

No. 16-1189

IN THE

United States Court of Appeals

FRIENDS OF THE EARTH, NUCLEAR INFORMATION AND RESOURCE CENTER, AND
HUDSON RIVER SLOOP CLEARWATER,

Petitioners,

v.

U.S. NUCLEAR REGULATORY COMMISSION,

Respondent,

ENTERGY NUCLEAR INDIAN POINT 2, LLC AND ENTERGY NUCLEAR OPERATIONS,
INC.,

Intervenors-Respondents.

On Emergency Petition for Writ of Mandamus

OPPOSITION OF INTERVENORS ENTERGY NUCLEAR INDIAN POINT 2, LLC AND ENTERGY NUCLEAR OPERATIONS, INC. TO EMERGENCY PETITION FOR WRIT OF MANDAMUS

Brad Fagg
Kathryn M. Sutton
Paul M. Bessette
MORGAN, LEWIS & BOCKIUS LLP
1111 Pennsylvania Avenue, NW
Washington, DC 20004-2541
(202) 739-3000

Sanford I. Weisburst
Ellyde R. Thompson
QUINN EMANUEL URQUHART
& SULLIVAN, LLP
51 Madison Ave., 22nd Floor
New York, NY 10010
(212) 849-7000

Marcus V. Brown
ENTERGY SERVICES, INC.
639 Loyola Avenue, Suite 2600
New Orleans, LA 70113
(504) 576-2765

June 21, 2016

CORPORATE DISCLOSURE STATEMENT

Pursuant to Federal Rule of Appeal Procedure 26.1 and Circuit Rule 26.1, Entergy Nuclear Indian Point 2, LLC and Entergy Nuclear Operations, Inc. certifies as follows:

Plaintiff Entergy Nuclear Indian Point 2, LLC, is a wholly owned subsidiary of Entergy Nuclear Holding Company #3, LLC, which is a wholly owned subsidiary of Entergy Nuclear Holding Company, LLC. Entergy Nuclear Holding Company, LLC, is a wholly owned subsidiary of Entergy Corporation.

Plaintiff Entergy Nuclear Operations, Inc. is a wholly owned subsidiary of Entergy Nuclear Holding Company #2, which is a wholly owned subsidiary of Entergy Corporation.

Entergy Corporation is a publicly traded company. It has no parent corporation, and no publicly traded company owns more than 10% of its stock.

TABLE OF CONTENTS

	<u>Page</u>
CORPORATE DISCLOSURE STATEMENT	i
TABLE OF AUTHORITIES	iii
INTRODUCTION	1
STATEMENT.....	3
A. Background On Indian Point 2.....	3
B. Entergy’s Detection And Replacement Of Degraded Baffle- Former Bolts.....	5
C. Friends Of The Earth’s Petition To NRC.....	9
D. Proceedings In This Court.....	11
ARGUMENT	12
I. MANDAMUS IS UNAVAILABLE UNDER A <i>TRAC</i> THEORY BECAUSE NRC’S TO-BE-ISSUED FINAL ORDER ON THE SECTION 2.206 PETITION WILL BE PRESUMPTIVELY UNREVIEWABLE BY THIS COURT	12
II. MANDAMUS IS LIKEWISE UNAVAILABLE UNDER A NON- <i>TRAC</i> THEORY	16
CONCLUSION.....	19

TABLE OF AUTHORITIES**Page(s)****Cases**

<i>Am. Hosp. Ass'n v. Burwell</i> , 812 F.3d 183 (D.C. Cir. 2016).....	18
<i>Arnow v. U.S. Nuclear Reg. Comm'n</i> , 868 F.2d 223 (7th Cir. 1989)	14
<i>Crowley Caribbean Transport, Inc. v. Pena</i> , 37 F.3d 671 (D.C. Cir. 1994).....	14, 18-19
<i>Dickinson v. Zech</i> , 846 F.2d 369 (6th Cir. 1988)	17
<i>Florida Power & Light Co. v. Lorion</i> , 470 U.S. 729 (1985).....	13, 14
<i>Heckler v. Chaney</i> , 470 U.S. 821 (1985).....	13, 14
<i>Honicker v. U.S. Nuclear Regulatory Comm'n</i> , 590 F.2d 1207 (D.C. Cir. 1978) (<i>per curiam</i>)	16
<i>Mass. Pub. Interest Research Grp., Inc. v. U.S. Nuclear Regulatory Comm'n</i> , 852 F.2d 9 (1st Cir. 1988).....	14
<i>In re Medicare Reimbursement Litig.</i> , 414 F.3d 7 (D.C. Cir. 2005).....	17
<i>*Moms Against Mercury v. Food & Drug Admin.</i> , 483 F.3d 824 (D.C. Cir. 2007).....	1, 12, 13, 14, 15
<i>Motor Vehicles Mfrs. Ass'n of U.S., Inc. v. State Farm Mut. Auto. Ins. Co.</i> , 463 U.S. 29 (1983).....	17
<i>Power v. Barnhart</i> , 292 F.3d 781 (D.C. Cir. 2002).....	17, 18

<i>Riverkeeper, Inc. v. Collins</i> , 359 F.3d 156 (2d Cir. 2004)	13-14
* <i>Safe Energy Coalition of Mich. v. U.S. Nuclear Reg. Comm'n</i> , 866 F.2d 1473 (D.C. Cir. 1989).....	2, 13, 14, 18
<i>Telecomms. Research & Action Ctr. v. FCC</i> , 750 F.2d 70 (D.C. Cir. 1984).....	1, 2, 3, 12, 13, 14, 15, 16
* <i>Thomas v. Holder</i> , 750 F.3d 899 (D.C. Cir. 2014).....	3, 18
<i>United States v. Monzel</i> , 641 F.3d 528 (D.C. Cir. 2011).....	17

Regulations And Statutes

10 C.F.R. § 1.11(b)	7
10 C.F.R. § 2.206	1, 2, 3, 9, 10, 12, 13, 14, 15, 18
5 U.S.C. § 701(a)	13
28 U.S.C. § 2342(4)	16
42 U.S.C. § 2239	16

Other Authorities

Event Notification, Event Number 51829, “Baffle Bolt Indications Identified During Inservice Inspection” (Mar. 29, 2016)	7
Indian Point Energy Center, <i>Hundreds of Inspections Completed on Indian Point Unit 2, Replacement of Reactor Liner Bolts Planned</i> (Mar. 29, 2016), http://www.safesecurevital.com/hundreds-of-inspections-completed-on-indian- point-unit-2-replacement-of-reactor-liner-bolts-planned/	5
Kerry Emanuel, <i>et al.</i> , <i>Climate Scientists, Scholars & Environmentalists Open Letter to Governor Cuomo Regarding Indian Point</i> (June 6, 2016), http://www.environmentalprogress.org/big-news/2016/6/6/climate-scientists- scholars-environmentalists-open-letter-to-governor-cuomo-regarding-indian- point	5

