SUPREME COURT OF THE STATE OF NEW YORK COUNTY OF ALBANY

In the Matter of

HUDSON RIVER SLOOP CLEARWATER, INC., Goshen Green Farms, LLC, Town of North Salem, New York Public Interest Research Group Fund, Inc., NUCLEAR INFORMATION AND RESOURCE SERVICE, Beyond Nuclear, Indian Point Safe Energy Coalition, Promoting Health and Sustainable Energy, INC., Green Education and Legal Fund, Inc., Safe Energy Rights Group, Inc., SCOTT CHASE, RICHARD HAMMER, SCOTT CHASE, RICHARD HAMMER, JOYCE HARTSFIELD, JOSEPH J. HEATH. WILLIAM MCKNIGHT, SR., BRUCE ROSEN. GEORGE STADNIK, LYNNE TEPLIN, ELLEN C. BANKS, CARYL BARON, LINDA BELISLE, DANIEL BIRN, MIRIAM BLUESTONE, J. ALLISON CROCKETT, LAURA DEL GAUDIO, ALLEGRA DENGLER, MICHELLE FREEDMAN, DEAN GALLEA, VALERIE GILBERT, ALLAN GOLDHAMMER, CARLTON GORDON, JENNIFER GORMAN, STEVEN L. GOULDEN, CATHY A. HAFT, RICHARD HAMMER, BRIAN HOBERMAN, OBIE HUNT, ROBERT V. JACOBSON, VICKEY KAISER, ALVIN KONIGSBERG, JUDITH A. LASKO, SUSAN D. LEIFER, MIKHAELA MARICICH, FREDERICK MARTIN, III, PATRICIA MATTESON, JANE MAYER, JANET MCBRIDE, VALERIE NIEDERHOFFER, TERESA OLANDER, VICTOR PALIA, CAROLINE PAULSON, GAIL PAYNE, THOMAS RIPPOLON, ROSEMARIE SANTIESTEBAN, CHERYL SCHNEIDER, CAROL SKRYM, MELVYN T. STEVENS, STEVEN STUART, MONICA WEISS, ERIC WESSMAN, TODD D. WOLGAMUTH, JUDITH M. ZINGHER, Petitioners-Plaintiffs,

For a Judgment pursuant to Article 78 of the CPLR,

-against-

NEW YORK STATE PUBLIC SERVICE COMMISSION, along with KATHLEEN BURGESS in her official capacity as Secretary, AUDREY Index No. 07242-16

AFFIRMATION OF SUSAN H. SHAPIRO IN OPPOSITION OF MOTION TO DISMISS ZIBLEMAN in her official capacity as Chair, PATRICIA L. ACAMPORA, GREGG C. SAYRE, and DIANE X. BURMAN, in their official capacities as Commissioners,

Respondents-Defendants,

-and

CONSTELLATION ENERGY NUCLEAR GROUP, LLC, with Subsidiaries and affiliates EXELON GENERATION COMPANY, LLC, R.E. GINNA NUCLEAR POWER PLANT, LLC, NINE MILE POINT NUCLEAR STATION, LLC, ENTERGY NUCLEAR FITZPATRICK, LLC, ENTERGY NUCLEAR INDIAN POINT 2, LLC, and ENTERGY NUCLEAR INDIAN POINT 3, LLC.

Nominal Respondents-Defendants

Index No. 07242-16
AFFIRMATION OF
SUSAN H. SHAPIRO IN
SUPPORT OF
AMENDED VERIFIED
ARTICLE 78
AND COMPLAINT

SUSAN H. SHAPIRO, is an attorney duly admitted to practice before the Court of New York, submits this Reply Affidavit pursuant to CPLR Section 2106, as follows;

- 1. I am a New York State attorney with offices located at 75 North Middletown Road, Nanuet, New York 10954, counsel for the Petitioner/Plaintiff's ("Petitioners") in the above-captioned matter, and as such I am fully familiar with the facts and circumstance of the subject actions-proceedings.
- 2. I submit this affirmation in opposition to the motions to dismiss filed on behalf of New York State Public Service Commission ("Commission" or "PSC") and other nominal Respondents named above (collectively "Respondents"), and in further support of the Petitioners-Plaintiffs' ("Petitioners") Amended Verified Petition ("Petition"), brought pursuant to Article 78 of the New York State Civil Practice Rules ("CPLR"), and

Declaratory Judgment challenges in which Petitioners request redress from the Court to annul Tier 3 of the Clean Energy Standard August 1, 2016 Order (the "Order").

- 3. I am fully familiar with the facts and issues raised in the underlying Petition and submit this Affidavit on behalf of the Petitioners in opposition to the motion to dismiss filed by New York Public Service Commission (PSC or Commission) on February 15, 2017
- 4. On behalf of Petitioners I submit Petitioners' Memorandum of Law in Opposition to Respondents' Motion to Dismiss.
- 5. Attached hereto at "Exhibit I" is a true and correct copy of the Affidavit of Warren Lucas, Supervisor of the Petitioner Town of North Salem, sworn to on March 24, 2017.
- 6. Attached hereto at "Exhibit 2" is a true and correct copy of the Affidavit of Petitioner Joseph J. Heath, Esq, sworn to on March 22, 2017.
- 7. Attached hereto at "Exhibit 3" is a true and correct copy of the Affidavit of Michel Lee on behalf of the Petitioners Indian Point Safe Energy Coalition ("IPSEC") and Promoting Health and Sustainable Energy ("PHASE"), sworn to on March 22, 2017.
- 8. Attached hereto at "Exhibit 4", are true and correct copies of the Affidavits of individual members of organizations who are named Petitioners for the following organizations:

Hudson River Sloop Clearwater ("Clearwater"): Andra Leimas, sworn to on March 22, 2017; and leff Debes, sworn to on March 22, 2017;

Nuclear Information and Resource Service ("NIRS"): Linda DeStefano, sworn to on March 22, 2017; and Richard Weiskopf, sworn to on March 22, 2017;

Beyond Nuclear Peter Swords, sworn to on March 22, 2017;

Green Education and Legal Fund ("GELF"): Jessica Maxwell, sworn to on March 22, 2017

New York Public Interest and Research Group, Inc. ("NYPIRG"): Donald Hughes, sworn to on March 22, 2017; and, Karen A. Costello, sworn to on March 23, 2017.

- 9. Attached hereto as "Exhibit 5" is the Affidavit of David A. Lochbaum, Director, Nuclear Safety Project, Union of Concerned Scientists, Sworn to on March 6, 2017.
- Regulatory Commission 10 CFR § 50.47 Emergency Plans Zone ("EPZ") Regulation, which identifies in c)(2) ... the plume exposure pathway EPZ for nuclear power plants shall consist of the ingestion pathway EPZ, an area about 50 miles (80 km) in radius. ... The plans for the ingestion pathway shall focus on such actions as are appropriate to protect the food ingestion pathway." This is a federal determination that those living within the 50 mile radius of a nuclear energy reactor are within the ingestion pathway and thus are subjected to unique harm different from the rest of the population.

I am submitting this document to support Petitioners position that all people living within the Emergency Plan Zone 50 miles radius of a nuclear reactor are within the zone of injury and have unique standing to challenge an agency's review of environmental impacts.

Agreement ("Agreement") dated January 9, 2017 relating to prospective closure of Indian Point in 2024 and 2025. Petitioners respectfully request the Court to take judicial notice of this Agreement, as it has ource relationship to the Orders at issue in this matter.

The very terms of the Agreement make it clear that Indian Point is subject to the challenged Order as:

"a sudden increase in the demand for electric energy, or a sudden shortage of electric energy or of facilities for the generation or transmission of electric energy, the operation of IP2 may be extended upon the mutual agreement of NYS and Entergy, but in no event beyond April 30, 2024, and the operation of IP3 may be extended upon the mutual agreement of NYS and Entergy, but in no event beyond April 30, 2025" 1a. (p. 2)

Additionally,"

(iv) Notwithstanding the foregoing provisions of this Subparagraph 1.b, the restrictions in Subparagraphs (b)(i) and (b)(ii) and the rights conferred in Subparagraph 3 (b)(iii) are expressly subject to any order issued by the United States Secretary of Energy pursuant to Section 202(c) of the Federal Power Act. (p 2-3)

Thus, we ask the Court to take judicial notice of this document as it is directly related to Order, as the standards and methodology for establishing "public need" to continue nuclear operations at Indian Point has been established in the challenged Order.

- 12. Attached hereto as "Exhibit 8" is a true and correct copy of the New York State Senate Bill 4800-A, and New York State Assembly Bill 5985-A proposed Moratorium legislation.
- 13. During the underlying proceeding, at public hearings Petitioners provided the Commission with authoritative evidence and reports which included reports on greenhouse gas emission from nuclear energy generation from the International Atomic Energy Agency (http://www-pub.iaea.org/MTCD/publications/PDF/TRS421_web.pdf) and Electric Power Research Institute ("EPRI")

(http://www.epri.com/search/Pages/results.aspx?k=Estimation%20of%20Carbon-14%20in%20Nuclear%20Power%20Plant%20Gaseous%20Effluents) regarding the

existence of nuclear greenhouse gas and carbon emissions. The Commission failed to produce the administrative records which contained these voluminous evidence which I personally submitted.

- 14. Attached hereto as "Exhibit 9" is a true and correct copy of United States
 Environmental Protection Agency Office of Radiation Programs, report "Public Health
 Consideration of Discharges from Light-Water-Cooled Nuclear Power Industry, July
 1976.
- 15. Attached hereto as "Exhibit" 10" is a true and correct copy of Ontario Power Generation report regarding CANDU's "Management of Carbon-14 Emissions and Environmental Impacts at Ontario Power Generation Nuclear", June 29, 2011. http://hps.ne.uiuc.edu/rets-remp/PastWorkshops/2011/presentations/5A-Management%20of%20Carbon-14%20Emissions%20%20and%20E.pdf
- 16. Attached hereto as "Exhibit 11" is a true and correct copy of the "Shutting Indian Point a Financial Decision: Entergy, by Lanning Taliaferro, Peekskill Patch January 12, 2017 in which Bill Mohl, president of Entergy's Wholesale Commodities that Indian Point is "no longer financially viable."
- 17. Attached hereto as "Exhibit 12" is Timeline of the Adoption of Tier 3, which upon information is true and correct.
- 18. The following Petitioners, NIRS, PHASE, IPSEC and Goshen Green Farms, LLC submitted timely rehearing Petitions of the August 1, 2017 Order.

The following Petitioners NIRS, CLEARWATER, IPSEC, PHASE, GELF, 19.

NYPIRG, Goshen Green Farms, LLC submitted multiple public comments and filed

documents during the Clean Energy Standard proceeding leading up to the challenged

Order.

20. I am submitting this affidavit on behalf of Petitioners who believe legal substantive

procedures should be followed, agency determinations must be based on evidence,

agency decisions must be just and reasonable; and words have meaning.

21. Petitioners respectfully request that the Court:

A. Deny the Respondents Motion to Dismiss;

B1. Grant Petitioners request to annul Tier 3 of the Commission's August 1, 2016

Order;

Or in the alternative,

B2. Order Respondents to file and serve the administrative record and answer the

Petition without delay.

Finally, we respectfully request that the Court adjudicate the merits of this matter as

expeditiously as possible,

Dated: March 24, 2017

Nanuet, New York

Respectfully submitted,

Susan H. Shapiro, Esq.

Attorney for the Petitioners

75 North Middletown Road Nanuet, New York 10954

SUPREME COURT OF THE STATE OF NEW YORK COUNTY OF ALBANY

In the Matter of

HUDSON RIVER SLOOP CLEARWATER, INC., GOSHEN GREEN FARMS, LLC, TOWN OF NORTH SALEM, NEW YORK PUBLIC INTEREST RESEARCH GROUP FUND, INC., NUCLEAR INFORMATION AND RESOURCE SERVICE. BEYOND NUCLEAR, INDIAN POINT SAFE ENERGY COALITION, PROMOTING HEALTH AND SUSTAINABLE ENERGY, INC., GREEN EDUCATION AND LEGAL FUND, INC., SAFE ENERGY RIGHTS GROUP, INC., SCOTT CHASE, RICHARD HAMMER, SCOTT CHASE, RICHARD HAMMER, JOYCE HARTSFIELD, JOSEPH J. HEATH, WILLIAM MCKNIGHT, SR., BRUCE ROSEN, GEORGE STADNIK, LYNNE TEPLIN. ELLEN C. BANKS, CARYL BARON, LINDA BELISLE, DANIEL BIRN, MIRIAM BLUESTONE, J. ALLISON CROCKETT, LAURA DEL GAUDIO, ALLEGRA DENGLER, MICHELLE FREEDMAN, DEAN GALLEA, VALERIE GILBERT, ALLAN GOLDHAMMER, CARLTON GORDON, JENNIFER GORMAN, STEVEN L. GOULDEN, CATHY A. HAFT, RICHARD HAMMER, BRIAN HOBERMAN, OBIE HUNT, ROBERT V. JACOBSON, VICKEY KAISER, ALVIN KONIGSBERG, JUDITH A. LASKO, SUSAN D. LEIFER, MIKHAELA MARICICH, FREDERICK MARTIN, III, PATRICIA MATTESON, JANE MAYER, JANET MCBRIDE, VALERIE NIEDERHOFFER, TERESA OLANDER, VICTOR PALIA, CAROLINE PAULSON, GAIL PAYNE, THOMAS RIPPOLON, ROSEMARIE SANTIESTEBAN, CHERYL SCHNEIDER, CAROL SKRYM, MELVYN T. STEVENS, STEVEN STUART, MONICA WEISS, ERIC WESSMAN, TODD D. WOLGAMUTH, JUDITH M. ZINGHER,

Petitioners-Plaintiffs,

For a Judgment pursuant to Article 78 of the CPLR,

Index No. 07242-16

AFFIDAVIT OF WARREN J. LUCAS IN OPPOSITION TO RESPONDENTS MOTION TO DISMISS

-against-

NEW YORK STATE PUBLIC SERVICE COMMISSION, along with KATHLEEN BURGESS in her official capacity as Secretary, AUDREY ZIBLEMAN in her official capacity as Chair, PATRICIA L. ACAMPORA, GREGG C. SAYRE, and DIANE X. BURMAN, in their official capacities as Commissioners,

Respondents-Defendants,

-and

CONSTELLATION ENERGY NUCLEAR GROUP, LLC, with Subsidiaries and affiliates EXELON GENERATION COMPANY, LLC, R.E. GINNA NUCLEAR POWER PLANT, LLC, NINE MILE POINT NUCLEAR STATION, LLC, ENTERGY NUCLEAR FITZPATRICK, LLC, ENTERGY NUCLEAR INDIAN POINT 2, LLC, and ENTERGY NUCLEAR INDIAN POINT 3, LLC.

Nominal Respondents-Defendants

STATE OF NEW YORK) ss:
COUNTY OF WESTCHESTER)

Index No. 07242-16

AFFIDAVIT OF
WARREN J. LUCAS IN
OPPOSITION TO
RESPONDENTS
MOTION TO DISMISS

WARREN J. LUCAS, being duly sworn, hereby deposes and, under penalties of perjury, states as follows:

- 1. I, Warren J. Lucas, am Supervisor of the Town of North Salem, New York ("North Salem,") whose offices are located at 266 Titicus Road, North Salem, New York 10560.
- 2. I submit this Affidavit to bring to the Court's attention additional facts in further support of the Petition in this proceeding to rescind, annul, vacate, and set aside the Tier 3 orders issued by the New York State Public Service Commission dated August, 1 2016 and September 17, 2016, and the PSC's order of December 15, 2016 denying rehearing.
- 3. North Salem joined the Community Choice Aggregation ("CCA") program that I understand is managed by Sustainable Westchester Inc. under New York State's Reforming the Energy Vision strategy. North Salem joined this program to contract directly with an energy supplier to be able to realize bulk discounts on retail rates for its community, and to choose power from non-renewable or renewable sources.
- 4. North Salem has contracted to purchase power from Constellation Energy and has opted to make 100% renewable power the North Salem community's "default option" for qualified community ratepayers who do not choose to opt out for a non-renewable source of power. As of May 2016, more than 80 % of the Town's 1,976 ratepayers who qualified to participate in the CCA program chose to participate. (Please see the accompanying Exhibit A). Recently, on March 20, 2017, Constellation Energy advised me that there are currently 1,298 North Salem ratepayers participating in the CCA program. (Please see the accompanying Exhibit B). They represent approximately 66% of the Town's ratepayers who qualify to participate in the CCA program and approximately 54% of all Town ratepayers. Their participation in the renewable

energy default plan cost them a premium of 1.94% above the rate paid for power from non-renewable sources. (Please see the accompanying Exhibit C).

- 5. I have read in its Motion to Dismiss, that the Public Service Commission estimates the cost of the Zero Emissions Credits program to be borne by the average residential utility customer to be two dollars per month. (I refer to the Commission's Memorandum of Law dated February 15, 2017 at pages 6, 16 and 26). I believe that in fact, the actual cost of the Tier 3 Zero Emission Credit program that each ratepayer in North Salem must pay is significantly higher.
- 6. The New York State Energy Research and Development Authority ("NYSERDA") confirmed to me on March 22, 2017 that the Town of North Salem's energy consumption in 2016 was 38,000.4 MWHs (or 38.0004 million KWHs). (Please see the accompanying Exhibit D). The rate of the subsidy under dispute in this proceeding is \$.00278/KWH, yielding an estimated \$105,641/year for the 38.0004 million KWHs. Dividing that dollar figure by the 2,446 meters that I am informed by NYSERDA are in the Town, and further dividing by 12, yields a monthly cost of \$3.60 80 percent higher than the Commission's claim. These calculations are made on current subsidy rates on electrical usage. These surcharges may become even higher with rate increases during the potential 12-year life of this surcharge.
- 7. I dispute the Commission's implication that this surcharge is insignificant. North Salem's estimated annual cost of the subsidy \$105,641 exceeds by 76.33% North Salem's \$59,910.20 allowable tax cap as specified by state law for 2017. (Please see the accompanying Exhibit E).

The Tax Cap limit—imposed by the legislature—constitutes an amount so burdensome to individual taxpayers that municipalities are required to adopt special measures to exceed it.

8. I also object to the Commission assessing a surcharge for Tier 3 Zero Emission Credits upon North Salem ratepayers who are already paying a premium for renewable power. It is grossly unfair to further require these ratepayers to subsidize nuclear plants, when they have already taken the affirmative step—at the State's encouragement—to support renewable sources of energy.

arren J. Lucas

Sworn to before me this Alfalay of March 2017

Notary Public

MELANIE L. GOLDEN
NOTARY PUBLIC-STATE OF NEW YORK
NO 02G06336568
QUALIFIED IN ROCKLAND COUNTY
MY COMMISSION EXPIRES 02-08-2020

Warren Lucas

From: Young, Kori:(Constellation) < Kori.Young@constellation.com>

Sent: Wednesday, May 11, 2016 4:35 PM

To: Bedford Town Supervisor (supervisor@bedfordny.gov); supervisor@somersny.com; Warren

Lucas

Cc: Bowe, Brian J:(Constellation); Glenn Weinberg (gweinberg@jouleassets.com);

mgordon@jouleassets.com

Subject: Westchester opt-out rates

NYSEG town leaders,

Here are the opt-out rates as of last Wednesday:

	Original Mailing	CPT-CUT	NAILFAIL	PoundRidge	Total CUT	%
Lewisbaro	4813	512	19	31	" 532	13%
North Salem	1976	210	15	1	. 226	11%
Scres	7475	1005	33	ឡ	1051	149/6
Bedford	5309	833	18	12	918	17%

Thank you, Kori

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Warren Lucas

From:

Bowe, Brian J:(Constellation) < Brian.Bowe@constellation.com>

Sent:

Monday, March 20, 2017 9:19 AM

To:

Warren Lucas

Cc:

Bowe, Brian J:(Constellation)

Subject:

RE: North Salem

Good morning Warren:

There are currently 1,137 residential accounts and 161 commercial accounts from North Salem in the aggregation program.

