

1 UNITED STATES

2 NUCLEAR REGULATORY COMMISSION

3 BEFORE THE ATOMIC SAFETY AND LICENSING BOARD

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5 In re: Docket Nos. 50-247-LR; 50-286-LR
6 License Renewal Application Submitted by ASLBP No. 07-858-03-LR-BD01
7 Entergy Nuclear Indian Point 2, LLC, DPR-26, DPR-64
8 Entergy Nuclear Indian Point 3, LLC, and
9 Entergy Nuclear Operations, Inc. June 29, 2012

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11 PRE-FILED WRITTEN REBUTTAL TESTIMONY OF

12 DAVID A. SCHLISSEL

13 REGARDING CONTENTION NYS-37

14 On behalf of the State of New York ("NYS" or "the State"),
15 the Office of the Attorney General hereby submits the following
16 testimony by David A. Schlissel regarding Contention NYS-37.

17 Q. What is the purpose of your testimony?

18 A. The purpose of this testimony is to respond to the
19 testimony of Entergy Witnesses Donald P. Cleary, David Harrison,
20 Jr., and Eugene T. Meehan Regarding Contention NYS-37 (Energy
21 Alternatives).

22 Q. What documents did you review in preparation for your
23 rebuttal testimony?

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1 A. I read Entergy's Statement of Position concerning
2 Contention NYS-37; the testimony of Entergy witnesses Donald P.
3 Cleary, David Harrison, Jr., and Eugene T. Meehan concerning
4 NYS-37 and exhibits thereto ("Entergy Testimony") and the report
5 prepared for Entergy by NERA Economic Consultants. I have also
6 read NRC Staff's Statement of Position concerning Contention
7 NYS-37 and the testimony of NRC witness Andrew L. Stuyvenberg
8 and exhibits thereto("Staff Testimony").

9 Q. What are your conclusions?

10 A. My conclusions are as follows:

11 1. Entergy's witnesses on Contention NYS-37 (Energy
12 Alternatives) inappropriately used the widely
13 respected National Energy Modeling System
14 ("NEMS") to model the No Action Alternative. NEMS
15 is traditionally used to model the effect of
16 proposed policy changes or alternatives. I have
17 never seen it used, as Entergy's witnesses use it
18 here, to model the retirement of one or two
19 specific generating units.

20 2. There are other production simulation models that
21 are traditionally used in the industry to
22 evaluate the economic and environmental impacts
23 of power plant retirements and the addition of

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1 new generating capacity, energy efficiency and
2 renewable resources. For example, Entergy's 2003
3 assessment of the potential economic and
4 environmental impacts of an Indian Point Energy
5 Center ("IPEC") retirement used the GE MAPS
6 model.

7 3. Entergy has not modeled a credible No Action
8 Alternative. It assumes that there would be no
9 market or state response to replace the lost
10 generation from IPEC until 2026 other than
11 through the continued operation of old, dirty and
12 inefficient coal and oil/gas steam units that
13 would otherwise be retired by 2015.

14 4. The results of Entergy's NEMS modeling of the No
15 Action Alternative do not provide credible
16 evidence that there would only be a small role
17 for additional energy efficiency and conservation
18 under the No Action Alternative.

19 A. Neither the NEMS Baseline analysis nor
20 Entergy's No Action Alternative modeled New
21 York State's current "15 x 15" energy
22 efficiency plan.

23 B. NEMS does not model energy efficiency as an

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1 additional resource. Instead, the only way
2 in NEMS to model additional energy
3 efficiency is to reduce the energy forecast
4 - something that Entergy's witnesses did not
5 do either in the Baseline Analysis or the
6 No-Action Alternative. For this reason, it
7 is not possible for NEMS to directly compare
8 the cost of continuing to operate Indian
9 Point against the cost of achieving more
10 energy efficiency. In fact, the NEMS model
11 could not add additional energy efficiency
12 even if it is the lower cost resource.

13 5. The results of Entergy's NEMS modeling also do
14 not provide credible evidence that additional
15 renewable resources would not play a significant
16 role as replacement energy in a No Action
17 Alternative. In particular, Entergy did not
18 consider the potential for a proposed
19 transmission line to bring additional low cost
20 renewable resources into downstate New York from
21 Canada or that the cost of renewable resources
22 might decrease as a result of economies of scale.

23 6. Entergy unreasonably assumes in its No Action

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Alternative that the following substantial amounts of older, dirtier and less efficient coal and oil and gas steam capacity would continue to operate long past 2015:

- 323 MW of coal capacity in Upstate New York that would otherwise be retired in 2015 or 2017
- 822 MW of oil and gas steam capacity in Upstate New York that would otherwise be retired in 2018
- 25 MW of combustion turbine capacity on Long Island that would otherwise be retired in 2015
- 85 MW of coal capacity in New England that would otherwise be retired in 2016
- 960 MW of oil and natural gas steam capacity in New England that would otherwise be retired in 2015 or 2016

7. Entergy's witnesses misleadingly understate the marginal cost of generating electricity at existing coal and oil and natural gas steam generating units.

