC SERVICE COMMISSION

In the Matter of Hudson Transmission Partners, LLC PSC Case # 08-T-0034 Date: April 8, 2010

Prepared Supplementary and RubttalTestimony of: Robert G. Sliwinski, P.E. Bureau of Air Quality Planning Division of Air Resources Department of Environmental Conservation 625 Broadway Albany, New York 12233-3251

1324

1 Q. Please state your name, position and place of employment.

- A. My name is Robert Sliwinski. I am the Director of the Bureau of Air Quality Planning
 for the Division of Air Resources, New York State Department of Environmental
 Conservation (DEC). My business address is 625 Broadway, Albany, New York 12233.
 Q. Did you have an opportunity to review some of the assumptions behind the Department
 of Public Service's and Charles River Associate's modeling results for air emissions from
 the HTP transmission line?
- 8 A. Yes. Last week when responding to an interrogatory posed to me by HTP counsel and 9 when reviewing testimony prepared by New York City Economic Development 10 Corporation's consultant (Charles River Associates or CRA), I needed to perform 11 additional review of the modeling results provided the Department of Public Service (DPS). During this review, I found what I believe to be fundamental problems with the 12 13 modeling performed by DPS and gross errors in the summary information provided by 14 CRA serious enough as to call into question all of the emissions analyses done to date for this project and potentially render these analyses invalid for assessing the emissions 15 16 impact of the project.

17 Q. What did you find?

A. The DPS MAPS modeling did not properly assign the emissions that result from the
operation of the electricity system in New York. The emission rates for SO₂ emissions
identified as burning oil are set at zero. This is wrong. In fact, for Northport Power
Station, SO₂ emission rates in the DPS model run are set at zero. This compares to actual
emissions of 9,084, 9,922, and 5,898 tons in 2006, 2007, 2008, respectively. Similarly,
Astoria Generating Station has emitted 1,351, 940 and 450 tons in 2006, 2007 and 2008,
while the model runs have emissions set to zero.

25 Q. Are you aware of any possible explanation for these errors?

A. Yes. One possible explanation for this inaccurate treatment of emissions is the failure to
assign generation in accordance with the reliability requirements that exist in the
downstate area. If the MAPS model is set by DPS to run in an economic-only mode, it
would ignore the 'loss of gas – minimum oil burn' requirement that dominates the choice
of fuel utilized for certain generation assets for upwards of 2,000 hours per year.
Because of this requirement, certain units are forced to operate in an uneconomic mode to

assure that the loss of a major gas supply line does not cause an interruption of electricity service. Essentially, units are required to burn oil instead of less expensive natural gas. This causes extra SO_2 and NO_x emissions inherent in the use of the more polluting fuel, oil, which is not accounted for in the DPS analysis. I am not aware of any infrastructure improvements that will render the 'loss of gas – minimum oil burn' requirement obsolete

6 in the 2013 time period.

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7 Q. Can you tell us about the errors you found in the CRA model?

8 A. It appears that the CRA analysis has this same inaccuracy as well as another gross error. 9 SO₂ emissions in Zones J and K, New York City and Long Island, as shown in Table 1 on 10 page 6 of the prepared direct testimony of the transmission study panel, Scott W. 11 Niemann and Chirstopher J. Russo, are 35 and 30 tons in the base case and 29 and 49 12 tons in the HTP case. Similarly, NO_x emissions in Zone J are in Table 1 are 3,649 tons in 13 the base case and 3,586 tons in the HTP case while actual Zone J emissions in 2008 14 exceeded 5,600 tons and the Zone K NOx emissions in Table 1 are 1,577 tons in the base 15 case and 1,551 tons in the HTP case while actual emissions at Northport alone have 16 ranged between 4,613 and 3,149 tons from 2006 to 2008. As described above, if the downstate reliability requirements are not properly represented in the model, the 17 18 emissions analysis presented here would be so inaccurate that these results should be 19 considered invalid.

20 In addition, upon further inspection of Table 1, it is obvious that something very unusual 21 is being presented relating to NO_x emissions in Zone D, northern New York, as to further 22 call into question the analysis performed by CRA. CRA shows the NO_x emissions in 23 Zone D to be 38,670 tons in the base case and 38,603 tons in the HTP case. This is, quite 24 frankly, a physical impossibility. There are not enough generation assets to create this 25 amount of NO_x emissions in Zone D which appears to be in excess of a two (2) orders of 26 magnitude overestimation of NO_x emissions in Zone D. Before this modeling can be 27 used in any analysis, this anomaly needs to be explained.

28 Q. Can you tell us why you did not find these errors before?

A. Before doing my original review I was told by DPS staff that emissions in the model

30 were based on actual emissions calculated from the USEPA Clean Air Markets Division

31 database. I am very familiar with and have great confidence in that database. I did not

Case 08 - T -- 0034 Rebuttal and Supplementary Testimony of Robert G. Sliwinski, P.E.

1		find these errors earlier because I focused my initial review on the overall emissions
2		tabulations and the unit by unit difference tables presented to me by DPS. In looking at
3		the individual unit emissions estimates, I re-ordered the spreadsheets and focused on the
4		top emitting units and the units where the greatest changes in emissions were expected.
5		By focusing on the data in this way, this problem was not apparent. In preparing my
6		response to the HTP interrogatory and in reviewing the testimony presented by CRA, I
7		re-examined the information presented to me by DPS. In this re-examination of the
8		information presented to me by DPS, I found these problems with the analyses
9		performed.
10	Q.	Based on the errors so far found in the DPS' and CRA's models, do you believe that any

reliable judgments can be made about the air emissions from the HTP transmission line?
A. No. Given what I know about the analyses performed to date, I cannot, nor can anyone,
determine with any confidence what will be the air emissions impacts of the HTP project.
To determine these impacts, this analysis would need to re-done with more realistic
reliability and emissions assumptions.

Q. If the analysis was redone, and the emissions results remained significantly adverse to air
quality or commensurate with the results you already observed based upon an accurate
analysis, is there a condition that would mitigate the adverse impact of such emissions?
A. A requirement to offset the increase in emissions that will result from utilizing the more
polluting power such as the purchase of emission reduction credits commensurate with

the emission impacts of the line. This is an alternative to a requirement that the line be
connected to a low emissions dedicated generation source.

Q. DPS staff state in their supplementary testimony that stricter environmental regulations
 could impact the availability of current sources of generation and that the NYISO base
 case did not consider the impact of all of the potential tighter environmental regulations
 that may be implemented before 2019. Do you have a response to this statement?

A. NYISO recently completed a study "Assessment of Proposed NOx RACT Regulations on
Emissions, Costs of Electricity and Electric System Reliability" that essentially updated
the above conclusions based on more realistic application of the proposed revisions to the
Department's NOx RACT regulation. This study concluded that a "more reasonable
compliance schedule for retrofitting is estimated to be June 1, 2014 based on a two year

1		retrofit program beginning no earlier than 2012 as permitting, engineering, and financing
2		would be required prerequisites to the beginning of construction." The study further
3		concluded that assuming nearly 8400 MW of generation would install suggested controls,
4		NOx emissions in New York would be significantly lower (by nearly 20 %) and that the
5		energy generated and the production cost and wholesale prices in New York were
6		virtually the same under existing and proposed RACT regulations. DPS commented on
7		the Department's NOx RACT regulation based on the results of this study.
8		Conclusion
9	Q.	Does this conclude your testimony?
10	А.	Yes, it does.
11		

1 ALJ BOUTEILLER: Now let's turn to your 2 exhibits. MR. WEINTRAUB: Your Honor, the first 3 exhibit is entitled "New York State Department of 4 5 Environmental Conservation, Response to HTP 2," and this is a -- this document is a response made by 6 7 Mr. Sliwinski to HTP's second interrogatory to DEC. 8 ALJ BOUTEILLER: For identification, we'll mark it as Number 76. 9 (Exhibit No. 76 was marked for 10 identification.) 11 12 MR. WEINTRAUB: And we are distributing 13 copies to the other persons in this hearing. 14 Your Honor, the second exhibit is 15 entitled "The Nature of the Ozone Air Quality 16 Problem in The Ozone Transport Region, A Conceptual 17 Description." It's prepared for the Ozone 18 Transport Commission. It's a final version dated 19 October 2006, and DEC would like to offer that up as an exhibit. 20 21 ALJ BOUTEILLER: For identification, Number 77. 22 (Exhibit No. 77 was marked for 23 24 identification.) 25 MR. WEINTRAUB: Your Honor, the DEC's

1 third exhibit in connection with Mr. Sliwinski is a 2 letter dated -- excuse me. There's no date on it. 3 But it's to Mr. Alan J. Steinburg, regional administrator, United States Environmental 4 5 Protection Agency, Region 2, 290 Broadway, 26th Floor, New York, New York. It is entitled 6 7 "Revision to the New York State, New York Section 8 111(D) State Plan for Implementation of Coal-Fired Electric Steam Generating Unit Mercury Emission 9 10 Guidelines." And we do have extra copies for 11 everybody. 12 ALJ BOUTEILLER: For identification, 13 Number 78. 14 (Exhibit No. 78 was marked for 15 identification.) 16 MR. WEINTRAUB: Off the record, Your 17 Honor. 18 ALJ BOUTEILLER: Off the record. 19 (Discussion off the record.) 20 ALJ BOUTEILLER: Counsel, you want to 21 describe for the record what you just passed out? 22 MR. WEINTRAUB: Yes. Your Honor, the 23 exhibit is the 2009 Load and Capacity Data Gold 24 Book by ISO, New York State Independent System 25 Operator.

1 ALJ BOUTEILLER: And the reason for 2 providing this one when we have a document that at least is a subset of this document? 3 MR. WEINTRAUB: Your Honor, this is a 4 5 fuller version that contains pages that we had on -- that DEC was also referring to in addition to 6 7 the ones that were previously submitted as part of 8 the exhibit. 9 ALJ BOUTEILLER: Okay. Exhibit Number 79, for identification. 10 11 MR. DAX: For clarification, Your Honor, 12 could we have the references, when Mr. Weintraub 13 says that DEC is referring to the Gold Book, where 14 are they referring to it? 15 MR. WEINTRAUB: Page 61. 16 MR. DAX: No, of Mr. Sliwinski or Mr. Gardner's testimony. I'm trying to get the 17 18 reference to where you've used it. 19 MR. WEINTRAUB: Yes. You want me to 20 find -- should I find it right now? 21 ALJ BOUTEILLER: It would be helpful if 22 you can take a minute. 23 MR. WEINTRAUB: It was in page 9 of 24 Mr. Sliwinski's original testimony. 25 ALJ BOUTEILLER: Okay, thank you.

1 MR. DAX: Is this what you're -- this has 2 been represented to be the entire Gold Book and 3 it's not. I don't have an objection on that basis; I just want the record to reflect that this is 4 5 another excerption, as opposed to Exhibit 58. ALJ BOUTEILLER: That clarity on the 6 record is useful and helpful. Neither document is 7 8 the entire Gold Book. Apparently, we have different subsets for the purposes of the different 9 10 parties. Thank you, Mr. Dax. 11 MR. WEINTRAUB: Should I proceed, Your 12 Honor? 13 ALJ BOUTEILLER: Yes. 14 MR. WEINTRAUB: The next exhibit is 15 entitled "Monitoring Analytics." It's -- "PJM State of the Market 2008" is the further title. 16 17 ALJ BOUTEILLER: Has that been 18 distributed to parties? 19 MR. WEINTRAUB: Yes. Betsy is doing 20 that. 21 ALJ BOUTEILLER: For identification, Exhibit Number 80. 22 23 (Exhibit No. 80 was marked for 24 identification.) 25 MR. WEINTRAUB: Your Honor, the next

1 document is entitled "Report on Assessment of 2 Proposed NO_x, N-O-_x subscript, RACT, R-A-C-T Regulations on Emissions, Costs of Electricity and 3 Electric System Reliability," submitted to New York 4 5 Independent System Operator. It's issued February 12, 2010. It was prepared by General Electric 6 International, Inc., 20 River Road, Schenectady, 7 8 New York 12345. 9 ALJ BOUTEILLER: If all the parties have 10 this document as well, for identification, Exhibit 11 Number 81. 12 (Exhibit No. 81 was marked for 13 identification.) 14 MR. WEINTRAUB: Your Honor, the only 15 other documents are ones that we would ask at the 16 conclusion of the hearing that you take judicial 17 notice of. 18 ALJ BOUTEILLER: Okay. We can handle 19 that as a set. Anything further for this witness? 20 MR. WEINTRAUB: Your Honor, I have 21 nothing further for this witness, and I present this witness as available for cross-examination. 22 23 ALJ BOUTEILLER: Thank you. 24 Mr. Dax. 25 MR. DAX: Thank you.

1 CROSS-EXAMINATION

2 BY MR. DAX:

3 Q Good afternoon, Mr. Sliwinski.

4 A Good afternoon.

5 Q In your testimony you concluded that certification 6 of the HTP facility would result in increased emissions 7 of SO₂ and NO_x making New York's attainment of national 8 ambient air quality standards more difficult, is that 9 correct?

10 A No.

11 Q You didn't state that?

12 A I referred to an analysis that had been prepared by 13 others to make that assertion.

14 Q Okay. Do you agree with that assertion or disagree 15 with that assertion?

16 In my rebuttal testimony I believe I stated that А 17 you can make no assertion regarding emissions as a 18 result of these analyses because of the invalid 19 assumptions made in the application of the model. 20 0 In light of that conclusion, can you point to me 21 which parts of your original testimony you continue to 22 subscribe to today?

A There is likely to be an increase in emissions as a result of this line. What the value or what the magnitude of that is, whether it's in the PJM region or

1 within New York State, currently you can't assess based on the way the analysis was performed, but there is 2 likely to be an increase in emissions. 3 4 Okay. So using that statement of likelihood, let 0 5 me continue my questioning and we'll --6 А Sure. 7 -- and we'll understand each other that you're not 0 quantifying or subscribing to a particular assertion. 8 9 Very well. А Would you agree that there are other variables in 10 0 11 an electrical system operation that could have the same likelihood of an impact that you've just described? 12 13 I don't understand what you mean by that. А 14 Well, let's -- do you understand what load growth 0 15 means? 16 Α Yes. 17 And would load growth in the New York State system 0 likely have the same increase in emissions impact that 18 19 you subscribed to? There -- yes, there would likely be an emissions 20 А 21 increase. 22 Would load growth in PJM likely increase emissions Q 23 in the region? 24 Α Yes. Would the retirement of Indian Point units 2 and 3 25 0

1 have a likely impact on emissions?

- 2 A Yes.
- 3 Q An increase?
- 4 A Yes.

5 Q You probably heard me in discussions with other 6 witnesses describe the State Energy Plan Volume III 7 infrastructure brief statement about the relicensing of 8 Indian Point units 2 and 3. Do you recall that 9 testimony?

10 A Yes.

11 And do you recall references to the State Energy 0 12 Plan statements there that the State opposes the relicensing of Indian Point units 2 and 3? 13 14 I'll have to take your word for that, yes. А 15 Do you have any independent information on the 0 16 State's position in the relicensing of Indian Point 2 17 and 3? 18 No, I do not. Α 19 On page 5, lines 9 through 31, over to page 6, Q

20 lines 1 through 9, you talk about --

21 MR. WEINTRAUB: Your Honor, would Mr. Dax 22 specify which -- whether he's referring to the 23 original testimony or the rebuttal testimony? 24 MR. DAX: The rebuttal only goes to page 25 4, so I'm only talking about the other testimony.

1 MR. WEINTRAUB: Okay. There's a clarity. 2 BY MR. DAX: There you talk about the DEC's responsibility to 3 0 develop plans for achieving compliance with ambient air 4 5 quality standards, is that correct? Yes. 6 Α It's correct, is it not, that DEC or New York 7 0 8 State, neither is limited to focusing only on the 9 electricity-generating sector to achieve attainment for 10 these pollutants, isn't that correct? 11 Α That is correct. As a matter of fact, we have 12 focused on many sectors, most all sectors. For 13 example, motor vehicles, we have the cleanest vehicles 14 that are allowed under the Clean Air Act, the 15 California low emission vehicle program. We also have a state-wide inspection and maintenance program for 16 17 those motor vehicles, passenger cars. 18 In addition, we control VOCs from consumer 19 products, such as hair spray and other personal care 20 products, as well as we also have controls on small 21 businesses, small factories, as well as -- I'm trying 22 to think of large -- other large entities and large 23 emitting sources. So we look at everything when we 24 develop one of these plans. And many times we are 25 among the leaders in the nation, if not the leader in

1 the nation, in controlling these emissions from these 2 sources.

3	Q One final question. This is similar to a question
4	I posed to Mr. Gardner. On page let's see page
5	9, line 25, 27, you express the SO_2 emissions that would
6	be attributable well, let me start over again. You
7	say according this is at line 25. "According to the
8	DPS model, the HTP project would add 6,589 tons of SO_2
9	emissions per year, which represents about 10 percent
10	of the current New York State EGU emissions." Do you
11	recall that?
12	A Yes.
13	Q That's the model that you no longer have competence
14	in, isn't that correct, or the results?
15	A The results I don't have confidence in. The model
16	is the model.
17	MR. DAX: Okay. I have nothing further,
18	Your Honor.
19	ALJ BOUTEILLER: Does any other party
20	have cross for this witness? Counsel for staff.
21	MR. DREXLER: Thank you.
22	CROSS-EXAMINATION
23	BY MR. DREXLER:
24	Q Good afternoon, Mr. Sliwinski.
25	A Good afternoon.

Q Would you please explain your understandings of how the Minimum Oil Burn rules work for New York City and Long Island?

4 Let me refer to my testimony. I do believe I Α 5 stated that. The way I understand it is that if the units -- there are various units that need to burn in a 6 7 mode for -- as if one of the major gas lines into the 8 city were to be -- was to be cut off or was no longer 9 available that the -- you would have to run enough generation on oil in order to make sure you assert --10 11 you assure reliability.

12 Q Do you know how that's decided?

13 A Not specifically.

Q Do you know what triggers it in addition to -- let me put it this way: Is it true that the Minimum Oil Burns are triggered under various forecasts of low levels with the number of units involved increasing

18 with increasing load levels? Is that your

19 understanding?

20 A That's my understanding, yes.

21 Q And in the NYISO markets, if a unit is needed to

22 operate in a certain manner to assure system

23 reliability, for example, the Minimum Oil Burn, are

24 economics set aside in that instance?