Let me know if you have any additional questions.

Brian

From: Warren Lucas [mailto:Wlucas@northsalemny.org]

Sent: Friday, March 17, 2017 3:27 PM To: Bowe, Brian J:(Constellation) Subject: [EXTERNAL] North Salem

Brian, how many people in North Salem are in the CCA program?

Sincerely,

Warren J. Lucas

Supervisor, Town of North Salem 266 Titicus Road North Salem, NY 10560 (914) 669 5110 work (914) 161 2636 cell www.northsalemny.org

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1430 Broadway New York, NY 10018

212.221.7822 PHONE 212.221.7840 FAX

www.trasolutions.com

March 10, 2016

Mr. Michael Gordon Chief Executive Officer Sustainable Westchester, Inc. 2 Depot Plaza Bedford Hills, NY 10507

Re: Validation of Third-Party Commodity Pricing versus Utility Offering - Constellation

Mr. Gordon:

TRC's sole responsibility in this exercise is to verify, that the price provided by the qualified bidder to Sustainable Westchester, Inc., for electric commodity is, in fact, less than the average utility energy pricing determined by TRC and agreed upon by Sustainable Westchester, Inc., for calendar year 2015. TRC is providing this comparison at no cost to anyone.

The following represents the price comparison:

Supplier	Commercial Price	Commercial Price	Residential Price	Residential Price
	(36 month)	Green (36 month)	(36 month)	Green (36 month)
Constellation	\$.0695	\$.07085	\$.0695	\$.07085

The utility price to beat as determined by TRC:

Utility	Commercial Price	Residential Price
NYSEG	S.08414	\$.07761

The pricing as provided to TRC by Constellation via Sustainable Westchester, Inc., is indicated to be for a 36 month period. The pricing provided by Constellation is less than the average energy price provided by the New York State Electric & Gas Corp. (NYSEG) during calendar year 2015.

If you have any questions or concerns pursuant to this matter, please do not hesitate to contact me.

Very truly yours

John J. Lembo

Vice President, Principal

TRC Energy Services, a division of TRC Environmental Corp.

Warren Lucas

From: Sent: Jim Yienger <mr_jjy@climatetools.com> Wednesday, March 22, 2017 3:31 PM

To: Cc: Warren Lucas KDAbels@nyseg.com RE: electrical usage

Subject: Attachments:

North Salem.NYSEG.Data.2016,xlsx

Hi Supervisor Lucas,

We are the implementation contractor for NYSERDA working with utilities on this. Please find your attached data for 2016. There are 2446 accounts represented here in the residential and commercial sectors. This is less than the 2491 meters you mention.

There is a small amount of consumption in the industrial and streetlighting sectors NYSEG screened that out because there were too few accounts in these sectors to ensure privacy. The sector called public authorities, which is public facilities mainly, has also been screened out. I asked for clarification from NYSEG on this because you may have enough accounts in sector to allow for aggregation according to the rules utilities and NYSERDA are working out.

Once I get clarification we may be able to provide complete data for 2010-2015 period as well.

Regards Jim

Jim Yienger Principal Climate Action Associates LLC 518-560-9830

From: Warren Lucas [mailto:Wlucas@northsalemny.org]

Sent: Wednesday, March 22, 2017 1:46 PM

To: mr jjy@climatetools.com Subject: FW: electrical usage

Jim, it is possible to get the information for North Salem's kilowatt hour usage for 2016.

Sincerely,

Warren J. Lucas Supervisor, Town of North Salem 265 Titicus Road North Salem, NY 10560 (914) 669 5110 worl: (914) 261 2636 cell www.northsalemny.arg

From: Abels, Kathleen [mailto:KDAbels@nyseg.com]

Sent: Wednesday, March 22, 2017 11:08 AM

To: Warren Lucas

Subject: RE: electrical usage

2016	YEAR		
	NYSEG ID County Location funi Type	NYSEGS's Service Territory Description	Franchise Service Territory
Town	1uni Type	SII	e Territory
Town North Salem 3611953517	Name	US Census Standard FIPS	
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Town of North Salem 2017 Budget - Final



12/6 V2

0.9511%	\$ 59,910.20	by \$2,962.95	Under Tax Cap by \$2,962.95	\$ 6,358,843.44	6,358,843.44 Allowed Tax Cap ===> \$ 6,358,843.44	6,358,843,44	2017 Cap still avallable + 2016 carryover avallable
0.9041%	\$ 56,947.25 0.9041%	6,355,880.49 \$ 6,298,933.24 \$ 6,228,162.35 \$	\$ 6,298,933.24	\$ 6,355,880.49	All District Taxes Combined: Tax Increase	\$ 340.71	Allowable carryover from 2016 (under cap \$ - omitted tax) = (\$4961,87-\$4017.80)
-8.333%	\$ (500,00)	\$ 5,400.00 \$	\$ 6,000.00 \$	\$ 5,500.00	6,358,502.73 Purdys Lighting Dist.	\$ 6,358,502.73	Tax cap for 2017
0.000%	ļ	\$ 10,000.00 \$	\$ 12,000,00 \$	\$ 12,000.00	2,622.24 Croton Falls Lighting Dist.	2,622.24	2016 cap still available
-0.011%	\$ (0.67)	\$ 6,140.91 \$	\$ 6,140.67	\$ 6,140.00	1.006800 Candlewood Lake Park D	1.006800	2016 Tax cap
0.000%	,	5 50,700.00 \$	\$ 49,831.73	\$ 49,831.73	1.002000 Sunset Ridge Water D	1.002000	2016 Growth factor
5.529%	\$ 1,810.00	5 32,671.86 \$	\$ 32,735,95	\$ 34,545.95	6,302,951.04 Candlewood Water Dist.	\$ 6,302,951.04	Total 2016 taxes
0.000%	\$	\$ 62,759.33	\$ 56,061.00	\$ 56,061.00	4,017.80 Croton Falls Water Dist.	\$ 4,017.80	2016 Omitted Gen.Fund lax
	275,491.46 \$ {10,157.73}	\$ 275,491.46	\$ 275,486.23	\$ 265,328.50	4,358.51 Peach Lake Sewer Dist.	\$ 4,358.51	Under Cap for 2016
5.334%	\$ 116,946.33	\$ 2,121,386.98 \$ 116,946.33	\$ 2,192,302.99 \$	\$ 2,309,249.32	Highway Tax	\$ 6,298,933.24 Highway Tax	2016 Taxes
-1.394%	\$ (51,150.68)	\$ 3,663,611.81 \$	\$ 3,668,374.67 \$	\$ 3,617,223.99	General Tax	\$ 6,355,880.49 General Tax	Total Tax for 2017
Increase	Tax Delta	VAI CTO7	XVI 9T07	ZD1 / 1AX	TAXES by Fund	Tax Cap	Tax Cap Description
2017 Tax	2017 to 2016	30.5740	2010 TAV		нения положения в нением в не	THE COMMERCIAL PROPERTY OF THE COMMERCIAL PROPER	

		28 AD92	7470 GC		
		71,60%	70.20%	Amount of budget from taxes	
2.923%	\$ 257,120,92	\$ 8,797,385.59	\$ 9,054,506.51	Total Budget: Revenue/Expense	Total
-8.333%	\$ (500.00)	\$ 6,000.00	\$ 5,500.00	Total Budget: Revenue/Expense	Purdys Lighting Dist.
0.000%	\$	\$ 12,000.00	\$ 12,000.00	Total Budget: Revenue/Expense	Croton Falls Lighting Dist.
0.136%	\$ 8.33	\$ 6,144.67	\$ 6,153,00	Total Budget: Revenue/Expense	Candlewood Lake Park D
0.038%	\$ 27.00	\$ 70,625.73	\$ 70,652,73	Total Budget: Revenue/Expense	Sunset Ridge Water D
2.000%	\$ 893,56	\$ 44,672.49	\$ 45,566,05	Total Budget: Revenue/Expense	Candlewood Water Dist.
2.760%	\$ 2,075.96	\$ 75,227.00	\$ 77,302.96	Total Budget: Revenue/Expense	Croton Falls Water Dist.
-2,647%	\$ (15,169.96)	\$ 573,067.32	\$ 557,897.36	Total Budget: Revenue/Expense	Peach Lake Sewer Dist.
3.268%	\$ 79,173.51	\$ 2,422,976.81	\$ 2,502,150.32	Total Budget: Revenue/Expense	Highway Budget
3.412%	\$ 190,612.52	\$ 5,586,671.57	\$ 5,777,284.09	Total Budget: Revenue/Expense	General Budget (1)
% Change	Delta	2016	2017	n Budget	Total revenue all sources: Town Budget
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29.80% 29

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SUPREME COURT OF THE STATE OF NEW YORK COUNTY OF ALBANY

In the Matter of

HUDSON RIVER SLOOP CLEARWATER, INC., GOSHEN GREEN FARMS, LLC, TOWN OF NORTH SALEM, NEW YORK PUBLIC INTEREST RESEARCH GROUP FUND, INC., NUCLEAR INFORMATION AND RESOURCE SERVICE, BEYOND NUCLEAR, INDIAN POINT SAFE ENERGY COALITION, PROMOTING HEALTH AND SUSTAINABLE ENERGY, INC., GREEN EDUCATION AND LEGAL FUND, INC., SAFE ENERGY RIGHTS GROUP, INC., SCOTT CHASE, RICHARD HAMMER, SCOTT CHASE, RICHARD HAMMER, JOYCE HARTSFIELD, JOSEPH J. HEATH, WILLIAM MCKNIGHT, SR., BRUCE ROSEN, GEORGE STADNIK, LYNNE TEPLIN, ELLEN C. BANKS, CARYL BARON, LINDA BELISLE, DANIEL BIRN, MIRIAM BLUESTONE, J. ALLISON CROCKETT, LAURA DEL GAUDIO, ALLEGRA DENGLER, MICHELLE FREEDMAN, DEAN GALLEA, VALERIE GILBERT, ALLAN GOLDHAMMER, CARLTON GORDON, JENNIFER GORMAN, STEVEN L. GOULDEN, CATHY A. HAFT, RICHARD HAMMER, BRIAN HOBERMAN, OBIE HUNT, ROBERT V. JACOBSON, VICKEY KAISER, ALVIN KONIGSBERG, JUDITH A. LASKO, SUSAN D. LEIFER, MIKHAELA MARICICH, FREDERICK MARTIN, III, PATRICIA MATTESON, JANE MAYER, JANET MCBRIDE, VALERIE NIEDERHOFFER, TERESA OLANDER, VICTOR PALIA, CAROLINE PAULSON, GAIL PAYNE, THOMAS RIPPOLON, ROSEMARIE SANTIESTEBAN, CHERYL SCHNEIDER, CAROL SKRYM, MELVYN T. STEVENS, STEVEN STUART. MONICA WEISS, ERIC WESSMAN, TODD D. WOLGAMUTH, JUDITH M. ZINGHER,

Index No. 07242-16

AFFIDAVIT OF JOSEPH J. HEATH, ESQ. IN OPPOSITION TO RESPONDENTS MOTION TO DISMISS

Petitioners-Plaintiffs,

For a Judgment pursuant to Article 78 of the CPLR,

-against-

NEW YORK STATE PUBLIC SERVICE COMMISSION, along with KATHLEEN BURGESS in her official capacity as Secretary, AUDREY ZIBLEMAN in her official capacity as Chair, PATRICIA L. ACAMPORA, GREGG C. SAYRE, and DIANE X. BURMAN, in their official capacities as Commissioners.

Respondents-Defendants,

CONSTELLATION ENERGY NUCLEAR GROUP, LLC, with Subsidiaries and affiliates EXELON GENERATION COMPANY, LLC, R.E. GINNA NUCLEAR POWER PLANT, LLC, NINE MILE POINT NUCLEAR STATION, LLC, ENTERGY NUCLEAR FITZPATRICK, LLC, ENTERGY NUCLEAR INDIAN POINT 2, LLC, and ENTERGY NUCLEAR INDIAN POINT 3, LLC.

Nominal Re	espondents-Defendants
STATE OF NEW YORK	
STATE OF NEW YORK)) ss:
COUNTY OF ONONDAGA)

JOSEPH J. HEATH, ESQ., being duly sworn, hereby deposes and, under the penalty of perjury, states that:

- 1. I, Joseph J. Heath, Esq., submit this Supplemental Affidavit in further support of this Article 78 Petition to provide the Court with more details about my relationship with Oswego County and the impact of the nuclear plants at Oswego and Scriba has on that relationship.
- 2. I was born and raised in northern Oswego County, in the town of Sandy Creek and spent the first eighteen (18) years of my life there. The western border of Sandy Creek is the eastern shore of Lake Ontario, with most of that shoreline being white sand beaches, separating the Lake from wetlands and Sandy Pond. I spent a great deal of time in my youth on those beaches swimming, hiking, boating and water skiing. Our school also had a summer program that included taking a school bus to Selkirk Shores State Park, slightly to the south, two days a week for swimming and using the beach and park trails.

- 3. This was all before the nuclear plants were constructed in Oswego and Scriba. I remember that Nine Mile 1 nuclear plant's construction was started while I was in high school, in the early 1960s.
- 4. When one stands on either Sandy Island State Park or Selkirk Shores and looks across Lake Ontario in a south western direction, the cooling tower from Nine Mile 1 is a dominant feature along the Lake shoreline.
- 5. In the 1980s, I used to take my son to the beach at Sandy Island for swimming and playing in the sand.
- 6. Also, in the 1980s, I began to travel back to Oswego County for extensive recreational use of the Lake and its tributaries for white water canoeing and kayaking, in the Salmon River, Little Sandy Creek, Deer Creek and other Lake tributaries. I have not done so for the past decade for a variety of reasons, one of which is my concern for impacts of the emissions and releases from the nuclear power plants in Oswego and Scriba.
- 7. My other recreational activity in Oswego County has been extensive cross country skiing in the eastern area of the town of Sandy Creek and the town of Boylston, after the Tug Hill Tourathon ski trails were developed. This is an area that receives approximately 300 inches of snow a year, due to lake effect snow, that is created by winds picking up moisture and water from Lake Ontario and then depositing it as the air has to rise above the increasing elevation of the Tug Hill. So, the snow in this area is predominantly made of water from Lake Ontario, which has been impacted by the nuclear plants. I have used these ski trails much less frequently now, partially due to concern about the source of the water for the snow because of emissions and releases from the nuclear power plants.

- 8. My current home, in northern Cortland County is a relative short drive north on Route 81 to Lake Ontario and Oswego County, which enables me to regularly use and enjoy the scenic, aesthetic and environmental quality of the lake. I would use and enjoy Lake Ontario and its tributaries more but do not because of the impacts of the operation of the nuclear reactors at R.E. Ginna, John FitzPatrick, and Nine Mile Point 1 and 2, specifically the thermal and radioactive releases and emissions into the Lake Ontario from these facilities.
- 9. I had been anticipating that Ginna and FitzPatrick nuclear plants had been scheduled to close and that, therefore, the releases and emissions from them would have stopped impacting my use and enjoyment of Lake Ontario. Tier 3 the Zero Emissions Credits by subsidizing these reactors have directly harmed and impacted my environmental, scenic, and aesthetic enjoyment of Lake Ontario.
- 10. I want the injury to my use and enjoyment of Lake Ontario to stop and therefore I do not think it just or right for my family to be forced to subsidize the ongoing operation of these nuclear facilities, and their production of releases and emissions, for twelve (12) more years. I would be able to use and enjoy the lake and appreciate its aesthetic value more if the nuclear power plants were allowed to close because they are too expensive to operate.
- 11. I am also concerned with the impact of impact on the Lake Ontario of the additional twelve years of generation of nuclear waste. My environmental and aesthetic interests in the use of Lake Ontario are injured by my knowledge that nuclear waste will be generated and stockpiled near the shores of the lake. Over fifty (50) years worth of highly radioactive spent nuclear fuel rods continue to be stored on site in these nuclear plants on the shores of the lake. Some of the concrete holding tanks for these spent fuel rods are also over 50 years old.

- 12. The Public Service Commission did not consider the consequences of storage of additional radioactive waste produced by twelve (12) years of additional nuclear energy generations because of Tier 3 of its August 1, 2016 Order and subsequent rehearing Denial on December 15, 2016. Further, the environmental impacts of the operation of the nuclear plants, particularly emissions to the air and water and the decrease in my ability to use and enjoy the lake which these emissions cause has not been adequately subject of environmental review.
- 13. The Commission did not adequately consider the environmental impacts of the additional high levels of nuclear waste produced by Tier 3 and that it will most likely need to be stored at each of the upstate nuclear reactors for hundred of thousand of years. Nor did the Commission consider the huge cost of managing this additional waste over time.

I have read the foregoing and hereby swear that the facts contained herein are true to the best of my knowledge and based upon by decades of research.

Joseph J. Heath

Sworn to before me this QQ day of March, 2017

Notary Public

02106239793

My commission expires 4/25/19

SUPREME COURT OF THE STATE OF NEW YORK COUNTY OF ALBANY

In the Matter of

HUDSON RIVER SLOOP CLEARWATER, INC., et al.

Petitioners-Plaintiffs,

For a Judgment pursuant to Article 78 of the CPLR,

-against-

NEW YORK STATE PUBLIC SERVICE COMMISSION, along with KATHLEEN BURGESS in her official capacity as Secretary, AUDREY ZIBLEMAN in her official capacity as Chair, PATRICIA L. ACAMPORA, GREGG C. SAYRE, and DIANE X. BURMAN, in their official capacities as Commissioners,

Respondents-Defendants,

-and

CONSTELLATION ENERGY NUCLEAR GROUP, LLC, with Subsidiaries and affiliates EXELON GENERATION COMPANY, LLC, R.E. GINNA NUCLEAR POWER PLANT, LLC, NINE MILE POINT NUCLEAR STATION, LLC, ENTERGY NUCLEAR FITZPATRICK, LLC, ENTERGY NUCLEAR INDIAN POINT 2, LLC, and ENTERGY NUCLEAR INDIAN POINT 3, LLC,

Nominal Respondents-Defendants,

Index No. 07242-16

AFFIDAVIT OF MICHEL LEE IN OPPOSITION TO RESPONDENTS MOTION TO DISMISS

STATE OF NEW YORK)
• .) ss:
COUNTY OF WESTCHESTER)

AFFIDAVIT OF MICHEL LEE ON BEHALF OF PROMOTING HEALTH AND SUSTAINABLE ENERGY (PHASE) AND THE INDIAN POINT SAFE ENERGY COALITION (IPSEC)

- 1. MICHEL LEE, a Senior Analyst with PHASE and a Leadership Council Member of IPSEC, being duly sworn hereby deposes and, under penalties of perjury, states as follows:
- 2. I, MICHEL LEE, am a Senior Analyst with Promoting Health and Sustainable Energy (PHASE), a New York State based nonprofit public interest group which promotes and advocates for public health and sustainable energy, primarily through research, with offices located at 75 North Middletown Road, Nanuet, New York 10954. I am also a member of the Leadership Council of the Indian Point Safe Energy Coalition (IPSEC), a New York State based, nonprofit, nonpartisan coalition of public interest, health advocate, environmental and citizen groups, with offices located at 7 John Dorsey Drive, Cortlandt Manor, New York 10566.
- Petition and submit this Affidavit in opposition to the motion to dismiss filed by New York Public Service Commission (PSC or Commission) on February 15, 2017. I am writing this affidavit because I believe words have meaning. Our democracy depends on the ability of citizens to trust the agencies which work on their behalf. Political efficiency is a fact of life. Agencies sometimes will deliver messy products. Stakeholder interests need to be balanced.