8. In Entergy's modeling of the No Action Alternative:

A. No clean and efficient replacement capacity is added in New York State (let alone

1 downstate New York City/Westchester County)
2 until 2026 and then only a relatively small
3 amount (300 MW in total) is added in the
4 years 2026 through 2040.

5 B. In Entergy's modeling of the No Action
6 Alternative most of the replacement power
7 for Indian Point is built in New England and
8 not New York State. However, no clean and
9 efficient replacement capacity would be
10 added in New England before 2025 and then
11 only a relatively small amount (110 MW)
12 would be added until 2030.

13 9. It is more reasonable to expect that the likely
14 market response would be to add some replacement
15 generating capacity before 2026 if IPEC is not
16 relicensed.

17 10. New York State is currently taking a number of
18 actions to ensure that there would be new
19 generating capacity in downstate New York if IPEC
20 is not relicensed or that there would be
21 additional transmission capability to import new
22 generating capacity (both clean and efficient gas
23 and renewable) into the downstate region. These

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1 actions include the development of a New York
2 Energy Highway.

3 11. Well over 2,000 MW of clean and efficient new
4 natural gas-fired combined cycle capacity is
5 being proposed for construction in or near New
6 York City and Westchester County.

7 12. The NEMS modeling of the Baseline Analysis and
8 the No Action Alternative does not reflect either
9 the New York Energy Highway or the over 2,000 MW
10 of clean and efficient generating capacity being
11 proposed for construction in or near New York
12 City and Westchester County.

13 13. Entergy's witnesses misleadingly overstate the
14 environmental impacts of the No Action
15 Alternative by understating the potential for (a)
16 substantial energy efficiency, (b) renewable
17 energy and (c) clean and efficient generating
18 capacity as alternatives if IPEC is not
19 relicensed.

20 Q. Entergy's witnesses have testified that they have
21 developed two related "empirical" evaluations to identify the
22 environmental impacts of the generation that would likely
23 replace Indian Point Energy Center ("IPEC") under the No Action

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1 Alternative.¹ Do you agree that they have presented the results
2 of two "empirical" evaluations?

3 A. No. They present only a single empirical evaluation -
4 based on their NEMS modeling - (and that is seriously flawed as
5 I will explain). The remainder of the Entergy witnesses'
6 testimony on Contention NYS-37 consists of hypothesis and
7 conjecture.

8 Q. Entergy's witnesses testify that the results of their
9 NEMS modeling show that under the No Action Alternative (1)
10 existing IPEC generation would be replaced primarily by fossil-
11 fueled generation from existing natural gas and coal facilities
12 and (2) conservation and renewables would be unlikely to play
13 significant roles in replacing lost generation from IPEC. Do
14 the results of the NEMS modeling support these claims?

15 A. No. The NEMS results presented by Entergy's witnesses
16 are misleading and flawed for several reasons. First, NEMS is
17 not the appropriate model to use to determine the economic and
18 environmental impacts of the No Action Alternative. Second,
19 NEMS does not accurately or fully model New York's "15 x 15"
20 energy efficiency plan or the potential for additional energy

¹ Testimony of Entergy Witnesses Donald P. Cleary, David Harrison, Jr., and Eugene T. Meehan Regarding Contention NYS-37 (Energy Alternatives), ENT000479 ("Entergy Testimony") at Answer A49 on page 34.

1 efficiency above that included in the "15 x 15" plan. Third,
2 the assumption that if Indian Point Units 2 and 3 were retired
3 in 2013 and 2015, respectively, replacement capacity would not
4 be added in downstate New York until sometime in 2026 is
5 completely unrealistic in that it ignores (a) the current plans
6 being developed by New York State to add clean and efficient new
7 natural gas-fired generating capacity in the New York
8 City/Westchester region of the state and (b) the economic
9 incentives that the retirement of IPEC would create for
10 developers of new generating projects in the New York
11 City/Westchester region.

12 Q. Have you ever seen NEMS used to measure the economic
13 and environmental impacts of retiring one or two generating
14 units, as Entergy's witnesses use it here?

15 A. No. I have seen NEMS used (a) to evaluate the impact
16 of new or revised national or regional policies or (b) to
17 provide inputs (such as projected future natural gas and coal
18 prices) that have been used in plant retirement studies.
19 However, I have not seen NEMS used to evaluate the potential
20 economic and environmental impacts of retiring one or two
21 specific generating units such as Indian Point Units 2 and 3.

22 Q. In your experience is the NEMS model the appropriate
23 model to use to evaluate the economic and environmental impacts

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1 of retiring Indian Point Units 2 and 3?