25 A It's my understanding that, yes, you would need to

1 burn oil based on that -- based on that assumption. 2 0 And are you -- you're familiar with the evaluation that DPS staff performed using the GE maps model? 3 4 А Yes. 5 And are you aware that when DPS prepared that 0 model, a base case model was run, and then all other --6 7 all those assumptions were unchanged except for those 8 required to model the HTP line itself? 9 Α Yes. So you would accept that staff simulations isolate 10 0 11 the effects of operating the HTP line when compared to 12 a base case simulation? 13 The problem that I see is it ignores the А Sure. 14 single most important thing that dominates the 15 emissions within the area from the sector. By doing 16 so, you lose focus on what exactly are the air emission 17 impacts. 18 It may be fine from an economic standpoint. It may 19 be fine from a dispatch standpoint. I don't know. Ι 20 can't speak to that. I'm not an expert on the model. 21 But I would say that something that does not 22 predict what is going to happen in the emissions arena 23 is -- or does so inaccurately is problematic for 24 determining what the impacts of emissions are going to 25 be.

1 So getting back to the Minimum Oil Burn, given that Q 2 the units and the load level triggers are known and 3 that the unit has to comply, even though they're 4 uneconomic, and that these parameters would be 5 unchanged in both the base case and the HTP line case 6 simulations, wouldn't the Minimum Oil Burn effects net out when the base case air emissions are subtracted 7 8 from the HTP line case emissions? 9 I don't know that to be the case. Α 10 Why not? You have a different interpretation? Ο 11 А I don't know the impact of what HTP would be on the 12 Minimum Oil Burn requirements. I don't know that. So, 13 therefore, I can't say whether or not there would be a 14 net zero result. 15 Are you aware of whether LYPA and Con Edison rely Ο 16 upon PJM units to satisfy the Minimum Oil Burn 17 requirement? 18 I don't know what the reliability rules would Α 19 entail and whether or not that would satisfy them. 20 0 Are you aware of whether the units are specifically 21 located within Zone J to satisfy the Minimum Oil Burn 22 and Zone K, which is Long Island? 23 Α Yes. 24 So do Con Edison and LYPA call upon PJM units to \bigcirc 25 satisfy the Minimum Oil Burn requirement?

1 A I don't know that answer.

2 MR. DREXLER: One second, please. Mr. Sliwinski, if the Minimum Oil Burn rule was 3 0 explicitly modeled in both the base case and the HTP 4 5 case, and given the previous statement that PJM units are not used to satisfy the Minimum Oil Burn, what 6 7 would you expect to happen to the SO₂ levels in New 8 York? 9 MR. WEINTRAUB: Your Honor, I'm going to 10 object because I think that Mr. Drexler did not 11 correctly characterize Mr. Sliwinski's testimony. 12 ALJ BOUTEILLER: Did you establish a 13 foundation with this witness that he understands 14 the circumstances that you've portrayed? 15 MR. DREXLER: I think we satisfied 16 that -- well, I'm not sure. I thought he agreed 17 that the PJM units were not used to satisfy the 18 Minimum Oil Burn for New York and that --19 ALJ BOUTEILLER: He agreed that they were 20 modeled within your base case and with the 21 variation, assuming the run of the Hudson 22 Transmission Partners line. If we go to back to 23 your cross-examination of this witness, we'll find 24 that assertion? MR. DREXLER: I believe that's the case. 25

1 MR. WEINTRAUB: Your Honor, the statement I'm objecting to is Mr. Drexler stated that 2 3 Mr. Sliwinski had agreed that PJM units are used to satisfy the LOGMOB rule, and that wasn't his 4 5 testimony. I believe he said he didn't know whether that was the case. 6 7 ALJ BOUTEILLER: At that point you're 8 asking him to accept a hypothetical, is that correct? 9 10 MR. DREXLER: Yeah. Yes. 11 ALJ BOUTEILLER: Can the question then 12 stand on that basis, Mr. Weintraub? 13 MR. WEINTRAUB: Yes, Your Honor, if he 14 wants to ask it hypothetically and if it's clear on 15 the record that it is a hypothetical question. 16 ALJ BOUTEILLER: It is now. Okay. Can the witness answer the question? 17 18 THE WITNESS: Can I have the question 19 repeated for me? 20 ALJ BOUTEILLER: Mr. Drexler, can you 21 reconstruct the question? 22 MR. DREXLER: I'll try. 23 BY MR. DREXLER: 24 If the Minimum Oil Burn rules were explicitly 0 25 modeled in both the base case and the HTP case, and

1 assuming that PJM units are not called upon to satisfy 2 the Minimum Oil Burns for New York City, what would you 3 expect to happen to the SO₂ levels in New York? I guess -- one more time. Let me try to understand 4 Α 5 exactly what we're asking here. ALJ BOUTEILLER: Let's have the reporter 6 7 read it back, please. 8 (Whereupon, the following question was 9 read: QUESTION: "If the Minimum Oil Burn rules 10 11 were explicitly modeled in both the base case and 12 the HTP case, and assuming that PJM units are not 13 called upon to satisfy the Minimum Oil Burns for 14 New York City, what would you expect to happen to 15 the SO₂ levels in New York?") 16 They would remain the same, it seems. You're Α 17 assuming that there would be no change to the dispatch, 18 and I'm unclear that that would be the case, but if 19 there's no change to the dispatch of those units, based 20 on the loss of gas Minimum Oil Burn requirement, then 21 the emissions would remain the same. 22 MR. DREXLER: Okay. I have no further 23 questions. Thank you. 24 ALJ BOUTEILLER: Does any other party 25 have questions for this witness?

1	MR. LEVENSON: Yes, Your Honor.
2	ALJ BOUTEILLER: Go ahead, Mr. Levenson.
3	CROSS-EXAMINATION
4	BY MR. LEVENSON:
5	Q I'm Gary Levenson with the New York Power
6	Authority. How are you?
7	A I'm fine, thank you.
8	Q I just want to ask you a few questions about your
9	rebuttal testimony.
10	A Sure.
11	Q Just referring to page 1, I think there you're
12	discussing that lines 8 through 16, approximately,
13	you say that you found fundamental problems with the
14	modeling performed by DPS and gross errors in the
15	summary information provided by CRA, serious enough to
16	call into question all the emission analyses done to
17	date. That's your testimony, right?
18	A That's correct.
19	Q And you say that the some of this we've been
20	over, but you said that the air that certain
21	downstate reliability requirements were not modeled in
22	these analysis, specifically the loss of gas in Minimum
23	Oil Burn requirement?
24	A That's correct. That loss against Minimum Oil Burn
25	requirement dominates the emissions characteristics

1 within Zones J and K, SO₂ especially. You say on page 2, you describe how you believe 2 0 3 this error or inaccuracy is manifested in the testimony 4 of Mr. Neiman and Mr. Russo of CRA, correct? 5 Α That's correct. And it's your testimony that when you found out 6 0 7 this fact, that the LOGMOB rules were not incorporated 8 into the emission analyses, you were surprised? 9 That's correct, for the reason I just stated, Α because they do dominate the emissions characteristics 10 11 of the generating sources in Zones J and K. 12 You had an opportunity to review the testimony and Ο 13 exhibits of the CRA consultants before you filed your 14 rebuttal testimony, correct? 15 That's correct. А And did you review the revised benefits analysis of 16 Q 17 CRA? This is, I believe, Exhibit 23. 18 А Could you bring that to me? 19 Yes. Q 20 А The question again, sir? 21 Have you reviewed this document? 0 22 Α I did, yes. 23 Q Okay. 24 MR. LEVENSON: If I can just stand up 25 here for a couple follow-up questions.

1	ALJ BOUTEILLER: Sure.
2	Q On page 4
3	MR. WEINTRAUB: Your Honor, if
4	Mr. Levenson is going to ask Mr. Sliwinski
5	questions regarding that document, I think it would
6	be a fair if he had a copy of the document before
7	him.
8	BY MR. LEVENSON:
9	Q On page 4 of that document do you see how can
10	you read the heading of that slide?
11	A "What does an as-is (e.g. EDC) model leave out?"
12	Q You recognize you understand the as-is model to
13	be the one that was incorporated into the master
14	transmission plan analysis that CRA performed, both for
15	purposes of economics and emissions?
16	A Yes.
17	Q And you notice here that what was left out
18	included in what was left out you just recited the
19	heading was the Minimum Oil Burn rules?
20	A That's correct.
21	Q So you did not did you make any data requests to
22	the CRA?
23	A I did not see that document until after I filed my
24	original testimony, so I did not have knowledge of that
25	exact that document, exactly. All I had from CRA

1 were some -- a couple of tables that were provided by 2 DPS related to emissions changes on the modeling they I never saw that document before I did my 3 ran. 4 testimony. 5 But you had it before you did your rebuttal 0 6 testimony? 7 Α That's right. It was provided to me at that point. 8 I'm not -- I'm trying to remember exactly when I saw 9 To the best of my recollection, I did have it when it. I did my rebuttal testimony. 10 11 Okay. So it was possible to learn this without 0 12 having to consult the emissions levels themselves? Tt. 13 said right here, plain as day, that the Minimum Oil 14 Burn rule was not included in the as-is analysis. 15 That's correct. It does say that. А What I learned -- maybe I'll just go through my -- how -- what 16 17 my review entailed here, how I found what I thought to 18 be these errors, were upon receiving -- looking at --19 and this is probably just about at the same time --20 questions from Mr. Dax as well as the testimony that 21 was filed by the CRA panel, I looked at those things at 22 probably roughly the same time and noticed some things 23 that were odd about them, that, you know, that the CRA 24 analysis, that I didn't expect to see. I never saw, 25 previous to that, the zone totals in the tables that

were provided in that testimony. At that point I saw that the level of SO₂ emissions was a lot lower than I sexpected.

Q In your answer to one of Mr. Drexler's questions about whether the dispatches would be the same with the Minimum Oil Burn rule incorporated or not, you would have had the opportunity to ask CRA questions about that between the time they filed their direct testimony and the time you filed rebuttal, correct?

10 A Not that I'm aware of.

11 Q You only learned about -- you had the opportunity 12 to learn about the Minimum Oil Burn rule assumption 13 after the March 18 submission of the CRA materials? 14 A Correct.

15 MR. WEINTRAUB: Your Honor, I'm going to 16 I recall we had a discussion at last object. 17 week's hearing about not delving into why 18 somebody -- why somebody did or didn't file an 19 interrogatory request or make an information 20 request or use the opportunity to do this or that 21 at a certain time, and we agreed that we weren't 22 going to get involved in that. We were going to 23 just stick to evidentiary matters.

ALJ BOUTEILLER: And if you want to use that as precedent here, you're going to have to be

1 far more specific to refresh my recollection as to 2 how that was identical or comparable to the circumstance here. The circumstance presented here 3 is that we do have an alteration between the time 4 5 of the witness' direct testimony and rebuttal testimony, which other parties are perceiving as 6 7 being a significant alteration in the witness' 8 testimony, such that it could affect the further processing of this case. So I think we have a 9 10 material change in testimony that ought to be 11 followed up here. But if you can be more specific 12 with how I ruled and how I'd be inconsistent about 13 hearing this testimony, I'd be willing to hear 14 that. 15 MR. WEINTRAUB: Your Honor, I can't 16 remember exactly the exact circumstance. I just 17 remember the general discussion. I withdraw the

19ALJ BOUTEILLER: Yeah. Context is20everything. Your objection is overruled.

21 MR. LEVENSON: Mr. Weintraub derailed me 22 sufficiently with that objection.

ALJ BOUTEILLER: Would you like to hearyour last question?

25 MR. LEVENSON: Please.

objection.

18

1 ALJ BOUTEILLER: Can we go back to the 2 last question? (Whereupon, the following question was 3 read: 4 5 QUESTION: "You only learned about -- you had the opportunity to learn about the Minimum Oil 6 7 Burn rule assumption after the March 18 submission 8 of the CRA materials? 9 ANSWER: Correct.") 10 COURT REPORTER: It was answered before 11 the objection. 12 ALJ BOUTEILLER: Okay. Your next 13 question. 14 BY MR. LEVENSON: 15 When you were answering one of Mr. Drexler's 0 questions, you agreed that if the Minimum Oil Burn 16 17 assumption had been employed, that the emissions change of HTP being in the study would be the same as long as 18 19 dispatch didn't change? That's right. Right. Under that assumption that 20 А there would be no difference in the amount of oil 21 burned. 22 23 Q All right. And you made no inquiries about that 24 after March 18th to the City witnesses? 25 А No, I did not.

Q One other thing about the Minimum Oil Burn issue, if the Minimum Oil Burn rule were included in the studies, and having -- excepting for discussion sake that the delta in emissions by the HTP line is the same, would the emission impacts of the HTP line in the PJM New York State region be a smaller percentage of the total emissions?

8 A I'm not sure I understand the question.

9 Q Okay. I'll restate it. The studies you said you 10 saw have the Minimum Oil Burn rule excluded and you 11 observed that the emissions were -- from certain units 12 were low, correct?

13 A They were zero.

Q Understood. And if the Minimum Oil Burn assumption were included, and excepting for discussion's sake that the delta for HTP is the same in either case, isn't the emissions impact with the Minimum Oil Burn rule included a smaller percentage of the total SO₂ and NO_x

19 emissions?

A Again, I don't -- I don't -- I'm not getting it.
I'm not understanding your question. I'm sorry.

Q That's okay. I'll ask it one other way. Doesn't the denominator go up when the Minimum Oil Burn rule is included in the analysis?

25 A Yes.

1 Q Okay. 2 MR. LEVENSON: I have no further 3 questions, Your Honor. ALJ BOUTEILLER: Does any other party 4 5 have any further questions for the witness before I ask Mr. Weintraub to approach the witness and 6 7 consider the need for redirect? If not, go ahead 8 and approach the witness, either at the table or out in the hall. 9 10 MR. WEINTRAUB: Out in the hall, Your 11 Honor. 12 ALJ BOUTEILLER: Sure. 13 (Discussion off the record.) 14 ALJ BOUTEILLER: Is there redirect for 15 the witness? 16 MR. WEINTRAUB: Yes, Your Honor. DEC has 17 some redirect. 18 ALJ BOUTEILLER: Please proceed. 19 REDIRECT EXAMINATION 20 BY MR. WEINTRAUB: 21 Mr. Sliwinski, you were asked a series of questions 0 22 about the LOGMOB rules, and would you wish -- do you 23 wish to clarify some of your responses to those 24 questions? 25 Α Yes. When performing an analysis such as was done

1 in this case, you would -- to be able to interpret the results of that analysis, you need to have good inputs 2 in the assumptions, to suppose that something would 3 come out as a result of this, based on certain things 4 5 being assumed in the model, so I guess my point is that without considering the single most important rule, 6 local reliability on emissions within the city or in 7 8 state, Zones J and K, I could not or I do not believe 9 the model could come out with a decent approximation of 10 what will happen in terms of emissions within those So without knowing that, I can't make an 11 areas. 12 assessment of what is the impact of this project on air emissions in -- as a result. 13

14 Q Thank you.

You were asked a couple of questions about -- you were asked hypothetical questions to assume that -- to assume that what was done approximated the LOGMOB rules. Do you recall those questions?

19 A Yes.

20 Q Can you just -- can you simply make such

21 assumptions and have a valid result?

22 A The reason you have these models and the reason you 23 use these models is to attempt to quantify or

24 approximate the results of the system. The system is

25 very complex. Changing these inputs can have differing

results. You can't predict the results based on that.
So I would say that the reason you run the model is
to -- is to attempt to quantify what might happen. Not
putting those things in and trying to quantify it, I
don't think you can come to any conclusions, at least
in terms of air emissions.

Q So, Mr. Sliwinski, if -- for the Commission to make a determination of environmental impact, at least in terms of air impacts, do you believe that these models have to be rerun?

11 A Yes.

12 Q Thank you.

13 MR. WEINTRAUB: That's all, Your Honor.14 EXAMINATION

15 BY ALJ BOUTEILLER:

16 Q I don't have many questions or any questions, but 17 let me ask you a simple question. And, again, I don't 18 know what the answer to the question is. I'm more 19 interested in what your view is.

The runs that were performed and the results that it produced, is it possible that that might be a floor or a minimum amount of emissions that one might

23 attribute to this scenario? Is that a fair

24 characterization?

25 A I really don't know. I just don't know the answer.

1 I don't know how to quantify the impact.

Q I think you're clear on the record with respect to how you believe the model should be run to reconstruct operating conditions as you saw them, and you were surprised that those conditions were not modeled explicitly. Is that fair?

7 A Correct.

Q But the results that you see from this model where everything was held constant and some explanation has been tried to be offered to you that that was a sufficient way of approaching things, I understand that, we do have some results here, and what -- your suggestion is that these results should be entirely disregarded, thrown away completely?

15 Let me try to put it in -- quantify it a bit for Α 16 you, Your Honor. The emissions in the city we're 17 talking about in, say, Zone J, they're talking tens of 18 tons of SO₂ and we're talking -- I'm talking two orders 19 of magnitude or more higher than that, thousands of 20 tons. To suppose that this has no difference on it, I 21 don't know that answer. I would suggest that as a 22 result of that, that I can't make any statements 23 related to air emissions and how they would -- whether 24 what's been provided to me is a valid look at what this 25 project may do.

Q Okay. So, again, I'm just trying to tease out from you what I've just heard as an answer. Your largest concern, your biggest fear is that there is the potential for an order of magnitude of air quality emissions that this study has not revealed that you believe that a correctly modeled study might be able to demonstrate?

8 А I don't even know that. All I know is based -- you 9 run -- models are, you know, the tools. And to properly assess something, your assumptions, your input 10 11 assumptions have to be correct. Something that so 12 grossly underestimates SO₂ emissions raises red flags to 13 It tells me that I don't -- I can't accurately or me. 14 properly assess what the result of this project will 15 be.

So for analysis purposes, based upon the 16 Q 17 information that you've learned throughout this 18 proceeding about how the model was performed, what it 19 assumed, from learning all of that at the stages you 20 learned it, at this point in the process -- I hate to 21 use this phrase because of events -- but you're back to 22 ground zero; you're back to the starting point, is that 23 correct?