Compromises must always be made. But good governance and an informed citizenry are imperiled when facts are cherry-picked to the point of absurdity, terminology is deceptive, and methodology is contorted beyond recognition.

- 4. The underlying New York Public Service Commission (PSC or Commission) matter may appear to be a complex confusing case with abstruse technicalities and a long and winding procedural history. But, in fact, it is not. Simply stated, the PSC embarked on a process designed to implement the bold and aspirational goals of New York's Reforming the Energy Vision (REV) and State Energy Plan (SEP) which then morphed rapidly and dramatically into a bailout of a few aging industrial sites operated by multibillion out-of-state conglomerates. Thus, what began as a transformative clean energy initiative devolved into a windfall for long entrenched and toxic big energy interests. All the complexity and all the confusion results from the PSC's labored effort to portray the tacked-on Tier 3 component of the PSC's August 1, 2016 Order Adopting a Clean Energy Standard (PSC Order) as something it is most decidedly not.
- 5. At the heart of Petitioners' objection in this case is that the public was grievously misled. As an attorney and an individual who devoted literally hundreds of hours working pro bono on comments filed in the underlying PSC proceeding, I can tell the Court, I was *personally* misled. I trusted that the PSC was true to its name and worked independent of political calculus solely in the public service. I believed the PSC was assaying to create a scheme that could transform New York's energy system and represent a guiding light for the nation and the world. The July 8, 2016 PSC Staff Responsive Proposal (Staff Responsive Proposal) and the August 1, 2016 PSC Order (PSC Order) came as a matter of utter shock to me.

A VISONARY AND INSPIRATIONAL BEGINNING

- 6. The underlying PSC proceeding was initiated to foster greater penetration of clean generation and energy efficiency technologies and practices, facilitate least cost supply, improve electric system efficiency, and empower customer choice. These goals were the clear focus and driver of Commission action as it initiated its Proceeding on Motion of the Commission in Regard to Reforming the Energy Vision. As it went forward, the PSC implemented its Proceeding on Motion of the Commission to Implement a Large-Scale Renewable Program and a Clean Energy Standard. The title of this proceeding has import which the public took to heart. The Commission was moving forward with New York State's heavily publicized plan to spur renewables and be in the vanguard of the transformation to a new clean energy system.
- 7. The Commission's enunciated mission was to achieve the goals of the REV and SEP. Both the REV and SEP were actively promoted by the State as blueprints for a bold transition away from the old energy model to a new clean renewables-powered New York economy. Consumer choice was broadcast as a prime directive.

The REV:

- Advances transformation of New York's electric industry "with the objective of creating market based, sustainable products and services that drive an increasingly efficient, clean, reliable, and consumer-oriented industry. One key outcome of the transformation is to address the Commission's stated objective to make energy efficiency and other distributed resources a primary tool in the planning and operation of an interconnected modernized power grid." (REV, p 2)
- Proposes the need to question the assumption of the old centralized power station paradigm and prioritize development of Distributed Energy Resources (DER), a model

which it deems inclusive of energy efficiency, demand response, and distributed generation. REV estimated (in 2014) that \$30 billion would be needed over the next decade to deal with New York's aging energy infrastructure and points to the vast opportunity for rethinking the traditional model now enabled by developments in information technology. "Developments in information technology make it possible for customers to manage their electricity demand without inconvenience, and enable utilities to coordinate customer-side resources to an extent not previously possible; this in turn enables more predictable and manageable system load with resulting system efficiencies." (REV, p 7)

- Notes new "technologies and programs should have immediate consumer benefit and be scalable to support systemic change. To leave no doubt, Staff emphasizes that this initiative will be driven by the overriding statutory mission of ensuring safe, reliable, environmentally sustainable electric service at just and reasonable rates. What we propose is a dramatically improved set of means toward achieving those ends." (REV, p 11)
- 8. The 2015 SEP begins with the statement in bold print: "The Plan lays out a bold vision for capturing the significant economic development and environmental benefits of a clean, modern economy." Nearly 700 pages in length, the SEP presents a comprehensive roadmap to build a clean affordable energy system by "stimulating a vibrant private sector market to provide clean energy solutions to communities and individual customers throughout New York." (SEP preface) Energy efficiency, the SEP recognizes repeatedly throughout all of its volumes, "is the single most cost-effective tool in achieving energy objectives." (see, e.g., SEP preface) Volume 1 of the SEP, titled "The Energy to Lead," begins with several pages of colorful photographs of wind turbines and solar photovoltaic rooftop panels. The strong theme of the entire SEP is encapsulated by the following statements:
 - "We must keep moving forward. New York should accelerate its ongoing transition to a clean energy economy in order to capture the benefits of scale that will lower project costs and produce the job growth, increased private investment in local economies, and emissions reductions that the State and its residents need." (SEP Vol 1, p 10).

- "REV will create a dynamic, clean energy economy driven by consumer choice, enabling new energy technologies, products, and services, and adding tangible value to the daily lives of New York businesses and consumers." (SEP Vol 1, p 16)
- "New York will build upon the State's existing momentum to accelerate deployment of energy efficiency and renewable energy resources along the path toward the scale that is needed to ensure a clean, resilient, and affordable energy future". (SEP Vol 1, p 20)
- "Helping communities envision and pursue a clean energy future is a key component of community revitalization, sending an important signal that those communities are planning for a sustainable future. The Plan will increase the State's emphasis on improving energy affordability for LMI [low- to moderate-income] consumers, while increasing deployment of distributed energy resources in LMI communities throughout New York, both as a matter of equity, and as a matter of necessity if the State is to meet its clean energy targets." (SEP Vol 1, p 39)
- "The REV Regulatory Docket considers an overhaul of New York's utility regulations to give customers greater value from and choice over their energy use, facilitate the rapid expansion and integration of DERs into the State's energy system, and transition clean energy from periphery to the core of investor-owned utilities' business models." (SEP Vol 1, p 57)
- 9. One objective nowhere to be found in either the REV or SEP is the desirability of diverting billions of public dollars to prop up New York's aging uncompetitive nuclear plants.
- 10. Again, what bears strong emphasis, is the fact that the New York energy policy and plans were billed to the public as one thing and then became another thing entirely. Here, for example, are excerpts from a PSC January 22, 2016 press release announcing a meeting and inviting public comment:
 - "Through regulatory overhaul, REV is remaking New York's utilities to encourage the cleanest, most advanced, and efficient power system operation,' said Commission Chair Audrey Zibelman. 'The goal is one electric market for the state from Buffalo to Babylon that puts customers first and offers more cost-saving choices in a growing clean-energy economy.'"
 - "Under Governor Cuomo's Reforming the Energy Vision (REV), New York State is spurring clean-energy innovation and attracting new investment to build a cleaner, more resilient and affordable energy system for all New Yorkers. REV encompasses groundbreaking regulatory reform to integrate clean energy into the core of our power

- grid, redesigned programs and strategies to unlock private capital, and active leadership in deploying innovative energy solutions across the State's own public facilities and operations. REV will enable a dynamic, clean-energy economy operating at a scale that will stimulate opportunities for communities across the state to create jobs and drive local economic growth, while protecting our environment by reducing greenhouse gas emissions and other pollutants."
- "Successful initiatives already launched as part of REV include NY Sun, NY Green Bank, NY Prize, K-Solar, and a commitment to improve energy affordability for lowincome communities. To learn more about REV, please visit www.ny.gov/REV4NY."²
- 11. Who would have guessed that the subsidy of old polluting power plants was going to end up being the most aggressive and financially muscular part of the final scheme?

ALTERED COURSE: CHANGING FROM A TRANSFORMATIVE AND FUTURE-FOCUSED DIRECTION TO LOCKING NEW YORK INTO USE OF OLD NUCLEAR GENERATION

12. On November 2, 2015, Entergy Corporation announced its intent to close its

FitzPatrick nuclear plant on Lake Ontario. The very same day, the aluminum giant Alcoa said it
would idle or shut two upstate New York plants.³ On November 24, 2015, Governor Cuomo
struck a deal with Alcoa whereby New York would provide \$70 million in state subsidies and
Alcoa would agree to halt its plans to shut its Massena, N.Y. smelting plant. The term of the
agreement was 3 and a-half years.⁴ About a week later, on December 2, 2015, Governor Cuomo
sent a letter to then PSC Chair and CEO Audrey Zibelman, directing commencement of a
proceeding to establish a Clean Energy Standard (CES). The Governor noted the State's goal of
attaining 50% of its electricity from renewable by 2030 (50 by 30 goal), and suggested that
"additional attention needs to be given to ensure emissions free sources of electricity remain
operational." Without expressly directing the PSC to include nuclear, the governor opined that
elimination of New York's upstate facilities would "eviscerate the emissions reductions achieved

through the State's renewable energy programs" and "financially harms host communities."

Shortly thereafter, the Governor facilitated negotiations for Entergy to sell FitzPatrick to Exelon so the plant could remain open and the PSC staff began to incorporate a subsidy scheme to provide revenue for New York's aging upstate nuclear power plants.

Thus the public record clearly reflects the very reasonable concern for the 13. economic viability of stressed upstate communities, exacerbated by the possibility of economically laggard old nuclear plants shutting sooner than anticipated. A reasonable governmental response would have been the clear acknowledgement of this problem and an honest directed effort to mitigate the financial - including job - impacts upon those communities under normal State economic development modalities. As Alliance for a Green Economy (AGREE), Nuclear Information and Resource Service (NIRS), Council on Intelligent Energy & Conservation Policy (CIEPC), and Sierra Club Atlantic Chapter proposed, "The Commission, the Governor, or the NYS Legislature could implement a community and worker protection program to ensure a responsible and effective economic transition for communities and workers impacted by power plant closures." (AGREE, NIRS, et al Comments, July 22, 2016.) The PSC could have stepped up its commitment to renewables and included concrete mandates to vigorously support efficiency and transmission. Tiers 1 and 2, aimed at renewables, could have been expanded to more rapidly and aggressively spur renewable deployment, fund technological innovation and transformative energy research, and create brand new jobs - well in keeping with the objectives of the REV and SEP. A Tier 3 could have been added to propose the same level of Tier 3 financial support (potentially \$7.6 to \$10.4 billion) to vigorously promote efficiency and transmission grid modernization - also well in keeping with the objectives of the REV and SEP.6 Beyond comprehension and certainly not transparent is how and why the PSC ended up promulgating a Tier 3 that diverts money away from direct renewable investment, direct support of workers, direct assistance to communities, and targeted *reduction* of greenhouse gas emissions.

14. The PSC, of course, claims more vigorous support for non-nuclear options was not realistic. Therefore it did not need to give consideration to those options. This flies in the face of the voluminous evidence in the record of the potential for the dynamic combination of renewable, efficiency and grid upgrades that could replace nuclear power. It also flies in the face of plain logic. How can an agency reach a conclusion about options it would not consider? Reaching a conclusion, *ipso facto*, requires consideration. We are not talking about deliberating the viability of fusion technology. We are talking about deeper consideration of the very options most strongly advocated by the State in the REV and SEP.

SOPHISTRY AND DANGEROUS DISTORTIONS

record and in the case before the Court, the hard factual evidence which belies the PSC's promotion of nuclear as economically "clean," "zero-emissions" and "protective of the natural environment". ⁸ Suffice it to say, the industry creates the most toxic waste product on the planet – deadly for tens of thousands of years. The cost for disposal is dumped on the taxpayers. There is, in fact, no known disposal option, despite expenditure of hundreds of billions over half a century. ⁹ Nuclear pours radioactive effluents into the groundwater air and soil constantly as part of ordinary operation. It generates massive amounts of thermal pollution; pollution which is

increasingly damaging under climate change conditions. Uranium mining and nuclear fuel cycle front and back-end activities have devastated the environment and health of environmental justice communities. Accidental radioactive leaks have occurred at New York reactor sites and at virtually every nuclear power site in the nation. And nuclear not only results in prodigious quantities of greenhouse gas emission releases into the atmosphere through its full fuel cycle, it generates radioactive greenhouse gas – Carbon-14 – during the fission process, carbon that never even existed in nature and is radioactive for over well over 5,000 years. The contaminants which nuclear generation uniquely contributes to the environment will remain a threat to untold generations. Nothing in the record disputes a single one of these facts. For the PSC to proclaim nuclear "clean" and "zero-emissions" is to render such terms devoid of rational meaning.

16. The PSC promotes Tier 3 as "low cost" and cost efficient. The New York State goal is to improve "affordability," PSC says. (PSC Order, p 3) The Order provides a "continued obligation and opportunity for utilities to ensure that low-income consumers have access to clean energy alternatives that help them reduce their energy burden and improve the environment." (PSC Order, p 13) The PSC asserts its analysis "is driven by the Commission's fundamental responsibility to consumers to achieve the SEP goal at a reasonable cost." (PSC Order, p 99) Imposing a staggering multi-billion dollar tax on consumers is a dubious way of serving the public interest of keeping costs low. But, putting that obvious observation aside, overwhelming evidence attests efficiency is the least cost way to reduce both energy use and greenhouse gas emissions. The PSC even acknowledges as much in its Order: "Energy efficiency is a crucial and cost effective means to achieve clean energy objectives. Study after study has shown that when deployed well, energy efficiency is the cheapest and most effective manner to reduce carbon

emissions in the energy sector." (PSC Order, pp 81-82) Notwithstanding, the Commission makes absolutely no concrete provision for efficiency in the PSC Order. In a similar vein, the PSC acknowledges the declining cost of renewables, noting, for example, "Over the last three years the reported installed cost of solar has declined by about 26%. The cost of wind has seen a similar improvement and technology changes associated with offshore wind development and economies of scale will also improve these cost dynamics." (PSC Order, p 91) Yet, instead of advancing more vigorous deployment of lower and lowering cost renewables, the Commission impedes their deployment by sending far more money to subsidize increasingly costly nuclear power. For the PSC to pretend Tier 3 is low cost or economically efficient is to render such concepts devoid of import.

- 17. A third key area where the PSC most grievously strips words of meaning is through its professed advancement of consumer choice. The PSC Order flows abundantly with self-proclaimed support of this goal:
 - PSC seeks to "enhance opportunities for consumer choice". (PSC Order, p 1)
 - PSC seeks to "encourage consumer-initiated clean energy purchases or investments".
 (PSC Order, p 2)
 - "Through better pricing and retail market design, New York is positioning itself to create a two-way fully transactive electric system that uses demand and clean energy as solutions that drive consumer value and choice." (PSC Order, p 4)
 - "An overwhelming majority of parties to the CES proceeding, as well as thousands of public comments, support the renewable resource objectives of the SEP. The goals directed in the SEP are aggressive. Ambitious goals are needed, however, to provide scale to the industry and impetus to markets." (PSC Order, pp 5-6)
 - The Commission's is "using free consumer choice as the first mechanism" to achieve the State's goals. (PSC Order, p 7)

- The programs and retail market design of the scheme will ensure market animation "by reducing barriers to entry, supporting economies of scale, and establishing a mechanism to ensure that regardless of the pace of self-initiating consumer actions, New York consumers will be well positioned to meet the State's necessary climate goals in a fair and cost effective manner." (PSC Order, p 7)
- Under REV, the Commission and the State's energy entities are linked through "the
 uniform goal of promoting consumer choice through competition and innovation as the
 chief vehicles of integrating clean energy into the fabric of a two-way integrated,
 efficient, reliable and resilient modern New York electric power industry." (PSC Order,
 pp 7-8)
- "The REV policies are also looking to advance energy democracy by facilitating meaningful consumer choice so that regardless of income, location, or living structure, all consumers have the ability to choose the type of supply they want and how much they want to consume." (PSC Order, p 8)
- "These energy policies are also reflecting the fact that New Yorkers are concerned about the natural environment and when they have the choice and financial opportunity, many New Yorkers will gladly choose the more environmentally benign resource." (PSC Order, p 8)
- "Energy efficiency, voluntary green energy purchases, and other market responses to REV will contribute towards the SEP goals. The public in New York is increasingly asserting its desire and preference for clean energy solutions." (PSC Order, p 8)
- "The Commission is compelled to ensure that New Yorkers are able to reveal their preference for clean energy by first giving them full opportunity to choose solutions that meet their individual needs and advance the greater public interest." (PSC Order, pp 8-9)
- "The CES must encourage individual customer choice that exceeds the State's objectives." (PSC Order, p 9)
- "Business and individual customers voluntarily choosing to become more energy
 efficient, and to deploy or buy economic clean energy resources are New York's most
 valuable asset towards achieving the SEP goals." (PSC Order, p 9)
- The Order encourages "consumer-initiated green energy purchases or investments" through "market-based incentives" and transparent certification. (PSC Order, p 12)
- The Order provides a "continued obligation and opportunity for utilities to ensure that low-income consumers have access to clean energy alternatives that help them reduce their energy burden and improve the environment". (PSC Order, p 13)
- "The resiliency advantages of clean power choices, and the economies of scale that can be achieved through ambitious standards and well-designed retail markets that support

- consumer-motivated transactions, are the best path to a better energy future." (PSC Order, pp 76-77)
- It is anticipated "markets will develop even more rapidly and consequently have a dynamic and positive effect on the supply available to meet the demand for renewable energy. Based upon the speed of this activity and the choices of individual customers, the State may find itself in an enviable position of accelerated achievement of the 2030 target." (PSC Order, p 86)
- "Related to these market developments are the effect that improved information, pricing, and product definition will have on customer grid-based supply choices. One of the great advantages that the Commission has in the development of the RES targets is the increased public awareness and interest in taking personal action to combat climate change, whether in the interest of protecting against environmental damage or to ensure resiliency and to achieve positive economic as well as environmental outcomes." (PSC Order, pp 86-87)
- "[T]he focus here is on directing efforts to meet consumer demand for accurate information and full choice on the content of the supply they purchase and the location of the source." (PSC Order, p 88, fn 67)
- "The net effect of this action is that, by revealing their preferences, customers may be able to accelerate the State's achievement of the 50% target, or, that the target becomes the minimum and that the revealed preference of New Yorkers as a whole is to have a greater than 50% resource mix of renewable resources. In all cases, the development of a vibrant market for consumer choice for clean resources and the development of standard products that create confidence, will impact the timing of the mandated requirements and their associated costs." (PSC Order, pp 89-90)
- "While firm targets for planning purposes are necessary for the near-term, there is value to the market in seeing a potential trajectory that is non-linear and that looks to take advantage of voluntary consumer activities and reduced renewable supply costs." (PSC Order, p 91)
- 18. With apologies to the Court for the quantity, the examples of consumer choice-related quotes above are iterated to contrast the level to which this goal was given lip service with the actual reality of the Tier 3 requirement. The PSC Order takes choice *away* from consumers. Tier 3 forces purchase of nuclear and actually *prevents* individuals, businesses, school systems, and municipalities from buying 100% renewable power. And this astonishing

deprivation is advanced in a proceeding intended to support development and use of renewable power.