2 A. No. As Entergy's witnesses have explained, NEMS is
3 used by the Energy Information Administration to perform policy
4 analyses in response to requests from Congress, the White House,
5 the Department of Energy, and other federal agencies.² The firm,
6 NERA Economic Consulting, for which Entergy witnesses David
7 Harrison and Eugene Meehan work, and other analysts, also have
8 used NEMS to model potential policy changes in other contexts.³

9 Q. Why is NEMS an inappropriate model to use to evaluate
10 the economic and environmental impacts of retiring IPEC?

11 A. Although NEMS is a widely used model for policy
12 analysis because it seeks to replicate the entire U.S. and even
13 portions of Canada, it offers only very simplified descriptions
14 of the electric grid and the electric dispatch process in any
15 one state (New York State included). For example, generating
16 units are dispatched in NEMS for only 9 demand points or
17 segments in the year instead of all 8760 hours. Thus, the model
18 does not provide a detailed or accurate picture of the dispatch
19 of generating units in the state. The same is true for the rest
20 of the United States. For this reason, the results of the NEMS
21 analyses presented by Entergy's witnesses may be gross

² Entergy Testimony, Answer A88 at page 72.

³ Id.

1 distortions of what would actually happen if IPEC is not
2 relicensed.

3 In addition, NEMS divides the New York State electric grid
4 into only 3 zones with just a single transmission link modeled
5 between each zone. By way of contrast, NYISO divides New York
6 into 11 zones (A through K) with different transmission
7 interchange limits between the zones.

8 Q. Are there other electric system models that Entergy
9 could and should have used to better evaluate the economic and
10 environmental impacts of the No Action Alternative?

11 A. Yes. There are a number of electric system models
12 that are routinely used for capacity expansion planning analyses
13 or for examining the economic and environmental impacts of
14 retiring existing generating facilities. These models include
15 GE-MAPS, Strategist, Market Analytics, and PROMOD. These models
16 provide more detailed replications of the existing electric
17 grids and the economic dispatch of existing generating
18 facilities than does NEMS.

19 Q. Has Entergy previously used any of these models to
20 evaluate the economic and environmental impacts of retiring
21 Indian Point Units 2 and 3?

22 A. Yes. As noted by Entergy witnesses Harrison and
23 Meehan, Entergy used the GE MAPs model in a 2002-2003 assessment

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1 of the potential economic and environmental impacts of an IPEC
2 shutdown.⁴

3 Q. What is your opinion of the No Action Alternative that
4 Entergy has modeled with NEMS?

5 A. The No Action Alternative that Entergy has modeled is
6 not credible in any way. It assumes that there would be no
7 market or state response to replace any of the lost generation
8 from IPEC until 2026 other than through the continued operation
9 of old, dirty and inefficient coal and oil/gas steam units that
10 would otherwise have been retired by 2015.

11 For this reason, Entergy does not model a reasonable No
12 Action Alternative. Instead, it models what clearly is a 'worst
13 case' alternative in which (a) there is very little or no new
14 energy efficiency, (b) little new renewable energy and (3) no
15 efficient and clean new capacity is added until 2026 or later.
16 Instead, Entergy models a No Action future in which old, dirty
17 and inefficient coal and oil/gas units that would be retired in
18 or around 2015 are operated as baseload facilities for an
19 additional 20 years. This is simply not a credible future.

20 Q. What have you reviewed to reach your conclusions about
21 the reasonableness of the results of Entergy's NEMS modeling of
22 the Baseline analysis and the No Action Alternative?

⁴ Entergy Testimony, Answer A12 at page 9.

1 A. I reviewed an Excel file provided by Entergy entitled
2 "NERA_Full NEMS Output Including Unused Tables." Entergy
3 represents that this Excel file contains the full NEMS output,
4 including all the output tables that NERA used in its analysis
5 and the output tables that NERA deemed irrelevant and did not
6 use in its analysis.⁵

7 Q. What is your opinion of the results of Entergy's NEMS
8 modeling that purport to show there would only be a small role
9 for additional energy efficiency and conservation under the No
10 Action Alternative?⁶

11 A. These results are not credible. First, contrary to
12 what Entergy's witnesses imply, NEMS does not model (nor does it
13 have an easy way to model) New York State's current "15 x 15"
14 energy efficiency goal. Consequently, Entergy's witnesses have
15 not shown that all of the low cost energy efficiency that will
16 be achieved under the "15 x 15" plan already is included in
17 their "Baseline" analysis and, in fact, there may be a
18 significant amount of additional low cost energy efficiency
19 available to replace IPEC beyond that reflected in that Baseline
20 analysis.

21 At the same time, the NEMS model does not treat energy

⁵ Exh. NYS000438

⁶ Entergy Testimony, Answer A85 at page 71.

1 efficiency as an additional resource - that is, the only way to
2 model additional energy efficiency in NEMS is as a reduction to
3 the energy forecast. For this reason, it is not possible in
4 NEMS to directly compare the cost of continuing to operate
5 Indian Point against the cost of adding more energy efficiency.
6 As a result, as Entergy has run it, (that is, without reducing
7 the energy forecast for New York State to reflect either the "15
8 x 15" goal or the availability of other low cost energy
9 efficiency) the NEMS model could not add additional energy
10 efficiency even if it is the lower cost resource. Instead, the
11 model is limited to reflecting only a very limited amount of
12 price induced conservation.