A Yes. I wish I was brought into this process
earlier on so I could have participated in that, but I

1 started in this when they had already had modeling 2 results. 3 ALJ BOUTEILLER: Okay. I'm understanding 4 a little bit better now. Thank you. 5 THE WITNESS: Thanks. ALJ BOUTEILLER: Let's go back to Mr. Dax 6 7 and see if he has any more questions for you. 8 RECROSS-EXAMINATION 9 BY MR. DAX: 10 I do have a question. 0 11 Α Sure. I want to follow up on that. A Minimum Oil Burn 12 Q is, by definition, a fixed number of hours and megawatt 13 hours of use of oil, is that correct? 14 15 I'm not exactly sure what the -- all the details А 16 are, but yes, that is my understanding. So it's a fixed minimum? 17 0 18 Based on a number of other factors, there's -- you Α 19 know, like I said, my understanding is it is, you know, depending on the load, on the system and et cetera. 20 21 Okay. 0 And what's available in other units, what units are 22 А 23 available and all that. It's not the same thing every 24 day, and it's not the same thing, you know, based --25 you know, it changes all the time because the system

1 itself is changing all the time.

2 0 So the Minimum Oil Burn changes all the time 3 depending upon other conditions in the system? 4 That's my understanding. Α 5 Okay. But if we -- do you understand that the 0 6 model that was run with HTP and without HTP was 7 identical in all other respects other than those two --8 that factor, that variable, HTP or no HTP? 9 That's my understanding, yes. А 10 So the Minimum Oil Burn would have been the same in 0 each of those models in terms of what actually was 11 12 being modeled as being consumed by those must-run 13 units, isn't that correct? 14 А There was no oil ever used in those units in the 15 They were all burning natural gas in the model model. 16 all the time. 17 Ο All right. 18 Α So I don't know what oil would have done. 19 If you add -- let me restate my question. 0 In the 20 case in which HTP was assumed to operate and in the 21 case in which HTP was assumed not to exist, the 22 conditions, the underlying conditions, load, unit 23 availability, were the same, were they not? 24 That's my understanding, yes. Α 25 So if the model had had the Minimum Oil Burn in 0
1 each model, in each run of the model, wouldn't the 2 units of oil consumed have been the same? That I can't answer. I don't know the answer to 3 А 4 that question. 5 That's the one you don't know? 0 That's what I don't know. I'm not -- I'm not 6 Α 7 familiar enough with the model itself. 8 But if they were the same --0 9 That's what -- I've haven't been asked that. Α 10 If they were the same, then the point that has been 0 11 made by others today that the net impact of the HTP 12 line on total emissions would be the same, wouldn't it? 13 А That's what I've been told, yes. 14 MR. DAX: That's all I have. 15 ALJ BOUTEILLER: Mr. Levenson? 16 MR. LEVENSON: Yes. 17 RECROSS-EXAMINATION 18 BY MR. LEVENSON: 19 A brief follow-up. You were saying in your Q 20 questions -- your answers to Mr. Weintraub and, I 21 believe, with the judge that the assumptions are 22 everything, and if there's bad inputs, the whole model 23 is suspect, correct? 24 Correct. Α 25 Q Now, you agree that the assumptions were the

1 product of a consensus process, the consensus 2 stakeholders to the massive transmission plan and all 3 the stakeholders agreed to them; that's your 4 understanding, right? 5 That's my understanding, yes. Α MR. LEVENSON: Okay. Nothing further, 6 7 Your Honor. 8 ALJ BOUTEILLER: Mr. Drexler? 9 MR. DREXLER: Yes, just a couple 10 follow-ups. 11 RECROSS-EXAMINATION 12 BY MR. DREXLER: 13 Q Are you aware that DPS staff's analysis was intended to provide the differences in emissions both 14 15 without the HTP line and with the HTP line in service? 16 Is that correct? That's my understanding. 17 Α 18 So DPS staff's analysis was not intended to provide Ο 19 the absolute values of emissions, correct? Forecast 20 emissions, correct? 21 That's my understanding, yes. А 22 Okay. One other question. On page 1 of your 0 23 rebuttal and supplementary testimony, lines 22 and 23 24 indicate a number of emissions that are decreased 25 relatively over time -- I think there's one aberration,

1 2007. But can you provide an explanation for why those 2 emissions have decreased?

3 А It's my understanding that the price of oil has gone down -- I mean the price of natural gas has gone 4 5 down to a point where it is the economic choice, so, in fact, oil is not -- in those years that were quoted 6 7 there, oil was the economic choice and it was being 8 burned more often in those units. Now it's -- natural gas is the economic choice, and it is being burned more 9 often as the fuel and that --10 MR. DREXLER: I have no more questions. 11 12 Thank you. 13 ALJ BOUTEILLER: Mr. Weintraub, do you 14 need to approach the witness again? 15 MR. WEINTRAUB: Yes, Your Honor. 16 (Discussion off the record.) 17 ALJ BOUTEILLER: Further redirect? MR. WEINTRAUB: Yes, Your Honor. 18 19 REDIRECT EXAMINATION 20 BY MR. WEINTRAUB: 21 Mr. Sliwinski, you were asked at least one or more Ο 22 questions regarding whether it mattered if the LOGMOB rules -- if the LOG -- if the Minimum Oil Burn rules 23 24 were imposed upon the model in terms of air emissions

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and your ability to state what the total emissions

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1 would be. Can you comment on that?

Yes. In the sense that for me to make some sort of 2 А assessment on air emissions, I would need to look at 3 4 the totality of the emissions that are going to occur 5 within an area as a result of this project. Taking out 6 one of the factors that means the most related to air 7 emissions doesn't allow me to make any assessment on 8 that. 9 MR. WEINTRAUB: That's all, Your Honor. 10 ALJ BOUTEILLER: Unless somebody twists 11 my arm, I don't believe that's going to require any 12 further cross-examine. 13 Mr. Drexler, consider my arm twisted. 14 RECROSS-EXAMINATION 15 BY MR. DREXLER: 16 Mr. Sliwinski, when generators are burning natural Q 17 gas, is sulfur dioxide emitted? 18 Very minimal. А 19 MR. DREXLER: Nothing further. Thank 20 you. 21 ALJ BOUTEILLER: Okay. I'm going to call 22 it at that point. There's not going to be anything further. Let's go off the record. 23 2.4 (Discussion off the record.) 25 ALJ BOUTEILLER: I want to thank the

1 witness for being here today, and you are excused. Let's go off the record. 2 3 (Discussion off the record.) ALJ BOUTEILLER: Counsel for the 4 5 applicant, call your witness. MR. DAX: James P. Nash. 6 7 ALJ BOUTEILLER: Before you sit down, 8 I'll ask you to raise your right hand. JAMES P. NASH, 9 10 having been first duly sworn by the notary public, was examined and testified as follows: 11 12 ALJ BOUTEILLER: Please be seated, and 13 please state for the record your name and your 14 address. 15 THE WITNESS: My name is James P. Nash. 16 My business address is 501 Kings Highway East, 17 Fairfield, Connecticut. 18 ALJ BOUTEILLER: If you can hit the 19 button on the microphone and turn it green, 20 everyone will hear you. DIRECT EXAMINATION 21 BY MR. DAX: 22 23 0 Mr. Nash, did you cause to be prefiled testimony in 24 support of the original application that has been 25 marked as Exhibit 1?

1 A Yes, I did.

2	Q I show you a one-page document consisting of ten
3	lines of questions and answers in which you explain
4	which parts of the original application you were
5	responsible for. Is that the document that you was
6	prefiled with the application on your behalf?
7	A Yes, it is.
8	Q Is it accurate?
9	A Yes.
10	MR. DAX: Your Honor, I ask that the
11	identified document be incorporated into the record
12	as if given orally.
13	ALJ BOUTEILLER: Absent objection, I will
14	instruct the reporter to copy into the record as if
15	given orally today the one-page document of
16	prefiled testimony by Mr. Nash.
17	(The testimony is included, as ordered.)
18	
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James P. Nash, P.E.

Public Service Commission Case No. 08-T-_____ Hudson Transmission Partners, LLC

- 1 Q. Please state your name, employer, and business address.
- 2 A. James P. Nash, Hudson Transmission Partners, LLC, 501 Kings Highway
- 3 East, Fairfield, Connecticut 06825.
- 4 **Q.** In what capacity are you employed?
- 5 A. I am Vice President, Engineering for Hudson Transmission Partners.
- 6 **Q.** For what parts of the application are you responsible?
- 7 A. Exhibits 4.13, 5, E-1, E-2, E-4 and E-5 were prepared under my
- 8 supervision.
- 9 **Q.** Please explain your professional background and expertise.
- 10 A. Please see attached curriculum vitae.

1 BY MR. DAX:

2	Q	And did you cause to be prefiled with the prefiling
3	on A	pril 8th a "Prepared Supplemental and Rebuttal
4	Test	imony of James P. Nash"?
5	A	Yes, I did.
6	Q	I show you a document consisting of three pages
7	of -	- one of them a cover sheet and two pages of
8	ques	tions and answers as I've identified. Is that the
9	docu	ment that you caused to be prefiled?
10	A	Yes, it is.
11	Q	If I were to ask you these questions today, would
12	your	answers be the same as set forth in this document?
13	A	Yes, they are.
14	Q	Okay.
15		MR. DAX: Your Honor, I'm going to ask
16		that that document be incorporated into the record
17		as if given orally here today.
18		ALJ BOUTEILLER: Okay, a copy for the
19		reporter, a copy for me.
20		Absent any objection, I will instruct the
21		reporter to copy into the record as if given orally
22		today the prepared supplemental and rebuttal
23		testimony of the witness, Mr. Nash.
24		(The testimony is included, as ordered.)
25		

STATE OF NEW YORK PUBLIC SERVICE COMMISSION

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Case No. 08-T-0034 of Hudson Transmission Partners, LLC for a Certificate of Environmental Compatibility and Public Need for a 345 Kilovolt Submarine/Underground Electric Transmission Link Between Manhattan and New Jersey

> PREPARED SUPPLEMENTAL AND REBUTTAL TESTIMONY OF JAMES P. NASH APRIL 8, 2010

> > James P. Nash, Vice President, Engineering Hudson Transmission Partners, LLC 501 Kings Highway East Fairfield Connecticut 06825

- 1 Q. State your name, address and job description.
- A. James P. Nash, Hudson Transmission Partners, LLC (HTP), 501 Kings Highway East,
 Fairfield Connecticut 06825; Vice President, Engineering.
- 4 Q. Have you previously filed testimony in this proceeding?
- 5 A. Yes. I provided testimony sponsoring various parts of the application HTP filed in
 6 January of 2008. My *curriculum vitae* are attached to that testimony.
- 7 Q. What is the purpose of this testimony?

8 A. I will describe the current status of HTP's interconnection requests in PJM and the New 9 York Independent System Operator (NYISO). I will also explain the modifications we 10 are proposing to the certificate conditions addressing Transmission System Reliability as 11 proposed by DPS in Exhibit PFD-3. The facilities studies for HTP in both PJM and 12 NYISO are complete. HTP is working with staff at PJM and the interconnecting utilities 13 of Public Service Electric & Gas (PSE&G) and First Energy Corporation (First Energy) 14 to finalize Interconnecting Service Agreements and Construction Service Agreements so 15 as to allow PSE&G and First Energy to proceed with associated network upgrades. The 16 PSE&G-related agreements also establish technical specifications for HTP to follow to 17 finalize its designs and commission the interconnection with PSEG's 230 kV substation.

18 HTP was a participant in NYISO's Class Year 2008 facilities study group, which 19 concluded in January 2010. In this process HTP has accepted the estimated System 20 Upgrade Facilities costs submitted by Con Edison and has also provided acceptable 21 security to NYISO. HTP is presently working with NYISO and Con Edison staff to 22 finalize the associated three-way Interconnection Agreement to proceed with the 23 interconnection at the Con Edison W49th Substation.

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Q.

Have you reviewed proposed certificate conditions related to Transmission System Reliability as provided by DPS in Exhibit PFD-3?

3 Yes. HTP has proposed several deletions, edits and clarifications, which can be found in A. 4 certificate condition numbers 54-76 in Exhibit CH-2. For example, we have used the 5 term "Transmission Facility" throughout rather than "electric plant" and made other similar changes for clarity and consistency. We reconciled the DPS proposals to the 6 7 actual allocation of responsibilities involved in interconnecting the cable and in 8 controlling its operation. For example, HTP is not responsible for the design and 9 construction of the affected system upgrades or the attachment facilities, including the 10 Con Edison W49th Substation modifications. Therefore, HTP cannot commit to provide 11 associated design drawings and final cost estimates for those items. HTP has also 12 clarified language regarding how and under what methods the interconnection will be directed for operation, since the Regional Transmission Organization that will be the 13 14 control authority (NYISO or PJM) has not yet been determined. HTP will keep PSC staff 15 informed of this determination and abide by the proposed conditions as they relate to the 16 respective control authority. We also deleted one provision, Certificate Condition No. 17 65(d), which appears to be a holdover from the Bayonne Energy Center generator lead decision and Certificate Condition No. 74, a provision that would simply duplicate 18 19 authority that rests exclusively with the Office of General Services.

20 Q. Does that complete your testimony?

21 A. Yes.

1 BY MR. DAX:

2 0 Mr. Nash, have you had occasion to review some comments that were provided by Mr. Drexler to us 3 4 concerning certificate conditions regarding 5 transmission reliability? Yes, I have. 6 Α 7 Did it cause you to make any revisions to those Q 8 certificate conditions as included in the revised 9 Exhibit CH-2, which has now been marked for 10 identification as Exhibit 26? Did you make -- were you 11 responsible for changes that were incorporated into 12 that document? 13 Yes, I was. Α 14 I'm going to show you a document that appears to be 0 15 an e-mail printout, printed out by Amy Butler, so her 16 name shows at the top. It has page 1 of 2, but I'm 17 only showing you one page of it. And there is text in 18 blue and in red and in black, and the e-mail from 19 myself to Mr. Drexler, cc'd to all parties, and ask 20 whether you've seen that document? 21 Yes, I have. А 22 And do you understand what it purports to show? Q 23 Α Yes, I do. 24 And can you explain just briefly, without going 0 25 into the details, what it purports to show in general

1 terms?

2	A It demonstrates our acceptance of a number of
3	comments proposed by DPS staff and also four specific
4	items that we did not feel were acceptable.
5	MR. DAX: Your Honor, I'd like to ask
6	I would ask that that document so identified be
7	marked for identification as Exhibit 82 for
8	identification.
9	ALJ BOUTEILLER: Do you have two?
10	MR. DAX: Yes.
11	ALJ BOUTEILLER: The document just
12	described will be marked as Exhibit Number 82 for
13	identification.
14	(Exhibit No. 82 was marked for
15	identification.)
16	BY MR. DAX:
17	Q And attached to that e-mail was there, in fact, a
18	set of revised certificate conditions?
19	A Yes, there were.
20	Q And I'm showing you a document that has in the
21	upper right-hand corner it starts with Exhibit_PFD-03,
22	and then the next line says second "Revised 4-30-2010,
23	Exhibit_CH-2, page 1 of 25, HTP Proposed Certificate
24	Conditions." Is that the document
25	A Yes, it is.

1 Q -- that was attached to that e-mail?

2 A Yes.

Does that -- starting on certificate condition 3 0 4 number 55, does that show changes that you were 5 responsible for that were made subsequent to the filing 6 of this when it was marked as Exhibit 26? 7 А Yes. 8 MR. DAX: Your Honor, I ask that the 9 document that has been identified be marked for identification as Exhibit 83. 10 ALJ BOUTEILLER: It will be so marked. 11 12 (Exhibit No. 83 was marked for 13 identification.) 14 BY MR. DAX: 15 Now, with reference to Exhibit 82 and the comments 0 16 in red, and pointing to language as needed in Exhibit 17 83, would you briefly explain the items in red that 18 reflect comments provided by DPS that HTP was either 19 unwilling to accept or not willing to accept as 20 proposed by DPS? 21 Yes, certainly. On a general comment, it was А 22 requested by DPS that the term. "Transmission facility" indicated encompasses 23 24 associated equipment including but not limited to the 25 associated back-to-back HVDC terminal. Upon advice of

1 counsel, I've been informed that expanding the 2 definition for "transmission facility" has implications elsewhere within the application. 3 And is it correct that the transmission facility, 4 0 5 as defined by the application and in the certificate conditions proposed by the applicant, is limited to the 6 New York side of the transmission for the entire 7 8 system? Yes, it is. 9 А 10 So the transmission facility includes the cable and 0 11 associated equipment from the New Jersey border to the 12 Con Edison substation, is that correct? 13 That is correct. А 14 And the DPS comment that was received previously 0 15 would have expanded that definition to include 16 equipment located in New Jersey, is that correct? 17 Α That's correct. 18 Okay. Continue to the next comment. 0 19 Related to specific line item numbers, item А Yes. 20 number 55, request to add back in language referencing substation and transmission interconnection as it 21 22 relates to that portion of the transmission facility 23 that would -- should require proof of acceptance by Con 24 Edison. Con Edison, through the process of review and 25 acceptance of the project and the portion associated

1 with them, is confined to the substation at the West 2 49th Street -- the facilities inside the West 49th 3 Street substation. Therefore, the changes that we 4 propose would limit it specifically to that portion of 5 the facility.

So if you turn to what's been marked for 6 0 7 identification as Exhibit 83 and you turn to page 18 8 and look at certificate condition 55, does the wording 9 there reflect what you just said, that it provides that 10 prior to commencing construction of the portion of the transmission facility associated with the cable 11 12 entrance into and its termination within the West 49th 13 Street substation must first be approved by Con Edison, 14 is that correct?

15 A That's correct.

If you turn to the next comment, which is 16 Q 17 concerning number 65, would you explain the applicant's 18 position there, certificate condition 65? 19 That's on page 20, and -- 21, actually, here. А Yes. 20 There was a request that specified that New York ISO be 21 the control authority for this project when, in 22 actuality, the determination of what that control 23 authority is going -- who that control authority is 24 going to be has not yet been determined. That's an 25 ongoing process and would likely take place after the

1 completion of this process here. That determination 2 will be made as part of a joint committee formed to 3 develop a document called a Common Operating 4 Instruction for the project itself, and that will 5 include participation by ourselves as certificate 6 holder, New York ISO, Con Edison, PJM and PSE&G. We propose to add language to this particular line item 7 8 such that would offer to DPS staff all copies of 9 drafts, finals and modifications to that document 10 through the life of the project. 11 Is that shown on page 22 of Exhibit 83 in the --0 12 what looks to be the new condition 65E? 13 А Yes. 14 So in lieu of agreeing with staff that we would 0 15 commit somehow to have -- that you would commit to have 16 the New York ISO be the control authority, what --17 you're offering up an alternative that includes 18 providing this document to them, is that correct? 19 That's correct. Α Just for reference, you're familiar with the 20 0 21 Neptune project, is that correct? 22 Α Yes, I am. 23 Ο And who is the controlling authority for Neptune? 24 That is PJM. Α 25 Q Okay. Now, the last comment that the applicant did

not accept or modified -- concerns condition number 66 in which the DPS request was to put back in the original language, what is your explanation for not agreeing to that?