- 19. Aside from inviting cynicism and giving lie to the meaning of words, the elimination of choice to buy only renewable power contravenes the vision of the REV and intent of the SEP to "give customers greater value from and choice over their energy use, facilitate the rapid expansion and integration of DERs into the State's energy system, and transition clean energy from periphery to the core of investor-owned utilities' business models." (SEP Vol 1, p 57) It is further most likely to dramatically reduce consumer interest in selecting renewable sources. Undeniably, the primary driver for consumer purchase of 100% renewable especially for ratepayers willing to pay more for the privilege is environmentally value-based. Tier 3 not only takes away consumer choice, it eliminates, for more than a decade, the ethical propellant spurring consumer selection of clean power. Tier 3 is utterly demoralizing for Petitioners and others personally motivated by the desire to avoid adding to the toxic load delivered by nuclear and fossil fuel-generated power.
- 20. The fact this ethical incentive was going to be taken away from the public was, of course never advertised by the PSC and was not disclosed before its sudden appearance in the Staff Responsive Proposal. Personally, I have yet to meet anyone not intensively involved in the minutia of the underlying proceeding who was or is aware that New York was eliminating the ability of ratepayers to choose 100% clean energy. An illustration of the very real way confusion exists, in fact, arrived just this very week in my mailbox. An offer addressed to "New York Resident" invites:

"If you pay your electric bill, you can now choose the source of your electrical power supply. If you would prefer your electricity come from clean, renewable solar and wind sources, please return the form provided"

"Once your form is received, the source of your electricity will be switched to clean energy with no switch fees or conversion charges." (Emphasis in original.)

CONCLUSION

- 21. Tier 3 on its face undermines the prime goals advanced by New York in its Reforming the Energy Vision and State Energy Plan. To wit:
- 22. Tier 3 creates a massive unnecessary subsidy scheme. There is absolutely no evidence in the record to support the contention that keeping all New York's upstate nuclear reactors operating for a full 12 more years will result in a net reduction of greenhouse gas or any other emissions. The fallacy of the "public necessity" claim is addressed in my prior affidavit before the Court.¹⁰
- clause. Tier 3 shackles the State to nuclear power for over a decade, with no escape clause. Tier 3 is economically unjust and unfair. It forces every ratepayer in New York to subsidize old nuclear reactors, regardless of the degree of financial burden leveled upon low income, fixed income, and otherwise financially stressed individuals, nonprofit groups, businesses, industrial facilities, and institutions. The added expense will be passed along to New Yorkers not just through electric rates, but through every product and service which utilizes electricity. Service and product providers will need to raise prices to accommodate the added cost of Tier 3. Such institutions, of course, include energy-use intensive hospitals, schools, and municipalities.

- 24. Tier 3 subsidies may end up going to Indian Point, and could incentivize that problem-plagued facility's longer operation, despite New York State's long effort in opposition to the relicensing. Tier 3 could impede renewable expansion and regional grid upgrades, compromising downstate electric reliability. As a result, Tier 3 could enable Indian Point to operate for 8 more years and allow it to claim entitlement to Tier 3 subsidies.¹¹
- 25. Tier 3 prevents individuals, businesses, school systems, and municipalities from buying 100% renewable power even if they are willing to pay more for clean energy.
- diverts twice as much support to aging nuclear plants as the PSC Order provides to all renewables *combined*. And it forces continued reliance upon dirty large baseload power, just at the point renewables and efficiency technologies were getting a foothold in the marketplace. This threat is not just to clean energy development in New York. The Order adopts nuclear industry PR terminology by falsely promoting the scheme as "zero-emissions credits" or "ZECs". The undisputed science is that nuclear produces radioactive, thermal and greenhouse gas emissions. The nuclear industry is heavily promoting the ZEC concept as a way to bail out aging nuclear reactors all around the country. ¹²
 - 27. Tier 3 places no constraint upon use of the subsidy. The scheme funnels ratepayer money to the coffers of the corporate operators. There is no requirement the funds be spent on safe operation of New York's plants or retention of their workforce. All or most of the financial

windfall is likely to go to one multibillion dollar corporate giant, which also has large investment in fossil fuel, and has funded opposition to the expansion of renewables.¹³

- 28. Tier 3 most arbitrarily, capriciously, and irresponsibly undermines public safety by imposing a penalty for reduced nuclear reactor generation, thereby incentivizing operators to continue running their reactors when safety or security concerns warrant prudent temporary shutdown.¹⁴
- 29. Tier 3 utterly disregards the voluminous and extraordinary environmental, health, safety, and security costs and risks elevated by massively financially incentivizing the many additional years of operation of New York's already aging nuclear reactors. Prime among these are those which will be visited upon New York by continued buildup of some 50 additional reactor years' worth of nuclear waste.
- 30. Tier 3 callously and unjustly ignores the reality that the nuclear fuel must be mined and milled, and those mining and milling activities exact a horrific toll on Native American and other environmental justice communities. Likewise, even presuming the spent fuel (high level) nuclear waste remains on the shores of Lake Ontario and the Hudson River for eternity, much, if not all, of the other radioactive and toxic waste products from these reactors are sent to dumps situated in environmental justice communities.
- 31. Tier 3, the overall record and public evidence shows, represents an effort to provide environmental cover for a behind-the-scenes economic deal. To be clear we are not alleging the PSC was engaged in some sort of nefarious collusion. Nor are we arguing that economic deals may not be properly made. We are arguing simply that Tier 3 was inappropriately and illegitimately devised and promulgated.

The PSC, as it itself acknowledges, is tasked with the obligation to order improvements in manufacturing, distributing and supplying electricity in a manner which will best promote the public interest, preserve the public health and environment, and protect those using electrical power. It is duty-bound to serve the ratepayers and the public, not any particular industry, and most especially not any particular corporation. Tier 3 represents an abrogation of this agency's responsibility. Worse, it is founded upon false premises, contorted logic, and misleading claims. This Court must not allow Tier 3 to stand.

MICHEL LEE on behalf of PROMOTING HEALTH AND SUSTAINABLE ENERGY, INC. and the INDIAN POINT SAFE ENERGY COALITION (IPSEC)

Sworn to before me this

22nd day of March 2017

Notary Public

ENZA PILLA-SKALA Notary Public, State of New York
No. 01Pl5017625
Qualified in Rockland County
Commission Expires on September 7, 20

· ENDNOTES

https://www3.dps.ny.gov/pscweb/WebFileRoom.nsf/web/20EA3442B5F189A085257F4200738F40/\$File/pr16007.pdf?OpenElement.

https://www.governor.ny.gov/sites/governor.ny.gov/files/atoms/files/Renewable_Energy_Letter.pdf.

 CIECP-PHASE Comments on PSC Staff White Paper on Clean Energy Standard, New York Public Service Commission (PSC) Case 15-E-0302, Large-Scale Renewable Program and Clean Energy Standard, Apr 22, 2016.

¹ Public Service Commission Order Instituting Proceeding on Motion of the Commission in Regard to Reforming the Energy Vision, April 24, 2014. file:///C:/Users/michelle2/Downloads/%7B5A9BDBBD-1EB7-43BE-B751-0C1DAB53F2AA%7D.pdf.

² Public Information and Comment Hearings on REV – Reforming the Energy Vision – Set for Jan. 26 in Riverhead & Mineola, Audrey Zibelman, Chair, New York Public Service Commission, Press Release, Jan 22, 2016.

³ See, e.g., McKinley, Jesse, Governor Struggles to Preserve Jobs and Economic Momentum Upstate, New York Times, Nov 7, 2015. https://www.nytimes.com/2015/11/07/nyregion/cuomo-struggles-to-maintain-momentum-in-upstate-employment.html.

⁴ See, McKinley, Jesse, Cuomo Reaches Deal to Keep Open Alcoa Plant in Upstate New York, New York Times, Nov 24, 2015. https://www.nytimes.com/2015/11/25/nyregion/cuomo-reaches-deal-to-keep-open-alcoa-plant-in-upstate-new-york.html.

⁶ Governor Andrew M. Cuomo letter to Audrey Zibelman, CEO, New York State Department of Public Service, Dec 2, 2015.

⁶ Another option was (and remains) to provide government help to corporations like Exelon and Entergy which are most heavily invested in nuclear and gas, move more boldly into the clean energy sector. Instead of incentivizing polluters and their investors to remain financially stuck in 20th Century energy technology, why not help bring them into the 21st Century? Many corporations are clearly conflicted about which way to go, where to put their capital; the struggle between the old way of doing business and the new is occurring within corporate offices throughout the nation. The PSC could have designed Tier 3 to induce the Exelon Corporation to invest in New York renewable resources.

⁷ The whole impetus underlying the REV, SEP and early PSC proceeding was the awareness the market structure needed change in order to excite investors and accelerate innovation. As the REV observed, the problem is that "markets are not designed or operated to value system based investments and operation protocols that drive distribution utility innovation and efficiency." (REV, p 5) The need to make transmission and distribution more efficient was also highlighted in the REV. The bulk power system was designed to meet retail peak demand which in New York is ~75% higher than the average load. Accordingly much of the system is underutilized most of the time. In fact some 9% of generated power is lost because it has to travel long distances over lines. (REV, p 5)

⁸ Filings in the underlying PSC proceeding which present such evidence include:

- Alliance for a Green Energy Economy (AGREE) and Nuclear Information and Resource Service (NIRS) Comments on PSC Staff White Paper on Clean Energy Standard, New York Public Service Commission (PSC) Case 15-E-0302, Large-Scale Renewable Program and Clean Energy Standard, Apr 22, 2016.
- CIECP-PHASE Comments on PSC Order Further Expanding Scope of Proceeding and Seeking Comments on Proceeding on Motion of Commission to Implement a Large-Scale Renewable Program and Clean Energy Standard, New York Public Service Commission (PSC) Case 15-E-0302, Large-Scale Renewable Program and Clean Energy Standard, May 2, 2016.
- Alliance for a Green Energy Economy (AGREE) and Nuclear Information and Resource Service (NIRS) Comments on PSC Order Further Expanding Scope of Proceeding and Seeking Comments on Proceeding on Motion of Commission to Implement a Large-Scale Renewable Program and Clean Energy Standard, New York Public Service Commission (PSC) Case 15-E-0302, Large-Scale Renewable Program and Clean Energy Standard, May 2, 2016.
- Alliance for a Green Energy Economy (AGREE), Nuclear Information and Resource Service
 (NIRS), et al Request of 40 Organizations to PSC for detailed analysis of costs for proposed Tier
 3 program ZECs and analysis of greenhouse gas emissions attributable to nuclear generation in
 New York through its role in establishing locational operating reserve requirements in the New
 York Control Area, (PSC) Case 15-E-0302, Large-Scale Renewable Program and Clean Energy
 Standard, May 9, 2016.
- CIECP-PHASE Comments in response to the comments of multiple parties regarding the Staff
 White Paper on Clean Energy Standard, New York Public Service Commission (PSC) Case 15-E0302, Large-Scale Renewable Program and Clean Energy Standard, May 13, 2016.
- CIECP-PHASE Comments on the DPS Clean Energy Standard White Paper Cost Study, New York Public Service Commission (PSC) Case 15-E-0302, Large-Scale Renewable Program and Clean Energy Standard, Jun 6, 2016.
- Alliance for a Green Energy Economy (AGREE) and Nuclear Information and Resource Service (NIRS) Comments on the DPS Clean Energy Standard White Paper – Cost Study, New York Public Service Commission (PSC) Case 15-E-0302, Large-Scale Renewable Program and Clean Energy Standard, Jun 6, 2016.
- Indian Point Safe Energy Coalition (IPSEC) Comments on New York State Department of Public Service (DPS) Clean Energy Standard White Paper — Cost Study, (PSC) Case 15-E-0302, Large-Scale Renewable Program and Clean Energy Standard, Jun 16, 2016.
- Susan Shapiro, Esq. Comments on PSC Staff July 8, 2016 Responsive Proposal, New York Public Service Commission (PSC) Case 15-E-0302, Large-Scale Renewable Program and Clean Energy Standard, Jul 18, 2016.
- Alliance for a Green Energy Economy (AGREE), Nuclear Information and Resource Service (NIRS), Council on Intelligent Energy & Conservation Policy (CIECP), and Sierra Club Atlantic Chapter Comments on PSC Staff July 8, 2016 Responsive Proposal, (PSC) Case 15-E-0302, Large-Scale Renewable Program and Clean Energy Standard, et al, Jul 22, 2016.

- CIECP-PHASE, Manhattan Project for a Nuclear-Free World, and Indian Point Safe Energy Coalition (IPSEC) Supplemental Multi-Party Comments on PSC Staff July 8, 2016 Responsive Proposal, (PSC) Case 15-E-0302, Large-Scale Renewable Program and Clean Energy Standard, et al, Jul 22, 2016.
- CIECP-PHASE, Physicians for Social Responsibility, New York; Sierra Club Lower Hudson Valley Group; Rockland Sierra Club; Indian Point Safe Energy Coalition (IPSEC); Goshen Green Farms, LLC; Ellen Jaffee, New York State Assemblymember District 97; and Andrew Stewart, Orangetown Supervisor Petition for Rehearing, PSC Case 15-E-0302, Large-Scale Renewable Program and Clean Energy Standard, Aug 31, 2016.
- Alliance for a Green Energy Economy (AGREE), Nuclear Information and Resource Service (NIRS) Petition for Rehearing, PSC Case 15-E-0302, Large-Scale Renewable Program and Clean Energy Standard, Aug 31, 2016.

⁹ Aside from the untold billions spent on R&D in an effort to find a final disposal site for nuclear waste and all the governmental regulatory and research expenditure spent on so-called "interim" storage options, taxpayers are also on the hook for legal damages to the nuclear industry for the current cost of holding spent fuel. This is because the Waste Policy Act of 1982 relieves the nuclear industry of its responsibility to secure or pay for permanent high level nuclear waste disposal. The Government Accountability Office (GAO) has noted that "successfully resolving the issue of what to do with spent commercial nuclear fuel will likely be a decades-long, costly, and complex endeavor, which can be disrupted by changing views and unpredictable funding" and concluded the costly and time-consuming process of finding a solution will likely prolong the need for interim storage at reactor sites, for which the government bears part of the storage costs as a result of industry lawsuits over the Department of Energy's failure to take custody of commercial spent fuel in 1998. The GAO concluded: "These costs exceed \$15.4 billion and could grow by an additional \$500 million a year after 2020." Commercial Nuclear Waste: Effects of a Termination of the Yucca Mountain Repository Program and Lessons Learned, U.S. Government Accountability Office Report, Apr 2011, GAO-11-229. http://www.gao.gov/assets/320/317627.pdf. See also, Dirty, Dangerous and Expensive: The Truth about Nuclear Power, Physicians for Social Responsibility U.S. http://www.psr.org/resources/dirty-dangerousand-expensive-the-truth-about-nuclear-power.pdf. In 2013.

The Nuclear Regulatory Commission (NRC) decided high level nuclear waste could remain at reactor sites indefinitely. The enormous cost of holding nuclear waste in perpetuity was specifically recognized in the SEP: "New York opposes the use of SAFESTOR because there is a strong possibility that it will not leave sufficient non-radiological decommissioning funds for future use. The funds will need to cover future security, maintenance, and utilities for storing the spent fuel, and the funding has shown vulnerability to economic turmoil, increasing the likelihood of a funding shortage with an economic downturn. Additionally, the State has no control over the spending of decommissioning funds and no say in what constitutes non-radiological decommissioning and site restoration. The State has no authority to determine that decommissioning and restoration have been conducted satisfactorily. Furthermore, since funding for radiological and non-radiological cleanup and site restoration of nuclear decommissioning is commingled, and because non-radiological decommissioning and site restoration are the last steps in the decommissioning process, removal of structures and completion of site restoration following decommissioning may not occur if insufficient funds remain. Without separation of decommissioning funds, overruns in radiological decommissioning will reduce or eliminate available funding for site restoration." (SEP Vol 2, Sources, p 24)

¹⁰ In its evident rush to include a Tier 3 nuclear subsidy scheme, the PSC did not consider any alternatives. Nor did the PSC consider which system would be most beneficial for the public good and be most effective and efficient to meet the state's greenhouse gas reduction goal as contemplated by the REV. The PSC did not weigh new sustainable renewable energy and efficiency technologies and systems (solar, wind, off-shore wind, tidal, geothermal efficiencies, retrofits, transmission improvements, and storage, etc.) against outdated, costly, polluting unsustainable nuclear power generation. Astonishingly, even the increased cost to New York of continuing production and storage of nuclear waste was completely ignored.

As noted extensively in the CIECP, PHASE, NIRS, and AGREE filings in the record, renewables costs have plummeted in recent years, whereas nuclear is becoming more costly and uncompetitive. Perversely, the PSC Order envisions larger Tier 3 subsidies will go to New York's aging nuclear plants over the years with the greatest subsidies being given at the end of the 12 year term. In other words, the cheaper and more technologically advanced renewables become, the more ratepayers will have to pay to the nuclear operators. This is about as arbitrary and capricious a market scheme as could be envisioned. Furthermore, as noted, the role of efficiency is subverted. The REV envisioned a market where Distributed System Platform Providers (DSPP) "will integrate energy efficiency into its system planning, targeting efficiency where it will produce maximum system value, and thus optimizing the economic value of energy efficiency expenditures for all customers." (REV, p 21) NYSERDA, it advanced, should provide access to clean energy for low-income customer who may not otherwise benefit from new markets. Efficiency will enhance customer ability to manage their bills. (REV, p 21) Tier 3 stands as a giant obstacle to all these plans.

The PSC Order determines the price of ZECs through a formula based on the U.S. Environmental Protection Agency's (EPA) Social Cost of Carbon (SCC). Petitioners are not arguing against the benefit or value of a SCC metric. The problem is the PSC misunderstands and misapplies the metric. To begin with, the purported amount of carbon saved by continuing nuclear operations was promoted by the industry and manifestly adopted without verification – or even scrutiny – by the Commission. In fact from an atmospheric sciences perspective, the only relevant factor is the amount of full emissions produced by an industrial activity, not what may or may not be emitted at one specific stage. Moreover, the metric applies to incremental emissions mitigation globally. The PSC uses the purported SCC global figure and applies it to New York State. Further, by setting the cost of greenhouse gas emissions reductions (abatement) at the same price as the cost of emissions releases, the PSC errantly promulgated a policy in which the direct cost of reducing emissions must be equivalent to the environmental harms from increasing emissions. The PSC additionally inconsistently applied the SCC metric, using it to benefit nuclear but not renewable energy or efficiency resources. The PSC also failed to evaluate the availability of lower cost means of emissions abatement. The Commission's action is thus arbitrary and capricious in its misapplication of the SCC metric.