13 Q. After reviewing the testimony and report filed by
14 Entergy's witnesses on Contention NYS-37, is it still your
15 opinion that energy efficiency could play a significant role as
16 replacement energy in a No Action Alternative?

17 A. Yes. It is not a surprise that Entergy's modeling
18 results do not show a major role for additional energy
19 efficiency in the No Action Alternative because (1) NEMS does
20 not model the New York State "15 x 15" energy efficiency goal
21 and (2) it is not possible to add any other low cost energy
22 efficiency in NEMS except by reducing the energy forecast which
23 Entergy's witnesses have not done. For these reasons, I

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1 continue to believe that energy efficiency could play a
2 significant role as replacement energy in a No Action
3 Alternative.

4 Q. What is your opinion of the results of Entergy's NEMS
5 modeling that purport to show that additional renewable
6 resources would not play a significant role as replacement
7 energy in a No Action Alternative?

8 A. These results are not credible. Entergy's
9 hypothetical analysis that purports to show that any additional
10 renewable resources beyond those considered in the State's "30 x
11 15" plan would be more expensive is incomplete and misleading.⁷
12 First, the NEMS output information provided by Entergy's
13 witnesses does not show conclusively that the amount of
14 renewable energy in either the Baseline Analysis or the No
15 Action Alternative actually meets the New York State "30 x 15"
16 goal.

17 At the same time, Entergy's modeling of the No Action
18 Alternative ignores the possibility that there will be
19 additional low cost renewable energy above that included in the
20 "30 x 15" goal. For example, Entergy's NEMS modeling ignores
21 the very possibility that its own witnesses cite, that is, that

⁷ For example, see the discussion in Entergy's Testimony,
answer A68 on pages 53 and 54.

1 the completion of transmission system upgrades could unlock the
2 capability of bringing large amounts of low cost hydro generated
3 power from Canada into downstate New York.⁸ Entergy also ignores
4 the very real possibility that the cost of renewable resources
5 will decrease over time, in part as the result of economies of
6 scale. Instead, all Entergy's witnesses provide are some
7 theoretical graphs that are not empirically tied to actual costs
8 and circumstances in New York State.

9 Q. Will the new hydro generation capacity and energy from
10 Quebec that Entergy's witnesses discuss be available whether or
11 not IPEC is relicensed?

12 A. Not necessarily. Entergy provides absolutely no
13 evidence that this additional hydro generation from Canada is
14 included as a resource either in the state's "30 x 15" renewable
15 portfolio plan or in Entergy's NEMS Baseline analysis. Nor do
16 they present any evidence that the delivered price of the
17 additional hydro generated power from Quebec would be more
18 expensive than any of the renewable energy that is included in
19 "30 x 15" plan or the NEMS modeling. Instead, Entergy presents
20 only analytic conjecture and theoretical graphs with no
21 empirical links to New York State.

22 Q. What units does Entergy assume would not be retired if

⁸ See Entergy Testimony, Answer A124 on page 98.

1 IPEC were not relicensed?

2 A. Entergy assumes that the following older, dirtier, and
3 less efficient coal and oil/gas steam capacity that would be
4 retired in the Baseline analysis would not be retired in the No
5 Action Alternative:

- 6 • 323 MW of coal capacity in Upstate New York that would
7 otherwise be retired in 2015 or 2017
8
- 9 • 822 MW of oil and gas steam capacity in Upstate New
10 York that would otherwise be retired in 2018
11
- 12 • 85 MW of coal capacity in New England that would
13 otherwise be retired in 2016
14
- 15 • 960 MW of oil and natural gas steam capacity in New
16 England that would otherwise be retired in 2015 or
17 2016⁹

18 Q. Is there any evidence that the merchant companies that
19 own this capacity will want to keep their plants operating in
20 future years whether or not IPEC is relicensed?

21 A. No. In fact, coal units in both New York State and
22 New England have reduced their generation or have been shut down
23 as a result of competition from extremely low natural gas
24 prices.

25 Q. Based on their NEMS modeling, Entergy's witnesses
26 claim that the marginal costs of generation at existing coal and
27 oil and natural gas steam generating units are lower than the

⁹ Exh.NYS000438

1 costs of either (1) generating power at new natural gas fired
2 combined cycle units, (2) additional conservation beyond that
3 included in the state's "15 x 15" energy efficiency plan or (3)
4 additional renewable energy beyond that included in the state's
5 "30 x 15" plan. From this, they argue that new, clean gas-fired
6 generation, additional conservation or additional renewable
7 energy will be more expensive and therefore less competitive in
8 New York's deregulated electricity market. Do you agree?