5 Yes. As I -- in response to our desire to strike А the words "withstand most system abnormalities," we 6 7 offer as an alternative -- and we believe an approved 8 alternative -- that we would design the system as 9 required by NPCC protection requirements. Those would 10 include, perhaps, system abnormalities, which is a general term not fully defined but would be better 11 12 defined than NPCC and would also include standard and 13 normal operating requirements for our interconnection. With the exception of those four comments 14 0 15 highlighted in red on Exhibit 82, has Hudson accepted 16 and agreed to incorporate the remaining comments that 17 were in Mr. Drexler's original e-mail? 18 Yes, we have. А

19 Q Thank you.

20 MR. DAX: The witness is available for 21 cross-examination, Your Honor.

22 ALJ BOUTEILLER: Thank you.

23 Mr. Drexler.

- 24 MR. DREXLER: Thank you.
- 25 CROSS-EXAMINATION

1 BY MR. DREXLER:

2 Q Good afternoon, Mr. Nash.

3 A Good afternoon, Mr. Drexler.

4 Q I want to turn to -- start with page 3 of your
5 supplemental and rebuttal testimony.

6 A Yes.

7 At lines 3 through 19 your testimony discusses Q 8 changes to and deletions of certificate conditions 9 recommended by DPS staff witnesses. At lines 18 and 19 10 you assert that condition 74 will only "duplicate 11 authority that rests exclusively with the Office of 12 General Services." Have you discussed this condition with DPS staff? 13 14 I have not personally discussed that with DPS А 15 staff. 16 Have you discussed this recommendation condition 0 with the Office of General Services? 17 18 I have not personally discussed this with. А

However, I believe that an application has been made to the Office of General Services for this petition and grant of rights to install the line in the final location.

Q Can you explain how the last sentence of recommended certificate condition 74 duplicates authority that rests exclusively with OGS?

1 May I look at the language? I believe that the А 2 language, as defined, for what is required by the project in order to obtain permission under OGS 3 4 regulations, has been properly addressed by the project 5 and submitted accordingly. Therefore, since that process is in place, it is not necessary to include 6 duplicate language within our conditions here. 7 8 Would your version of this condition change if you 0 9 understood that OGS recently asked DPS staff to include 10 such a requirement to assist OGS in compliance regarding the matter of documenting as-built 11 12 facilities, submerged lands, locations --13 COURT REPORTER: I'm sorry. 14 MR. DREXLER: I can repeat it. 15 MR. DAX: Your Honor, we'll stipulate 16 that if that, in fact, is the case, we'll agree to 17 it. Our only point here, as Mr. Nash has said, was 18 to avoid answering to two masters on the same 19 subject. 20 We have made an application to OGS. Ιt 21 was -- we were asked last week for a copy of that 22 application on the record, and on Friday we 23 circulated it to all parties. And we -- I've had many conversations with OGS over the months and 24

most recently last week with Mr. John Hernick, who

25

1 is the project manager on our application. And if 2 Mr. Hernick wants this language in the Article 7 3 certificate, we have no problem with that. ALJ BOUTEILLER: Mr. Drexler, is there a 4 5 meeting of the minds here now? MR. DREXLER: Just so we're clear, HTP is 6 7 willing to add back in condition number 74 as 8 proposed? MR. DAX: I want to run it by OGS. Or if 9 you have evidence -- if you can show me a 10 11 communication with OGS proposing this language --12 our nervousness was there's always the risk that 13 subtle differences will creep into language. And 14 when there is a primary jurisdiction body that is 15 running that particular show, I want to make sure that we're agreeing to abide by their rules and not 16 17 have to do something slightly differently on the 18 same topic to meet a condition in this separate certificate, which really generally doesn't involve 19 20 property rights. 21 So with that qualification, it's just a

22 matter of checking. If this is exactly the way OGS 23 wants to see us comply with their requirements, 24 their as-built requirements, then so be it. We 25 certainly have no problem with giving you copies of

whatever we give them. That was not the issue. MR. DREXLER: I'm not sure -- I'm not sure how we close the loop on this, Your Honor. It sounds like HTP is willing to accept this subject to check.

record is your representation that you're not the authors of this language; the authors of this language are OGS, and this language has just been delivered by you exactly the way you received it from OGS. That's all that Mr. Dax is looking for. MR. DREXLER: This language was worked

13 out by DPS in conjunction with OGS, so, I mean, I 14 would say that we may be considered a co-author of 15 this.

ALJ BOUTEILLER: I think you need to continue your line and we need to pursue this independent of what the status of OGS is. You've just compounded or complexed it. So just close out your guestions.

21 MR. DREXLER: All right. Let me keep 22 going, then.

23 BY MR. DREXLER:

Q Okay. Your testimony does not explain why Exhibit CH-2 deletes clauses 75 and 76, correct?

1 MR. DAX: I think Mr. Hocker was asked 2 questions about that. This was his exhibit. 3 Mr. Nash was really confined to transmission reliability issues. And these two issues were 4 5 specifically asked of Mr. Hocker. So I don't think Mr. Nash, quite frankly, has anything more to offer 6 7 than what's in the record through Mr. Hocker. 8 ALJ BOUTEILLER: Is that acceptable to 9 you, Mr. Drexler? 10 MR. DREXLER: Just one second, please. Ι 11 think I would like the question to still go to the 12 witness. I would like the record to be clear that 13 this witness does not have any explanation for why clauses 75 and 76 have been deleted. 14 15 ALJ BOUTEILLER: You're referring to 16 Exhibit Number 83, the very last page? 17 MR. DREXLER: Correct. 18 ALJ BOUTEILLER: The copy I have shows 19 those as being stricken, 75 and 74. I just want 20 that clear for the record. 21 MR. DREXLER: I think they're -- on Exhibit CH-2 that are clauses 75 and 76. They 22 23 might be different labels. 24 MR. DAX: I believe it was a typo that 25 was in PFD-03, and we just kept using that same

document for tracking changes to the certificate
 conditions.

ALJ BOUTEILLER: I just want whoever is 3 using this record to be able to follow it by your 4 5 question. So if we're referring to Exhibit Number 83, we don't have an accurate description of 83 in 6 7 your question. If you're referring to some other 8 document or exhibit, you need to be clear about it. 9 MR. DREXLER: All right. To be 10 explicitly clear, I am referring to what has been 11 labeled as Exhibit 83. At the top it's a HTP cover 12 sheet, shows it's "HTP Proposed Certificate 13 Conditions, Revisions to PFD 3." On page 25 of 25 14 condition number 75 has been completely stricken, 15 and the following condition labeled as 74 has been 16 completely stricken as well. 17 MR. DAX: Just for the record, these were stricken -- these are identical as in Exhibit 26. 18 19 In other words, those aren't new strike-outs. 20 Those are the strike-outs that were in Exhibit 26 21 sponsored by Mr. Hocker. 22 ALJ BOUTEILLER: All right. And we have 23 a question now before the witness.

24 MR. DREXLER: May I repeat the question? 25 BY MR. DREXLER:

1 Q Your testimony does not explain why those two 2 conditions that I just referenced have been deleted, 3 correct? 4 А Correct. And, therefore, you have no reason or explanation 5 0 to offer of why those were deleted? 6 7 Other than the same explanation as was offered by А 8 counsel, that they were addressed in other testimony. Okay. All right. On page 2, lines 19 through 21, 9 0 you indicate that HTP has accepted the SUF costs and 10 11 provided security. What are the costs of the facility 12 upgrades within NYISO? 13 I don't have that precise number. It's in the А vicinity of -- I'm sorry. I'd have to check that and 14 15 provide that. I don't have that before me. 16 MR. DREXLER: I'd like to make an 17 on-the-record request that HTP provide that 18 information, please. 19 ALJ BOUTEILLER: You want to reserve an 20 exhibit number for it? 21 MR. DREXLER: Yes, please, I would like to reserve Exhibit Number 84. 22 23 ALJ BOUTEILLER: Okay. 24 MR. DAX: Subject to whatever 25 confidentiality requirements the New York ISO

1 tariff imposes and making appropriate arrangements 2 for that, we will endeavor to get that information. They've accepted, and we 3 ALJ BOUTEILLER: don't know whether or not this is confidential 4 5 information. Possibly it is. And it will be submitted on that basis. 6 Mr. Johnson? 7 8 MR. JOHNSON: Is there a protective order in this case? 9 ALJ BOUTEILLER: I have not rendered a 10 11 protective order of a general nature. 12 MR. JOHNSON: Okay. So to the extent it 13 is critical infrastructure information, which I 14 believe it probably is, and other parties want 15 access to that data, at that point a protective order could be issued to protect access to the 16 17 other parties because I assume it would be given to 18 you? 19 MR. DAX: We're not asking for cost of 20 service rates, Your Honor. I'm not sure -- I'm, 21 you know, happy to give out information that's 22 relevant, but I'm not sure how far we're going to 23 go down this cost --24 ALJ BOUTEILLER: When we receive the 25 information and it is made available, the fact that

1	it will be received will be known to you. You can
2	make your request for the information at that time,
3	and we'll entertain any objections to such request
4	at that time as well.
5	We will reserve Exhibit Number 84 for the
6	information that the applicant has agreed to
7	provide Department of Public Service staff as
8	reflected on the record.
9	MR. DREXLER: Thank you.
10	BY MR. DREXLER:
11	Q What are the costs and the facility upgrades within
12	PJM?
13	A I don't have this information before me.
14	MR. DREXLER: I guess similar request
15	along the lines of the last question, I'd like to
16	make an on-the-record request that that information
17	be provided and included as within the exhibit,
18	the proposed exhibit identified as Number 84.
19	MR. DAX: Same qualifications.
20	ALJ BOUTEILLER: But let's give it a
21	separate number so as not to confuse the two cost
22	estimates. The second one you're asking for is for
23	the PJM system, is that correct?
24	MR. DREXLER: Correct.
25	ALJ BOUTEILLER: Okay. So let's call

1 that one Exhibit Number 85.

2 BY MR. DREXLER:

3 These costs that are going to be provided, are they 0 annual costs? 4 5 I'm not sure what costs -- the SUF costs and New А York ISO and the PJM costs? 6 7 Yes. Are they one-time charges or are they annual 0 8 costs? 9 I prefer not to answer that until we have clarity А established as to what is and what isn't revealable 10 11 language with regards to these interconnection. 12 ALJ BOUTEILLER: Can you make sure that 13 your response to Exhibits Number 84 and 85 are 14 clear as to whether or not they're recurring costs 15 or they're one-time costs? 16 MR. DREXLER: I don't know if they indicated that they can. 17 18 MR. DAX: We will do that, Your Honor. 19 The tariff explains that SUF costs are generally 20 one time. Sometimes they're maintenance costs. 21 We'll try to sort them out. 22 ALJ BOUTEILLER: The responses with 23 respect to 84 and 85 will be explicit with regard 24 to those categories. 25 MR. DREXLER: Okay.

1

BY MR. DREXLER:

And will HTP be required to make annual 2 0 contributions to PJM's regional transmission expansion 3 plans? 4 5 Α I'm not sure. 0 What is the amount of the security? 6 7 MR. DAX: Which security are you talking 8 about? 9 MR. DREXLER: I'm referencing on page 2 10 of the testimony, line 21, indicates security to 11 the NYISO. And what amount is that security? Has 12 that security been provided. 13 MR. DAX: We will endeavor to provide 14 that information when we provide the information in 15 response to Exhibit 84. It's probably subject to 16 the same confidentiality obligations. 17 ALJ BOUTEILLER: If that's acceptable, 18 the proposal is to include that information with 19 the remainder of the information being provided in 20 Exhibit Number 84. 21 MR. DREXLER: Great. Thank you. BY MR. DREXLER: 22 23 0 In Exhibit 1 of the HTP application at pages 4-83 24 in Section 4.13.2.2 it indicates that the HC power 25 cable will meet the PSC magnetic field standard for new

1 transmission facilities at the edges of the project 2 rights-of-way. What is the width of the project 3 right-of-way at upland locations? 4 MR. DAX: Do you need to see the 5 reference? THE WITNESS: I'd like to see the 6 7 reference. 8 MR. DAX: Counsel, will you show the 9 witness the document? MR. DREXLER: Your application? 10 11 MR. DAX: Yes. 12 MR. DREXLER: I happened to bring a copy 13 with me. 14 MR. DAX: That's good. It's your 15 cross-examination. 16 MR. DREXLER: Permission to approach the 17 witness? 18 ALJ BOUTEILLER: Approach. 19 BY MR. DREXLER: 20 Q There you are. 21 Could I ask you to restate the question, please? А 22 What is the width of the project right-of-way at Q upland locations? 23 24 I'm not able to make that determination with this Α 25 information in front of me.

MR. DAX: Your Honor, we can stipulate that there is no right-of-way as defined -- as I suspect counsel is defining it. The right-of-way is the public streets, public rights-of-way of the city streets, much like Con Edison or Brooklyn Union or anybody in the same line of business uses.

7 Also, these questions were the subject of extensive discovery responses that are included in 8 Exhibit CH-1, whatever that's been marked as. 9 That 10 would be Exhibit 25. And so there is evidence in the record concerning compliance with the 11 12 Commission standards. But in terms of a 13 right-of-way width, it's -- it really doesn't apply in the context of the use of city streets. 14

ALJ BOUTEILLER: We have the applicant's representation from counsel as to how they're addressing your request for a specification of a right-of-way in this instance in this context with reference to exhibits provided to staff and existing on the record.

21 MR. DREXLER: Okay.

22 BY MR. DREXLER:

Q What is the width of the project right-of-way at submarine locations?

25 A Again, I'm not precisely sure on the definition of

1 right-of-way, but I believe we're granted a guarter or 2 approximately 100 feet wide in which we are to make --3 perform our cable installation as part of the 4 certification. We would then provide as-built drawings 5 to all required parties identifying its location. MR. DREXLER: There was a on the 6 7 record -- in response to one of the on-the-record 8 requests last week at the hearing, there was a --9 the petition for a grant of easement in lands under 10 the waters of the Hudson River, County of New York was provided -- was in letter from Mr. Dax to the 11 12 Office of General Services dated October 14, 2009. 13 I'd like to ask that that document be marked as an 14 exhibit. 15 ALJ BOUTEILLER: Do you have copies? Do 16 you have something for me to mark? 17 MR. DREXLER: I got one copy. 18 ALJ BOUTEILLER: There's a fax machine 19 across the hall. 20 MR. DREXLER: Let me ask a question 21 before I ask that this be marked for 22 identification, okay? 23 BY MR. DREXLER: 24 I'd like to ask, are you aware that in that 0 25 document on page 2, paragraph 7, it indicates that

1 Hudson is requesting that the permit be converted to an 2 easement 30 feet in width? Are you aware of that 3 statement. 4 I am not. I was not participating in the Α 5 production of that permit application. MR. DREXLER: We'll have copies made 6 7 right now. MR. DAX: And we'll stipulate to 30 feet, 8 9 if that's the fact he's trying to elicit. 10 ALJ BOUTEILLER: Does that suffice for your purposes, Mr. Drexler? 11 12 MR. DREXLER: We'll still be asking that 13 this whole document be marked as an exhibit unless 14 you want to provide it, Jonathan. 15 MR. DAX: It was your request. I 16 supplied it in response to your request very 17 promptly. And if you -- I have no problem with it coming into the record, but I don't have copies 18 19 with me. 20 MR. DREXLER: We'll have copies made 21 right now. How many copies do we need, two, three? Who else would like copies in the room? 22 ALJ BOUTEILLER: Let's go off the record. 23 24 (Discussion off the record.) 25 BY MR. DREXLER:

1 Are you aware of the proposed location of the Q 2 facility in relation to buildings along West 52nd 3 Street? 4 А Yes. 5 Approximately how close to those buildings is the Q location of the proposed transmission facility? 6 7 I do not have that technical information before me, Α 8 so I hesitate to provide an answer. 9 MR. DAX: We offered Mr. Hocker up with detailed drawings that were in front of Mr. Hocker, 10 11 and I think he did get some questions about it. Ι 12 don't know why this transmission reliability 13 witness is being asked questions about the 14 proximity of the line to buildings. 15 ALJ BOUTEILLER: Mr. Dax, are you saying 16 this is not the correct witness for those questions 17 to be asked? 18 MR. DAX: For that particular question. 19 If he wants to tie it to EMF issues, this is the 20 correct witness. But if he's talking about where 21 is the line going to be in relation to buildings, 22 that was a Mr. Hocker question. 23 MR. DREXLER: These questions go to the 24 EMFs. 25 ALJ BOUTEILLER: Please proceed on that

2 BY MR. DREXLER:

basis.

3 Are you aware that Exhibit 31 indicates that the 0 4 facility will be located seven feet from the fronts of 5 buildings at West 52nd Street? Subject to check, I would accept your statement. 6 Α 7 Are you aware that Exhibit 31 also indicates that Q 8 the facility be located seven feet from the fronts of 9 buildings at 12th Avenue? 10 Again, subject to check, I'll accept your Α 11 assertion. 12 And assuming an offset of seven feet from nearest Ο 13 buildings, as indicated in that Exhibit 31, what will 14 the magnetic field strengths related to operation of 15 the proposed facility be at the nearest portion of 16 occupied buildings? 17 Α I do not have that information before me to provide 18 an answer. 19 Do you know where that information can be found? Q 20 А I do not have a specific reference to any exhibit 21 numbers, but I believe that magnetic field charts and 22 predictive levels have been provided as part of this 23 process. 2.4 MR. DAX: Exhibit 25. 25 BY MR. DREXLER:

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1 Will the facility comply with the PSC policy Q standards for magnetic field strength at the nearby 2 3 buildings at 52nd Street? 4 А Yes. 5 And also at the 12th Avenue? 0 6 А Yes. 7 I'd like to refer back to -- do you have a copy of Q 8 Exhibit CH-1? 9 MR. DAX: It's Exhibit 25, for the 10 record. 11 А Not before me. 12 Are you familiar with the response to that exhibit? Q 13 Yes. А 14 And I want to read the statement to you from that 0 15 exhibit. 16 MR. DAX: What particular page of the 17 exhibit or IR response? 18 MR. DREXLER: It's page 36 of Exhibit --19 MR. DAX: 25. 20 MR. DREXLER: -- 25. 21 MR. DAX: Do you have a copy to show the 22 witness? MR. DREXLER: I'll read him the statement 23 24 to see whether he's familiar with the response. 25 BY MR. DREXLER:
1 Therein, in part, this answer provided by you on Q 2 June 2, 2009 states "the analysis shows that magnetic 3 field strength is below the New York State interim 4 standard of 200 milligauss in all conditions except the 5 splice area where the cable is in a horizontal configuration. At this location the cable is an 6 7 assumed depth of 4 feet and the phases are assumed to 8 be 39 inches arc to facilitate splicing." Does that 9 sound familiar? 10 Yes, it does. А Is that information correct? 11 0 12 Α Yes. 13 Would you like to revise your testimony that you 0 14 just provided indicating that the facility will comply 15 with the PSC policy standards for magnetic field 16 strength in nearby buildings?