The PSC has deemed all upstate New York reactors qualified for subsidy for 12 full years with little or no evidence that the operator would definitely cease operation without subsidy. All that apparently was needed for the money-flow gates to open was for the operator to threaten or muse it would close a plant if it didn't get public money. Even that extremely low threshold was apparently not needed for the PSC to include the newer (circa 1980s) Nine Mile Point reactor in the scheme. Nowhere in the proceeding record (or to our knowledge the broader public record) was that plant considered unprofitable or at risk of closure for financial reasons. Under Tier 3, Indian Point may become entitled to so-called "ZECs" in as little as 2 years if it can no longer make enough profit to satisfy its corporate operator, which is currently Entergy. In a January 2016 press conference, the day the Indian Point Closure Agreement was made public, Bill Mohl, President of Entergy Wholesale Commodities, proclaimed Indian Point had suddenly become unprofitable: "The costs of operating a nuclear power plant have been higher than expected,

running well above inflation for a number of years." He emphasized, "The key driver and the primary driver is the low energy prices and the lost revenue at the site." Mr. Mohl further contended Indian Point's power was needed: "Obviously they need this plant for reliability. The ISO has made that clear in recent reports. So it will be up to the state to come up with plans to replace this capacity in a timely manner." Then he advanced, "There needs to be value put on the carbon-free nature of nuclear generation." While Entergy's enthusiasm for ZECs may be in the hope similar schemes will be adopted in other states to prop up uncompetitive nuclear plants, Entergy will presumably seek ZEC subsidies for Indian Point as soon as the Closure Agreement permits (in 2 years). Moreover, there is nothing to prevent Entergy from transferring Indian Point to Exelon. There is also nothing to prevent the PSC from instituting another expedited program to enable Indian Point to access subsidies even earlier.

- ¹² See Judson T, Too Big to Bail Out: The Economic Costs of a National Nuclear Power Subsidy, Nuclear Information and Resource Service report, November 2016. https://www.nirs.org/big-bailout-economic-costs-national-nuclear-power-subsidy/.
- See, Negin, Elliott, Nuclear Giant Exelon Launches Front Group to Cover Its Assets, Huffington Post, Jun 2, 2014, updated Nov 5, 2014. http://www.huffingtonpost.com/elliott-negin/nuclear-giant-exelon-laun_b_5428994.html. Exelon is a Fortune 100 company with 2015 reported annual revenues of over \$34 billion. Public accountability would seem to be in order to substantiate the "necessity" of lavishing this company with public money. The first expenditures warranting transparent disclosure would be a detailed litany of the sums (and beneficiaries) spent on lobbying, public relations, advertisement, legal and accounting fees, and payments made to industry and Exelon promotional groups. If Exelon's plants are to become public wards, the public has a right to know the evidence for that need precisely where the money has been drained.
- the expense allowances. "Utilities may focus intensely on areas where specific metrics and incentives are detailed and may neglect other areas where there is not an incentive." (REV, p 52) "Deterioration of plant has always been a risk under multi-year plans and can be mitigated by clear metrics and oversight." (REV, p 51) Yet shockingly, the PSC's ill-considered Tier 3 scheme actually pushes nuclear operators to engage in reckless operation. The PSC Order does this by requiring nuclear generators to maximize power generation using historic output as a metric. Nuclear operators already have substantial financial incentive to run reactors. When reactors have unplanned shutdowns it is nearly always because of safety or security issues. Indeed, New York State, noted these concerns in many documents on record. The Order thus places the State in the absurd position of penalizing operators for caution and effectively endangering public safety. Protection of public safety and health are the highest obligations of the PSC. Thus the Order represents an abdication of the Commission's most basic and primary duty.

SUPREME COURT OF THE STATE OF NEW YORK COUNTY OF ALBANY

In the Matter of

HUDSON RIVER SLOOP CLEARWATER, INC., et al.

Petitioners-Plaintiffs,

For a Judgment pursuant to Article 78 of the CPLR,

-against-

NEW YORK STATE PUBLIC SERVICE COMMISSION, along with KATHLEEN BURGESS in her official capacity as Secretary, AUDREY ZIBLEMAN in her official capacity as Chair, PATRICIA L. ACAMPORA, GREGG C. SAYRE, and DIANE X. BURMAN, in their official capacities as Commissioners,

Respondents-Defendants,

-and

CONSTELLATION ENERGY NUCLEAR GROUP, LLC, with Subsidiaries and affiliates EXELON GENERATION COMPANY, LLC, R.E. GINNA NUCLEAR POWER PLANT, LLC, NINE MILE POINT NUCLEAR STATION, LLC, ENTERGY NUCLEAR FITZPATRICK, LLC, ENTERGY NUCLEAR INDIAN POINT 2, LLC, and ENTERGY NUCLEAR INDIAN POINT 3, LLC,

Nominal Respondents-Defendants,

Index No. 07242-16

AFFIDAVIT OF LINDA DESTEFANO IN OPPOSITION TO RESPONDENTS MOTION TO DISMISS

LINDA DeSTEFANO, being duly sworn, hereby deposes and, under penalties of perjury, states as follows:

- I am Linda DeStefano I live at 5031 Onondaga Road, Syracuse , New York, 13215-1403.
- 2. I submit this Affidavit in support of Petitioners' effort, pursuant to Article 78 of the New York State Civil Practice Law and Rules and Declaratory Judgment action to rescind, annul, vacate, and set aside the Tier 3 Orders issued by the New York State Public Service Commission dated August 1, 2016 and September 17, 2016 and the December 15, 2016 Rehearing Denial.
 - 3. I am a member of Nuclear Information Resource Service. ("NIRS").
- 4. I live within approximately 44 miles from the James A. Fitzpatrick and Nine Mile Point nuclear power reactors.
- 5. According to the Nuclear Regulatory Commission I live within the ingestion pathway emergency preparedness zone which extends about 50 miles in radius around a nuclear reactor.
- 6. I am concerned about contamination of the environment from the routine emissions of radioactivity, thermal pollution and greenhouse gases released from Fitzpatrick and Nine Mile Point nuclear reactors and the possibility of a catastrophic nuclear accident.

- 7. I live nearby to Lake Ontario and use its beach and enjoy the scenic. aesthetic and environmental quality of the lake. I would use and enjoy Lake Ontario more but do not because of the impacts of the operation of the nuclear reactors at R.E. Ginna, John FitzPatrick, and Nine Mile Point 1 and 2, specifically the thermal and radioactive releases and emissions into the Lake Ontario from these facilities.
- 8. The releases and emissions from FitzPatrick, Nine Mile Point and Ginna nuclear reactors would have stopped impacting my use and enjoyment of Lake Ontario if the facilities had stopped operating when they indicated they would close. Tier 3 the Zero Emissions Credits by subsidizing these reactors have directly harmed and impacted my environmental, scenic, and aesthetic enjoyment of Lake Ontario.
- 9. I want the injury to my use and enjoyment of Lake Ontario to stop, and therefore I do not think it just or right for my family to be forced to subsidize the ongoing operation of these nuclear facilities, and their production of releases and emissions, for 12 more years.
- 10. I am also concerned with the impact of impact on the Lake Ontario of the additional twelve years of generation of nuclear waste. My environmental and aesthetic interests in the use of Lake Ontario are injured by my knowledge that additional nuclear waste will be generated and stockpiled near the shores of the lake.
- 11. The Public Service Commission did not consider the consequences of storage of additional radioactive waste produced by 12 years of additional nuclear energy generations because of Tier 3 of its August 1, 2016 Order and subsequent rehearing Denial on December 15, 2016.

The Commission did not adequately consider the environmental impacts 12. of the additional high levels of nuclear waste produced by Tier 3 and that it will most likely need to be stored at each of the upstate nuclear reactors for hundred of thousand of years. Nor did the Commission consider the huge cost of managing this additional waste over time.

For all the above reasons I strongly oppose Tier 3 adopted by the 13. Commission in its August 1, 2016 Order.

Sworn to before me this

Notary Public

SUSAN M. BROCKWAY Notary Public, State of New York County of Onendaga

#4995943
My Comm. Expires May 4,

SUPREME COURT OF THE STATE OF NEW YORK COUNTY OF ALBANY

In the Matter of

HUDSON RIVER SLOOP CLEARWATER, INC., et al.

Petitioners-Plaintiffs,

For a Judgment pursuant to Article 78 of the CPLR,

-against-

NEW YORK STATE PUBLIC SERVICE COMMISSION, along with KATHLEEN BURGESS in her official capacity as Secretary, AUDREY ZIBLEMAN in her official capacity as Chair, PATRICIA L. ACAMPORA, GREGG C. SAYRE, and DIANE X. BURMAN, in their official capacities as Commissioners,

Respondents-Defendants,

-and

CONSTELLATION ENERGY NUCLEAR GROUP, LLC, with Subsidiaries and affiliates EXELON GENERATION COMPANY, LLC, R.E. GINNA NUCLEAR POWER PLANT, LLC, NINE MILE POINT NUCLEAR STATION, LLC, ENTERGY NUCLEAR FITZPATRICK, LLC, ENTERGY NUCLEAR INDIAN POINT 2, LLC, and ENTERGY NUCLEAR INDIAN POINT 3, LLC,

Nominal Respondents-Defendants,

Index No. 07242-16

AFFIDAVIT OF ANDRA LEIMANIS IN OPPOSITION TO RESPONDENTS MOTION TO DISMISS STATE OF NEW YORK)
) ss:
COUNTY OF ONONDAGA)

ANDRA LEIMANIS, being duly sworn, hereby deposes and, under penalties of perjury, states as follows:

- 1. I am Andra Leimanis. I live at 921 Maryland Avenue, Syracuse, New York 13210.
- 2. I submit this Affidavit in support of Petitioners' effort, pursuant to Article 78 of the New York State Civil Practice Law and Rules and Declaratory Judgment action to rescind, annul, vacate, and set aside the Tier 3 Orders issued by the New York State Public Service Commission dated August 1, 2016 and September 17, 2016 and the December 15, 2016 Rehearing Denial.
- 3. I submit this affidavit as a member of the not-for-profit organization Hudson River Sloop Clearwater ("Clearwater") and rely upon Clearwater's representation in this matter.
- 4. I live less than 50 miles from the James A. Fitzpatrick and Nine Mile Point 1 and 2 nuclear power reactors. I live within the 50-mile zone where emergency planning for nuclear impacts is required (by the United States). I live 62 miles from the R. E. Ginna nuclear power reactor. Over the years these four reactors have all had leaks of radioactive emissions into Lake Ontario. Lake Ontario is used to cool the reactors. The reactors have also had planned and unplanned air emissions.

- 5. Even though the owners of these 4 upstate nuclear reactors said they were no longer profitable to run and they were going to close, the PSC is forcing them to say open by paying them billions of dollars of rates via everyone's electric bill.
- 6. The Commission's order results in direct harm to my family, my family assets and me. My city home, my country home (2831 LaFayette Road, LaFayette), and my parents' home (2805 LaFayette Road, LaFayette) are south southeast of Scriba, NY. That means ALL of our family-owned homes and lands are within the 50-mile emergency planning ingestion zone.
- 7. All four nuclear reactors in our region are located on the banks of Lake Ontario or its tributaries, so we are careful about our drinking water, since some sections of Syracuse get drinking water from Lake Ontario.
- 8. It has been reported that all of the Oswego area reactors have been leaking into Lake Ontario so I am concerned about drinking tritium-laced water.
- 9. We used to swim in Lake Ontario, but since we found out that all four reactors are leaking we no longer do.
- 10. Tier 3 of the Clean Energy Standard prolongs the life of last century's nuclear reactor technology, instead of investing in this century's energy future, thus endangering my family and me, our watersheds, and our foodsheds.
- 11. When the nuclear reactors in our area started announcing that they would be closely for financial reasons, I was relieved.
- 12. Instead the PSC is propping up these old nuclear reactors with billions in ratepayer surcharges, and then forcing them to stay open for another 12 years, even if renewables gain more market base.

- 13. And to make matters worse, the PSC is forcing me to pay to keep these dangerous and toxic industries polluting my air and water for twelve more years.
- 14. This is a waste of public monies, basically throwing good money at a dying, toxic industry, instead of spending public money on transitioning to a clean energy future.
- 15. New York State's unquestioning reliance on the Nuclear Regulatory Commission ("NRC") is wholly unreasonable and endangers my family and friends. For years New York State has been a party to many challenges regarding NRC's lack of enforcement and not protecting public health and safety.
- 16. According to the Nuclear Regulatory Commission, I live within the ingestion pathway emergency planning zone ("EPZ"), which extends about 50 miles in radius around a nuclear reactor. I find living within the ingestion pathway of operating nuclear reactor to be stressful.
- 17. I am concerned about contamination of the environment from the routine emissions of radioactivity, thermal pollution and greenhouse gases released from Fitzpatrick and Nine Mile Point nuclear reactors and the possibility of a catastrophic nuclear accident. I know that radioactivity and greenhouse gases do not heed a 50 mile distance and am concerned about emissions from the Ginna nuclear reactor too.
- 18. I want the injury to my use and enjoyment of Lake Ontario to stop, and therefore I do not think it just or right for my family to be forced to subsidize the ongoing operation of these nuclear facilities, and their production of releases and emissions and nuclear waste for 12 more years.

19. The Public Service Commission did not consider the consequences of

storage of additional radioactive waste produced by 12 years of additional nuclear energy

generations because of Tier 3 of its August 1, 2016 Order and subsequent rehearing

Denial on December 15, 2016.

20. The Commission did not adequately consider the environmental impacts

of the additional stockpiles high levels of nuclear waste produced by Tier 3 and no

federal nuclear waste storage plan, except to leave the waste where it was made and leave

it to the states to pay for maintenance for thousand of years. The Commission did not

consider the huge and long-term costs to New York State, of safely storing, indefinitely,

another twelve years of high-level nuclear waste from four (4) reactors. The Commission

did not consider the psychological stress and burden to us of knowing the above as well

as that there are generations of harm done to communities in uranium mining and milling

areas during nuclear reactor fuel production.

21. For all the above reasons I strongly oppose Tier 3 adopted by the

Commission in its August 1, 2016 Order.

ANDRA LEIMANIS

Sworn to before me this

<u>27</u> day of March 2017

Notary Public

Samuel Thomas Eschenbrenner Notary Public, State of New York Qualified in Onon. Co., No. 01ES6331366 My Commission Expires Oct. 05, 20_1_1.

SUPREME COURT OF THE STATE OF NEW YORK COUNTY OF ALBANY

In the Matter of

HUDSON RIVER SLOOP CLEARWATER, INC., et al.

Petitioners-Plaintiffs,

For a Judgment pursuant to Article 78 of the CPLR,

-against-

NEW YORK STATE PUBLIC SERVICE COMMISSION, along with KATHLEEN BURGESS in her official capacity as Secretary, AUDREY ZIBLEMAN in her official capacity as Chair, PATRICIA L. ACAMPORA, GREGG C. SAYRE, and DIANE X. BURMAN, in their official capacities as Commissioners,

Respondents-Defendants,

-and

CONSTELLATION ENERGY NUCLEAR GROUP, LLC, with Subsidiaries and affiliates EXELON GENERATION COMPANY, LLC, R.E. GINNA NUCLEAR POWER PLANT, LLC, NINE MILE POINT NUCLEAR STATION, LLC, ENTERGY NUCLEAR FITZPATRICK, LLC, ENTERGY NUCLEAR INDIAN POINT 2, LLC, and ENTERGY NUCLEAR INDIAN POINT 3, LLC,

Nominal Respondents-Defendants,

Index No. 07242-16

AFFIDAVIT OF JEFF DEBES IN OPPOSITION TO RESPONDENTS MOTION TO DISMISS STATE OF NEW YORK) ss:

JEFF DEBES, being duly sworn, hereby deposes and, under penalties of perjury, states as follows:

- 1. I am Jeff Debes. I live at 60 Castlebar Road, Rochester, New York, 14610.
- 2. I submit this Affidavit in support of Petitioners' effort, pursuant to Article 78 of the New York State Civil Practice Law and Rules and Declaratory Judgment action to rescind, annul, vacate, and set aside the Tier 3 Orders issued by the New York State Public Service Commission dated August 1, 2016 and September 17, 2016 and the December 15, 2016 Rehearing Denial.
 - 3. I am a member of Hudson River Sloop Clearwater, Inc. ("Clearwater").
- 4. I am a retired System Engineer who specializes in overall system management.
- 5. I live within approximately 20 miles from the Robert Emmett Ginna nuclear power reactor.
- 6. According to the Nuclear Regulatory Commission I live within the ingestion pathway emergency preparedness zone which extends about 50 miles in radius around a nuclear reactor.
- 7. I am concerned about contamination of the environment from the routine emissions of radioactivity, thermal pollution and greenhouse gases released from Ginna, and the possibility of a catastrophic nuclear accident.

- 8. I live nearby to Lake Ontario and regularly use and enjoy the scenic, aesthetic and environmental quality of the lake. I would use and enjoy Lake Ontario more but do not because of the impacts of the operation of the nuclear reactors at R.E. Ginna, John FitzPatrick, and Nine Mile Point 1 and 2, specifically the thermal and radioactive releases and emissions into the Lake Ontario from these facilities.
- 9. The releases and emissions from Ginna and FitzPatrick would have stopped impacting my use and enjoyment of Lake Ontario if the facilities had stopped operating when they indicated they would close. Tier 3 the Zero Emissions Credits by subsidizing these reactors have directly harmed and impacted my environmental, scenic, and aesthetic enjoyment of Lake Ontario.
- 10. I want the injury to my use and enjoyment of Lake Ontario to stop, and therefore I do not think it just or right for my family to be forced to subsidize the ongoing operation of these nuclear facilities, and their production of releases and emissions, for 12 more years.
- 11. I am also concerned with the impact of impact on the Lake Ontario of the additional twelve years of generation of nuclear waste. My environmental and aesthetic interests in the use of Lake Ontario are injured by my knowledge that nuclear waste will be generated and stockpiled near the shores of the lake.
- 12. The Public Service Commission did not consider the consequences of storage of additional radioactive waste produced by 12 years of additional nuclear energy generations because of Tier 3 of its August 1, 2016 Order and subsequent rehearing Denial on December 15, 2016.

- 13. The Commission did not adequately consider the environmental impacts of the additional high levels of nuclear waste produced by Tier 3 and that it will most likely need to be stored at each of the upstate nuclear reactors for hundred of thousand of years. Nor did the Commission consider the huge cost of managing this additional waste over time.
 - 14. For all the above reasons I strongly oppose Tier 3 adopted by the

Commission in its August 1, 2016 Order.