9 A. No. Entergy's witnesses present a very misleading
10 comparison in Table 1 on page 58 of their testimony that
11 purports to show the marginal costs of generation technologies
12 "that are generally capable of increasing utilization," which
13 are all fossil fuel power plants and do not include wind, solar,
14 or hydro facilities. The listed marginal costs are too low
15 because Entergy uses the heat rates of efficient new coal and
16 gas fired combined cycle and combustion turbine units to
17 calculate the marginal costs of the existing coal and natural
18 gas steam units that NERA assumes will run more if IPEC is not
19 relicensed. However, these existing units generally are less
20 efficient than new natural gas combined cycle units and the heat
21 rates of these older, less efficient units are more probably
22 above (perhaps significantly above) 10,000 btu/kwh than in the
23 7-8,000 btu/kwh range assumed by Entergy in the derivation of

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1 the marginal costs in Table 1. Therefore, the marginal costs of
2 existing fossil fuel units are higher per megawatt hour than the
3 figures shown in the table and they would be less competitive
4 than Entergy asserts.

5 Q. When would new generation capacity be added under Entergy's
6 No Action Alternative?

7 A. Figures 1 and 2, below (taken from the outputs for
8 Entergy's NEMS modeling) show the cumulative megawatts of
9 capacity added in New York State and New England under Entergy's
10 Baseline analysis (Figure 1) and the No Action Alternative
11 (Figure 2). Figure 3 then shows how much capacity is added
12 under the No Action Alternative above that which would be added
13 in the Baseline analysis. This represents the capacity added as
14 a result of the retirement of Indian Point Units 2 and 3.

Figure 1: Cumulative Capacity Additions After 2012 in New York State and New England in Entergy's Baseline Analysis

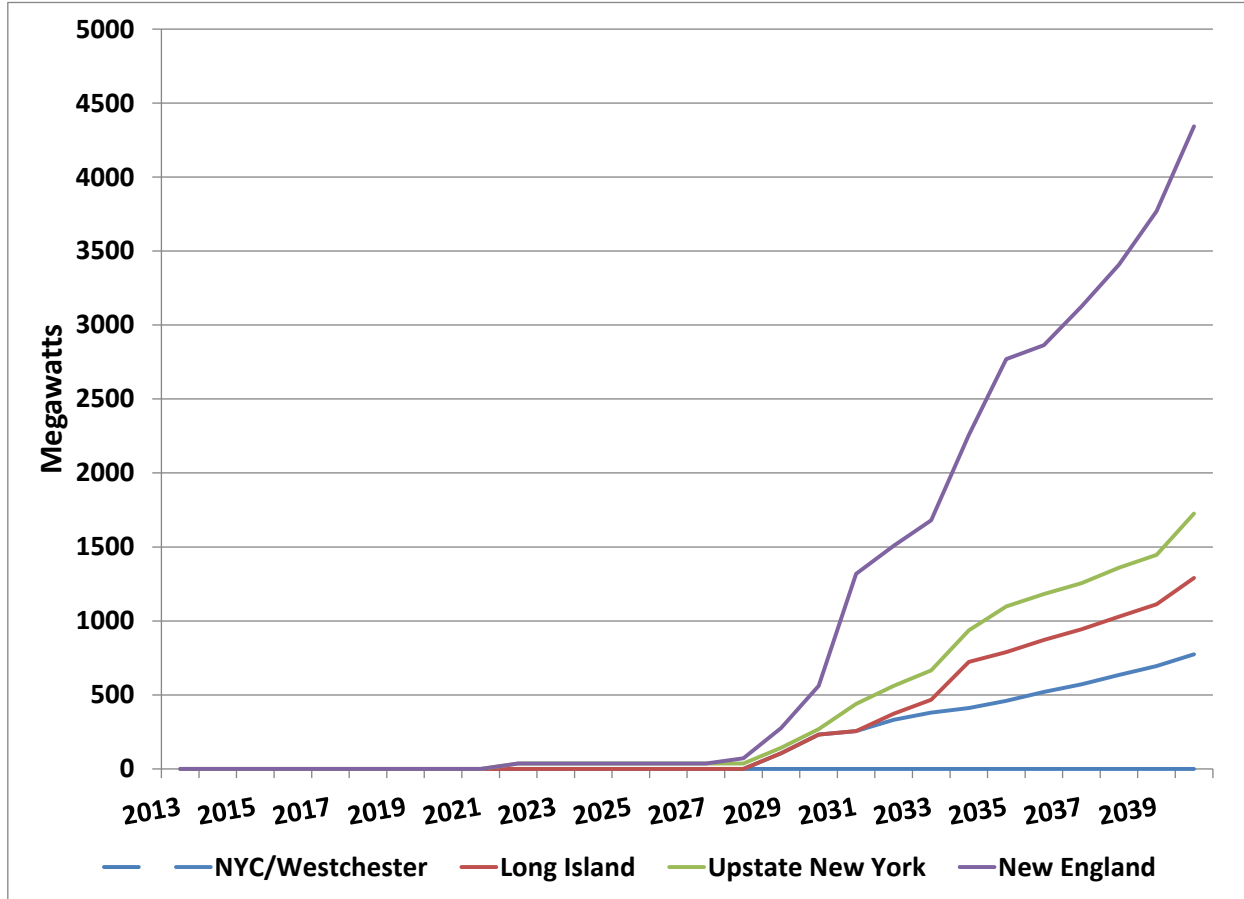


Figure 2: Cumulative Capacity Additions After 2012 in Entergy's No Action Alternative