17MR. DAX: There's no reason to do that.18He said that there'll be mitigation required.

19 BY MR. DREXLER:

20 Q What mitigation will be implemented?

A I do recall that there is an intention to install EMF reducing wires around those splices such as to counteract the effects of magnetic fields generated at those particular points, which will allow the project to stay within compliance, as you state.

1 MR. DAX: Could I show the witness the 2 answer to the complete -- the complete answer to 3 the IR rather than him having to go from recollection and getting selected guotes from 4 5 Mr. Drexler? ALJ BOUTEILLER: Yes, put it before him. 6 7 MR. DAX: This is at page 36. You can 8 scroll up or down with these buttons. 9 ALJ BOUTEILLER: Mr. Drexler. 10 MR. DREXLER: Yes. 11 BY MR. DREXLER: 12 What mitigation measures will be employed here? 0 13 As described in the exhibit, there are several ways Α 14 to accomplish this. One could be a greater depth of 15 burial, reducing the distance between the phases, and 16 we're also offering, as part of an Attachment C, some 17 simple technological mitigation methods, one that I 18 just described earlier about counteractive EMF wiring 19 such as to reduce the EMF at that point. 20 0 What analysis have you done to conclude that these 21 mitigation measures will allow the PSC's policy 22 standards for magnetic field strength to be met? 23 Α I think it's readily acceptable that greater depth 24 does, in fact, reduce the EMF at any particular point, 25 as does moving the phases closer together. And those

1 mitigation methods for some technological mitigation 2 has been provided as part of Attachment C by our cable 3 contractor, Prysmian, P-r-y-s-m-i-a-n. 4 Attachment C has not been included in your response 0 5 here. MR. DAX: We didn't include Attachment C. 6 7 You're right. 8 BY MR. DREXLER: Is there anything in the record that shows that the 9 0 mitigation measures will allow compliance with the 10 11 PSC's policy standards? 12 MR. DAX: May I be heard, Your Honor? 13 Mr. Dax. ALJ BOUTEILLER: 14 MR. DAX: The Department of Public 15 Service in their Exhibit PSD-03 has a certificate 16 condition which has been -- become customary in 17 Article 7s that I'm familiar, which is in the EMCP 18 the applicant is bound to provide a professional 19 engineer's certification that, if built to design, 20 the project will comply with the interim standards 21 for magnetic and electric fields that the Commission has established. That has been the 22 23 customary approach to EMF in these projects. That 24 was included in staff's proposed certificate 25 conditions in this case. Applicant has accepted

1 that certificate condition and, as a result of that, one does not generally get into the details 2 3 of how it's going to be done. It's left to the EMCP stage. There was extensive discovery earlier 4 5 in -- more than a year ago in this proceeding in which we provided answers based upon studies that 6 were done to respond to the discovery requests, and 7 8 the record includes those. If there are attachments missing and somebody wants us to 9 10 include those as an exhibit, we'll be happy to 11 supply them. 12 ALJ BOUTEILLER: Mr. Drexler, are you 13 requesting Attachment C at this time? 14 MR. DREXLER: Yes, I am requesting a copy 15 of Attachment C be put into the record. The 16 problem is here there is no defined design to 17 ensure compliance. They've essentially left it up 18 to, I quess, a decision down the road. 19 MR. DAX: We've complied with their 20 request. It is their condition that says do this 21 in the EMCP. Apparently, that's not enough now, 22 but that was a staff proposal, and we accepted it. 23 ALJ BOUTEILLER: Okay. I'm hearing 24 arguments that belong in briefs at this point.

25 Okay.

1 MR. DREXLER: I'm okay with the 2 on-the-record request. 3 ALJ BOUTEILLER: Are we reserving an exhibit number? 4 5 MR. DREXLER: Yes. I'd like to ask that Exhibit 86 -- Exhibit Number 86 be reserved for a 6 7 copy of the October 14, 2009 transmittal from John 8 Dax to John Egan of the New York State Office of General Services regarding the petition for a grant 9 10 of easement in lands under the waters of the Hudson 11 River, County of New York. 12 Judge, do you have a copy at this point? 13 ALJ BOUTEILLER: You're changing topics on me or not? Off the record. 14 15 (Discussion off the record.) 16 ALJ BOUTEILLER: Before we go on to any 17 further matters or go back in time to perfect 18 matters that were raised on the record before, 19 let's continue with our consideration of Exhibit 20 Number 25 and specifically page 36 of that exhibit where we had some cross-examination of this witness 21 22 and in your cross-examination an indication that staff had not received Attachment C that was 23 24 referenced on this page of Exhibit Number 25. 25 Mr. Drexler, is that true, that you've not received

1

a copy of Attachment C?

2 MR. DREXLER: I'm not necessarily saying that I haven't received it but that the record 3 should reflect the information contained therein. 4 5 ALJ BOUTEILLER: So you want to reserve a number for the record to include the Attachment C 6 7 cross-referenced in Exhibit Number 25, is that 8 correct? 9 MR. DREXLER: Yes, please. ALJ BOUTEILLER: Let's reserve that 10 11 number is --12 MR. DAX: Your Honor, may I be heard, just to expand on the scope of what's coming in? 13 14 ALJ BOUTEILLER: Okay. Please do. 15 MR. DAX: As I said off the record, Attachment C is referenced in the response to DPS 16 17 23, and Attachment C is one of several attachments 18 to a study that was performed by David Estey, E-s-t-e-y, of RLC Engineering to respond to DPS's 19 20 questions. We would propose to submit the entirety 21 of that study, which we did not include in what has now been marked as Exhibit 25, which was done not 22 23 purposefully but to reduce paper. We will now 24 bring that in. And, yes, indeed, staff has had 25 that. And I just would note that generally, when

1 you come to cross-examine witnesses, you should 2 come with your documents in hand. 3 ALJ BOUTEILLER: Okay. That's fine. Let's just stick to the matters at hand. We'll 4 5 reserve Number 86 for the document as described between Mr. Dax and Mr. Drexler, but let's go back 6 7 in your series. I've already reserved Number 85. 8 Do we have the -- no? 9 MR. DAX: 85 is the PJM costs. 10 ALJ BOUTEILLER: 85 is PJM. 86, now, is 11 the one you just identified, but we did have 12 conversation and we did not have documents 13 available, but I believe the documents are 14 available now for inclusion in the record. 15 Mr. Drexler, can you identify the next document that you want to include in this record 16 17 that we discussed previously? 18 MR. DREXLER: Yes, Your Honor. The 19 document that is identified as an October 14, 2009 20 correspondence between John W. Dax and John Egan, Commissioner of the New York State Office of 21 22 General Services, regarding petition for a grant of 23 easement in lands under the waters of the Hudson 24 River, County of New York. 25 ALJ BOUTEILLER: 87, for identification.

1 (Exhibit No. 87 was marked for 2 identification.) 3 MR. DREXLER: Do you have copies now, Your Honor? 4 5 I already have one. ALJ BOUTEILLER: MR. DREXLER: Okay. 6 7 BY MR. DREXLER: 8 Turning to what's been marked as Exhibit 83, these 0 are the HTP revised certificate conditions. On page 3 9 of 25, paragraph 8B indicates that the certificate 10 11 holder shall seek to minimize electromagnetic fields by 12 designing and constructing the transmission facility, 13 including the cables and the manholes, as deep as 14 practical and as close as practical to the center of 15 the West Side Highway, taking into consideration the 16 location of preexisting underground facilities and the 17 requirements of the affected New York City agencies. 18 Given the rerouting of the facility along the buildings 19 along the West Side Highway, how can this condition be 20 met? 21 А It's my understanding that present design, 22 including this location that you're talking about, takes this into consideration and does meet standards. 23 24 But the line will not be located near the center of 0 25 the West Side Highway, correct?

1 A As close as practical.

Q But the consideration is to put it as close as possible to the buildings along the West Side Highway, isn't that correct? A In reading this, I could still read that to be as

In reading this, I could still read that to be as А close as practical, taking into consideration other 6 7 discussions with regards to the location of the cable, 8 closer to the buildings than originally anticipated. 9 However, if there was a need to modify this language 10 for DPS, I would imagine we could discuss that. 11 Do you know at what distance the HTP facility will 0 meet the PSC policy standards for magnetic field 12 13 strength? 14 I don't recall the precise distance for the А 15 standard. 16 MR. DREXLER: I have no further questions 17 right now. Thank you. 18 ALJ BOUTEILLER: Is there cross for this 19 witness from other parties present? 20 MR. WEINTRAUB: Not from DEC, Your Honor. 21 ALJ BOUTEILLER: If not, Mr. Dax, do you need to redirect? 22 23 MR. DAX: I just have one question. 24 That's with respect to the last topic about 8B. 25 REDIRECT EXAMINATION

1 BY MR. DAX:

2	Q	Mr. Nash, were you directly involved in the process
3	of a	pplying for the revocable consent to the City of
4	New	York for permission to locate, install and occupy
5	publ	ic streets for the location of the cable?
6	A	Not personally.
7	Q	Do you have a general familiarity of what that
8	proc	ess entails?
9	А	Generally.
10	Q	And is it true that that process of seeking to
11	loca	te and install and occupy cable install cable
12	and	occupy city streets for location of the cable
13	invo	lved consultation either directly or indirectly
14	thro	ugh New York City DOT with a number of city
15	agen	cies?
16	A	Yes, I'm aware of that.
17	Q	Did that include the agency that controls water and
18	sewe	r facilities in the city?
19		
19	A	Yes, that's my recollection.
20	A Q	Yes, that's my recollection. Is that the Department of Environmental Protection?
20	Q	Is that the Department of Environmental Protection?
20 21	Q A Q	Is that the Department of Environmental Protection? Yes.
20 21 22	Q A Q	Is that the Department of Environmental Protection? Yes. And did it also involve consultation with other

1 Development Corporation?

2 A Yes.

3 Q As well as the city DOT itself?

4 A Yes.

5 Q And do you understand that the location that has 6 been displayed on various detailed drawings that have 7 been marked for identification in this proceeding are 8 the result of those consultations?

9 A I'm sorry. I do know they were involved. I'm not10 quite sure exactly what your question is.

11 Q Let me restate it. Are you aware -- have you seen 12 any detail drawings that have been submitted in this 13 proceeding to date that locate -- that show the

14 location, the proposed location of the facility?

15 A Yes.

16 Q Do you understand that those drawings reflect the 17 results of the consultations that we just talked about 18 with the various agencies?

19 A Yes, they do.

20 MR. DAX: Nothing further.

21 ALJ BOUTEILLER: Mr. Drexler, anything 22 further?

23MR. DREXLER: No, Your Honor.24ALJ BOUTEILLER: Any other party? If

25 not, Mr. Nash, you're excused, and thank you for

1 your testimony. THE WITNESS: Thank you. 2 3 ALJ BOUTEILLER: Is there anything further from the applicant at this time? 4 5 MR. DAX: That is our case, Your Honor. ALJ BOUTEILLER: Thank you very much. 6 7 Mr. Drexler, do you have a witness at 8 this time? 9 MR. DREXLER: Yes, Your Honor, DPS staff calls Edward Schrom. 10 ALJ BOUTEILLER: Thank you. 11 12 MR. DREXLER: Can we go off the record for a second? 13 14 ALJ BOUTEILLER: Off the record. 15 (Discussion off the record.) 16 ALJ BOUTEILLER: Mr. Schrom, please 17 stand. Please raise your right hand. 18 EDWARD SCHROM, 19 having been first duly sworn by the notary public, 20 was examined and testified as follows: ALJ BOUTEILLER: Please be seated. 21 22 Please state your name and your address. 23 THE WITNESS: My name is Edward Schrom. 24 I work at the Department of Public Service, 3 25 Empire State Plaza, Albany, New York.

1	ALJ BOUTEILLER: We'll turn to counsel
2	for the testimony to be coming into the record.
3	DIRECT EXAMINATION
4	BY MR. DREXLER:
5	Q Mr. Schrom, do you have before you a 13-page
6	document plus cover sheet entitled "Prepared Testimony
7	of Edward C. Schrom, Jr."?
8	A That's correct.
9	Q Was that testimony prepared by you or under your
10	direction?
11	A Yes, it was.
12	Q Do you have any substantive additions or
13	corrections to make to that testimony?
14	A I have none.
15	Q If I were to ask you the questions contained in the
16	testimony, would your answers be the same as those
17	contained therein?
18	A Yes, they would.
19	MR. DREXLER: Your Honor, I move that the
20	testimony of Mr. Schrom be placed into the record
21	as if given orally.
22	ALJ BOUTEILLER: Absent objection, I will
23	instruct the reporter to copy into the record as if
24	given orally today the prefiled direct testimony of
25	the staff witness, Edward C. Schrom.

1	MR. I	DREXLER:	Thai	nk you.		
2	(The	testimony	is	included,	as	ordered.)
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BEFORE THE STATE OF NEW YORK PUBLIC SERVICE COMMISSION

In the Matter of

Hudson Transmission Partners, LLC

Case 08-T-0034

Prepared Testimony of:

Edward C. Schrom, Jr. Electric Operations Specialist Office of Electric, Gas, and Water State of New York Department of Public Service Three Empire State Plaza Albany, New York 12223-1350 Case 08-T-0034 EDWARD C. SCHROM, JR.

1	Q.	Please state your name, employer and business
2		address.
3	A.	Edward C. Schrom, Jr., New York State Department
4		of Public Service (Department), Three Empire
5		State Plaza, Albany, New York 12223.
6	Q.	In what capacity are you employed by the
7		Department?
8	A.	I am a Power System Operations Specialist in the
9		Bulk Electric Systems Section, Office of
10		Electric Gas and Water.
11	Q.	Please summarize your educational background and
12		professional experience.
13	A.	I graduated from Rochester Institute of
14		Technology with a Bachelor of Science degree in
15		Electrical Engineering.
16	Q.	Have you previously testified in other
17		proceedings?
18	A.	I have testified before the New York State
19		Public Service Commission (Commission) on
20		numerous Article VII transmission siting cases

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1		and numerous rate cases. I have also testified
2		before the New York State Board on Electric
3		Generation Siting and the Environment on Article
4		X power plant siting cases, and before the State
5		Energy Office in the State Energy Master Plan
б		III proceeding.
7	Q.	Do you belong to any professional associations?
8	Α.	Yes, I am a member of the Institute of
9		Electrical and Electronics Engineers (IEEE), the
10		IEEE Industrial Applications Society, the IEEE
11		Dielectric and Electrical Insulation Society,
12		and the IEEE Power Engineering Society.
13	Q.	Are you a licensed professional engineer?
14	Α.	Yes. I am registered as a professional engineer
15		in the State of New York.
16	Q.	What is the purpose of your testimony in this
17		case?
18	Α.	The purpose of my testimony in this case is to
19		discuss the potential reliability benefits of
20		the Hudson Transmission Partners, LLC (HTP)

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1		project.
2	Q.	Has the New York Independent System Operator,
3		Inc. (NYISO) conducted a Reliability Needs
4		Assessment (RNA) for the New York Control Area
5		for the next 10 years?
6	A.	Yes.
7	Q.	What are the conclusions of the RNA?
8	A.	The RNA indicates that there is no reliability
9		need for new capacity or transmission facilities
10		through at least 2018. However, various
11		sensitivity analyses performed in the RNA study
12		indicate that capacity could be needed under
13		certain scenarios, particularly in Zone J, in
14		the next 10 years. These scenarios include,
15		among others, implementation of more stringent
16		air emission regulations, retirement of the
17		Indian Point nuclear facility, and higher than
18		expected load growth.
19	Q.	Why is it important to look at the potential

reliability impacts under various scenarios? 20

- 3 -

1 Α. While the RNA base case models the system based 2 on current expectations regarding load and resource availability, it is important to 3 4 understand the potential system impacts related to various possible events so that planning for 5 those events can happen as soon as possible. 6 Long-term outages or the retirement of large 7 amounts of generation (i.e., 100 MWs or more) in 8 9 New York City could result in the remaining 10 resources being strained or insufficient to 11 supply load. To maintain the reliability of the 12 bulk system, sufficient lead-time is needed to 13 add transmission and/or other generation, and/or 14 secure sufficient additional demand response 15 resources. The addition of a new generator 16 and/or transmission line is likely to take up to 17 five years from the point of conception. What were the results under the RNA scenarios 18 Q. 19 which modeled potential future NO_x emissions 20 limitations?

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1	A.	According to the RNA, implementation of programs
2		to control $\ensuremath{\text{NO}}_x$ emissions from fossil-fueled
3		generators could render some units unavailable,
4		and limit other units' output, potentially
5		resulting in inadequate resources within the
б		control area.
7	Q.	What did the scenario related to the retirement
8		of Indian Point indicate?
9	Α.	Due to its location in a constrained area of the
10		system, retirement of one of the two Indian
11		Point nuclear plants, which are up for
12		relicensing by the Nuclear Regulatory Commission
13		(NRC), would result in inadequate resources in
14		2014.
15	Q.	Has the NYISO studied the reliability impacts
16		associated with all of the potential new
17		environmental regulations?
18	Α.	The NYISO is currently in the process of
19		studying the potential cumulative impacts of
20		various potential environmental regulations

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Case 08-T-0034 EDWARD C. SCHROM, JR.