Sworn to before me this 22 day of March 2017

Notary Public /

ELIZABETH K. BURGESS
Notary Public, State of New York
Monroe County Reg. #01BU6280740
Commission Expires 05/13/2012

SUPREME COURT OF THE STATE OF NEW YORK COUNTY OF ALBANY

In the Matter of

HUDSON RIVER SLOOP CLEARWATER, INC., et al.

Petitioners-Plaintiffs,

For a Judgment pursuant to Article 78 of the CPLR,

-against-

NEW YORK STATE PUBLIC SERVICE COMMISSION, along with KATHLEEN BURGESS in her official capacity as Secretary, AUDREY ZIBLEMAN in her official capacity as Chair, PATRICIA L. ACAMPORA, GREGG C. SAYRE, and DIANE X. BURMAN, in their official capacities as Commissioners,

Respondents-Defendants,

-and

CONSTELLATION ENERGY NUCLEAR GROUP, LLC, with Subsidiaries and affiliates EXELON GENERATION COMPANY, LLC, R.E. GINNA NUCLEAR POWER PLANT, LLC, NINE MILE POINT NUCLEAR STATION, LLC, ENTERGY NUCLEAR FITZPATRICK, LLC, ENTERGY NUCLEAR INDIAN POINT 2, LLC, and ENTERGY NUCLEAR INDIAN POINT 3, LLC,

Nominal Respondents-Defendants,

Index No. 07242-16

AFFIDAVIT OF LINDA
DESTEFANO IN
OPPOSITION TO
RESPONDENTS MOTION
TO DISMISS

LINDA DeSTEFANO, being duly sworn, hereby deposes and, under penalties of perjury, states as follows:

- 1. I am Linda DeStefano I live at 5031 Onondaga Road, Syracuse , New York, 13215-1403.
- 2. I submit this Affidavit in support of Petitioners' effort, pursuant to Article 78 of the New York State Civil Practice Law and Rules and Declaratory Judgment action to rescind, annul, vacate, and set aside the Tier 3 Orders issued by the New York State Public Service Commission dated August 1. 2016 and September 17, 2016 and the December 15, 2016 Rehearing Denial.
 - 3. I am a member of Nuclear Information Resource Service. ("NIRS").
- 4. I live within approximately 44 miles from the James A. Fitzpatrick and Nine Mile Point nuclear power reactors.
- 5. According to the Nuclear Regulatory Commission I live within the ingestion pathway emergency preparedness zone which extends about 50 miles in radius around a nuclear reactor.
- 6. I am concerned about contamination of the environment from the routine emissions of radioactivity, thermal pollution and greenhouse gases released from Fitzpatrick and Nine Mile Point nuclear reactors and the possibility of a catastrophic nuclear accident.

- 7. I live nearby to Lake Ontario and use its beach and enjoy the scenic. aesthetic and environmental quality of the lake. I would use and enjoy Lake Ontario more but do not because of the impacts of the operation of the nuclear reactors at R.E. Ginna. John FitzPatrick, and Nine Mile Point 1 and 2, specifically the thermal and radioactive releases and emissions into the Lake Ontario from these facilities.
- 8. The releases and emissions from FitzPatrick, Nine Mile Point and Ginna nuclear reactors would have stopped impacting my use and enjoyment of Lake Ontario if the facilities had stopped operating when they indicated they would close. Tier 3 the Zero Emissions Credits by subsidizing these reactors have directly harmed and impacted my environmental, scenic, and aesthetic enjoyment of Lake Ontario.
- 9. I want the injury to my use and enjoyment of Lake Ontario to stop, and therefore I do not think it just or right for my family to be forced to subsidize the ongoing operation of these nuclear facilities, and their production of releases and emissions, for 12 more years.
- 10. I am also concerned with the impact of impact on the Lake Ontario of the additional twelve years of generation of nuclear waste. My environmental and aesthetic interests in the use of Lake Ontario are injured by my knowledge that additional nuclear waste will be generated and stockpiled near the shores of the lake.
- 11. The Public Service Commission did not consider the consequences of storage of additional radioactive waste produced by 12 years of additional nuclear energy generations because of Tier 3 of its August 1, 2016 Order and subsequent rehearing Denial on December 15, 2016.

- The Commission did not adequately consider the environmental impacts 12. of the additional high levels of nuclear waste produced by Tier 3 and that it will most likely need to be stored at each of the upstate nuclear reactors for hundred of thousand of years. Nor did the Commission consider the huge cost of managing this additional waste over time.
- For all the above reasons I strongly oppose Tier 3 adopted by the 13. Commission in its August 1, 2016 Order.

Sworn to before me this

22 day of March 2017

Notary Public

SUSAN M. BROCKWAY Notary Fightic, State of New York Noteing France, State of New York

County of Chandaga

#4995943

My Comm. Expires May 4, 2006

SUPREME COURT OF THE STATE OF NEW YORK COUNTY OF ALBANY

In the Matter of

HUDSON RIVER SLOOP CLEARWATER, INC., et al.

Petitioners-Plaintiffs,

For a Judgment pursuant to Article 78 of the CPLR,

-against-

NEW YORK STATE PUBLIC SERVICE COMMISSION, along with KATHLEEN BURGESS in her official capacity as Secretary, AUDREY ZIBLEMAN in her official capacity as Chair, PATRICIA L. ACAMPORA, GREGG C. SAYRE, and DIANE X. BURMAN, in their official capacities as Commissioners,

Respondents-Defendants,

-and

CONSTELLATION ENERGY NUCLEAR GROUP, LLC, with Subsidiaries and affiliates EXELON GENERATION COMPANY, LLC, R.E. GINNA NUCLEAR POWER PLANT, LLC, NINE MILE POINT NUCLEAR STATION, LLC, ENTERGY NUCLEAR FITZPATRICK, LLC, ENTERGY NUCLEAR INDIAN POINT 2, LLC, and ENTERGY NUCLEAR INDIAN POINT 3, LLC,

Nominal Respondents-Defendants,

Index No. 07242-16

AFFIDAVIT OF RICHARD
WEISKOPF IN
OPPOSITION TO
RESPONDENTS MOTION
TO DISMISS

STATE OF NEW YORK) ss:

RICHARD WEISKOPF, being duly sworn, hereby deposes and, under penalties of perjury, states as follows:

- 1. I am Richard Weiskopf I live at 5031 Onondaga Road, Syracuse, New York, 13215-1403.
- 2. I submit this Affidavit in support of Petitioners' effort, pursuant to Article 78 of the New York State Civil Practice Law and Rules and Declaratory Judgment action to rescind, annul, vacate, and set aside the Tier 3 Orders issued by the New York State Public Service Commission dated August 1, 2016 and September 17, 2016 and the December 15, 2016 Rehearing Denial.
 - 3. I am a member of Nuclear Information Resource Service. ("NIRS").
- 4. I live within approximately 44 miles from the James A. Fitzpatrick and Nine Mile Point 1 and 2 nuclear power reactors.
- 5. According to the Nuclear Regulatory Commission I live within the ingestion pathway emergency preparedness zone which extends about 50 miles in radius around a nuclear reactor.
- 6. I am concerned about contamination of the environment from the routine emissions of radioactivity, thermal pollution and greenhouse gases released from Fitzpatrick and Nine Mile Point nuclear reactors and the possibility of a catastrophic nuclear accident.

- 7. I live nearby to Lake Ontario and use its beach and enjoy the scenic, aesthetic and environmental quality of the lake. I would use and enjoy Lake Ontario more but do not because of the impacts of the operation of the nuclear reactors at FitzPatrick. Nine Mile Point 1 and 2, and Ginna, specifically the thermal and radioactive releases and emissions into the Lake Ontario from these facilities.
- 8. The releases and emissions from FitzPatrick. Nine Mile Point and Ginna nuclear reactors would have stopped impacting my use and enjoyment of Lake Ontario if the facilities had stopped operating when they indicated they would close. Tier 3 the Zero Emissions Credits by subsidizing these reactors have directly harmed and impacted my environmental, scenic, and aesthetic enjoyment of Lake Ontario.
- 9. I want the injury to my use and enjoyment of Lake Ontario to stop, and therefore I do not think it just or right for my family to be forced to subsidize the ongoing operation of these nuclear facilities, and their production of releases and emissions, for 12 more years.
- 10. I am also concerned with the impact of impact on the Lake Ontario of the additional twelve years of generation of nuclear waste. My environmental and aesthetic interests in the use of Lake Ontario are injured by my knowledge that additional nuclear waste will be generated and stockpiled near the shores of the lake.
- 11. The Public Service Commission did not consider the consequences of storage of additional radioactive waste produced by 12 years of additional nuclear energy generations because of Tier 3 of its August 1, 2016 Order and subsequent rehearing Denial on December 15, 2016.

The Commission did not adequately consider the environmental impacts 12. of the additional high levels of nuclear waste produced by Tier 3 and that it will most likely need to be stored at each of the upstate nuclear reactors for hundred of thousand of years. Nor did the Commission consider the huge cost of managing this additional waste over time.

For all the above reasons I strongly oppose Tier 3 adopted by the 13. Commission in its August 1, 2016 Order.

Sworn to before me this

スス day of March 2017

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SUSAN M. BROCKWAY Notary Public, State of New York
County of Onendaya
#//905943
My Comm. Expires May 4, 2018

SUPREME COURT OF THE STATE OF NEW YORK COUNTY OF ALBANY

In the Matter of

HUDSON RIVER SLOOP CLEARWATER, INC., et al.

Petitioners-Plaintiffs,

For a Judgment pursuant to Article 78 of the CPLR,

-against-

NEW YORK STATE PUBLIC SERVICE COMMISSION, along with KATHLEEN BURGESS in her official capacity as Secretary, AUDREY ZIBLEMAN in her official capacity as Chair, PATRICIA L. ACAMPORA, GREGG C. SAYRE, and DIANE X. BURMAN, in their official capacities as Commissioners,

Respondents-Defendants,

-and

CONSTELLATION ENERGY NUCLEAR GROUP, LLC, with Subsidiaries and affiliates EXELON GENERATION COMPANY, LLC, R.E. GINNA NUCLEAR POWER PLANT, LLC, NINE MILE POINT NUCLEAR STATION, LLC, ENTERGY NUCLEAR FITZPATRICK, LLC, ENTERGY NUCLEAR INDIAN POINT 2, LLC, and ENTERGY NUCLEAR INDIAN POINT 3, LLC,

Nominal Respondents-Defendants,

Index No. 07242-16

AFFIDAVIT OF PETER E. SWORDS IN OPPOSITION TO RESPONDENTS MOTION TO DISMISS STATE OF NEW YORK)
(SS: COUNTY OF ONONDAGA)

PETER E. SWORDS, being duly sworn, hereby deposes and, under penalties of perjury, states as follows:

- I am Peter Swords, I live at 144 Kensington Place, Syracuse, New York,
 13210, and have lived there continuously since 1980.
- 2. I submit this Affidavit in support of Petitioners' effort, pursuant to Article 78 of the New York State Civil Practice Law and Rules and Declaratory Judgment action to rescind, annul, vacate, and set aside the Tier 3 Orders issued by the New York State Public Service Commission dated August 1, 2016 and September 17, 2016 and the December 15, 2016 Rehearing Denial.
 - 3. I am a member of the not-for-profit organization Beyond Nuclear.
- 4. I live less than 50 miles from the James A. Fitzpatrick and Nine Mile Point 1 and 2 nuclear power reactors.
- 5. According to the Nuclear Regulatory Commission I live within the ingestion pathway emergency planning zone which extends about 50 miles in radius around a nuclear reactor. I find living within the ingestion pathway of operating nuclear reactor to be stressful.
- 6. I am concerned about contamination of the environment from the routine emissions of radioactivity, thermal pollution and greenhouse gases released from Fitzpatrick and Nine Mile Point nuclear reactors and the possibility of a catastrophic

nuclear accident. I raised two children here, and worry about the genetic effects of radioactive contamination on their descendants as well.

- 7. I live nearby to Lake Ontario and use its waters for boating and swimming. I enjoy the scenic, aesthetic and environmental quality of the lake, e.g. when camping at state parks along the shore, except for the view of the cooling towers. I would use and enjoy Lake Ontario more but do not because of the impacts of the operation of the nuclear reactors at R.E. Ginna, John FitzPatrick, and Nine Mile Point 1 and 2, specifically the thermal and radioactive releases and emissions into the Lake Ontario from these facilities. I feel the thermal releases may be adding to the extreme weather, e.g. lake-effect snow, we have experienced here since the additional plants were built.
- 8. When the operators of these nuclear reactors announced that they would be closing for financial reasons I was relieved, as radioactive, greenhouse gas and thermal emissions from these nuclear reactors would have stopped impacting my use and enjoyment of Lake Ontario. Now due to Tier 3 the Zero Emissions Credits these reactors will be subsidized to stay open and will have direct harm and impact on my environmental, scenic, and aesthetic enjoyment of Lake Ontario.
- 9. I want the injury to my use and enjoyment of Lake Ontario to stop, and therefore I do not think it just or right for my family or community to be forced to subsidize the ongoing operation of these nuclear facilities, and their production of releases and emissions and nuclear waste for 12 more years.
- 10. I am also concerned with the impact on Lake Ontario of the additional twelve years of generation of nuclear waste. My environmental and aesthetic interests in

the use of Lake Ontario are injured by my knowledge that additional nuclear waste will be generated and stockpiled near the shores of the lake.

11. The Public Service Commission did not consider the consequences of storage of additional radioactive waste produced by 12 years of additional nuclear energy generations because of Tier 3 of its August 1, 2016 Order and subsequent rehearing

Denial on December 15, 2016.

12. The Commission did not adequately consider the environmental impacts of the additional high levels of nuclear waste produced by Tier 3 and that it will most likely need to be stored at each of the upstate nuclear reactors for hundreds of thousands of years. Nor did the Commission consider the huge cost of managing this additional

waste over time.

13. For all the above reasons I strongly oppose Tier 3 adopted by the Commission in its August 1, 2016 Order.

PETER E. SWORDS

Sworn to before me this 22 day of March 2017

Harm R. Bak.
Notary Public

NOTARY PUBLIC-STATE OF NEW YORK

No. 01ZU6246275

Qualified in Onondaga County

My Commission Expires 5/5/9

KAREN R. ZUK

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SUPREME COURT OF THE STATE OF NEW YORK COUNTY OF ALBANY

In the Matter of

HUDSON RIVER SLOOP CLEARWATER, INC., et al.

Petitioners-Plaintiffs,

For a Judgment pursuant to Article 78 of the CPLR,

-against-

NEW YORK STATE PUBLIC SERVICE COMMISSION, along with KATHLEEN BURGESS in her official capacity as Secretary, AUDREY ZIBLEMAN in her official capacity as Chair, PATRICIA L. ACAMPORA, GREGG C. SAYRE, and DIANE X. BURMAN, in their official capacities as Commissioners,

Respondents-Defendants,

-and

CONSTELLATION ENERGY NUCLEAR GROUP, LLC, with Subsidiaries and affiliates EXELON GENERATION COMPANY, LLC, R.E. GINNA NUCLEAR POWER PLANT, LLC, NINE MILE POINT NUCLEAR STATION, LLC, ENTERGY NUCLEAR FITZPATRICK, LLC, ENTERGY NUCLEAR INDIAN POINT 2, LLC, and ENTERGY NUCLEAR INDIAN POINT 3, LLC,

Nominal Respondents-Defendants,

Index No. 07242-16

AFFIDAVIT OF JESSICA MAXWELL IN OPPOSITION TO RESPONDENTS MOTION TO DISMISS STATE OF NEW YORK) ss: COUNTY OF ONONDAGA)

JESSICA MAXWELL, being duly sworn, hereby deposes and, under penalties of perjury, states as follows:

- I am Jessica Maxwell. I live at 162 Cambridge Street, Syracuse, New York 13210.
- 2. I submit this Affidavit in support of Petitioners' effort, pursuant to Article 78 of the New York State Civil Practice Law and Rules and Declaratory Judgment action to rescind, annul, vacate, and set aside the Tier 3 Orders issued by the New York State Public Service Commission dated August 1, 2016 and September 17, 2016 and the December 15, 2016 Rehearing Denial.
- 3. I submit this affidavit as a member of the not-for-profit organization Green Education and Legal Fund (GELF) and rely upon GELF's representation in this matter.
- 4. I live less than 50 miles from the James A. Fitzpatrick and Nine Mile Point 1 and 2 nuclear power reactors. I live within the 50-mile zone where emergency planning for nuclear impacts is required (by the United States). I live 62 miles from the R. E. Ginna nuclear power reactor. Over the years these four reactors have all had leaks of radioactive emissions into Lake Ontario. Lake Ontario is used to cool the reactors. The reactors have also had planned and unplanned air emissions.

- 5. Even though the owners of these 4 upstate nuclear reactors said they were no longer profitable to run and they were going to close, the PSC is forcing them to say open by paying them billions of dollars of rates via everyone's electric bill.
- 6. The Commission's order results in direct harm to my family, my family assets and me.
- 7. All four nuclear reactors in our region are located on the banks of Lake Ontario or its tributaries, so we are careful about our drinking water, since some sections of Syracuse get drinking water from Lake Ontario.
- 8. It has been reported that all of the Oswego area reactors have been leaking into Lake Ontario so I am concerned about drinking tritium-laced water.
- 9. Since we found out that all four reactors are leaking, we avoid swimming in Lake Ontario.
- 10. Tier 3 of the Clean Energy Standard prolongs the life of last century's nuclear reactor technology, instead of investing in this century's energy future, thus endangering my family and me, our watersheds, and our foodsheds.
- 11. When the nuclear reactors in our area started announcing that they would be closely for financial reasons, I was relieved.
- 12. Instead the PSC is propping up these old nuclear reactors with billions in ratepayer surcharges, and then forcing them to stay open for another 12 years, even if renewables gain more market base.
- 13. And to make matters worse, the PSC is forcing me to pay to keep these dangerous and toxic industries polluting my air and water for twelve more years.

- 14. This is a waste of public monies, basically throwing good money at a dying, toxic industry, instead of spending public money on transitioning to a clean energy future.
- 15. New York State's unquestioning reliance on the Nuclear Regulatory Commission ("NRC") is wholly unreasonable and endangers my family and friends. For years New York State has been a party to many challenges regarding NRC's lack of enforcement and not protecting public health and safety.
- 16. According to the Nuclear Regulatory Commission, I live within the ingestion pathway emergency planning zone ("EPZ"), which extends about 50 miles in radius around a nuclear reactor. I find living within the ingestion pathway of operating nuclear reactor to be stressful.
- 17. I am concerned about contamination of the environment from the routine emissions of radioactivity, thermal pollution and greenhouse gases released from Fitzpatrick and Nine Mile Point nuclear reactors and the possibility of a catastrophic nuclear accident. I know that radioactivity and greenhouse gases do not heed a 50 mile distance and am concerned about emissions from the Ginna nuclear reactor too.
- 18. I want the injury to my use and enjoyment of Lake Ontario to stop, and therefore I do not think it just or right for my family to be forced to subsidize the ongoing operation of these nuclear facilities, and their production of releases and emissions and nuclear waste for 12 more years.
- 19. The Public Service Commission did not consider the consequences of storage of additional radioactive waste produced by 12 years of additional nuclear energy

generations because of Tier 3 of its August 1, 2016 Order and subsequent rehearing Denial on December 15, 2016.