New York Independent System Operator, Inc., <i>2014 Comprehensive Reliability Plan 23</i> (July 21, 2015).....	4
New York Independent System Operator, Inc., <i>2015 Load & Capacity Data 22</i> (Apr. 2015).....	4
Nuclear Energy Institute, <i>Clean Air</i> , http://www.nei.org/Issues-Policy/Protecting-the-Environment/Clean-Air	5
The White House, <i>FACT SHEET: Obama Administration Announces Actions to Ensure that Nuclear Energy Remains a Vibrant Component of the United States' Clean Energy Strategy</i> , https://www.whitehouse.gov/the-press-office/2015/11/06/fact-sheet-obama-administration-announces-actions-ensure-nuclear-energy	4
U.S. EPA, <i>Particulate Matter (PM)</i> , https://www3.epa.gov/pm/health.html	5

Items marked by * are authorities principally relied upon.

Intervenors-Respondents Entergy Nuclear Indian Point 2, LLC and Entergy Nuclear Operations, Inc. (together, “Entergy”) respectfully submit this brief in opposition to the “Emergency Petition For Writ Of Mandamus” filed by Petitioners Friends of the Earth, Nuclear Information and Resource Service, and Hudson River Sloop Clearwater (together, “FOE”).

INTRODUCTION

In most of its Petition, FOE concedes (correctly) that this Court lacks jurisdiction to review NRC’s June 3, 2016 order—which denied FOE’s request that NRC issue an interim directive preventing Indian Point 2 from restarting—because it is a non-final order. Petition (“Pet.”) 6-8. Instead, FOE looks forward to NRC’s *not-yet-issued* final order on whether an enforcement action under 10 C.F.R. § 2.206 will be initiated, and FOE predicates its Petition on “D.C. Circuit precedent providing that the Court should exercise its extraordinary writ authority to protect its future jurisdiction to review not-yet-final agency actions.” Pet. 5; *see also id.* at 5-8 (discussing *Telecomms. Research & Action Ctr. v. FCC*, 750 F.2d 70 (D.C. Cir. 1984) (“*TRAC*”).

But FOE fails to apprehend that, where the agency’s to-be-issued final order will “not [be] reviewable in this Court,” there is no “jurisdiction under a *TRAC* theory.” *Moms Against Mercury v. Food & Drug Admin.*, 483 F.3d 824, 827 (D.C. Cir. 2007) (“*MAM*”). And this Court has held that an NRC order denying a

Section 2.206 petition¹ is a decision committed to agency discretion by law and hence is presumptively not reviewable. *See, e.g., Safe Energy Coalition of Mich. v. U.S. Nuclear Reg. Comm'n*, 866 F.2d 1473, 1476-77 (D.C. Cir. 1989). Accordingly, as in *MAM*, this Court should dismiss for lack of jurisdiction.

Even if this Court were to consider the merits, it should deny the petition. NRC's processing of FOE's petition, which FOE filed less than a month ago on May 24, 2016, does not even begin to approach the "egregious" delay that might warrant mandamus relief under *TRAC*. 750 F.2d at 80. To the contrary, in the June 3, 2016 non-final order, NRC promptly considered and rejected FOE's request for an interim directive preventing Indian Point 2 from restarting. The denial was well-reasoned. As NRC Chairman Stephen Burns explained in a letter that same day to U.S. Senator Kirsten Gillibrand of New York:

Based on our independent assessment of this issue, the NRC does not have an immediate safety concern at this time that would warrant regulatory action to prevent the restart of Indian Point Unit 2. The licensee has provided its root cause analysis to the NRC for its review. In light of the licensee's corrective actions described below and our understanding of the degradation phenomenon and its potential consequences, completion of our review of root-cause analysis is not a pre-condition to restart of Indian Point Unit 2. Baffle assemblies are constructed with a significant amount of structural margin and integrity of the baffle plates can be maintained even with the failure of a substantial number of bolts. Damage to fuel created by loose baffle-

¹ This brief uses upper-case "Petition" to refer to FOE's Petition in this Court, and lower-case "petition" to refer to FOE's petition before NRC.

former bolt parts would be detected by routine monitoring of reactor coolant radioactivity.

<http://www.nrc.gov/docs/ML1614/ML16146A233.pdf>. Having rejected FOE's request for interim relief, NRC is still considering the remainder of FOE's petition, and FOE provides no support for its assertion that this ongoing process will "tak[e] years to conclude." Pet. 3. In any event, only after egregious delay, not based on speculation that it might occur, would mandamus relief possibly be warranted.

Nor can FOE satisfy the strict criteria for mandamus under a non-*TRAC* theory because FOE has no "clear right" to compel NRC to take the wholly discretionary action of instituting an enforcement proceeding in response to a Section 2.206 petition, *Thomas v. Holder*, 750 F.3d 899, 903-04 (D.C. Cir. 2014), and because a shutdown, based on purported safety concerns that NRC has found unsubstantiated, would jeopardize the reliability of the electric grid in the New York City area and cause an increase in carbon and other emissions.

STATEMENT

A. Background On Indian Point 2

Entergy Nuclear Indian Point 2, LLC owns, and Entergy Nuclear Operations, Inc. operates, Indian Point 2, a nuclear power plant located in Buchanan, New York. Indian Point 2 and its sister unit, Indian Point 3, generate approximately 2,000 megawatts ("MW") of electricity and supply approximately

25 percent of the electricity used in New York City and Westchester County.² These plants' output helps assure reliability of the electric grid. The grid operator has stated that, "[i]f the Indian Point Plant becomes unavailable in 2016 . . . reliability violations would still occur immediately in 2016 ..., requiring approximately 500 MW in compensatory MW in [Southeastern New York]"³

Indian Point 2 generates electricity with *de minimis* carbon emissions and thus helps to address the climate-change problems that are caused by such emissions. According to The White House, "Nuclear power, which in 2014 generated about 60 percent of carbon-free electricity in the United States, continues to play a major role in efforts to reduce carbon emissions from the power sector."⁴ But when Indian Point 2 does not operate, it is replaced by carbon-

² New York Independent System Operator, Inc. ("NYISO"), *2015 Load & Capacity Data* 22 (columns H, I, J), 41 (April 2015) ("Gold Book"), http://www.nyiso.com/public/webdocs/markets_operations/services/planning/Documents_and_Resources/Planning_Data_and_Reference_Docs/Data_and_Reference_Docs/2015%20Load%20%20Capacity%20Data%20Report_Orig.pdf.