1		including those related to $\text{CO}_2\text{, SO}_x$ and NO_x
2		emissions, New Source Review, and Best Available
3		Control Technology (BACT) for water cooling.
4		Generator owners will need to weigh the
5		potential costs of the investments in the plant
6		to meet the new regulations versus the forecast
7		revenues from operating the plant. Potentially
8		cost-prohibitive retrofit expenses to meet the
9		emissions requirements could cause certain
10		generating plants to operate less, or shut down
11		altogether.
12	Q.	Did the NYISO examine the risk that the capacity
13		retirement would place on Zone J?
14	A.	The NYISO performed an analysis to determine how
15		much capacity would have to be taken away to
16		cause an exceedance of the loss of load
17		expectation (LOLE). The RNA showed that if 750
18		MWs of capacity were retired from the lower
19		Hudson Valley, or between 500 MWs and 750 MWs
20		were retired in NYC in the year 2018, the

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1		resource adequacy criteria would not be met.
2	Q.	Besides plant retirements, what else could
3		impact reliability in Zone J?
4	Α.	If a large generator were to suffer a boiler
5		implosion or become damaged in some way,
6		capacity from the plant could be out for
7		possibly some number of years.
8	Q.	Are there any potential benefits available from
9		the HTP project?
10	Α.	Yes. HTP may offer several potential benefits,
11		including: 1) The ability of the back to back
12		HVDC unit to isolate New York from disturbances
13		in New Jersey flowing over the proposed
14		transmission facility. For example, if New
15		Jersey should suffer a blackout or voltage
16		collapse problem, the terminal would isolate New
17		York from disturbances flowing over the proposed
18		facility. The terminal basically acts like a
19		mechanical check value. However, the proposed
20		facility would not protect New York from

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1 disturbances in New Jersey flowing over other 2 interconnections with New York, such as the "A, B, and C" lines, or the two 345 kV lines; 2) The 3 capability of the back-to-back HVDC terminal to 4 change the direction of flow or change the 5 amount of flow within a half-cycle, which is 6 7 faster and more controllable than a phase shifter, and allow a faster response to system 8 9 conditions; 3) An additional source to Zone J in the west 49th street load center; 4) An 10 11 additional source well below the often-12 constrained Dunwoodie interface that limits imports into Zone J; and, 5) The addition of the 13 14 HVDC line has a very low contribution of short 15 circuit current compared to an AC transmission line or a new generator, and thereby limits the 16 amount of necessary upgrades (i.e., breaker 17 change-outs). 18 Was it not a recommendation of various blackout 19 Q.

20 reports that there is a need to isolate or block

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EDWARD C. SCHROM, JR.

1 propagating disturbances from affecting other 2 Independent System Operators (ISOs) or state? Reports by the various organizations, in 3 Α. 4 response to the Department of Energy's 2003 Blackout Report, have recommended HVDC as a 5 6 method of blocking disturbances from propagating 7 across ISOs and states. HVDC is not free flowing like AC transmission, but blocks a 8 9 disturbance from propagating, and can control 10 unwanted power flows. Unfortunately, more HVDC units would need to be installed before all 11 12 unwanted flows could be prevented, or disturbances blocked on the interconnected 13 14 system. Surrounding New York State, the 15 installation of this HVDC back to back unit 16 would be the first step in developing those 17 systems to block disturbances from sweeping across the United States. HTP could be the 18 19 first of many needed HVDC installations. 20 Have there been any applications of HVDC Ο.

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1		installed to block system disturbances from
2		propagating in North America?
3	A.	Yes. We currently have a HVDC back-to-back
4		terminal in Hydro-Quebec, Canada, that prevents
5		disturbances from propagating from Hydro-Quebec
б		through to New York over that facility.
7		Disturbances that have occurred on the Canadian
8		system have not been able to propagate into New
9		York. Such disturbances have included voltage
10		collapse problems, solar magnetic disturbances,
11		and cascading transmission problems. These
12		events have occurred without any warning to
13		operations personnel, but have been blocked from
14		coming into New York.
15	Q.	Has HTP accepted its cost allocation for the
16		class year study of 2008?
17	A.	Yes. They have officially accepted the class
18		year allocation of approximately 17 million
19		dollars and have forwarded a deposit to the
20		NYISO.

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1	Q.	Have you evaluated the potential Electromagnetic
2		Fields (EMFs) associated with the HTP line?
3	Α.	Yes.
4	Q.	What are the results of your evaluation?
5	A.	The developer will be able to meet the
б		Commission's standard for EMFs in most
7		instances, except for the horizontal
8		configuration. At maximum conductor current in
9		the horizontal configuration, the
10		electromagnetic field as calculated would be 400
11		mg above the conductors. HTP should be required
12		to develop a shielding plan to reduce the
13		electromagnetic field to a reasonable level for
14		horizontal configurations.
15	Q.	If the Commission approves the HTP line, would
16		you recommend any conditions to ensure
17		reliability?
18	A.	Yes. The certificate conditions, identified as
19		Exhibit (PFD-3), in the testimony of
20		Philip/Flynn/Davis, which I was involved in

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1 preparing, should be required as part of any 2 certificate that may be issued. 3 Has the applicant completed the System 0. 4 Reliability Impact Statement (SRIS) study 5 process? The applicant completed and received 6 Yes. Α. 7 approval of its SRIS at the NYISO's Operating Committee on February 28, 2008. The SRIS shows 8 9 that the project can be interconnected to the 10 Con Edison control area reliably. However, the 11 SRIS does not cover the operating parameters by 12 which it will operate. Those details will follow in the facility studies that are to be 13 14 conducted later. Do you believe that this project may be needed 15 Q. 16 for reliability? 17 Α. Yes, in the event that a large amount of generation is retired or experiences a long-term 18 19 outage, as mentioned above. 20 Does this conclude your initial testimony? Ο.

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1 A. Yes.

1 DIRECT EXAMINATION

2 BY MR. DREXLER:

3 Mr. Schrom, have you had an opportunity to review 0 4 HTP's proposed revisions to the transmission system 5 reliability proposed certificate conditions? Yes, I have. 6 Α 7 I'd like to ask you just a few questions about Q 8 those conditions and the terms that HTP has not agreed 9 to within those system conditions -- or certificate conditions, excuse me. 10 11 ALJ BOUTEILLER: Mr. Drexler, are we 12 still working with Exhibit Number 83? MR. DREXLER: Let me confirm. Yeah, I'll 13 work off 83, Exhibit 83. 14 15 ALJ BOUTEILLER: I just want clarity in 16 the record. That's all. 17 MR. DREXLER: Yeah. 18 BY MR. DREXLER: 19 Now, in the conditions starting on page 18 of 25 of Q 20 Exhibit 83, paragraph 54 through, say, paragraph 73 on 21 page 24 of 25, you've noted that they have changed the -- included the word "transmission facility" 22 23 throughout those conditions, is that correct? 24 That's correct. Α 25 Q And in some places those conditions related to the

1 provision of information to DPS staff, correct?

2 A That's correct.

Q And staff, from what I understand, is interested in obtaining information relative to the associated equipment, including but not limited to the associated back-to-back HVDC terminal, is that correct?

7 A That's correct.

8 Q And the provision of that information would not 9 provide the Public Service Commission with jurisdiction 10 that it didn't otherwise have, would it?

11 A That's correct.

12 Q And looking specifically at paragraph 55 on page 18 13 of 25, was this condition intended to provide

14 information to DPS staff?

15 A This paragraph was intended to allow DPS staff to 16 not only review what was going on at West 49th Street 17 but the back-to-back terminal that the HTP was 18 proposing to build with this project and the 19 interconnection to the PSE&G system, so that we knew 20 that work was ongoing and that the project was going to 21 make its in service dates. In addition, if there was

22 ever a failure, it would also allow us to visit those

23 places to see what work was being accomplished.

Q In addition, this condition references proof of acceptance by Consolidated Edison?

1 A That's correct.

2 Q Why is that important to include in the certificate 3 conditions?

4 Because we don't want the company to be purchasing Α 5 equipment or to do a design that's not acceptable to Con Edison in order to interconnect this cable or this 6 7 facility to the system. We don't want them to spend 8 money for facilities that can't be connected and then, 9 in turn, at a later time come back and say, "well, gee 10 we bought all this stuff and it cost us millions of dollars and we can't connect," even though it doesn't 11 12 meet Con Ed's requirements.

13 Q Turning to condition -- proposed condition number 14 56 --

15 A Yes.

16 Q -- according to the revisions provided by HTP by 17 including this as the transmission facility, would DPS 18 staff be allowed to inspect the portions of the 19 facility outside of New York?

A According to the way this is written, that the transmission facility is only the facility that connects West 49th Street to the state line, so that would preclude us from going over and looking at the HVDC back-to-back terminal and the PSE&G substation. Q Why is it important that DPS staff be allowed to

1 inspect the entire facility?

A DPS needs to know -- the staff needs to confirm for the Commission that the owner of the facility is doing due diligence in getting his facility constructed, and, at a later time, if there is a failure, something that DPS staff can go look and see what the failure and what the work is that is involved in making the facility back to normal.

9 Q Turning to page 21 of 25 under HTP's proposed 10 certificate conditions, paragraph 65, is it correct 11 that this condition leaves it ambiguous as far as 12 who -- whether the ISO, the New York ISO or PJM will 13 have operational control of the facility?

14 It leaves it ambiguous as to who has the control, А 15 and we are concerned that because this is coming into 16 the Con Edison load center in Zone J, and because Con 17 Edison is responsible for its system, the only ones 18 that can really have the purview of the system is the 19 New York ISO and PJM -- I mean, New York ISO and Con 20 Edison. Con Edison can suffer a number of different 21 scenarios, which may be the loss of a major 22 transmission line or something like that, and, as a 23 result, may need the power flows reduced or changed, or 24 there may be a knowledge of certain other transmission 25 lines which may preclude the transfer of this capacity.

So we believe the New York ISO should be the operator
 of this cable.

ALJ BOUTEILLER: Let's go off the record. 3 (Discussion off the record.) 4 5 ALJ BOUTEILLER: You can ask your next direct question. 6 7 BY MR. DREXLER: 8 Turning to page 23 of 25, paragraph 66, is this 0 condition as it was originally drafted by DPS intended 9 to ensure that HTP would be working with Con Edison 10 11 before purchasing equipment? 12 А This is directly -- its purpose is to have Yes. 13 them work with Con Edison on the design to ensure that 14 their equipment can be connected to Con Ed's system. 15 Con Ed, after all, designed its system, and there are 16 certain aspects that they need to know about, and those are not written into NPCC protection requirements. 17 18 Thank you, Your Honor. MR. DREXLER: The witness is now available for cross-examination. 19 20 ALJ BOUTEILLER: Mr. Dax? 21 MR. DAX: Yes, I have some questions just 22 about the supplemental direct testimony. 23 CROSS-EXAMINATION 24 BY MR. DAX: 25 0 Good afternoon, Mr. Schrom.

1 A Good afternoon, Mr. Dax.

2 Q In response to a question about the changes that 3 were proposed to condition 55, I think you indicated 4 that your concern there was to make sure that DPS is 5 provided with relevant information about the entire 6 facility, including what's in New Jersey as well as 7 what's in New York. Do I correctly paraphrase your 8 previous answer?

9 A From terminal to terminal, yes.

10 Q Would you look at condition 64? And with the 11 exception of making some what I'll call minor editing 12 changes, would you agree with me that HTP has not 13 proposed any deletions or substantial changes to 64? 14 A I would agree with that.

15 Q And that the -- 64 requires that the certificate 16 holder file a copy of the following documents with the 17 Secretary to the Commission, and then there are 18 documents listed A through G, is that correct?

19 A That's correct.

20 Q Now, is there anything missing from that list of 21 documents that you think should be provided that's not 22 listed there?

23 MR. DREXLER: Essentially, the answer to
24 this was provided in his testimony earlier.
25 MR. DAX: You didn't actually discuss 64

1 with him. You discussed other provisions but not 2 64, and this is my opportunity to ask questions. 3 ALJ BOUTEILLER: The question will stand. I believe the question is does anything further 4 5 come to mind that's of equivalent value that should be listed in addition to these documents. 6 7 MR. DREXLER: This may take some time. This requires him to go through all of -- the whole 8 section that they've changed because, as I 9 discussed in the testimony, by changing the 10 11 certificate holder -- or, excuse me, the definition 12 of "transmission facility." 13 MR. DAX: Nothing in 64 refers to the term "transmission facility," number one. 14 Number 15 two, if this is the provision that staff proposed in their original certificate condition proposal, 16 17 where it puts us on the hook to provide copies of 18 documents, it's the logical place for us to look to understand what we need to supply, and if there are 19 20 things missing, it should be put in. ALJ BOUTEILLER: It's not clear from my 21 22 degree of participation to what extent the witness 23 needs to refresh his recollection with respect to 24 the sum and substance of everything that's going on

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Just if he can indicate for the record just

25

here.

1 what comes to mind or not comes to mind immediately 2 at this point in time, we'll have that characterization of it. 3 Mr. Schrom, can you think of anything 4 5 else, or can you tell us what kind of review would you need to accomplish to be able to respond to 6 7 that question? 8 THE WITNESS: This 55 really refers to construction activities and prior to the 9 commencement of construction, a portion of the 10 11 facility, so we're really talking prior to 12 construction of the facility. These documents that 13 are referred to in Section 64 are really referring 14 to, basically, post or just before it -- really, 15 startup of the facility. BY MR. DAX: 16 17 So it's a timing issue. 55 then -- I think you had 0 18 characterized 55 in response to Mr. Drexler as an 19 information requirement provision, but I think what you're saying now is it's really a question of the 20 21 timing of certain types of information, is that 22 correct? 23 Α That's correct. 24 Let's look at 55. Let's -- just to wrap up 64, 0 25 sitting there today, nothing comes to mind that would
1 be missing from the list of documents that you would 2 want to see the applicant provide pursuant to 64, is 3 that correct? 4 There is nothing missing from there right now that Α 5 I know of. This is the same certificate conditions that have been given to other people. 6 7 Turning to 55, do you understand that Con Edison is Q going to review and accept or not accept the designs 8 for the entire facility? 9 They are not going to do it for the entire 10 А 11 facility. If you mean the entire facility from West 12 49th Street and New Jersey --13 Let's start there. 0 14 Con Edison's responsibility, as I understand it, is А 15 for West 49th Street and the -- and what -- how the HVDC system works. 16 17 0 Okay. 18 And its effect upon Con Edison's system. Α Okay. So looking at 55 with respect to the changes 19 Q 20 that have been proposed by HTP today, and if you read 21 the first three lines, "prior to commencing 22 construction of the portion of the transmission 23 facility associated with the cable entrance into and 24 its termination within the West 49th Street 25 substation," stopping right there, let's just talk the

1 extent of what your concern is with 55. Doesn't that 2 respond to your answer you just gave, that Con Edison 3 is interested in those portions of the facility that are at West 49th Street? 4 5 No, because they would be concerned about how your Α terminal facilities look at the other end. 6 Okay. And would that be dealt with in the 7 0 8 interconnection agreement between Con Edison and the ISO and HTP? 9 I would expect it would, but the way a lot of these 10 А interconnection agreements go, that the interconnection 11 12 agreement never seems to get finalized and construction 13 starts of the facilities, and the interconnection 14 agreement finally gets solidified, you know, two months 15 before the plant goes into operation. 16 What projects are you referring to? Q 17 Α Many of the transmission -- wind transmission lines 18 that have been up, been put up, and other facilities. 19 Any of the interregional interconnections that --Q 20 А This would be the second interregional 21 interconnection. So we're trying to have assurance 22 that we have enough information in the right places to 23 get the information. 24 Do you know whether -- are you familiar with the 0 25 Neptune project?

1 A Yes, I am.

2 Ο Do you know whether that interconnection agreement 3 was signed before construction started? 4 That, I couldn't tell you, but I am familiar with Α 5 it. Now, does Con Ed have input into the relay 6 0 7 coordination study? 8 That's provided to provide enough information, they Α 9 have input into it. And the purpose of the relay interconnection study is to make sure you provide that 10 11 information and everybody is on the same level playing 12 field. 13 Aren't those requirements a requirement of the New 0 14 York ISO tariff? 15 They may be a requirement of the New York ISO А tariff. We're trying to make sure it's done in time so 16 we're not down to the last minute and somebody is 17 18 screaming "well, you're holding me up." We gave you 19 advance notice it's due by a certain period of time so 20 that it's done prior to the time when you have to 21 energize. Okay. Now going back to 55, explain to me what is 22 Q 23 missing that you think Con Edison needs to approve 24 before construction starts other than that portion of 25 the facility associated with the entrance into and its

1 termination within the substation?

2 Α As far as construction into the West 49th Street, 3 that's all they really have to approve. But we want to make sure that the rest of this stuff is coming in. 4 5 When you say "the rest of this stuff," what are you 0 referring to? 6 7 Which is referring to the HVDC back-to-back unit А 8 and that you are doing work in New Jersey. We wouldn't 9 want to certify one piece and then the other piece 10 doesn't occur, and you put 50 percent in the ground and 11 the other 50 percent never gets put down on the ground. 12 In your experience, is that likely to happen with a Ο 13 project -- revenue financed project? I have seen facilities stop. And we want to make 14 А 15 sure that we know what's going on with this facility 16 from day one when it starts. 17 Ο What facilities were stopped? 18 There have been other facilities that have stopped. Α 19 Q Can you --I don't think it's my right to say about which 20 А 21 facilities have stopped, because we have been committed 22 to being confidential with these people when they've 23 had problems. 24 Okav. Turn to certificate condition 56. That's 0 25 one certificate condition where you object to our

restriction of the definition of "transmission 1 2 facility" to being the jurisdictional part of this interregional tie, isn't that correct? 3 That's correct. 4 А Now, what is 66, Subdivision 8, of the Public 5 0 Service Law? 6 7 А You'll have to speak with my attorney. 8 You don't know what that means, inspection pursuant 0 to Section 66.8? I'm just asking -- I'm asking for 9 your understanding of this language here on this page 10 of this exhibit. And if you don't have an 11 12 understanding, you can just say that. 13 You'll have to speak with my attorney, because I am А 14 not a lawyer. Only he can tell you. 15 You don't have an understanding, a laymen's 0 understanding, of what Section 66.8 inspections consist 16 17 of or authorize? 18 I'm only authorized to inspect facilities in the А 19 State of New York, Mr. Dax. That's the legal limit of my jurisdiction. And if I walked into the State of New 20 21 Jersey and start inspecting stuff, I'm sure I could be 22 stopped very fast. 23 0 So an inspection of the facility in New Jersey 24 would not be done pursuant to Section 66.8, isn't that correct? From what you just said, isn't that a logical 25

1 conclusion?