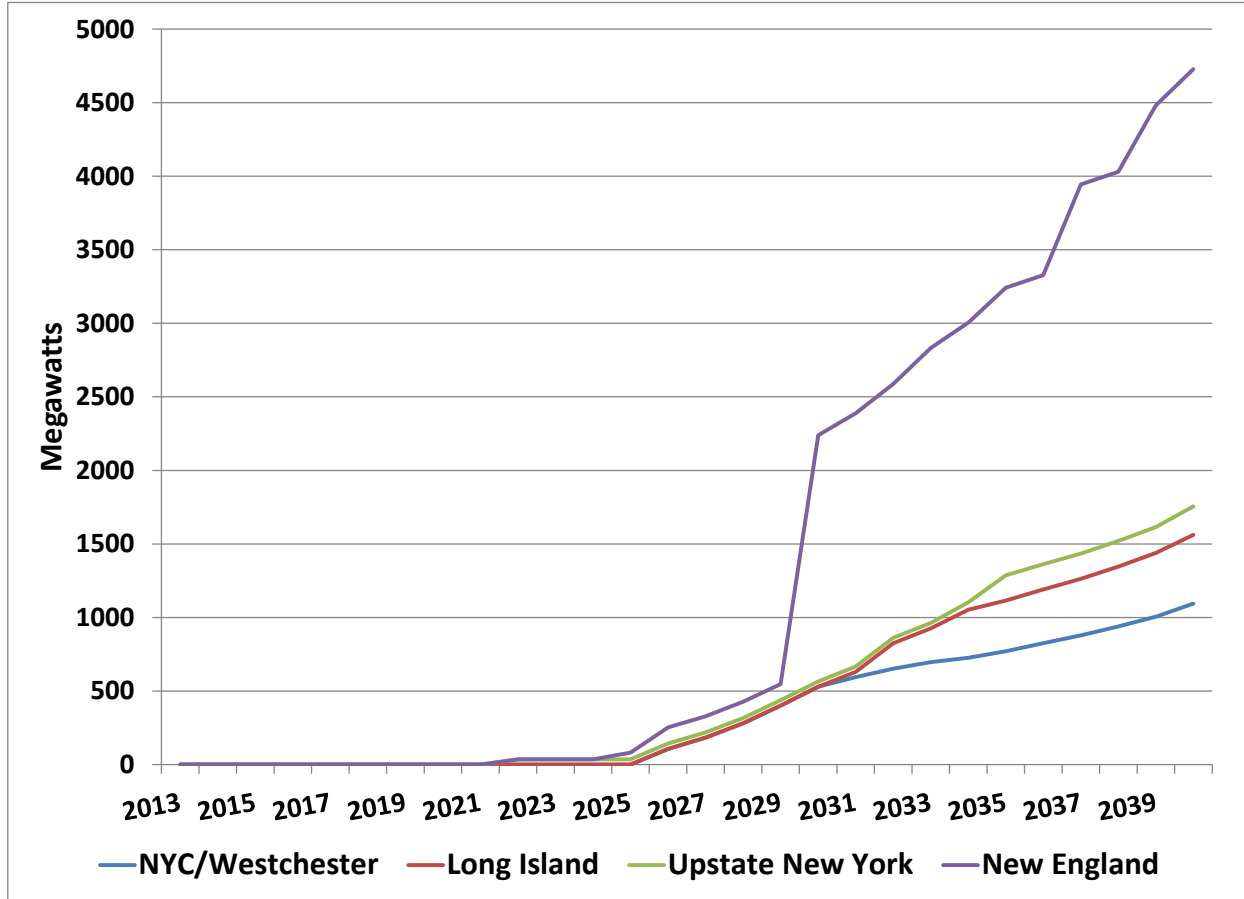
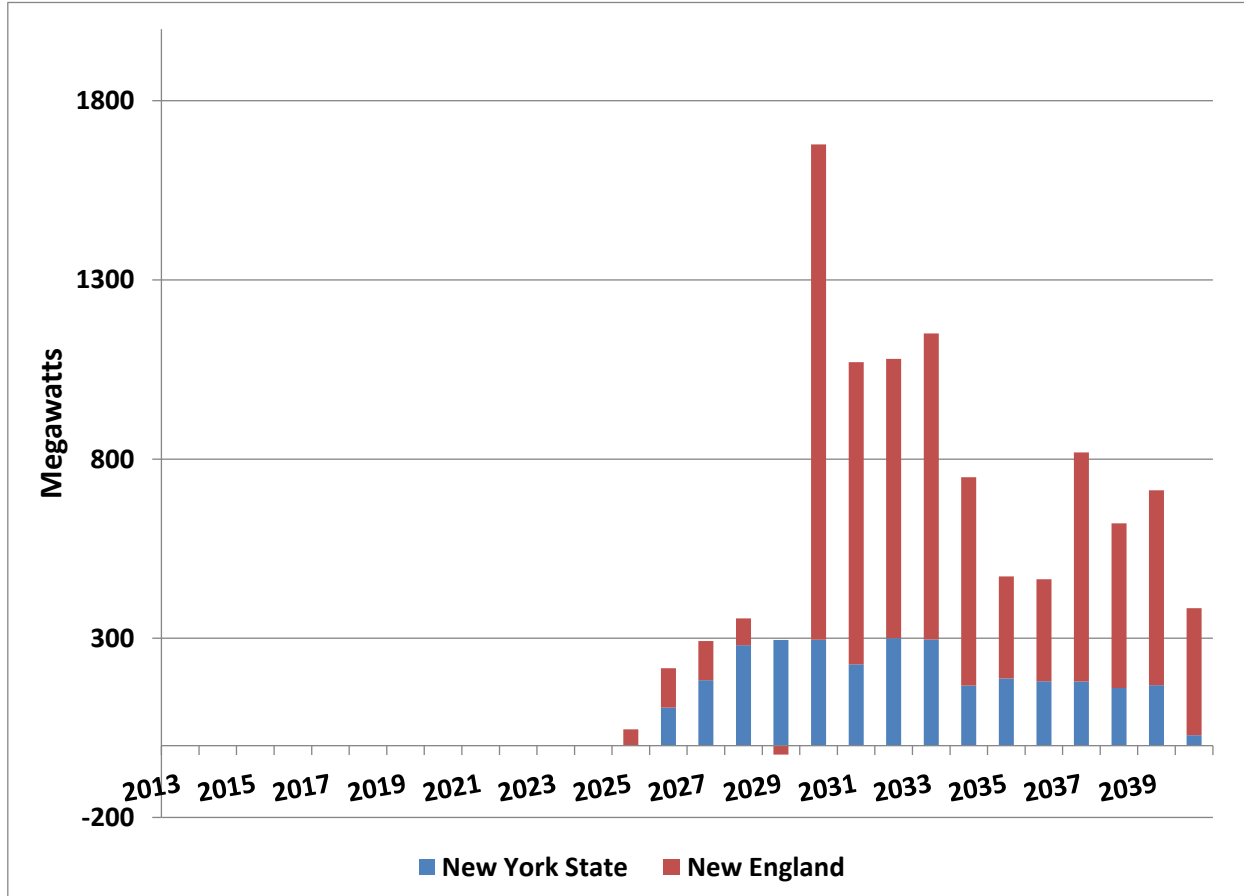