³ NYISO, *2014 Comprehensive Reliability Plan* 23 (July 21, 2015), http://www.nyiso.com/public/webdocs/markets_operations/services/planning/Planning_Studies/Reliability_Planning_Studies/Reliability_Assessment_Documents/2014CRP_Final_20150721.pdf.

⁴ The White House, *FACT SHEET: Obama Administration Announces Actions to Ensure that Nuclear Energy Remains a Vibrant Component of the United States' Clean Energy Strategy*, <https://www.whitehouse.gov/the-press-office/2015/11/06/fact-sheet-obama-administration-announces-actions-ensure-nuclear-energy>.

emitting sources.⁵ Such alternative sources also emit higher amounts of non-carbon air pollutants that have been linked to numerous health problems.⁶

B. Entergy's Detection And Replacement Of Degraded Baffle-Former Bolts

As part of routine operation, Indian Point 2 must shut down periodically to refuel. Such outages typically take place every 18 to 24 months. *See* Declaration of John Kirkpatrick, executed on June 20, 2016 ("Kirkpatrick Decl.") ¶ 6. On March 7, 2016, Indian Point 2 shut down for its most recent outage. *Id.* ¶ 7. During the outage, Entergy undertook numerous inspections in accordance with its Aging Management Program, which had been reviewed and approved by NRC.⁷

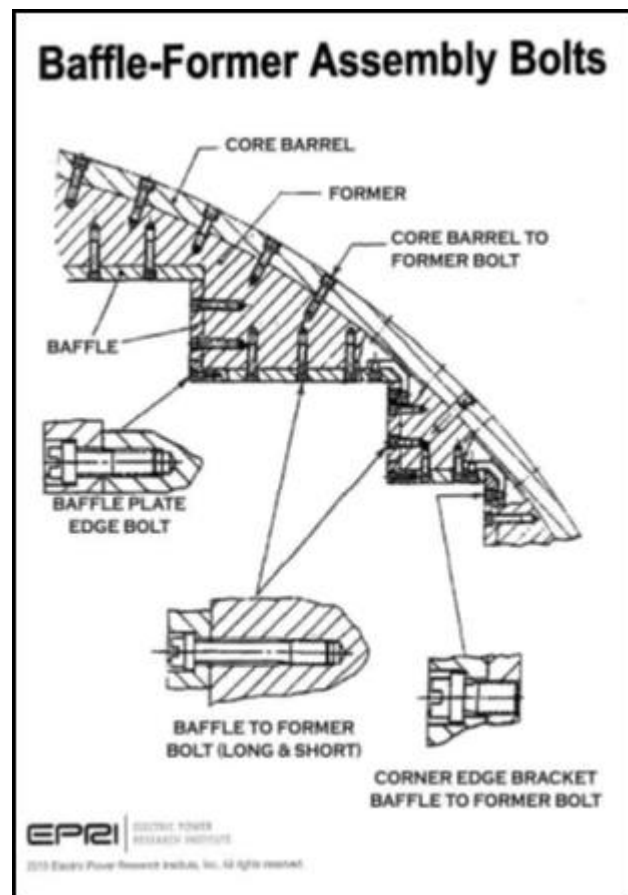
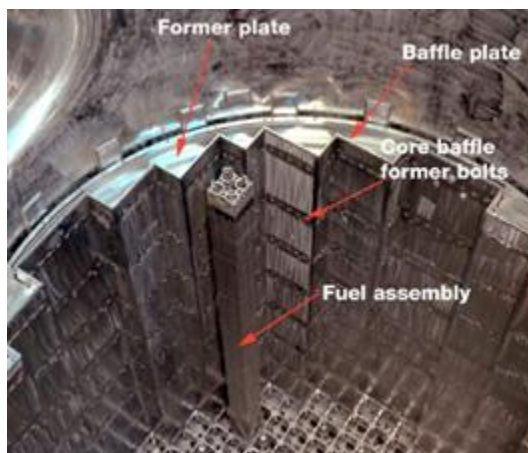
One such inspection concerned reactor vessel internals. Kirkpatrick Decl. ¶ 7. Indian Point 2 has a cylindrical reactor vessel that holds the fuel assemblies and other critical components. *Id.* ¶ 3. The main element is the core barrel, which

⁵ Kerry Emanuel, *et al.*, *Climate Scientists, Scholars & Environmentalists Open Letter to Governor Cuomo Regarding Indian Point*, (June 6, 2016), <http://www.environmentalprogress.org/big-news/2016/6/6/climate-scientists-scholars-environmentalists-open-letter-to-governor-cuomo-regarding-indian-point>.

⁶ Nuclear Energy Institute, *Clean Air*, <http://www.nei.org/Issues-Policy/Protecting-the-Environment/Clean-Air> (last visited June 20, 2016); U.S. EPA, *Particulate Matter (PM)*, <https://www3.epa.gov/pm/health.html> (last visited June 20, 2016).

⁷ Indian Point Energy Center, *Hundreds of Inspections Completed on Indian Point Unit 2, Replacement of Reactor Liner Bolts Planned* (Mar. 29, 2016), <http://www.safesecurevital.com/hundreds-of-inspections-completed-on-indian-point-unit-2-replacement-of-reactor-liner-bolts-planned/>.

is a cylindrical structure fabricated from welded plate. *Id.* The core barrel forms a boundary for the flow of reactor coolant to keep the heat-producing nuclear reaction at appropriate temperature levels. *Id.* The plates on the inner cylinder of the core barrel (*i.e.*, the side that faces the fuel assemblies) are bolted together by “baffle-former bolts” and “baffle-edge bolts.” *Id.* ¶ 5. These bolts assure structural integrity during normal operating and upset/emergency conditions such that the plant can be shut down safely and the reactor can be cooled. *Id.* The following photograph and image depict these components:



Id. ¶ 4.

During the inspection, Entergy detected that, of the 832 baffle-former bolts in the entire structure, 227 had visual anomalies or ultrasonic indications of such anomalies, or could not be examined by ultrasonic testing. *Id.* ¶ 7. Entergy conservatively assumed that bolts that could not be examined were abnormal. *Id.* There was, however, no sign of damage to the baffle-edge bolts and no evidence of separation of the baffle plates from their appropriate positions. *Id.* Additionally, many of the baffle-former bolts that indicated degradation retained sufficient strength that they would still limit baffle plates from being displaced or flexed. *Id.*

As a nuclear power plant located in the United States, Indian Point 2 is subject to extensive regulation by the NRC. *See, e.g.*, 10 C.F.R. § 1.11(b). On March 29, 2016, Entergy reported the preliminary results of its inspection to the NRC and advised that it was taking corrective actions. *Id.* ¶ 12.⁸ Entergy immediately developed a comprehensive plan to replace all of the degraded bolts. *Id.* ¶ 8. Over the next two months, Entergy used highly specialized equipment to replace the 227 bolts identified in the inspections as well as two additional baffle-former bolts determined to require replacement. *Id.* Entergy also elected to