20. The Commission did not adequately consider the environmental impacts

of the additional stockpiles high levels of nuclear waste produced by Tier 3 and no

federal nuclear waste storage plan, except to leave the waste where it was made and leave

it to the states to pay for maintenance for thousand of years. The Commission did not

consider the huge and long-term costs to New York State, of safely storing, indefinitely,

another twelve years of high-level nuclear waste from four (4) reactors. The Commission

did not consider the psychological stress and burden to us of knowing the above as well

as that there are generations of harm done to communities in uranium mining and milling

areas during nuclear reactor fuel production.

21. For all the above reasons I strongly oppose Tier 3 adopted by the

Commission in its August 1, 2016 Order.

JESSICA MAXWELL

Sworn to before me this 2 Z day of March 2017

Notary Public

Eaffler

Samuel Thomas Eschenbrenner Notary Public, State of New York Qualified in Onon. Co., No. 01ES6331366 My Commission Expires Oct. 05, 20

SUPREME COURT OF THE STATE OF NEW YORK COUNTY OF ALBANY

In the Matter of

HUDSON RIVER SLOOP CLEARWATER, INC., et al.

Petitioners-Plaintiffs,

For a Judgment pursuant to Article 78 of the CPLR,

-against-

NEW YORK STATE PUBLIC SERVICE COMMISSION, along with KATHLEEN BURGESS in her official capacity as Secretary, AUDREY ZIBLEMAN in her official capacity as Chair, PATRICIA L. ACAMPORA, GREGG C. SAYRE, and DIANE X. BURMAN, in their official capacities as Commissioners,

Respondents-Defendants,

-and

CONSTELLATION ENERGY NUCLEAR GROUP, LLC, with Subsidiaries and affiliates EXELON GENERATION COMPANY, LLC, R.E. GINNA NUCLEAR POWER PLANT, LLC, NINE MILE POINT NUCLEAR STATION, LLC, ENTERGY NUCLEAR FITZPATRICK, LLC, ENTERGY NUCLEAR INDIAN POINT 2, LLC, and ENTERGY NUCLEAR INDIAN POINT 3, LLC,

Nominal Respondents-Defendants,

Index No. 07242-16

AFFIDAVIT OF DONALD J. HUGHES IN OPPOSITION TO RESPONDENTS MOTION TO DISMISS STATE OF NEW YORK) ss: COUNTY OF ONONDAGA)

DONALD J. HUGHES, P.E, Ph.D., being duly sworn, hereby deposes and, under penalties of perjury, states as follows:

- 1. I am Donald J. Hughes, I live at 157 Strong Ave, Syracuse, New York, 13210. I am a professional engineer licensed in the State of New York. I earned a BS in Chemical Engineering from the University of Buffalo in 1980, and a Master of Science in Environmental Engineering from Cornell University in 1986. In addition to my engineering training and practice specializing in environmental engineering, I have a Ph.D in chemistry from State University of New York, College of Environmental Science & Forestry. I teach a variety of chemistry courses at Le Moyne College.
- 2. I submit this Affidavit in support of Petitioners' effort, pursuant to Article 78 of the New York State Civil Practice Law and Rules and Declaratory Judgment action to rescind, annul, vacate, and set aside the Tier 3 Orders issued by the New York State Public Service Commission dated August 1, 2016 and September 17, 2016 and the December 15, 2016 Rehearing Denial.
- 3. I am a frequent contributor to New York Public Interest Research Group ("NYPIRG"). I have donated to NYPIRG dozens of times since the 1980s. I rely on NYPIRG's representation in this matter.
- 4. I live less than 50 miles from the James A. Fitzpatrick and Nine Mile Point 1 and 2 nuclear power reactors. I live 62 miles from the R. E. Ginna nuclear power

reactor. Over the years these four reactors have all had leaks of radioactive emissions into Lake Ontario. Lake Ontario is used to cool the reactors. The reactors have also had planned and unplanned air emissions.

- 5. According to the Nuclear Regulatory Commission I live within the ingestion pathway emergency planning zone which extends about 50 miles in radius around a nuclear reactor. I find living within the ingestion pathway of operating nuclear reactor to be stressful.
- 6. I am directly injured by contamination of the environment from the routine emissions of radioactivity from Fitzpatrick and Nine Mile Point nuclear reactors and the possibility of a catastrophic nuclear accident.
- 7. Ever since the disastrous nuclear reactor incident which began on March 11, 2011 at the Fukushima Daiichi Nuclear Power Plant in Japan, my anxiety about the possibility of a nuclear accident at the four nuclear reactors closest to where I live, and to where my son lives, and many friends live-- R.E. Ginna, John Fitzpatrick, and Nine Mile Point 1 and 2—has greatly increased. I believe these nuclear power plants represent a threat to the safety of upstate New York, as well a threat to Lake Ontario and everyone and everything downstream.
- 8. I have reviewed much literature concerning nuclear power plant safety, including "Near Misses at U.S. Nuclear Power Plants in 2015," published by the Union of Concerned Scientists, an organization with experts on nuclear power plant safety. According to this report, as nuclear power plants age, the incidence and severity of accidents increases. I am aware that the Ninemile Point 1 and R.E. Ginna reactors have been in operation for 47 years, and Fitzpatrick has been operating for approximately 43

years. The Ninemile Point 2 reactor has been operating for approximately 30 years. I am very concerned that any one of these reactors could fail at any time. I am also concerned that, as happened in Japan, the spent nuclear fuel stored at each power plant site could overheat and release catastrophic amount of radioactivity.

- 9. I live nearby to Lake Ontario and enjoy the scenic, aesthetic and environmental quality of the lake. I would use and enjoy Lake Ontario more but do not because of the impacts of the operation of the nuclear reactors at R.E. Ginna, John FitzPatrick, and Nine Mile Point 1 and 2, specifically the thermal and radioactive releases and emissions into the Lake Ontario from these facilities.
- 10. When the nuclear reactors announced that they would be closely for financial reasons I was relieved, as radioactive and thermal emissions from these nuclear reactor would have stopped impacting my use and enjoyment of Lake Ontario. Now due to Tier 3 the Zero Emissions Credits these reactors will be subsidized to stay open and will have direct harm and impact on my environmental, scenic, and aesthetic enjoyment of Lake Ontario.
- 11. I want the injury to my use and enjoyment of Lake Ontario to stop, and therefore I do not think it just or right for my family, including my son, daughter, mother and brother, all of whom live in New York State, to be forced to subsidize the ongoing operation of these nuclear facilities, and their production of releases and emissions and nuclear waste for 12 more years.
- 12. The Commission did not adequately consider the environmental impacts of the additional stockpiles high levels of nuclear waste produced by Tier 3 and no federal nuclear waste storage plan, except to leave the waste in "temporary" storage

facilities situated on the shore of Lake Ontario. The Commission did not consider the huge and long-term costs to New York State, of safely storing, indefinitely, another twelve years of high-level nuclear waste from four (4) reactors.

- 13. The Commission did not consider the psychological stress and burden to us of knowing the above as well as that there are generations of harm done to communities in uranium mining and milling areas during nuclear reactor fuel production.
- 14. For all the above reasons I strongly oppose Tier 3 adopted by the Commission in its August 1, 2016 Order.

DONALD JÁÚUGHES

Sworn to before me this

2244 day of March 2017

Notary Public

CHRISTINE L. RILEY
Notary Public, State of New York
Qualified in Onon. Co. No. 01R15016699
My Commission Expires Aug. 23, 2017

SUPREME COURT OF THE STATE OF NEW YORK COUNTY OF ALBANY

In the Matter of

HUDSON RIVER SLOOP CLEARWATER, INC., et al.

Petitioners-Plaintiffs,

For a Judgment pursuant to Article 78 of the CPLR,

-against-

NEW YORK STATE PUBLIC SERVICE COMMISSION, along with KATHLEEN BURGESS in her official capacity as Secretary, AUDREY ZIBLEMAN in her official capacity as Chair, PATRICIA L. ACAMPORA, GREGG C. SAYRE, and DIANE X. BURMAN, in their official capacities as Commissioners,

Respondents-Defendants,

-and

CONSTELLATION ENERGY NUCLEAR GROUP, LLC, with Subsidiaries and affiliates EXELON GENERATION COMPANY, LLC, R.E. GINNA NUCLEAR POWER PLANT, LLC, NINE MILE POINT NUCLEAR STATION, LLC, ENTERGY NUCLEAR FITZPATRICK, LLC, ENTERGY NUCLEAR INDIAN POINT 2, LLC, and ENTERGY NUCLEAR INDIAN POINT 3, LLC,

Nominal Respondents-Defendants,

Index No. 07242-16

AFFIDAVIT OF KAREN A.
CASTELLO IN
OPPOSITION TO
RESPONDENTS MOTION
TO DISMISS

STATE OF NEW YORK)
COUNTY OF MONROE)

KAREN A. COSTELLO., being duly sworn, hereby deposes and, under penalties of perjury, states as follows:

- 1. My name is Karen A. Costello and I am a homeowner residing at 95 Colonial Road, Rochester, New York 14609. I am also an electric ratepayer and customer of Rochester Gas and Electric.
- 2. I submit this Affidavit in support of Petitioners' efforts, pursuant to Article 78 of the New York State Civil Practice Law and Rules and Declaratory Judgment action to rescind, annul, vacate, and set aside the Tier 3 Orders issued by the New York State Public Service Commission dated August 1, 2016 and September 17, 2016 and the December 15, 2016 Rehearing Denial.
- 3. Since at least 1990 I have contributed annually to and supported Petitioner New York Public Interest Research Group Fund, Inc. ("NYPIRG"). I became aware of the Tier 3 nuclear subsidy program through NYPIRG's public education work.
- 4. I am a long time environmentalist and believe that climate change is among the most pressing crises facing humankind. Accordingly I support a rapid shift to powering society by renewable energy. In addition, taking action on climate change is a moral issue. I was deeply moved by the Pope's Encyclical on climate, On Care for Our Common Home. As a mother and grandmother, with my three children, their spouses and my seven grandchildren in the Rochester

area, my concerns are also highly personal, extending to protecting my family, as well as the planet.

- 5. I live less than 20 miles from the R.E. Ginna Nuclear Power Plant, located on Lake Ontario, Town of Ontario, Wayne County, New York. According to the Nuclear Regulatory Commission I live within the ingestion pathway Emergency Planning Zone, which extends about 50 miles in radius around a nuclear reactor. I find living within the ingestion pathway of an operating nuclear reactor to be concerning and stressful.
- 6. I am directly injured by contamination of the environment from the routine emissions of radioactivity, thermal pollution and greenhouse gases released from the R.E. Ginna Nuclear Power Plant and live every day mindful of the possibility of a catastrophic nuclear accident.
- 7. I live nearby to Lake Ontario and I used to enjoy the scenic, aesthetic and environmental quality of the lake. Since I learned nuclear reactors at R.E. Ginna, James A. FitzPatrick, and Nine Mile Point Nuclear Generating Station Unit 1 and Unit 2 were leaking into Lake Ontario I can no longer enjoy Lake Ontario in the same way. Unlike their parents, who swam in Lake Ontario, I will no longer allow my grandchildren in the lake waters and travel, instead, to the Finger Lakes for lake excursions. They must now experience Lake Ontario as something to look at but never to touch. I am especially concerned about the thermal and radioactive releases and emissions around and into Lake Ontario from these facilities.

- 8. When the nuclear reactors owners announced that they would be closing due to financial reasons I was relieved, as radioactive, greenhouse gas and thermal emissions from these nuclear reactors would have stopped inhibiting my use and enjoyment of Lake Ontario. Now due to Tier 3 there is and will be ongoing direct harm and impact on my environmental, scenic, and aesthetic enjoyment of Lake Ontario.
- 9. I want the injury to my use and enjoyment of Lake Ontario to stop, and therefore I do not think it just or right for me, my family and community to be forced to subsidize the ongoing operation of these nuclear facilities, and their production of releases and emissions and nuclear waste for 12 more years.
- 10. Further, I am also distressed about the impact to Lake Ontario posed by an additional twelve years of generation of nuclear waste. This will harm my ability to use Lake Ontario due to the stockpiles of nuclear waste near the shores of the lake.
- 11. The Public Service Commission did not consider the consequences of storage of additional radioactive waste produced by 12 years of additional nuclear energy generations as a result of Tier 3 in its August 1, 2016 Order and subsequent rehearing Denial on December 15, 2016.
- 12. The Commission did not adequately consider the environmental impacts of the additional high levels of nuclear waste produced by Tier 3 and that it will most likely need to be stored at each of the upstate nuclear reactors for hundreds of thousands of years. Nor did the Commission consider the huge cost of managing this additional waste over time.

13. For all the above reasons I strongly oppose Tier 3 adopted by the Commission in its August 1, 2016 Order.

KAREN A. COSTELLO

Sworn to before me this

23/15/Lday of March 2017

Notary Public

EMILY A. VAN NORMAN Notary Public, State of New York No. 01VA6324324 Qualified in Livingston County I Commission Expires May 04, 20

SUPREME COURT OF THE STATE OF NEW YORK COUNTY OF ALBANY

In the Matter of

HUDSON RIVER SLOOP CLEARWATER, INC., et al.

Petitioners-Plaintiffs,

For a Judgment pursuant to Article 78 of the CPLR,

-against-

NEW YORK STATE PUBLIC SERVICE COMMISSION, along with KATHLEEN BURGESS in her official capacity as Secretary, AUDREY ZIBLEMAN in her official capacity as Chair, PATRICIA L. ACAMPORA, GREGG C. SAYRE, and DIANE X. BURMAN, in their official capacities as Commissioners,

Respondents-Defendants,

-and

CONSTELLATION ENERGY NUCLEAR GROUP, LLC, with Subsidiaries and affiliates EXELON GENERATION COMPANY, LLC, R.E. GINNA NUCLEAR POWER PLANT, LLC, NINE MILE POINT NUCLEAR STATION, LLC, ENTERGY NUCLEAR FITZPATRICK, LLC, ENTERGY NUCLEAR INDIAN POINT 2, LLC, and ENTERGY NUCLEAR INDIAN POINT 3, LLC,

Nominal Respondents-Defendants,

Index No. 07242-16

AFFIDAVIT OF DAVID A.
LOCHBAUM IN
OPPOSITION TO
RESPONDENTS MOTION
TO DISMISS

STATE OF TENNE SSEE)

COUNTY OF Hamilton)

David H. Lach Daum, being duly sworn, hereby deposes and, under penalties of perjury, states as follows:

- 1. I am David A. Lochbaum. I work for the Union of Concerned Scientists (a non-profit, public interest group) as the Director, Nuclear Safety Project out of the organization's Washington, DC offices.
- 2. I graduated in June 1979 with a bachelor of science degree in nuclear engineering from The University of Tennessee. I worked in the U.S. commercial nuclear power industry from June 1979 until fall 1996 when I joined the Union of Concerned Scientists. I have worked for them since then, except for the period between February 2009 and March 2010 when I worked for the U.S. Nuclear Regulatory Commission (NRC) as a reactor technology instructor at their training center where I provided initial and requalification training to NRC inspectors, reviewers, and managers.
- 3. I have been an expert witness in a 1996 civil action in the U.S. District Court for the Middle District of Pennsylvania regarding alleged damages caused by the March 1979 accident at Three Mile Island, in a 1998 proceeding before the NRC's Atomic Safety and Licensing Board (ASLB) regarding the proposed termination of the operating license for the Yankee Rowe nuclear plant, in a 1998 proceeding before the Indiana Utility Regulatory Commission regarding rate recovery during an extended outage of the two reactor at the Donald C. Cook nuclear plant, in a 1999 proceeding before the NRC's ASLB regarding the proposed reactivation of spent fuel pools at the

Shearon Harris nuclear plant, in a 1999 proceeding before the NRC's ASLB regarding the proposed replacement of storage racks in the spent fuel pool for the Millstone Unit 3 reactor to increase its storage capacity, in a 2000 proceeding before the Vermont Public Service Board regarding the proposed transfer of ownership of the Vermont Yankee nuclear plant, in a 2000 proceeding before the NRC's ASLB regarding the proposed transfer of the operating licenses for the Indian Point and FitzPatrick nuclear plants, in a 2008 proceeding before the NRC's ASLB regarding the proposed license renewal of the Pilgrim nuclear plant, and in a 2008 proceeding before the NRC regarding the proposed construction and operation of new reactors at the Shearon Harris nuclear plant.

- 4. I submit this Affidavit in support of Petitioners' effort, pursuant to Article 78 of the New York State Civil Practice Law and Rules and Declaratory Judgment challenge to rescind, annul, vacate, and set the Tier 3 orders issued by the New York State Public Service Commission dated August 1, 2016 and September 17, 2016 and the December 15, 2016 rehearing denial.
 - 5. Nuclear power is neither emissions free nor "zero-emissions."
- 6. Nuclear power plants emissions include radiation, waste heat, and greenhouse gases.
- 7. Owners of operating nuclear power plants submit annual reports to the NRC describing the planned and unplanned releases of radioactivity in gaseous, liquid, and solid form.¹
- 8. In September 2010, the Union of Concerned Scientists released my report "Regulatory Roulette: The NRC's Inconsistent Oversight of Radioactive Releases from

¹ The NRC's webpage https://www.nrc.gov/reactors/operating/ops-experience/tritium/plant-info.html provides links to the annual reports submitted since 2005. The NRC's Public Document Room enables earlier reports to be accessed.

Nuclear Power Plants." This report described the federal regulations that permit nuclear plant owners to release radioactivity to the air and water, but only through controlled and monitored pathways. The total quantity of radioactivity released via these controlled and monitored pathways must be kept less than limits established to protect workers and the public.

- 9. In addition to these routine, permitted releases, virtually every nuclear plant has experienced leaks and spills where radioactive releases reached the environment through uncontrolled and unmonitored pathways. A January 2017 update by the NRC reports that 46 of the nation's 65 nuclear plants have experienced such leaks and spills.³
- 10. The routine, permitted emissions factor in dilution by mixing with rivers and lakes before radioactively contaminated water is used as a public drinking source. Leaks and spills through uncontrolled and unmonitored pathways can result in radioactive emissions not being attenuated before being encountered by workers and the public.
- 11. The 2013 report⁴ submitted to the NRC by the owner of the Indian Point Energy Center in New York indicated that there were 269 batch gaseous releases of an average duration of 52.5 minutes from Indian Point Units 1 and 2 and an additional 101 batch gaseous releases of an average duration of 94.5 minutes from Indian Point Unit 3. The report indicated the gaseous releases from Indian Point Units 1 and 2 totaled 0.482 curies of fission & activation products, 13 curies of tritium, and 11 curies of Carbon-14.

² Available online at http://www.ucsusa.org/nuclear-power/whos-responsible-nuclear-power-safety/regulatory-roulette#. WKxl.hnkzXL8

https://adamswebsearch2.nrc.gov/webSearch2/main.jsp?AccessionNumber=ML14127A085

Nuclear Regulatory Commission fact sheet dated January 2017, "Leaks and Spills At U.S. Commerical Nuclear Power Plants." Available online at https://www.nrc.gov/docs/ML1703/ML17030A025.pdf

⁴ Entergy Nuclear Northeast letter dated April 28, 2014, to the U.S. Nuclear Regulatory Commission,

[&]quot;2013 Annual Radioactive Effluent Release Report." Available online at

The report indicated the gaseous releases from Indian Point Unit 3 totaled 0.352 curies of fission & activation products, 13.3 curies of tritium, and 10 curies of Carbon-14.