Figure 3: Cumulative Megawatts of Replacement Capacity Added in NEMS No Action Alternative above That Added in Baseline Analysis



Q. What do Figures 1, 2 and 3 reveal about the results of Entergy's NEMS modeling of the No Action Alternative?

A. In Entergy's NEMS modeling of the No Action Alternative:

- No clean and efficient replacement capacity is added in New York State (let alone New York City and/or Westchester) until 2026 and only a relatively small amount (300 MW in total) is added in the years 2026 through 2040.
- No clean and efficient replacement generating capacity would be added in New England until 2025 and then only

1 a relative small amount (110 MW) of new capacity would
2 be added between 2025 and 2030.¹⁰

3 Although this result is not reflected in Figure 4, remarkably,
4 the results of Entergy's NEMS modeling projects that more new
5 generating capacity would be built in Upstate New York in the
6 Baseline analysis than under the No Action Alternative.

7 Q. Is it reasonable to expect that any significant
8 portion of the replacement capacity that would be added if IPEC
9 is retired would be built in New England?

10 A. No. It is more reasonable to expect that replacement
11 generating capacity would either be built (1) in the downstate
12 New York region or (2) in Upstate New York rather than in
13 unspecified locations in New England.

14 Q. What do you believe would be the likely market
15 response to the retirement of Indian Point Units 2 and 3?

16 A. It is reasonable to expect that current or new market
17 participants would seek to add new capacity in New York City or
18 Westchester County close to the downstate loads. Given the
19 current and projected low costs of natural gas, and the
20 financial risks faced by new coal plants, I believe that the new
21 generating capacity that would be added would be clean and
22 efficient natural gas combined cycle units. Indeed, new

¹⁰ Exh.NYS000438

1 efficient natural gas combined cycle units have been added in
2 New York City within the past decade and other proposed combined
3 cycle units were licensed by the state to be built in downstate
4 New York but were unable to obtain needed financing. It is
5 reasonable to expect that IPEC's retirement would facilitate the
6 licensing of new replacement generation projects.

7 Q. What actions is the State of New York currently taking
8 to ensure that there would be new clean and efficient natural
9 gas-fired or renewable generating capacity added in downstate
10 New York or that there would be additional transmission
11 capability to import new generating capacity into the downstate
12 region?