⁸ Event Notification, Event Number 51829, “Baffle Bolt Indications Identified During Inservice Inspection” (Mar. 29, 2016), <http://www.nrc.gov/reading-rm/doc-collections/event-status/event/2016/20160330en.html#en51829>.

replace 49 additional bolts not identified as degraded. *Id.* These additional bolts were replaced in strategic locations to avoid clustering in the event of potential future failures of the original (un-replaced) bolts. *Id.* After replacement, all bolts were again visually inspected to ensure proper replacement and orientation. *See* Pet. Attach. D (page 105 of 128).⁹

Throughout the inspection and repair process, NRC's three resident inspectors—who work full-time at Indian Point—conducted regular status calls with NRC regional and headquarters experts regarding the status of bolt inspection, repair, and analysis activities. Kirkpatrick Decl. ¶ 12. NRC dispatched a three-person inspection team to conduct an on-site inspection at Indian Point beginning on May 23, 2016. *Id.* And NRC Staff closely monitored Entergy's baffle-former bolt repair efforts. *Id.*

On May 31, 2016, Entergy filed a Licensee Event Report with NRC that described these events and Entergy's plan going forward. Pet. Attach. D. On June 16, 2016, having replaced the degraded bolts and the 51 additional bolts, Entergy completed restart of Indian Point 2 and commencement of its current operational cycle. Kirkpatrick Decl. ¶ 13. Entergy's operations group continues to monitor

⁹ Attachment D is Entergy Nuclear Operations Inc.'s Licensee Event Report #2016-004-00, "Unanalyzed Condition due to Degraded Reactor Baffle-Former Bolts," Indian Point Unit No. 2, Docket No. 50-247, DPR-46 (May 31, 2016).

the reactor coolant system, through testing of coolant to check for increased radioactivity. *Id.* ¶ 10. Entergy is also monitoring for loose parts that could be symptomatic of baffle-bolt failure. *Id.* In the unlikely event that a problem is detected, Entergy can promptly perform a controlled, safe shutdown of the reactor to perform further inspections. *Id.* The three NRC Resident Inspectors remain onsite at Indian Point 2 to assess any further issues that may arise. *Id.* ¶ 12.

C. Friends Of The Earth's Petition To NRC

On May 24, 2016—nearly two months after Entergy announced it had determined that baffle-former bolts needed replacement and began to accomplish that task—FOE filed a petition with NRC charging that NRC had failed to exercise its regulatory responsibility. FOE alleged that “[n]o analysis ha[d] been conducted by the NRC regarding the cause of the bolt degradation, how or why some bolts went missing, and how long Unit 2 has been operating with over one-quarter of its baffle-former bolts degraded or missing entirely.” Pet. Attach. A (page 41 of 128). FOE asked NRC to “prohibit the restart of Unit 2 until the Commission is satisfied that the unit can be safely restarted.” *Id.* at 40 of 128.

On June 3, 2016, Richard Guzman, Senior Project Manager, Division of Operating Reactor Licensing, in NRC's Office of Nuclear Reactor Regulation, advised that FOE's NRC petition would be treated as a “10 CFR 2.206 petition.” Pet. Attach. B (pages 64-65 of 128). The notification explained that the Section

2.206 petition process “permits anyone to petition NRC to take enforcement-type action related to NRC licensees or licensed activities,” and that, “[d]epending on the results of its evaluation, NRC could modify, suspend or revoke an NRC-issued license or take any other appropriate enforcement action to resolve a problem.” *Id.* at 64 of 128. The notification advised FOE that it could object to the treatment of its petition under 10 C.F.R. § 2.206 by June 10, 2016, and that FOE could address the NRC Petition Review Board concerning its petition at its request. *Id.* FOE did not timely do so. Instead, as reported in its Petition in this Court, FOE waited until *June 14, 2016* to “protest” treatment of the petition under Section 2.206. Pet. 4 n.2.

NRC specifically stated in Mr. Guzman’s June 3 notification that it was denying FOE’s request for an immediate order preventing the restart of Indian Point 2. Pet. Attach. B at 64 of 128. NRC indicated that staff from NRC’s Office of Nuclear Reactor Regulation and Region I, the region that oversees Indian Point 2, had determined, “[a]fter thorough review and discussion,” that “there were no immediate safety significant concerns which would adversely impact the public’s health and safety.” *Id.* That same day, NRC’s highest-ranked official (Chairman Stephen G. Burns) sent a letter to U.S. Senator Kirsten Gillibrand, explaining that NRC found no safety concern that would warrant preventing Indian Point 2 from restarting, given “the licensee’s corrective actions described below and our

understanding of the degradation phenomenon and its potential consequences,” including that (1) “[b]affle assemblies are constructed with a significant amount of structural margin and integrity of the baffle plates can be maintained even with the failure of a substantial number of bolts,” and (2) “[d]amage to fuel created by loose baffle-former bolt parts would be detected by routine monitoring of reactor coolant radioactivity.” <http://www.nrc.gov/docs/ML1614/ML16146A233.pdf>.

D. Proceedings In This Court

On June 16, 2016, FOE filed an “Emergency Petition For Writ Of Mandamus” in this Court requesting, *inter alia*, an interim order (pending briefing on the Petition) compelling NRC to order Entergy not to restart Indian Point 2. Later that day, this Court denied that interim request because FOE “ha[d] not demonstrated that the requested relief is warranted.” Order, June 16, 2016, ECF No. 1619949. This Court also set an expedited briefing schedule, *id.*, on the Petition and its remaining requested relief that, “[i]n the event Unit 2 has been restarted prior to a decision on this Petition,” this Court should “direc[t] NRC to compel Entergy to power down Unit 2,” Pet. 1. Also that same day, Entergy restarted Indian Point 2. Kirkpatrick Decl. ¶ 13.

ARGUMENT

I. MANDAMUS IS UNAVAILABLE UNDER A *TRAC* THEORY BECAUSE NRC'S TO-BE-ISSUED FINAL ORDER ON THE SECTION 2.206 PETITION WILL BE PRESUMPTIVELY UNREVIEWABLE BY THIS COURT

FOE's central argument is that this Court "has jurisdiction to issue the writ requested, in order to protect its future jurisdiction to review the NRC's decision on any petition issued under 10 C.F.R. § 2.206. *TRAC*, 750 F.2d at 79." Pet. 8; *see also* Pet. 1, 6-7.¹⁰ But FOE disregards that, unlike in *TRAC*, the agency's future final order here will be presumptively unreviewable, such that this Court has no present interest to protect its ability to conduct a later review that this Court almost certainly will not undertake.