I would go -- if I had to go to New Jersey for an 2 Α inspection because your facility did not operate and 3 4 see why and if you were doing repair work, that would 5 be a purpose for the Commission to know that you were doing due diligence in getting the facility back in 6 7 That would be one good example. service. 8 Would it be acceptable to you if 56 was redrafted 0 to say that on reasonable notice to the certificate 9 10 holder, Department's representatives will be allowed to 11 visit and inspect facilities in New Jersey? 12 I will not negotiate with you on the stand, Α 13 Mr. Dax. If you want to negotiate, you have to speak 14 with my attorney. 15 I'm not negotiating. I asked you a question. Ο 16 You'll have to speak with my attorney. Α 17 0 Are you refusing to answer that question? 18 Mr. Dax, I don't know all the law, and I'm best Α 19 represented by my attorney at this point. I'm not asking for any conclusions of law. 20 0 I'm 21 asking whether you would personally, as a 22 representative of the reliability section of the volt transmission system, Department of Public Service, 23 24 would find that acceptable if we took out the reference 25 to 66.8 and simply said that on reasonable notice

Department representatives can inspect facilities in
 New Jersey?

ALJ BOUTEILLER: I'll just interject at this point, the witness need not answer. He's indicating for the record that he doesn't know if that would work or not, and he thinks he needs advice of counsel to know whether or not your specific language would work for his purposes. I think the record is clear.

10 BY MR. DAX:

Go to 65, certificate condition 65. 11 In your 0 12 answers to Mr. Drexler, I came to the understanding 13 that your position here is that you want to make it 14 mandatory that the certificate holder arrange to have 15 the NYISO be the system operator -- to be the control 16 authority for the Hudson transmission facility. Is 17 that a correct understanding? 18 Yes, that is correct. А 19

19 Q Are you aware of any -- are you aware of any 20 authority that a -- one party to an interregional tie 21 can dictate who the control authority will be?

22 A No, I am not.

23 Q Has Con Ed complained to you about condition 65?24 A No, they have not.

25 Q Have you had any discussions with Con Ed about any

1 of the certificate conditions?

2 A We have talked about the HTP project.

3 Q Have you talked about your certificate conditions 4 with Con Edison?

5 Α I discussed with them what it would mean if, say, PJM were to be the operator. And the concern that came 6 7 to my mind immediately was the fact that if you start 8 pumping all this capacity into Con Edison, they have no 9 eyesight into the Con Edison area in seeing how the 10 system is, or should there be a failure of a cable or a 11 device that has -- causes any other facility to go over 12 its limits, it would be impossible for PJM to see it. 13 And, as a result, I think it's best left with the New 14 York ISO, who has visual limits, and Con Edison, who 15 has visual limits of the facilities that are in there. 16 Now, was that your concern, or was that a concern Q 17 expressed by Con Edison? 18 They agreed with me that it's a concern. А 19 Who did you talk to? Q 20 А I talked to the operators.

21 Q Specific names?

22 A No, I don't.

Q I think you said you're familiar with the Neptune system, is that correct?

25 A I'm familiar it exists.

1 Is that it? Are you familiar with how it's 0 2 operated? No, I have never seen the operational agreement. 3 А 4 Are you familiar with how it's controlled by PJM? 0 5 А No, I'm not. 6 Are you familiar with the communication links 0 7 between LYPA and PSEG and Neptune? 8 А I know that there's a fiber cable running between 9 them. 10 Do you know what its purpose is? Ο The certificate condition was to have it be a 11 Α communication link and for a protective relay. 12 13 What does "protective relay" mean? 0 14 It means those elements which guard the system and А 15 measure the amount of power going back and forth and 16 then, in turn, take action should the power not be 17 equal. 18 And is that protective relaying -- does that Ο 19 protective relaying include a continuous communication 20 link? It is a continuous communication link. Should the 21 А 22 quard tones go away, then the protection system knows there's a problem. 23 24 Are you familiar with whether -- do you know Ο 25 whether or not operators at LYPA and operators at

1 PSEG -- or not PSEG -- First Energy -- excuse me --2 First Energy is the counterparty to Neptune --3 operators at First Energy, operators at LYPA and 4 Neptune operators are in constant communication? 5 I would hope so. Α And that would address this concern that you just 6 \bigcirc 7 had about what's addressed in your version of 65, isn't 8 that true? 9 I can't agree. А 10 Why not? 0 Because I believe that there -- PJM cannot see into 11 Α 12 New York. It can't see the Con Edison service area. 13 The only one that can see the Con Edison service area 14 is the New York ISO and Con Edison and, therefore, they 15 cannot see what the limiting facility is. 16 (Discussion off the record.) 17 Do you know whether, beyond the Neptune 0 18 interconnection and whatever might become of the HTP 19 connection, whether the ISO, the New York ISO and PJM 20 have communication protocols? 21 Do they have communication protocols? I don't know А what you mean by "protocols." 22 23 0 Do they communicate with each other? 24 They communicate all the time. They have hot Α 25 lines.

1 Q Continuously?

2 A No.

3 Q Only through hot lines?

A They continue -- let's stop before we get carried away. They have schedules. Those are called the DNIs. They have set schedules about the transactions will be in which directions at what hours. Then, if there's a change, they pick up the hot line and they talk verbal to verbal.

10 Q And a change could be a problem on a system on 11 either side of the border, right?

12 A It could be. And sometimes you don't get any 13 communication. You sit there and you react to what you 14 see.

15 And why would that be -- why would New York be 0 16 better able to deal with that than PJM, given that 17 conditions could change on either side of the border? Because, again, you're trying to push this power to 18 А 19 Con Edison and have everything that you've made 20 representation is that all -- you are pumping power into Con Edison. Con Edison and the New York ISO are 21 the only ones that have visualization of the Con Ed 22 23 system. PJM has no visualization of the Con Ed system. 24 And if in the absence of -- let's -- why don't you 0 25 define what "visualization" means?

A That is to see every bus, to see every breaker position, to see every line and how many megawatts it's carrying, what direction the flow is, if a facility drops out of service, what the flow is redistributed at and if any facility goes over short time or long time emergency ratings.

7 In case one of those contingencies were to happen, 0 8 explain for the record two different scenarios. Ιn 9 each of these two scenarios explain how the operators 10 would react. One is the scenario in which PJM is the 11 control authority, and one is the scenario in which New 12 York ISO is the control authority. And now you've had 13 this contingency event, like you listed, has happened on the Con Ed side. Explain how the operators would 14 15 react in each of those scenarios.

16 I don't know exactly how those operators will А 17 react. The only thing I can say is that if it became 18 an emergency such that you went over a rating, then the 19 New York ISO would see it and then, in turn, they would have to call PJM and say "you got to back off and get 20 21 our flows down to a reasonable level that you're shipping to us." 22

23 (Discussion off the record.)
24 Q Are those -- are those types of contingency issues
25 identified in the SRS process?

1 The SRS process does evaluate some contingencies. А It does not operate -- it does not evaluate operating 2 3 contingencies, which is a different level. Operating 4 contingencies involve all the various pieces of 5 equipment and involve all the various equipment that could be out or bus faults or anything else that could 6 7 happen. They are a much more rigorous type of 8 analysis.

9 So what we're left -- I think you've stated the 0 10 difference is -- between my two scenarios is in the 11 case of an operating contingency in the one situation, 12 there would have to be a call made over the hot line to 13 In the other case, presumably, that phone call PJM. 14 would not have to be made. Is that correct? 15 I don't follow you. А Let's go back to --16 Q 17 MR. DAX: I would like to have his answer 18 reread from several questions ago when I asked the 19 question about two different scenarios. 20 ALJ BOUTEILLER: Can you find that? 21 (Whereupon, the following answer was

"ANSWER: I don't know exactly how those
operators will react. The only thing I can say is
that if it became an emergency such that you went

22

read:

1 over a rating, then the New York ISO would see it 2 and then, in turn, they would have to call PJM and 3 say 'you got to back off and get our flows down to 4 a reasonable level that you're shipping to us.'") 5 BY MR. DAX: My question is, that's the difference between the 6 0 7 two scenarios? A call would have to be made to another 8 control authority in the one scenario and not in the 9 other scenario? You mean if PJM was the control? 10 А 11 Yeah, that's the scenario that we were talking 0 12 about. 13 А If -- in that ne particular one that she just read 14 back, if PJM was the control -- no, I think we answered 15 that was the New York ISO was in control, they would call PJM, and if PJM was the control, you would end up 16 17 almost doing the same thing. 18 MR. DAX: I have no further questions, 19 Your Honor. 20 А But --21 I'm sorry. Go ahead. I didn't mean to interrupt 0 22 you. I thought you were done. 23 Α I know you always want to run me over. The problem 24 is that, really, PJM would not have the visualization that New York has and could take actions of their own 25

1 with such a condition, whereas PJM, you're forced --2 they have -- they're only controlling their side to the 3 full -- you know, to the full amount, and New York 4 could take other actions based upon redispatch or 5 something else in order to limit the amount. In both case -- I'm sorry. You want to complete 6 0 7 your answer? 8 Α Go ahead. Are you done? 9 0 10 А Yes. 11 In any event, you've already agreed that there is 0 12 continuous communication between the two control authorities, isn't that correct? 13 14 I would never admit that there is totally А 15 continuous communication. As I said in the beginning, 16 there are times when the operators don't talk and they 17 take actions of other means. 18 As an example, you could all of a sudden lose a 19 unit and all the operators on the floor are busy in PJM 20 trying to recuperate from a major lost unit. Thev 21 start pulling on New York and our operators go "well, you must need capacity and we have it available" and we 22 23 just ship it. They don't necessarily talk. 24 So contingencies can happen on either side of the 0 interregional seam, isn't that correct? 25

1 That's correct, but it can have detrimental А 2 effects. And if you are being hurt, you need -- you're going to have to take some sort of action. And if that 3 4 hurt is so bad, you may have to either open other 5 breakers or you may -- it's not an easy scenario for either side. 6 And you're a New York regulator, so your concern is 7 Q 8 New York, isn't that correct? 9 My concern is the Consolidated Edison Company and А 10 its customers. I'm concerned about the system 11 reliability and integrity of the New York system. 12 MR. DAX: Nothing further. 13 ALJ BOUTEILLER: Does any other party 14 have questions for this witness? If not, you can 15 approach your counsel and the two of you can 16 consider the need for redirect. 17 MR. WEINTRAUB: Your Honor --18 ALJ BOUTEILLER: Did you have some? 19 MR. WEINTRAUB: Yes. 20 ALJ BOUTEILLER: I'm sorry. 21 MR. WEINTRAUB: Is it okay to ask 22 questions of other parts of Mr. Schrom's testimony? 23 ALJ BOUTEILLER: This is the time. 2.4 MR. WEINTRAUB: Okay. I know it's late, 25 so I wanted to be careful.

1 CROSS-EXAMINATION

2 BY MR. WEINTRAUB:

3 Mr. Schrom, on page 4 through 5 of your testimony, 0 your initial testimony, you were asked, starting on 4 5 page 4, line 18, what were the results under the RNA scenarios which modeled potential future NO, emissions 6 7 limitations, and you answered, "According to the RNA, 8 implementation of programs to control NO, from fossil 9 fuel generators could render some units unavailable and 10 limit other units' output, potentially resulting in 11 inadequate resources within the controlled area." In 12 answering that question, did you -- had you reviewed 13 what has been marked as Exhibit 81, which is the 14 General Electric Report on Assessment of Proposed NO. 15 RACT Regulations on Emissions, Costs of Electricity and 16 Electric System Reliability? And I can show you the 17 document if you'd like.

18 No, I did not. I reviewed only the RNA. А 19 Thank you. And the second question that follows 0 after that, on page 5, what did the scenario that you 20 were asked -- what did the scenario related to the 21 22 retirement of Indian Point indicate, and you answered, "Due to its location in a constrained area of the 23 24 system, retirement of one of the two Indian Point 25 nuclear power plants which are up for relicensing by

1 the Nuclear Regulatory Commission would result in 2 inadequate resources in 2014." My question is, do you 3 have any specific information indicating the date when 4 Indian Point is supposed to retire? 5 Do I have on me dismissive dates, no. I reviewed a А document which showed the dates, but we just chose that 6 7 as the date. They're both very close to that date. 8 0 When the date -- let me just -- clarification. You 9 chose 2014 as a date in that answer because you had 10 reviewed something that said Indian Point is supposed 11 to retire before that date? 12 А Supposed to retire -- not retire in 2014, but 13 they're up for relicensing. If they don't get the 14 relicensing, then in 2014 they would retire. 15 Okay. So your answer was based upon your 0 16 conjecture regarding whether Indian Point would be relicensed or not? 17 18 That's correct. Α 19 0 Thank you. 20 MR. WEINTRAUB: That's all, Your Honor. 21 ALJ BOUTEILLER: Mr. Drexler, you can 22 approach the witness. 23 MR. DREXLER: Does anybody else --2.4 ALJ BOUTEILLER: Go ahead. 25 (Discussion off the record.)

1 ALJ BOUTEILLER: Let's ask Mr. Drexler if 2 he has any further redirect for this witness? 3 MR. DREXLER: No, we have nothing further for Mr. Schrom. Thank you. 4 5 ALJ BOUTEILLER: Okay. So that does not open up for any further questions. 6 7 And I want to thank you for your 8 testimony. You are excused. 9 Is there anything else we need to put 10 into the record from the staff? 11 MR. DREXLER: Yes, Your Honor. 12 ALJ BOUTEILLER: Okay. No more witnesses, right? We've taken care of all your 13 14 witnesses? MR. DREXLER: All the witnesses have 15 16 been -- have testified and their testimony has been 17 entered into the record. 18 ALJ BOUTEILLER: You have some proposed 19 exhibits? 20 MR. DREXLER: I have one proposed 21 exhibit. ALJ BOUTEILLER: Can you describe it for 22 23 us, please? 24 MR. DREXLER: Yes. I will bring copies 25 up in just one second. The description would be

1 they contain the label at the top, the exhibit identified as LPG-7, 16-page document which 2 3 includes a number of generators that could be potentially dispatched as a result of the operation 4 5 of HTP, changes in dispatch among those generators. ALJ BOUTEILLER: Okay. If you'll 6 7 distribute it, and as soon as we get it, I'll give 8 it the next number for identification. 9 MR. DAX: Are you changing it, or is it 10 the same one? MR. DREXLER: No, it's the same one. We 11 12 just didn't get it in before. 13 Thank you. The next ALJ BOUTEILLER: 14 number available is Number 88 for identification. 15 MR. DAX: Your Honor, can we go off the 16 record for a minute? 17 ALJ BOUTEILLER: Off the record. 18 (Discussion off the record.) 19 ALJ BOUTEILLER: Staff, is that the last 20 exhibit you want to proffer at this time? 21 MR. DREXLER: Yes, Your Honor. Thank 22 you. 23 ALJ BOUTEILLER: Mr. Dax, do you have 24 some exhibits to offer? 25 MR. DAX: Yes, I do. I have two

1 exhibits. The first one is a response by DPS witnesses Quackenbush and Maxx to Information 2 3 Request HTP 3, and the question that I was 4 particularly interested in was the -- we had 5 elicited from them information about what dates to the site the staff made visits to the area 6 7 including the DeWitt Clinton Park, and there was 8 some discussion of that on the record the other 9 day, and I thought it would be useful to have this 10 brought into evidence as an exhibit. So I would 11 ask that Exhibit 89 be applied to the response to 12 HTP 3. 13 ALJ BOUTEILLER: Okay. Do you have two 14 copies for me? 15 MR. DAX: I do. 16 ALJ BOUTEILLER: Thank you. 17 MR. DAX: And I also have a document 18 which consists of Information Request HTP 9 19 addressed to the Independent Power Producers of New 20 York and a one-page objection by the Independent Power Producers, and I ask that this document be 21 marked for identification as Exhibit 90. 22 23 ALJ BOUTEILLER: We'll mark it for 2.4 identification. 25 (Exhibit No. 90 was marked for

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identification.)

ALJ BOUTEILLER: Before we turn to any other matters concerning taking official notice on the record, are there any other proffered exhibits at this time?

6 MR. LEVENSON: Your Honor, I was just 7 going to ask you, at the beginning of today you 8 talked about exhibits that didn't make it into the 9 transcript. Did you want to handle that now?

10 ALJ BOUTEILLER: Yeah, let's handle that 11 now. I know you're here. You can take care of one 12 of the two I had in mind. But we're at the same 13 location, so let me prep that and then I'll engage 14 you in the conversation as well.

15 Our court reporter from the New York City location has been working diligently on the 16 17 transcripts for this hearing. In the process of 18 doing so, he's run into a couple of difficulties in 19 trying to reproduce the official transcript to be 20 exactly that which was provided in prefiled 21 testimony or the documents that were submitted in 22 advance of the hearing. I want to reserve a 23 number, and we will fulfill it with information 24 that won't come as any surprise to anyone, but 25 Exhibit Number 91 will be used to incorporate into

1 the record some documents or some information we're having difficulty including in the prefiled 2 3 testimony. With respect to the New York City Economic Development Group, they offered a panel of 4 5 witnesses, Neiman and Russo. The prefiled testimony of Neiman and Russo contained four 6 7 tables. Those four tables are not reproducible 8 using the kind of software or transcribing equipment that's available to our New York City 9 10 reporter. In light of that, I will copy those 11 tables and make them each a portion of Exhibit 12 Number 91 in this case. So each party present can 13 reproduce or replicate or prepare for yourselves an 14 equivalent Exhibit 91, which will consist of the 15 table number 1 on page 6 of the Neiman/Russo 16 testimony, table number 2 of page 7 of the 17 Neiman/Russo testimony, table 3 on page 10 of the Neiman/Russo testimony, and table 4 on page 11 of 18 19 that testimony. I will make physical copies of 20 those, and those will be incorporated in the record 21 as exhibits in case whoever turns to the transcript 22 has difficulty finding the information where we 23 would have preferred to have it located. 24

24 We have a comparable difficulty 25 associated with a table that exists in the prefiled

1 brief of the New York Power Authority. You had a 2 chart on page 8 that we're not being able to 3 produce within the transcript. I would propose that we make that Exhibit Number 92 in this case, 4 5 and if I can provide the copy for the official report -- a copy kept for the Secretary, each of 6 7 the parties can put on their list of exhibits that 8 page or, at a minimum, that chart will be included in Exhibit Number 92. One second, please. 9

10

(Off the record.)

11 ALJ BOUTEILLER: Back on the record, 12 before we turn to matters of official notice, let's 13 see what the status is with respect to the exhibits 14 that we've identified for today. We started out 15 with Exhibit Number 70. We reserved a few exhibits for information to be provided by the parties, and 16 17 I'll entertain any objections to any of the numbers 18 that have been identified now.

19Mr. Johnson, did you have an objection?20MR. JOHNSON: I was just concerned about21the relevancy of IPPNY's objection to HTP-09.22ALJ BOUTEILLER: Off the record.23(Discussion off the record.)