13 A. The State has taken a number of actions that can be
14 expected to lead to efficient and clean new generation being
15 built in or imported into downstate New York. First, the Power
16 New York Act of 2011 established a process for the siting of
17 electric generating facilities and repowering projects. Second,
18 the State has started the process for developing an Energy
19 Highway plan that will include (1) building new transmission
20 lines or rebuilding and upgrading existing ones; (2) repowering
21 aging power plants to increase their efficiency and making them
22 more environmentally friendly and (3) building new plants
23 including those powered by natural gas and by wind and other

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1 renewable fuels.¹¹ The State has explained that:

2 While taking action to reduce demand through the
3 State's on-going energy efficiency initiatives
4 remains critical to the current and future
5 sustainable energy system, this initiative
6 focuses on supply-side and infrastructure
7 projects that generate and transmit energy.¹²

8
9 The specific objectives of the Energy Highway are to:

- 10 • Reduce constraints on the flow of electricity into,
11 and within, the downstate area; and expand the
12 diversity of power generation sources supplying
13 downstate
- 14 • Assure that long-term reliability of the electric
15 system is maintained in the face of major system
16 uncertainties
- 17 • Encourage development of utility-scale renewable
18 generation resources throughout the state
- 19 • Increase the efficiency of power generation,
20 particularly in densely populated urban areas.¹³

21 The current schedule calls for the State's Energy Highway Task
22 Force to develop an action plan sometime in the summer of 2012.

23 Q. Are clean and efficient new generation facilities
24 being proposed for in or near downstate New York?

25 A. Yes. A number of new projects representing well over
26 2,000 MW of clean and efficient generating capacity have been
27 proposed for completion in and near New York City in the years

¹¹ New York Energy Highway Request for Information, at page 4,
www.nyenergyhighway.com/Content/pdf/EH_RFI/Brochure_2012.pdf
f

¹² Id.

¹³ Id. at page 11.

1 2014-2017:

- 2 • NRG's Berrians GT I, II and III project involving the
3 addition of 580 MW of natural gas-fired capacity in
4 New York City
- 5 • The CPV Valley Energy Center in Orange County
6 involving 650 MW of natural gas -fired combined cycle
7 capacity
- 8 • US Power Gen's Luyster Creek Energy Project in New
9 York City involving 400 MW of natural gas-fired
10 combined cycle capacity
- 11 • The Cricket Valley Energy Center located east of
12 Poughkeepsie, New York which would add 1000 MW of new
13 natural gas-fired combined cycle capacity.

14 Q. Does Entergy's NEMS Baseline or No Action Alternatives
15 include the New York Energy Highway or any of these proposed
16 facilities?

17 A. No.

18 Q. You testified earlier that in Entergy's No Action
19 Alternative, clean new replacement generating capacity would not
20 be added in the New York City/Westchester region until 2026 and
21 in New England until 2025. Does the discussion of the
22 environmental impacts of the No Action Alternative by Entergy's
23 witnesses address the impact of adding this clean new
24 replacement capacity?

25 A. Not surprisingly, Entergy's witnesses discuss only the
26 environmental impacts of not relicensing IPEC in the years 2016-

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1 2025.¹⁴ This is significant because under Entergy's No Action
2 Alternative only a very small amount of clean and efficient
3 replacement capacity would be added in New York State during
4 this period and a mere 46 MW of clean and efficient replacement
5 capacity would be added in New England. Entergy also adds only
6 a little bit more energy conservation and barely any additional
7 renewable energy. Instead, Entergy assumes that the great bulk
8 of the replacement energy would come from the continued
9 operation of existing inefficient and dirty coal and oil/gas
10 steam units.¹⁵ Consequently, it is no wonder that Entergy
11 concludes that there would be significant environmental impacts
12 as it has excluded all clean sources of replacement energy.

13 Q. Does this complete your testimony?

14 A. Yes.

15 I have reviewed all the exhibits referenced herein. True
16 and accurate copies are attached.

14 For example, see Entergy Testimony, Table 8 on page 80.

15 As shown in Entergy Testimony, Table 7 on page 78, 43.1% of
the replacement energy would come from coal and 55.9% from
existing gas and oil units.

1 UNITED STATES

2 NUCLEAR REGULATORY COMMISSION

3 BEFORE THE ATOMIC SAFETY AND LICENSING BOARD

4 -----X

5 In re: Docket Nos. 50-247-LR; 50-286-LR

6 License Renewal Application Submitted by ASLBP No. 07-858-03-LR-BD01

7 Entergy Nuclear Indian Point 2, LLC, DPR-26, DPR-64

8 Entergy Nuclear Indian Point 3, LLC, and

9 Entergy Nuclear Operations, Inc. June 29, 2012

10 -----X

11 DECLARATION OF David A. Schlissel

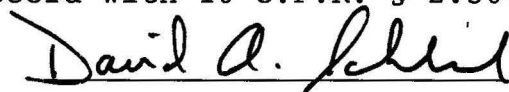
12 I, David Schlissel, do hereby declare under penalty of

13 perjury that my statements in the foregoing testimony and my

14 statement of professional qualifications are true and correct to

15 the best of my knowledge and belief.

16 Executed in Accord with 10 C.F.R. § 2.304(d)

17 

18 David A. Schlissel
19 45 Horace Road
20 Belmont, MA 02478
21 David@Schlissel-Technical.com
22 617-489-4840

23 June 29, 2012

24

*Pre-filed Rebuttal
Testimony of David
Schlissel
Contention NYS-37*