In *MAM*, this Court, addressing a nearly identical situation, adopted this rationale and dismissed the petition for lack of jurisdiction. There, individuals and associations had petitioned the Food and Drug Administration ("FDA") to classify a dental-filling material called EAADM under the Federal Food, Drug, and Cosmetic Act. 483 F.3d at 824. FDA had not yet classified the material but was in the process of reaching a classification decision. *Id.* at 825. In that posture, those

¹⁰ *TRAC* held that "this court has present jurisdiction to hear claims concerning nonfinal agency action (or inaction) that might affect our future statutory review of final agency action." 750 F.2d at 79.

who had filed the petition with FDA filed a petition for review in this Court. *Id.* at 826. This Court declined to assert jurisdiction under a *TRAC* theory:

In [*TRAC*], this Court held that a claim of unreasonable delay was reviewable directly and exclusively in this Court because any final FCC order could be reviewed in this Court. On those facts, the Court asserted jurisdiction over the intermediate issue in order to protect its future jurisdiction. It is this Court's interest in protecting its future jurisdiction that gives rise to jurisdiction under a *TRAC* theory. The interest does not arise if the final agency action is not reviewable in this Court. In the instant case, the FDA final action with regard to EAADM may or may not be reviewable in this Court.

Id. at 827 (internal quotation marks and citations omitted).

Similarly here, NRC's to-be-issued final order on FOE's Section 2.206 petition will presumptively be "not reviewable." This Court so held in *Safe Energy Coalition of Michigan v. U.S. Nuclear Regulatory Commission*, 866 F.2d 1473 (D.C. Cir. 1989). There, two associations sought review of an NRC order denying their Section 2.206 petition, which had asked NRC to take actions based on purported nuclear-safety issues concerning an "employee concern" program of Detroit Edison Company, the licensee of the Fermi-2 nuclear power plant. *Id.* at 1474. Answering a question left open by *Florida Power & Light Co. v. Lorion*, 470 U.S. 729, 735 n.8 (1985), this Court held that NRC's denial of the Section 2.206 petition qualified as a "refusal to undertake enforcement action" that is "presumptively unreviewable" under *Heckler v. Chaney*, 470 U.S. 821 (1985), and 5 U.S.C. § 701(a). *Safe Energy Coalition*, 866 F.2d at 1477; *accord Riverkeeper*,

Inc. v. Collins, 359 F.3d 156, 171 (2d Cir. 2004); *Arnow v. U.S. Nuclear Reg. Comm'n*, 868 F.2d 223, 235 (7th Cir. 1989); *Mass. Pub. Interest Research Grp., Inc. v. U.S. Nuclear Reg. Comm'n*, 852 F.2d 9, 19 (1st Cir. 1988).¹¹

NRC's potential future denial of FOE's Section 2.206 petition will likewise be presumptively unreviewable. And there is no reason to think the presumption could be rebutted; NRC has not issued a categorical statement that it will not examine the baffle-bolt issue, and to the contrary it is considering that issue in the ongoing proceeding. Even if the presumption might be rebutted, such rebuttal would depend on not-yet-available facts and would involve exactly the "speculat[ion]" that this Court in *MAM* held insufficient to support *TRAC*-style mandamus. 483 F.3d at 827; *see also id.* (dismissing mandamus petition where the

¹¹ To be sure, the Supreme Court in *Florida Power & Light Co. v. Lorion* held that federal courts of appeals have *jurisdiction* to review NRC orders denying Section 2.206 petitions. *See* Pet. 8. But the Court recognized that such jurisdiction might not be exercised if the NRC order were *unreviewable* under *Heckler v. Chaney*, 470 U.S. at 839, and this Court in *Safe Energy* subsequently held that such orders are indeed presumptively unreviewable. A key rationale for the presumption is that it is inappropriate for a court to second-guess the "complicated balancing of a number of factors which are peculiarly within [an agency's] expertise." *Crowley Caribbean Transport, Inc. v. Pena*, 37 F.3d 671, 675 (D.C. Cir. 1994) (quoting *Heckler v. Chaney*, 470 U.S. at 831-32) (brackets in original).

to-be-issued final agency order “may or may not be reviewable”).¹² Accordingly, as in *MAM*, the Petition should be dismissed.

Even if this Court were to consider the merits of FOE’s *TRAC*-based unreasonable-delay claim, it should deny FOE’s Petition. Not even a month has passed since FOE filed its petition before the NRC on May 24, 2016, and NRC has given full attention to the petition, addressing—and denying in an order accompanied by reasoned explanation by NRC Chairman Stephen Burns—its request for interim relief and setting it for further consideration under Section 2.206. FOE suggests (Pet. 23) that even a short delay is too long in the case of a nuclear-safety concern at a nuclear power plant, but FOE disregards that NRC, in its expertise, has determined that there is no legitimate safety concern presented by continued operation of Indian Point 2 while the petition receives further consideration, given the corrective action Entergy has taken and that future failures of baffle-bolts (even if they occur) will not jeopardize the structural integrity of the core barrel. Also, Entergy has directed enhanced monitoring of key plant

¹² FOE may argue that *MAM* considered a future final agency order over which the Court might lack jurisdiction, not an order over which the Court would have jurisdiction but might deem unreviewable. But *MAM*’s language referred to “not reviewable” orders, and *MAM*’s rationale likewise applies in both scenarios. Specifically, if this Court will not undertake a later appellate review for whatever reason, this Court has no interest in granting extraordinary mandamus relief at an interlocutory phase.

parameters to help detect any abnormalities well before they could escalate into a nuclear-safety problem. *See supra*, at 8-9.

II. MANDAMUS IS LIKEWISE UNAVAILABLE UNDER A NON-*TRAC* THEORY

Although FOE largely predicates its Petition on *TRAC* (and hence on NRC's not-yet-issued final order), FOE also criticizes NRC's non-final June 3, 2016 order, which denied FOE's request for an interim directive preventing Indian Point 2 from restarting. *See* Pet. 20 (“The emailed decision issued by the [NRC's] Petition Review Board denying [FOE's] request for immediate relief is patently insufficient under basic administrative law principles.”).