- 12. The 2013 report⁵ submitted to the NRC by the owner of the Indian Point Energy Center indicated 55 batch liquid releases of an average duration of 105 minutes from Indian Point Units 1 and 2 and an additional 126 batch liquid releases of an average duration of 110 minutes from Indian Point Unit 3. The report indicated the liquid releases from Indian Point Units 1 and 2 totaled 0.0521 curies of fission & activation products and 1,310 curies of tritium. The report indicated the liquid releases from Indian Point Unit 3 totaled 0.0241 curies of fission & activation products and 735 curies of tritium.
- In addition to the radioactively contaminated water emissions from the Indian Point Energy Center via monitored and controlled pathways, radioactively contaminated water has leaked into the soil and migrated to the groundwater and Hudson River. Figure 1 shows the estimated plumes of tritium leaking from Indian Point Unit 1 and 2 structures into the soil and flowing towards the Hudson River. The U.S. Environmental Protection Agency's drinking water limit for tritium contamination is 20,000 picocuries per liter. Figure 1 shows some tritium concentration values to exceed 20,000 picocuries per liter, such as those near the Unit 2 fuel handling building, this water is not drinking water so the EPA limit has not been violated. But Figure 1 clearly illustrates the fact that there are emissions of radiation from Indian Point.

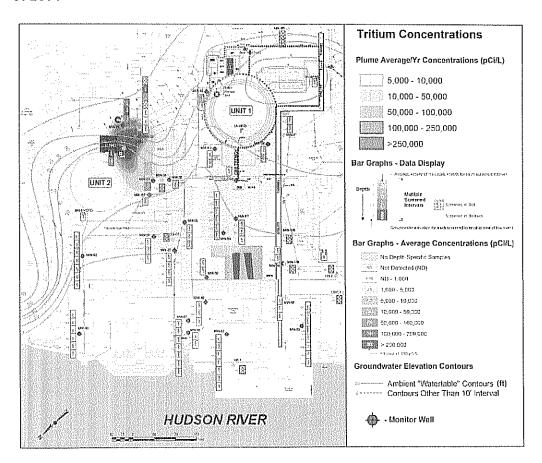
⁵ Entergy Nuclear Northeast letter dated April 28, 2014, to the U.S. Nuclear Regulatory Commission,

[&]quot;2013 Annual Radioactive Effluent Release Report." Available online at

https://adamswebsearch2.nrc.gov/webSearch2/main.jsp?AccessionNumber=ML14127A085

⁶ https://www.nrc.gov/reading-rm/doc-collections/fact-sheets/tritium-radiation-fs.html

Figure 1: Tritium Plumes from Indian Point Units 1 and 2 as of the Fourth Quarter of 2014⁷



14. Figure 2 shows the estimated plumes of Stronium-90 leaking from Indian Point Unit 1 and 2 structures into the soil and flowing towards the Hudson River. The U.S. Environmental Protection Agency's drinking water limit for Strontium-90 contamination is 8 picocuries per liter. Figure 2 shows some Strontium-90 concentration values to exceed 8 picocuries per liter, such as those between the Unit 1 containment

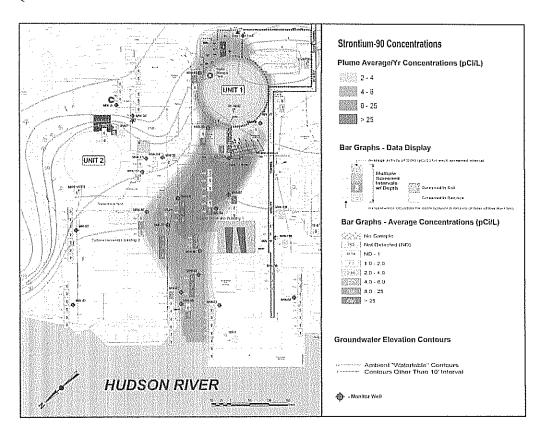
⁷ U.S. Nuclear Regulatory Commission, "Generic Environmental Impact Statement for License Renewal of Nuclear Plants, Supplement 38, Regarding Indian Point Generating Unit Nos. 2 and 3," December 2015. Available online at

https://adamswebsearch2.nrc.gov/webSearch2/main.jsp?AccessionNumber=ML15351A422

https://www3.epa.gov/region9/water/drinking/files/dwsha_0607.pdf

building and the Hudson River, this water is not drinking water so the EPA limit has not been violated. But Figure 2 clearly illustrates the fact that there are emissions of radiation from Indian Point.

Figure 2: Strontium-90 Plumes from Indian Point Units 1 and 2 as of the Fourth Quarter of 20149



The 2013 report¹⁰ submitted to the NRC by the owner of the Indian Point 15. Energy Center indicated 20,100 cubic feet of radioactively contaminated solids (e.g.,

⁹ U.S. Nuclear Regulatory Commission, "Generic Environmental Impact Statement for License Renewal of Nuclear Plants, Supplement 38, Regarding Indian Point Generating Unit Nos. 2 and 3," December 2015. Available online at

https://adamswebsearch2.nrc.gov/webSearch2/main.jsp?AccessionNumber=ML15351A422

10 Entergy Nuclear Northeast letter dated April 28, 2014, to the U.S. Nuclear Regulatory Commission, "2013 Annual Radioactive Effluent Release Report." Available online at

https://adamswebsearch2.nrc.gov/webSearch2/main.jsp?AccessionNumber=ML14127A085

resins, filters, evaporator bottoms and dry active waste) were transported offsite in 56 shipments from Indian Point Units 1 and 2. The 2013 report submitted to the NRC by the owner of the Indian Point Energy Center indicated 20,500 cubic feet of radioactively contaminated solids (e.g., resins, filters, evaporator bottoms and dry active waste) were transported offsite in 19 shipments from Indian Point Unit 3.

- 16. Paragraphs 11 through 15 cite typical reports about planned and unplanned emissions of radioactivity from Indian Point that conclusively show that this nuclear power plant is neither emissions free nor "zero-emissions" when it comes to radioactivity.
- 17. The 2015 report¹¹ submitted to the NRC by the owner of the R. E. Ginna nuclear plant in New York indicated there were 23 batch gaseous releases of an average duration of 21,900 minutes. The report indicated the gaseous emissions totaled 7.34 curies of fission & activation products, 171.8 curies of tritium, and 6.8 curies of Carbon-14.
- 18. The 2015 report¹² submitted to the NRC by the owner of the R. E. Ginna nuclear plant in New York indicated there were 89 batch liquid releases of an average duration of 180 minutes. The report indicated the gaseous emissions totaled 411.9 curies of tritium.

¹¹ Exelon Generation letter dated May 12, 2016, to the U.S. Nuclear Regulatory Commission, "Annual Radioactive Effluent Release Report and Annual Radiological Environmental Operating Report." Available online at https://adamswebsearch2.nrc.gov/webSearch2/main.jsp?AccessionNumber=ML16145A506

¹² Exelon Generation letter dated May 12, 2016, to the U.S. Nuclear Regulatory Commission, "Annual Radioactive Effluent Release Report and Annual Radiological Environmental Operating Report." Available online at https://adamswebsearch2.nrc.gov/webSearch2/main.jsp?AccessionNumber=ML16145A506

- 19. The 2015 report¹³ submitted to the NRC by the owner of the R. E. Ginna nuclear plant in New York indicated 43.63 cubic meters of radioactively contaminated solids (e.g., resins, filters, evaporator bottoms and dry active waste) were transported offsite in 9 shipments.
- 20. Paragraphs 17 through 19 cite typical reports about planned and unplanned emissions of radioactivity from R. E. Ginna that conclusively show that this nuclear power plant is neither emissions free nor "zero-emissions" when it comes to radioactivity.
- 21. On July 18, 1991, the NRC announced¹⁴ it proposed a \$137,500 fine on the owner of the James A. FitzPatrick nuclear plant in New York for the unplanned and unmonitored release of radioactive gases to the atmosphere from the liquid waste concentrator. Rainfall deposited some of the radioactivity into the plant's storm drain system which carried it into Lake Ontario. According to the NRC's press release about the fine, "the NRC staff alleges that the levels released to Lake Ontario were as high as 65 times the maximum permissible concentration," conclusively showing that this nuclear power plant is neither emissions free nor "zero-emissions" when it comes to radioactivity.
- 22. U.S. nuclear power plants currently use light water reactors that are approximately 33 percent efficient. For every three units of thermal energy produced by the reactor core, about one unit of electrical energy is sent out to the offsite power grid

¹³ Exelon Generation letter dated May 12, 2016, to the U.S. Nuclear Regulatory Commission, "Annual Radioactive Effluent Release Report and Annual Radiological Environmental Operating Report." Available online at https://adamswebsearch2.nrc.gov/webSearch2/main.jsp?AccessionNumber=ML16145A506

¹⁴ U.S. Nuclear Regulatory Commission press release dated July 18, 1991, "NRC Staff Proposed to Fine New York Power Authority \$137,500 for Alleged Violations at its FitzPatrick Nuclear Power Plant." Available online at

and about three units of energy are discharged to the environment as waste heat. Nuclear power plants use once-through cooling (e.g., water drawn from a nearby lake, river, or ocean and returned to that source warmed by the waste heat) or closed-cycle cooling (e.g., water circulated through a cooling tower to minimize water drawn from and released back to the nearby body of water.)

- 23. The September 2001 report¹⁵ submitted to the New York State Department of Environmental Conservation by the owner of the Nine Mile Point nuclear plant in New York indicated that the maximum difference between the water taken in by Unit 1 and discharged back from Unit 1 was 31°F, within the 35°F maximum allowed by the permit. The report indicated the maximum temperature of the water discharged from Unit 1 was 104°F, below the 115°F maximum allowed by the permit. This typical report about thermal discharges from Nine Mile Point conclusively shows that this nuclear power plant is neither emissions free nor "zero-emissions" when it comes to thermal pollution.
- 24. The September 2006 report 16 submitted to the New York State Department of Environmental Conservation by the owner of the James A. FitzPatrick nuclear plant in New York indicated that the maximum difference between the water taken in and discharged back was 28.9°F, below the 32.4°F maximum allowed by the permit. The report indicated the maximum temperature of the water discharged was 93.7°F, below the 112°F maximum allowed by the permit. This typical report about thermal discharges

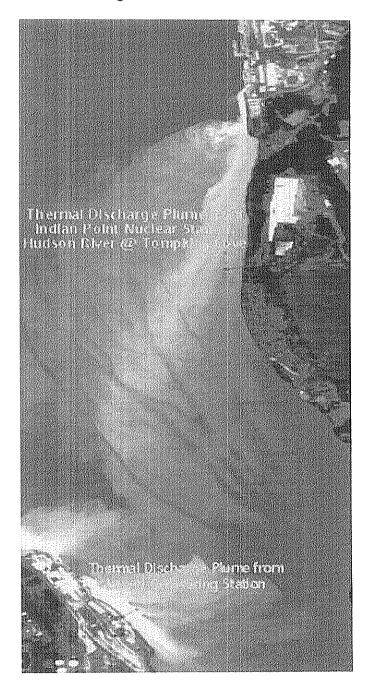
¹⁵ Niagara Mohawk letter dated October 25, 2001, to the New York State Department of Environmental Conservation, "Nine Mile Point Nuclear Station State Pollutant Discharge Elimination System Permit No. NY 0001015 September 2001 Discharge Monitoring Report." Available online at https://adamswebsearch2.nrc.gov/webSearch2/main.jsp?AccessionNumber=ML020160321

¹⁶ Entergy Nuclear Northeast letter dated October 20, 2006, to the New York State Department of Environmental Conservation, "James A. FitzPatrick Nuclear Power Plant SPDES Reooirt Facility ID #NY0020109." Available online at

from FitzPatrick conclusively shows that this nuclear power plant is neither emissions free nor "zero-emissions" when it comes to thermal pollution.

25. The Final Environmental Impact Statement prepared by the New York State Department of Environmental Conservation to support renewal of State Pollutant Discharge Elimination System permits for power plants along the Hudson River examined the effect of warmed water discharged by Indian Point Unit 3 into the river. Figure 3 shows the thermal plumes from that study. This report and Figure 3 conclusively show that Indian Point is neither emissions free nor "zero-emissions" when it comes to thermal pollution.

Figure 3: Thermal Discharge Plumes from Indian Point Unit 3 and the Downstream Lovett Generating Station¹⁷



¹⁷ New York State Department of Environmental Conservation Final Environmental Impact Statement dated June 25, 2003. Available online at

https://adamswebsearch2.nrc.gov/webSearch2/main.jsp?AccessionNumber=ML073090416

A review 18 of 103 studies of the estimated greenhouse gas emissions from 26. nuclear power plants over their life cycles reported the estimates ranged from 1.4 grams of carbon dioxide equivalent per kilowatt hour (g CO₂e/kWh) to 288 g CO₂e/kWh with a mean of 66 g CO2e/kWh.

27. The review of 103 studies of greenhouse gas emissions from nuclear power plants over their life cycles additionally provided information about greenhouse gas emissions from various energy sources. Figure 4 from the review shows that while some energy sources release more greenhouse gases than nuclear power, many energy sources release less greenhouse gases.

¹⁸ Paper by Benjamin K. Sovacool accepted April 21, 2008, "Valuing the greenhouse gas emissions from nuclear power: A critical survey." Available online at

https://adamswebsearch2.nrc.gov/webSearch2/main.jsp?AccessionNumber=ML100601133

Figure 4: Greenhouse Gases Emitted by Electricity Producers¹⁹

Lifecycle estimates for electricity generators^a

Technology	Capacity/configuration/fuel	Estimate (gCO2e/ kWh)	
Wind	2.5 MW, offshore	9	
Hydroelectric	3.1 MW, reservoir	10	
Wind	1.5 MW, onshore	10	
Biogas	Anaerobic digestion	11	
Hydroelectric	300 kW, run-of-river	13	
Solar thermal	80 MW, parabolic trough	13	
Biomass	Forest wood Co-combustion with hard coal	14	
Biomass	Forest wood steam turbine	22	
Biomass	Short rotation forestry Co-combustion with	23	
	hard coal		
Biomass	FOREST WOOD reciprocating engine	27	
Biomass	Waste wood steam turbine	31	
Solar PV	Polycrystalline silicone	32	
Biomass	Short rotation forestry steam turbine	35	
Geothermal	80 MW, hot dry rock	38	
Biomass	Short rotation forestry reciprocating engine	41	
Nuclear	Various reactor types	66	
Natural gas	Various combined cycle turbines	443	
Fuel cell	Hydrogen from gas reforming	664	
Diesel	Various generator and turbine types	778	
Heavy oil	Various generator and turbine types	778	
Coal	Various generator types with scrubbing	960	
Coal	Various generator types without scrubbing	1050	

^a Wind, hydroelectric, biogas, solar thermal, biomass, and geothermal, estimates taken from Pehnt (2006). Diesel, heavy oil, coal with scrubbing, coal without scrubbing, natural gas, and fuel cell estimates taken and Gagnon et al. (2002). Solar PV estimates taken from Fthenakis et al. (2008). Nuclear is taken from this study. Estimates have been rounded to the nearest whole number.

28. As part of its application for the renewal of the reactor operating licenses, the owner of the Indian Point Energy Center provided the NRC with information on the

¹⁹ Paper by Benjamin K. Sovacool accepted April 21, 2008, "Valuing the greenhouse gas emissions from nuclear power: A critical survey." Available online at https://adamswebsearch2.nrc.gov/webSearch2/main.jsp?AccessionNumber=ML100601133

greenhouse gas emissions from the plant. Figure 5 contains the owner's data as reported by the NRC.

Figure 5: Estimated Greenhouse Gas Emissions From Indian Point 2009-2013²⁰

Estimated Greenhouse Gas Emissions from Operations at IP2 and IP3

Year	Combustion Related Sources (CO _{2eq} (MT/year)) ^[a]	Worker Vehicles (CO _{2eq} (MT/year))	Electrical Equipment Related Sources (CO _{2aq} (MT/year)) ^(b)	Total (CO _{zeq} (MT/year)) ^(c)
2009	3 30	4,470	1,250	6,050
2010	750	4,470	3,740	8,960
2011	360	4,470	1,250	6,080
2012	290	4,470	6,230	10,990
2013	490	4,470	N/A	4,960

⁽a) Sources include diesel generators, pumps, boilers, and gas turbines. Emissions estimated based on annual fuel usage

- 29. Paragraphs 26 through 28 conclusively show that nuclear power is neither emissions free nor "zero-emissions" when it comes to greenhouse gases.
- 30. On December 3, 1998, the National Advertising Division (NAD) of the Council of Better Business Bureaus, Inc. announced ²¹ the conclusions from its investigation of a complaint filed by the Natural Resources Defense Council (NRDC) against ads placed by the Nuclear Energy Institute (NEI), the nuclear industry's trade group, in the *New York Times, Washington Post, New Republic*, and other publications. NRDC contended that the ads may deceive consumers about the actual environmental impact of nuclear power. The NAD concluded:

⁽b) Represents emissions of sulfur hexafluoride used in electrical equipment. Entergy does not track pounds of sulfur hexafluoride added to electrical equipment. Emission values were estimated based on the number of sulfur hexafluoride canisters (115 pounds per canister) utilized, assuming the entire canister represents GHG emissions. No data are available for 2013.

⁽c) Total emissions from combustion sources, worker vehicles, and electrical equipment.

²⁰ U.S. Nuclear Regulatory Commission, "Generic Environmental Impact Statement for License Renewal of Nuclear Plants, Supplement 38, Regarding Indian Point Generating Unit Nos. 2 and 3," December 2015. Available online at

https://adamswebsearch2.nrc.gov/webSearch2/main.jsp?AccessionNumber=ML15351A422

²¹ Letter dated December 3, 1998, from Peter C. Marinello, Senior Advertising Review Specialist, National Advertising Division, to Katherine Kennedy, Natural Resources Defense Council, "Advertising for Nuclear Energy."

a. "NAD determined that consumers can reasonably interpret the claim to mean that electricity generated by nuclear power is produced without any negative impact on the environment. The record, however, does not support this interpretation of the claim."

b. "NAD recommends that the advertiser refrain from using overly broad claims that nuclear energy is 'Environmentally Clean' or produces electricity 'without polluting the environment.'"

c. "NAD concluded that it is inaccurate to make an unqualified claim that nuclear electricity does not 'pollute the air.'"

d. "NAD was not persuaded by NEI's arguments that, because nuclear power plants comply with federal and state regulations regarding the acceptable levels for thermal discharge, that nuclear power plants can make an unqualified claim that 'nuclear energy generates electricity without polluting the water.'"

31. The NAD investigation conclusively shows that labeling nuclear energy as emissions free or "zero-emissions" is not supported by the evidence and therefore is clearly deceptive.

David A. Lochbaum

Sworn to before me this

 \mathcal{Q} day of March 2017

Notary Public