ALJ BOUTEILLER: You're referring to Exhibit Number 90, and you want to -- you want

1 counsel to explain the reference or the need for 2 this exhibit in the record? MR. JOHNSON: 3 Yes. ALJ BOUTEILLER: Mr. Dax? 4 5 MR. DAX: IPPNY intervened on the question of competitive impacts and targeted the 6 7 contract between HTP and NYPA at a time when there 8 is not a near term reliability need for additional capacity as a competitive issue. We asked -- in 9 10 our Information Request we asked IPPNY to identify 11 which of its members have power purchase agreements 12 with Zone J incumbent utilities, such as Con 13 Edison, LYPA and -- Zone K and Zone J, such as 14 LYPA, NYPA and Con Edison. We thought that was 15 relevant to the issue of fixed long-term contracts and whether there's a competitive impact from them. 16 17 It's our position that there are several 18 IPPNY members that have such contracts to recover 19 costs and that -- I mean, while hypocrisy is not 20 grounds for disgualification, it certainly is 21 relevant to inform the Commission when somebody is 22 making -- protesting about competitive impacts and doesn't want to disclose their own members' fixed 23 24 power purchase agreements, we think that that is 25 relevant. At least it tends to give color to the

1 nature of the argument that's being made by IPPNY. ALJ BOUTEILLER: 2 So the exhibit gives you 3 the foothold for purposes of making your argument? MR. DAX: That's right. 4 5 ALJ BOUTEILLER: Mr. Johnson? MR. JOHNSON: Well, in response to that, 6 7 I can't identify any particular contracts, but I 8 can say that some of the contracts were signed long ago pursuant to Section 66C of the Public Service 9 These are so-called PRPA contracts. 10 Law. There 11 have been recent contracts that were signed with 12 Long Island Power Authority for purposes of meeting 13 reliability needs. 14 I think the information that Mr. Dax

15 seeks, there's no way for him to demonstrate that these particular contracts are the type of contract 16 17 that the New York Power Authority would enter into 18 with HTP, which we're alleging is a non-economic contract, a contract that is designed to suppress 19 20 clearing prices in the New York City region and is 21 not designed to meet reliability need, and whose 22 costs are greater than the direct benefits to 23 consumers and the production costs savings. The 24 contracts that John Dax is seeking, there's no way 25 he'll be able to show any of that information.

1 MR. DAX: That was not the grounds for their objection, Your Honor. I guess until we got 2 the contracts -- and all we asked for -- we asked 3 for several things. We asked for the name of the 4 5 counter-party, the name of the project, and the megawatt size of the contract and the term. 6 Now, 7 with that as a starting point, we probably would 8 have been able to figure out when the contracts 9 were executed and what the reliability needs were 10 at that time. And so we could have made a number 11 of arguments.

12 IPPNY's objection was not based upon the 13 argument that Mr. Johnson is now raising about how limited the usefulness of it would have been. 14 15 Their argument is that they had no obligation to 16 divulge their members' contracts in this 17 proceeding. So I think it's a disingenuous 18 argument because whether or not we were able to 19 make use of and how we might make use of the 20 contracts isn't at issue. They simply weren't made 21 available to us.

22 MR. JOHNSON: We did argue, though, it's 23 not relevant nor material.

ALJ BOUTEILLER: Okay. I guess we're previewing the arguments that are going to get

1 further hearing, I guess, in the briefs that will 2 come in the case. I'm going to rule Exhibit 90 not only can be identified, it can be admitted into 3 evidence to be used for whatever arguments the 4 5 parties think that it needs to. I'm not making any determination that those are good arguments or bad 6 7 arguments. The only determination I'm making at 8 this point is we'll hear the arguments and we'll consider them in due course. So at least for that 9 minimal purpose, if not for others, it will allow 10 Exhibit 90 to be in evidence in this case. 11

12 We've reserved a number of items for 13 numbers for exhibits to be coming in. With respect 14 to them and with everything else that's been 15 identified today, just I'll just note on the record that we moved the exhibits on Thursday afternoon, 16 17 so we're good to 69. Now at this point I'm 18 wondering, is there any reason why we should not move into evidence any exhibit subsequent to 69, 19 20 that being Number 70 through 92, with the knowledge 21 that some of these numbers are being reserved? Ιf 22 there is no objection, if there are no arguments, then we'll consider all the documents that we've 23 24 received and numbers we've given them for identification will, in fact, be evidence and 25

1 exhibits in this case. 2 (Exhibits Nos. 70 through 92 were received in evidence.) 3 ALJ BOUTEILLER: The onus is on those 4 5 parties who have reserved a number to timely provide us the documents that they have asked the 6 7 Please provide a cover letter number be reserved. 8 reminding us of the reserved number for your document when you provide it. And, of course, 9 you'll provide all information to all active 10 11 parties here. If you'll provide me the official 12 copies to include in the record, I'll forward it to 13 the Secretary. 14 I think that takes us past the time of 15 exhibits. Now let's talk about matters of official 16 notice. 17 Mr. Weintraub. 18 MR. WEINTRAUB: Yes. Your Honor, DEC has 19 several documents which it would ask that -- would 20 ask that official notice be taken of. They are New 21 York State Department of Environmental 22 Conservation, Division of Water, Technical & 23 Operational Guidance Series, summarized as TOGS, 24 and in the list of exhibits we provided -- before

25 the hearing we identified a website. I could state

1 that website for the stenographer, if that's how
2 you wish me to proceed.

ALJ BOUTEILLER: Let's go off the record 3 and we'll have you just recite them for her off the 4 5 record, and then, when we come back on the record, we'll just confirm that that's what you've done, 6 7 okay. So let's go off the record. Off the record. 8 (Discussion held off the record.) http://www.dec.ny.gov/chemical/28677.html 9 http://www.dec.ny.gov/regulations/2652.html 10 ALJ BOUTEILLER: Just for the convenience 11 12 of everyone, let me explain what we've done. DEC has two series of Technical & Operational Guidance 13 Series called TOGS. The address for each has been 14 15 copied into the record. That's where these series can be located on the Internet. And it's with that 16 17 location that you've asked us to take official 18 notice of these series, is that correct? 19 MR. WEINTRAUB: Yes, Your Honor. 20 ALJ BOUTEILLER: Okay. Your request is reflected on the record. And the record will also 21 22 reflect no objection from the parties present. 23 Do you have other pieces of information you want the Commission to take official notice of? 24 25 MR. WEINTRAUB: Yes, Your Honor. The

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third -- there's a third document in that series, New York State Department of Environmental Conservation, Division Of Water, Technical & Operational Guidance Series 1.310. That is not on the web, but I have -- we have downloaded the document onto a CD and distributed it to the parties here, and I can provide that to Your Honor.

8 ALJ BOUTEILLER: I'll take one or two of your disks. The record will reflect that you're 9 requesting us to take official notice of an 10 11 additional Technical & Operational Guidance Series. 12 You've provided it by disk to the parties present, 13 and you've provided me copies, one to be included 14 with the official file, and I'll keep one for my 15 own personal use if I need to make reference to 16 that information. Do you have further items?

17 MR. WEINTRAUB: Yes, Your Honor. On that 18 same disk we have included -- if we can go off the 19 record.

20 ALJ BOUTEILLER: Off the record.

21 (Discussion off the record.)

ALJ BOUTEILLER: Counsel, from the description paper that you've provided in advance, it's clear to me that you have additional information on that disk, and we don't need to

1 belabor the inclusion of Volume I of the State 2 Energy Planning Board document or the copy of the Executive Order Number 24 that you've included on 3 the disk as well. Why don't you reference for the 4 5 record and provide other counsel the courtesy of knowing your reference to a PSC case? 6 7 MR. WEINTRAUB: PSC case 07-M-0548, 8 Proceeding on Motion, and that's the EEPS -- it's the EEPS case, and so we would ask that you take 9 10 judicial notice of that case. 11 ALJ BOUTEILLER: Okay. And the documents 12 that you want parties to be aware of are included 13 on that disk. MR. WEINTRAUB: Yes, Your Honor. 14 15 ALJ BOUTEILLER: And for the reporter's 16 purposes, it's E-E-P-S, Energy Efficiency Portfolio 17 Standard. 18 Is there anything else on that disk? 19 MR. WEINTRAUB: One more, Your Honor, one 20 more document, and that's the New York State 21 Implementation Plan for PM -- stands for 22 particulate matter -- 2.5 and Ozone, and that --23 and we would ask that judicial notice be taken of

24 that document. We've provided a website which I25 can hand to the stenographer, and it's also on the

CD.

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2 ALJ BOUTEILLER: Since it's on the CD, we 3 can take official notice of it on that location. And just for the convenience of the parties using 4 5 this record, I'll ask you to give the web description or address to the reporter, and we'll 6 7 have her copy it into the record. We can do that 8 now. 9 www.dec.ny.gov/chemical/60541.html 10 ALJ BOUTEILLER: Anything further? MR. WEINTRAUB: That's all, Your Honor. 11 12 ALJ BOUTEILLER: Okay. Staff counsel, 13 did you have anything? 14 MR. DREXLER: No, Your Honor. 15 ALJ BOUTEILLER: You're working with the 16 exhibits. 17 Mr. Levenson. 18 MR. LEVENSON: Yes. I request we take 19 official notice of a New Jersey Board of Public 20 Utilities case. Developments of this case has to do -- it's the siting of the Susquehanna Roseland 21 22 line, and it relates to discussion in this case 23 about whether there was so-called leakage of CO₂ 24 emissions into eastern PJM. And this is a recent 25 Order from the BPU of New Jersey, and I have a

1 citation and a docket number. If that's sufficient, I'll --2 3 ALJ BOUTEILLER: Can you provide the citation for the record, please? 4 5 MR. LEVENSON: It is docket number EM 09010035 in the Matter of Petition of Public 6 7 Service Electric Gas Company for the termination 8 pursuant to provisions of NGSA 40:55-D-19 9 (Susquehanna Roseland transmission line) from the 10 Board Of Public Utilities, issuance on February 11, 11 2010. 12 ALJ BOUTEILLER: Did you say you had 13 courtesy copies available? 14 MR. LEVENSON: I do not, Your Honor. 15 ALJ BOUTEILLER: Okay. We have the 16 description for the record. Let's go off the 17 record for a second. 18 (Discussion off the record.) 19 ALJ BOUTEILLER: While off the record we 20 discussed the courtesy that counsel for Power 21 Authority will provide, which means that he has 22 this decision available electronically and he plans 23 on sending it electronically to the parties 24 present. 25 Mr. Johnson, anything further, official

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1 notice or anything? 2 MR. JOHNSON: No, thanks. ALJ BOUTEILLER: Mr. Dax? 3 MR. DAX: Yes, thank you, Your Honor. I 4 5 have three documents that I would like official notice taken of. 6 In cross-examination of Mr. Maxx 7 8 concerning the authority of the Commission to authorize the occupation of public parkland, he 9 referred in an answer to case -- PSC case 70365, 10 New York Power Authority, Cable Sound Crossing 11 12 Project. I have an 11-page excerpt of the 13 memorandum from -- which it doesn't really indicate 14 where -- who it's to, but it's from Frank S. 15 Robinson, Administrative Law Judge, and it's part of a much larger document that is in the 16 17 Commission's files under that docket number. And I 18 only am offering this excerpt because it deals with 19 the question of the parkland alienation issue. 20 Apparently, there were -- there was a decision to 21 site this transmission line in a county park known 22 as Twin Creeks, and objections were made by 23 municipalities to that. 24 In a footnote on page 11, which is on the

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fourth page of this excerpt, there's a footnote in

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which Judge Robinson says, "The municipalities state that Twin Lakes Park is a dedicated Westchester County parkland and that park areas in New York State are impressed with the public trust with their use for other than park purposes requiring the direct and specific approval of the legislature."

Same footnote, new paragraph, "Applicant 8 9 replies," applicant being the Power Authority, 10 "replies that the rules cited by the municipalities 11 does not apply to a taking by the State as would be 12 the case here." That is the end of the discussion 13 that we could identify in this entire document, and 14 I would ask that judicial -- official notice be 15 taken of the entire document, and I have the 16 relevant excerpts here to distribute.

17 ALJ BOUTEILLER: Okay. Distribute the 18 documents, and the only question I have is, is 19 this, if you know, a recommended decision or a 20 final determination by the agency?

21 MR. DAX: You know, I'm a little 22 mystified myself as to what this is because it's 23 not in a form that I'm familiar with. I have 24 somebody checking that out, as a matter of fact. 25 ALJ BOUTEILLER: Okay. And we'll hear
about it in your brief, but you've got courtesy
 copies for everyone present. You've explained its
 location and source and its public existence, so we
 have the document for official notice.

5 MR. DAX: As you know, we filed a prehearing Memorandum of Law in which we addressed 6 7 this parkland alienation issue. And further 8 efforts in our research have uncovered two other documents that I would like official notice taken 9 The first one is a November 30, 2007 advisory 10 of. 11 ruling by the DEC general counsel Allison Crocker, 12 addressed to the Executive Director of New Yorkers 13 for Parks, which appears to be an advocacy -- a 14 park advocacy group located in New York. And this 15 document is, in its entirety, four pages -- a four-page letter in which Ms. Crocker makes 16 17 reference to, among other things, an Office of 18 Parks, Recreation and Historic Preservation 19 handbook on the alienation and conservation of 20 municipal parkland. And I would ask that official notice be taken of this advisory ruling. Do you 21 22 need two copies?

ALJ BOUTEILLER: Yes, please. And next?
 MR. DAX: Then I have that handbook on
 Alienation and Conversion of Municipal Parkland

1 prepared by the New York State Office Of Parks, 2 Recreation and Historic Preservation, content --3 the cover sheet says "Content revised April 1, 2005," and I ask that that document, which is --4 5 it's thirty -- I think 35 pages of text followed by several appendices -- ask that that document --6 7 that official notice be taken of that document as 8 well. 9 ALJ BOUTEILLER: Is that it, Mr. Dax? 10 MR. DAX: That's it.

11 ALJ BOUTEILLER: Before we turn to the 12 matter of briefs and their due dates in this case, 13 is there anything further I need to consider for a 14 full and adequate record for submission to the 15 Commission?

16 Mr. Drexler.

17 MR. DREXLER: Yeah. I just want to 18 follow up on HTP's offer to provide Commissioner 19 Curry additional information. I wanted to know 20 what that process was going to be and whether the 21 parties would be given an opportunity to respond to 22 that.

ALJ BOUTEILLER: It's an inquiry that you've just made of the applicant, and if the applicant is prepared to respond to you, we'll

entertain the response, but there's no duty or
 obligation at this point.

MR. DAX: We haven't had time to confer amongst each other -- amongst ourselves. And I'm not in a position to respond but, of course, anything would be done to all -- on notice to all parties before we would contact Your Honor or anybody else.

9 ALJ BOUTEILLER: Okay. So we have an 10 update on the status of the -- into the interaction 11 that we had with Commissioner Curry during the 12 hearing last week, and there has been no further 13 development along those lines.

MR. DREXLER: That doesn't answer my question about what process would we be allowed. Are we going to --

ALJ BOUTEILLER: Let's go off the record.
(Discussion off the record.)
ALJ BOUTEILLER: While off the record we

20 discussed the circumstances presented by the 21 appearance of Commissioner Curry at the hearing and 22 whether or not there will be any proceedings or any 23 process oriented around the Commissioner's 24 expression of his interest in this case. But 25 nothing was resolved on that.

1 Further, there have been some scheduling proposals circulated today, but because everyone 2 3 has been in the hearing, I don't believe that they've had -- they, the parties, have had ample 4 5 time to examine that and to chat among themselves with respect to what are the most beneficial dates 6 7 for purposes of briefing this case. What I would 8 propose, absent any objection, is we will go off the record. We will close the evidentiary hearing. 9 10 We will close the record in this case. And we will remain present for a few minutes and see what kind 11 12 of progress we can make in clearing dates for If that doesn't work particularly well, 13 briefs. 14 we'll make some contingency arrangements to either 15 get on the telephone or transfer e-mails or that 16 sort of thing.

17 So absent any objection from the parties 18 present, I want to bring the hearing to an end and 19 conclude these proceedings. I want to thank the 20 parties for their participation. I know that the 21 hearings went a little bit longer than we were 22 estimating, but I think that is endemic with the 23 kinds of proceedings we run. I think counsel gave 24 me the benefit of your best estimates, and during 25 the course of the hearings you've sensitized me to,

1 2 you've brought me into the purview of the areas that remain active among you.

3 Clearly, in your briefs I'm looking for matters being clearly identified in two categories; 4 5 one category, that being everything that's been resolved without any confusion and we think 6 7 everybody is on the same page. Clearly, there's a 8 lot of material in an application like this, a lot of review by staff, a lot of involvement from other 9 parties, and clearly designating in the category of 10 11 these things are resolved and settled and dealt 12 with well is an important feature or attribute to 13 maintain in these proceedings, segregating it away 14 from the matters that remain open and in contention 15 and require consideration of a third party, a 16 person like me, for purposes of figuring out what 17 seems to be most reasonable or most probative, most 18 logical or constitutes the best practice that we 19 can recommend to the Commission. So please 20 differentiate between the two.

I know the practice in cases like this is stylized, and I'm familiar with past styles. I'm looking for those comprehensive briefs from the applicant and the staff that I've seen in the past which deal with all of the aspects of an Article 7

1 certification proceeding, dealing with all the potential impacts, and dealing with all of the 2 3 statutory findings that need to be had here. I'm 4 not suggesting that other parties don't need to be 5 as comprehensive. Clearly, on issues in which 6 you're in dispute, you need to be as persuasive as 7 the applicant or the staff is. But, clearly, you 8 don't need to address as many aspects of the 9 application as those two parties do, but feel free 10 to address all the aspects of the application that 11 you feel are pertinent or significant to you and 12 your clients in participating in this proceeding. 13 That being said, I'd like to probably go 14 off the record at this point in time and bring the 15 hearing to an end. Thank you very much for your 16 attention and for the quality performance that 17 you've provided for this case. 18 We're off the record. 19 6:03 p.m. 20 * * * 21 2.2 23 24 25

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1	CERTIFICATE
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3	I, Kay Trigilio, a Shorthand Reporter and
4	Notary Public in and for the State of New York, do
5	hereby certify that the foregoing record taken by me
6	is a true and accurate transcript of the same, to
7	the best of my ability and belief.
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11	Kay Trigilio, Notary Public
12	State of New York
13	DATE: May 10, 2010
14	DATE: Hay 10, 2010
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