At the outset, this aspect of FOE's Petition disregards that NRC's June 3 order is not final and hence not within this Court's jurisdiction to review. Again, this Court's precedent is clear. In *Honicker v. U.S. Nuclear Regulatory Commission*, 590 F.2d 1207 (D.C. Cir. 1978) (*per curiam*), an individual petitioned NRC for emergency relief, including to “cease operation of all parts of the nuclear fuel cycle except those involving isolation of hazards from the biosphere.” *Id.* at 1208 n.1. NRC denied the emergency relief, explaining that “the technical complexity of the issues raised ... requires staff analysis and response before a decision can be made.” *Id.* at 1208. The petitioner then filed a petition for review in this Court. This Court dismissed the petition, holding that NRC's order “denying the emergency petition was not a final order or final agency action within

the meaning of the review statutes, 28 U.S.C. § 2342(4) and 42 U.S.C. § 2239.” 590 F.2d at 1209; *see also id.* (“The administrative process is not completed, and there is no record or final determination of the substantive issues for reviewable appeal. The only issue which has been decided is the question of whether the petition raised concerns which necessitated emergency relief.”); *Dickinson v. Zech*, 846 F.2d 369, 371 (6th Cir. 1988) (similar). The same is true here; only if NRC’s June 3 order were final would FOE be able to ask this Court to deem it “patently insufficient” under *Motor Vehicles Manufacturers Association of U.S., Inc. v. State Farm Mutual Automobile Insurance Company*, 463 U.S. 29 (1983), and similar authorities. *See* Pet. 20-22.

Even if NRC’s June 3 order were final, FOE falls well short of the stringent standards for mandamus relief. As this Court recently summarized those standards:

The remedy of mandamus is a drastic one, to be invoked only in extraordinary circumstances.” *Power v. Barnhart*, 292 F.3d 781, 784 (D.C. Cir. 2002) (internal quotation marks omitted). To show entitlement to mandamus, plaintiffs must demonstrate (1) a clear and indisputable right to relief, (2) that the government agency or official is violating a clear duty to act, and (3) that no adequate alternative remedy exists. *United States v. Monzel*, 641 F.3d 528, 534 (D.C. Cir. 2011). These three threshold requirements are jurisdictional; unless all are met, a court must dismiss the case for lack of jurisdiction. *See In re Medicare Reimbursement Litigation*, 414 F.3d 7, 10 (D.C. Cir. 2005) (internal quotation marks and alteration omitted). “Even when the legal requirements for mandamus jurisdiction have been satisfied, however, a court may grant relief only when it finds compelling equitable grounds.” *Id.* “The party seeking mandamus has the burden

of showing that its right to issuance of the writ is clear and indisputable.” *Power*, 292 F.3d at 784 (internal quotation marks omitted).

Am. Hosp. Ass’n v. Burwell, 812 F.3d 183, 189 (D.C. Cir. 2016).

FOE cannot satisfy its burden. Because NRC’s determination on a Section 2.206 petition is “committed to agency discretion by law,” *Safe Energy Coalition*, 866 F.2d at 1476 (quoting 5 U.S.C. § 701(a)(2)), there can be no “clear and indisputable right to relief” or “clear duty [of NRC] to act,” *Am. Hosp. Ass’n v. Burwell*, 812 F.3d at 189. *See Thomas*, 750 F.3d at 903-04 (“Mandamus petitioners can satisfy neither of the first two requirements if the act they seek to compel is discretionary, as government officials have no clear duty to perform such acts and petitioners have no clear right to compel them to do so.”); *id.* at 904 (denying reconsideration of denial of mandamus petition where government official, the Attorney General, “has at least some discretion” in the substantive matter at issue). This is especially so where NRC, in exercising its discretion, (1) gave due consideration to FOE’s request for emergency relief; (2) denied that request accompanied by the NRC Chairman’s explanation why no safety rationale warrants preventing Indian Point from commencing its current operational cycle;¹³

¹³ Chairman Burns’ letter to Senator Gillibrand can be considered if this Court undertakes to evaluate on the merits NRC’s decision that operation of Indian Point 2 does not pose a nuclear-safety risk. *See Crowley Caribbean Transport, Inc.*, 37 F.3d at 677 (to the extent courts review agencies’ non-enforcement decisions,

and (3) is proceeding to give further consideration to the remainder of FOE's petition.

Equitable concerns also weigh strongly against mandamus relief. As set forth in the Statement, *supra*, Entergy has implemented a number of measures to assure the safe operation of Indian Point 2, including by replacing additional bolts to provide an even greater safety margin for operation. *See supra*, at 7-8; Pet. Attach. D at 104 of 128. Additionally, Entergy will monitor for signs of bolt failure during the current operational cycle. *See supra*, at 8-9; Pet. Attach. D at 105 of 128. Entergy has taken and will continue to take such actions under NRC's close supervision.

Given NRC's expert finding that safety concerns do not prevent Indian Point 2 from operating, a shutdown would not materially enhance nuclear safety, but would cause potentially severe consequences for the reliability of the electric grid in the New York City area and for carbon and other emissions. *See supra*, at 4-5. Those negative consequences provide additional reason to deny the Petition.

CONCLUSION

The Petition should be dismissed or denied.

courts must "teas[e] meaning out of agencies' side comments, form letters, litigation documents, and informal communications").

Dated: June 21, 2016

Respectfully submitted,

QUINN EMANUEL URQUHART &
SULLIVAN, LLP

By: /s/ Sanford I. Weisburst

Sanford I. Weisburst
Ellyde R. Thompson
QUINN EMANUEL URQUHART
& SULLIVAN, LLP
51 Madison Ave., 22nd Floor
New York, NY 10010
(212) 849-7000

Brad Fagg
Kathryn M. Sutton
Paul M. Bessette
MORGAN, LEWIS & BOCKIUS LLP
1111 Pennsylvania Avenue, NW
Washington, DC 20004-2541
(202) 739-3000

Marcus V. Brown
ENERGY SERVICES, INC.
639 Loyola Avenue, Suite 2600
New Orleans, LA 70113
(504) 576-2765

*Attorneys for Intervenors-Respondents
Entergy Nuclear Indian Point 2, LLC
and Entergy Nuclear Operations, Inc.*

CERTIFICATE OF SERVICE

I, Sanford I. Weisburst, a member of the Bar of this Court, hereby certify that on June 21, 2016, I electronically filed the foregoing “Opposition Of Intervenors Entergy Nuclear Indian Point 2, LLC, And Entergy Nuclear Operations, Inc. To Emergency Petition For Writ of Mandamus” and the accompanying Declaration of John Kirkpatrick with the Clerk of the Court for the United States Court of Appeals for the D.C. Circuit by using the appellate CM/ECF system. Participants in the case who are registered CM/ECF users will be served by the appellate ECF system.

/s/ Sanford I. Weisburst

UNITED STATES COURT OF APPEALS
FOR THE DISTRICT OF COLUMBIA CIRCUIT

FRIENDS OF THE EARTH, NUCLEAR
INFORMATION AND RESOURCE
SERVICE, and HUDSON RIVER
SLOOP CLEARWATER,

Petitioners,

v.

U.S. NUCLEAR REGULATORY
COMMISSION,

Respondent.

No. 16-1189

DECLARATION OF JOHN KIRKPATRICK

Pursuant to 28 U.S.C. § 1746, I, John Kirkpatrick, am over the age of 18 and declare as follows:

1. I am employed by Entergy Nuclear Operations, Inc. (“Entergy”) as the General Manager, Plant Operations for Indian Point Unit 2 (“Indian Point 2”). I submit this Declaration to describe certain facts concerning Entergy’s discovery and replacement of baffle-former bolts at Indian Point 2, and Entergy’s ongoing monitoring of Indian Point 2 during the current operational cycle to identify further bolt problems that could cause a nuclear safety issue *before* any adverse safety consequences could result. I additionally describe the U.S. Nuclear Regulatory Commission’s (“NRC”) active oversight of Entergy’s actions regarding the bolts.

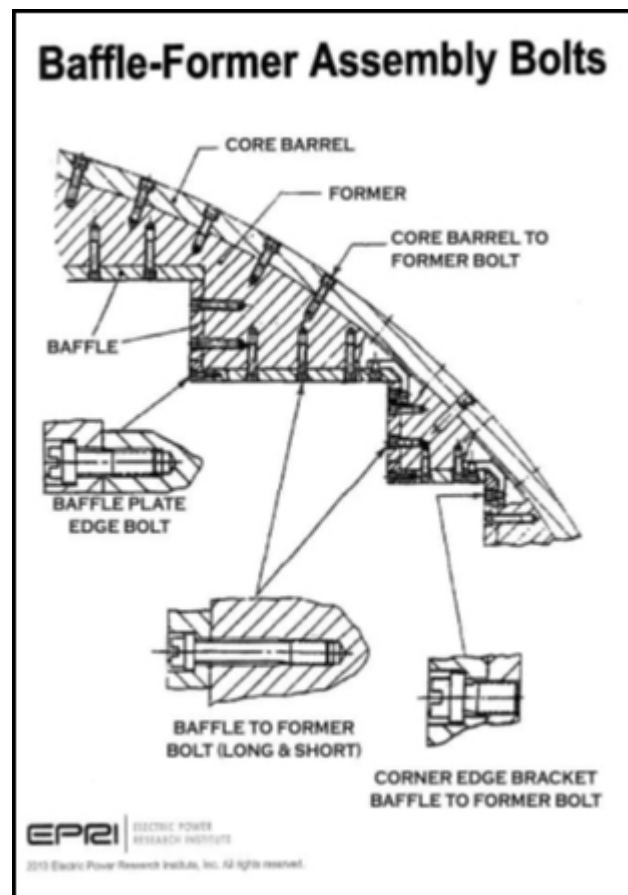
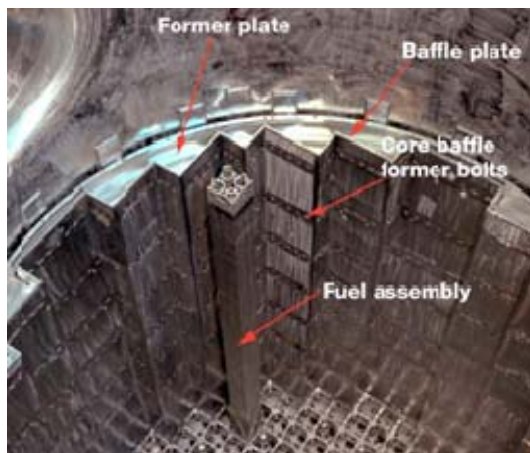
Finally, I respond to certain incorrect assertions in the Declaration of Arnold Gundersen dated June 13, 2016.

2. I began by summarizing my educational and professional background. I have been in the nuclear industry working on pressurized water reactors for more than 31 years working in various capacities including Director of Regulatory Assurance and Performance Improvement; Maintenance Manager; Assistant General Manager of Plant Operations; Training Manager; Emergency Preparedness Manager; and Protection Services Manager. I have worked for two other energy companies (Next Era and Dominion) besides Entergy. I hold a Bachelor's degree in Natural Sciences and Mathematics from Thomas Edison State University. I joined Entergy in 2010 and have served in my current position as General Manager, Plant Operations for Indian Point 2 since April 2016.

3. Indian Point 2 is a pressurized water reactor designed and manufactured by Westinghouse. This design includes a reactor vessel that is cylindrical in shape and contains long rectangular reactor fuel assemblies and other critical components, including the reactor vessel internals assembly. The main element of the internals assembly is the core barrel, which is a cylindrical structure fabricated from welded plate. The core barrel forms a boundary for the flow of reactor coolant to keep the heat-producing nuclear reaction at appropriate

temperature levels. The core barrel also provides lateral support for the fuel assemblies.

4. The construction of the Westinghouse-designed core barrel is depicted in the following annotated generic photograph and diagram (the diagram is taken from the NRC's website at <http://www.nrc.gov/reactors/operating/ops-experience/baffle-former-bolts.html> (last visited June 17, 2016)):



5. As these images show, the former plates are bolted to the core barrel and the baffle plates are bolted to the former plates by “baffle-former bolts.” The baffle-former bolts were locked in-place with a locking bar, which was tack welded to the baffle plates. Baffle-former bolts assure that the reactor vessel internals maintain structural integrity in the core region during normal operating and upset/emergency conditions such that the plant can be safely shut down and the reactor can be cooled. Additionally, baffle-edge bolts are installed at the corner of the plates, providing further structural support to the core barrel. There are 832 baffle-former bolts *and* 1,680 baffle-edge and baffle-angle bolts in the Indian Point 2 core barrel.

6. Indian Point 2, like other nuclear plants, must have new nuclear fuel assemblies installed every 18 to 24 months, as the older fuel no longer creates the appropriate level of nuclear reaction. Such replacement of old fuel with new fuel requires a temporary shutdown (or outage) of the plant so that the installation can be safely accomplished. During the outage, numerous maintenance and inspection activities are planned and conducted, again to ensure that the equipment is in proper working order.

7. Indian Point 2’s most recent scheduled refueling outage began on March 7, 2016. As part of a long-planned NRC-required inspection of reactor vessel internals, including the baffle bolts, an inspection detected that, of the 832

baffle-former bolts in the entire core baffle structure, 227 had visual anomalies or ultrasonic indications or could not be examined by ultrasonic testing. Those that could not be examined were conservatively assumed to have failed. There was, however, no sign of damage to the baffle edge bolts and no evidence of separation of the baffle plates from their appropriate positions. There was also no evidence of damage or premature degradation of any other reactor internals components. Additionally, many of the baffle-former bolts that indicated degradation nonetheless retained some residual strength that would act to limit baffle plates from being displaced or flexed.

8. After detection of the degraded baffle-former bolts, Entergy developed a comprehensive repair plan to replace all of the degraded bolts with an improved material and design before conclusion of the outage. Specifically, Entergy—using highly specialized equipment—replaced not only the 227 baffle-former bolts mentioned above, but also an additional 49 baffle-former bolts that were not degraded but were replaced in an abundance of caution to ensure that new bolts were in place to avoid possible clustering in the event of potential future failures of the original (un-replaced) bolts. Further, during replacement activities, two additional baffle-former bolts were determined to require replacement and were replaced. After replacement, all bolts were again visually inspected to ensure proper replacement and orientation.

9. Entergy also conducted a detailed investigation of the bolt failures, with the assistance of the reactor designer, Westinghouse, and other industry experts. Based on prior industry experience and the visual and ultrasonic inspection results, Entergy has determined that the cause of the baffle-former bolt failures is Irradiation Assisted Stress Corrosion Cracking (“IASCC”) and increased fatigue loading on the baffle plates. Entergy also determined that the failure of certain bolts in a localized area subsequently imposed increased loading on adjacent bolts, thus propagating the failures and generating the clustered pattern seen in the inspection results. The replacement of the failed bolts with an improved material and design, and replacement of the additional 49 bolts, is intended to address these failure mechanisms. Entergy, with the support of Westinghouse, also plans to conduct further detailed examinations of failed bolts with specialized equipment to confirm the failure mechanisms and any potential contributing factors.

10. Going forward, during the next operational cycle, substantial additional failures of baffle bolts are not expected based on Entergy’s corrective actions. And as discussed further in paragraph _ below, baffle assemblies are constructed with a significant amount of structural margin and integrity of the baffle plates can be maintained even with the failure of a substantial number of bolts. But Entergy’s operations group has nevertheless been provided with formal

written direction to monitor reactor coolant system (“RCS”) activity by taking RCS water samples and testing for increases in radioactivity, which may be an indication of fuel failure caused by additional baffle bolt failures. If such an increase is found, Entergy would take further action to investigate the cause of the increase, including possible plant shutdown. Additionally, Entergy will use the metal impact monitoring system for the Reactor Vessel upper and lower points to provide early indication of loose parts that could be symptomatic of baffle bolt failure. In the event that a problem is detected, Entergy could promptly perform a controlled, safe shutdown of the reactor to perform further inspections to ensure reactor vessel integrity.

11. Entergy also plans to inspect the baffle bolts during the next refueling outage, in approximately 20 months. If any new failed bolts are identified at that time, they will also be replaced.

12. During Entergy’s process of inspecting and replacing the degraded baffle-former bolts, the NRC was actively involved. Entergy first notified the NRC of the condition in an “Event Notification Report” on March 29, 2016. During April, May, and June 2016, Entergy employees had regular contact with NRC Staff specifically related to this issue. Additionally, NRC’s three resident inspectors—who work full-time at Indian Point—conducted regular status calls with NRC regional and headquarters experts regarding the status of bolt inspection,

repair, and analysis activities. NRC Staff further oversaw and reviewed Entergy's actions related to assessment of the root cause of the bolt degradation at Unit 2. The NRC dispatched a three-person inspection team to conduct an on-site inspection at Indian Point beginning on May 23, 2016. NRC Staff closely monitored Entergy's baffle-former bolt repair efforts at Indian Point 2. Entergy filed a Licensee Event Report with NRC on May 31, 2016. Finally, the three NRC Resident Inspectors remain onsite at Indian Point 2 to assess any further issues that may arise.

13. Only after Entergy completed the above-described corrective steps did Entergy restart Indian Point 2 on June 16, 2016. The unit has since operated without any problem arising from the core baffle structure.

14. Several assertions in the Declaration of Arnold Gundersen are based on incomplete information or are otherwise inaccurate. I discuss some examples below.

15. First, Mr. Gundersen describes the inspection results at Indian Point 2 as "unprecedented" in the world. To the contrary, baffle-bolt failure is not a new phenomenon, and has been found in many domestic and international reactors over the past several decades. The industry, including Entergy, and the NRC have studied this issue closely, which is why Entergy planned and conducted the Indian Point 2 inspections as part of its NRC-approved Aging Management Program. In

fact, the results of the inspections at Indian Point 2 are in line with the results of the more recent inspections of another Westinghouse reactor, which had approximately 182 bolt failures.

16. Second, Mr. Gundersen mischaracterizes the “51” additional replaced baffle-former bolts as “degraded, damaged, or missing.” Gundersen Decl. ¶ 11. In fact, as described in paragraph 8 above, these bolts were found to be acceptable by ultrasonic examination but were replaced in an abundance of caution to provide additional reinforcement and to prevent future clusters of failed bolts.

17. Third, Mr. Gundersen incorrectly asserts that “[o]perating Unit 2 with degraded bolts could have very serious disabling consequences for the reactor.” Gundersen Decl. ¶ 12. This statement disregards that all of the degraded baffle-former bolts have now been replaced. In addition, as confirmed in a June 3, 2016 letter from the Chairman of the Nuclear Regulatory Commission to Senator Gillibrand, baffle assemblies are constructed with a significant amount of structural margin and integrity of the baffle plates can be maintained even with the failure of a substantial number of bolts. As to the potential that baffle-former bolts may become degraded during the next operational cycle, Mr. Gundersen ignores that the unit has monitoring systems in place that would detect any problem before it could escalate into a safety risk. Specifically, the unit’s systems can detect loose parts and operators can take actions to shut the reactor down before any of the damage

discussed by Mr. Gundersen can occur. Any unusual level of radioactivity in the cooling water, such as mentioned by Mr. Gundersen in his paragraph 13, would also be detected in sufficient time to prevent any safety issue. Based on the inspection results and corrective actions, including replacement of approximately 50 extra bolts, significant further degradation during the next cycle is not expected, and in any event could be tolerated, just as it was during the last operational cycle.

18. Fourth, although Mr. Gundersen points out in his paragraph 14 that the number of degraded bolts at Indian Point 2 is higher than has been observed at other nuclear plants, it does not follow that a safety risk exists at Indian Point 2, given, among other things, Entergy's replacement of the degraded bolts and Entergy's systems and procedures for detecting future bolt degradation before it can escalate into a safety issue. In addition, Mr. Gundersen mentions "missing" or "disintegrated" bolts, but the bolts were all in place and only two bolt heads were dislodged from their locations. No bolts were missing or disintegrated.

19. Fifth, Mr. Gundersen engages in unsupported speculation in claiming in his paragraph 22 that the threaded holes in the metal plates (into which the baffle-former bolts are screwed) are likely to be compromised. No such problem was detected during the recently concluded refueling outage, even though Entergy replaced 278 baffle-former bolts into such threaded holes.

20. Finally, Mr. Gunderson states that one-third of the baffle structure and system is extensively damaged. That is false. The baffle plate structure showed no signs of damage or distortion, and the failed bolts have been replaced.

I declare under penalty of perjury under the laws of the United States of America that the foregoing is true and correct.

Executed on June 20, 2016.



John Kirkpatrick