

May 13, 2011

UNITED STATES OF AMERICA
NUCLEAR REGULATORY COMMISSION

BEFORE THE ATOMIC SAFETY AND LICENSING BOARD

In the Matter of)		
)		
FLORIDA POWER AND LIGHT CO.)	Docket No.	52-040-COL
)		52-041-COL
(Turkey Point, Units 6 and 7))		

NRC STAFF ANSWER TO "CITIZENS ALLIED FOR SAFE ENERGY, INC.
MOTION TO AMEND CONTENTIONS 1,2, AND 5 OF THE CASE REVISED
PETITION TO INTERVENE" AND "AMENDED CONTENTIONS 1,2 AND 5"

INTRODUCTION

Pursuant to 10 C.F.R. § 2.323 and the Atomic Safety and Licensing Board (Board) Order dated March 30, 2011,¹ the staff of the U.S. Nuclear Regulatory Commission (Staff) hereby responds to the "Motion to Amend Contentions 1,2, and 5 of the CASE Revised Petition to Intervene" ("Motion"), and "Amended Contentions 1,2 and 5" ("New Petition") filed by Citizens Allied for Safe Energy (CASE) on April 18, 2011. For the reasons set forth below, the Staff opposes the motion, as the proposed contentions do not meet the NRC requirements for admissibility.

BACKGROUND

This proceeding concerns the application filed by Florida Power and Light Company ("FPL" or "Applicant") for a combined license (COL) for Turkey Point Units 6

¹ *Florida Power & Light Co. (Turkey Point, Units 6 and 7), (Mar. 30, 2011) (unpublished order) (slip op. at 8) ("Initial Scheduling Order") (ML110890768).*

and 7.² The Application references the standard design certification (DCD) issued to Westinghouse Electric Company, as amended, including Revisions 16 and 17. On June 14, 2010, the NRC published a notice of hearing on the Application.³ CASE filed a petition to intervene on August 17, 2010 and an amended petition on August 20, 2010. (“Amended Petition”). On February 28, 2011, the Board granted the petition and admitted portions of two of CASE’s contentions. *Florida Power and Light Co.* (Turkey Point Units 6 and 7), LBP-11-06, 73 NRC __ (Feb. 28, 2011) (slip op.) (“Board Order”). The instant Motion and New Petition propose to amend three contentions, contentions 1, 2 and 5, which the Board found inadmissible. Board Order at 85-93, 96-99.

As explained below, neither the Motion nor the attached New Petition demonstrate that the contentions, as amended, are admissible, since neither demonstrates that the new contentions meet the general contention admissibility requirements of 10 C.F.R. § 2.309(f)(1) or the timeliness requirements of 10 C.F.R. § 2.309(c)(1) and 10 C.F.R. § 2.309(f)(2).

DISCUSSION

I. Legal Standards for Contention Admissibility

The admissibility of new and amended contentions in NRC adjudicatory proceedings is governed by three regulations. These are (a) 10 C.F.R. § 2.309(f)(1), establishing the general admissibility requirements for contentions; (b) 10 C.F.R. § 2.309(f)(2), concerning new and timely contentions; and (c) 10 C.F.R. § 2.309(c),

² See *Florida Power & Light Company; Acceptance for Docketing of an Application for Combined License for Turkey Point Units 6 and 7*, 74 Fed. Reg. 51,621 (Oct. 7, 2009).

³ See *Florida Power & Light Company, Combined License Application for the Turkey Point Units 6 & 7, Notice of Hearing, Opportunity To Petition for Leave to Intervene and Associated Order Imposing Procedures for Access to Sensitive Unclassified Non-Safeguards Information and Safeguards Information for Contention Preparation*, 75 Fed. Reg. 34,777 (June 18, 2010) [hereinafter Notice of Hearing].

concerning non-timely contentions. See *Entergy Nuclear Vermont Yankee, LLC, and Entergy Nuclear Operations, Inc.* (Vermont Yankee Nuclear Power Station), LBP-06-14, 63 NRC 568, 571-72 (2006). All contentions must comply with the general admissibility requirements in § 2.309(f)(1), requirements which are discussed in more detail in the Staff's initial response to the COL intervention petition, as well as in the Board's ruling on contention admissibility.⁴ Board Order at 8-9. Failure to comply with any of these requirements is grounds for dismissal of the contention. Final Rule, Changes to the Adjudicatory Process, 69 Fed. Reg. 2182, 2221 (Jan. 14, 2004); see also *Private Fuel Storage, L.L.C.* (Independent Spent Fuel Storage Installation), CLI-99-10, 49 NRC 318, 325 (1999).

II. Legal Standards Governing the Admission of Amended or Late-Filed Contentions

The standards governing the admissibility of contentions filed or amended after the initial deadline for filing (i.e., "late-filed contentions") are set forth in the

⁴ NRC Staff Answer to "Petition for Intervention" at 6-9 (Sept. 12, 2010); Board Order at 8-9. The requirements in § 2.309(f)(1) state that, to be admissible, a contention must:

- (i) Provide a specific statement of the issue of law or fact to be raised or controverted...;
- (ii) Provide a brief explanation of the basis for the contention;
- (iii) Demonstrate that the issue raised ... is within the scope of the proceeding;
- (iv) Demonstrate that the issue raised in the contention is material to the findings the NRC must make to support the action that is involved in the proceeding;
- (v) Provide a concise statement of the alleged facts or expert opinions which support the requestor's/petitioner's position on the issue and on which the petitioner intends to rely at hearing, together with references to the specific sources and documents on which the requestor/petitioner intends to rely to support its position on the issue; [and]
- (vi) . . .[P]rovide sufficient information to show that a genuine dispute exists with the applicant/licensee on a material issue of law or fact. This information must include references to specific portions of the application (including the applicant's environmental report and safety report) that the petitioner disputes and the supporting reasons for each dispute, or, if the petitioner believes that the application fails to contain information on a relevant matter as required by law, the identification of each failure and the supporting reasons for the petitioner's belief[.]

Commission's regulations. Where, as here, the Petitioners are admitted as parties to this case, consideration of the admissibility of an amended contention "is governed by the provisions of § 2.309(f)(2), as well as the general contention admissibility requirements of § 2.309(f)(1)." *Pa'ina Hawaii, LLC* (Materials License Application), CLI-10-18, 72 NRC __, __ (July 8, 2010) (slip op. at 40, n.171).

Under the requirements of 10 C.F.R. § 2.309(f)(2), a contention filed after the initial filing period may be admitted with leave if it meets the following requirements:

- (i) The information upon which the amended or new contention is based was not previously available;
- (ii) The information upon which the amended or new contention is based is materially different than information previously available; and
- (iii) The amended or new contention has been submitted in a timely fashion based on the availability of the subsequent information.

Id. A contention that does not qualify for admission as a new contention under § 2.309(f)(2) may still be admitted if it meets the provisions governing nontimely contentions set forth in 10 C.F.R. § 2.309(c)(1).⁵ 10 C.F.R. § 2.309(c)(1); *Amergen Energy Co.* (Oyster Creek Nuclear Generating Station), LBP-06-22, 64 NRC 229, 234 n.7 (2006); *see also Vermont Yankee*, LBP-06-14, 63 NRC at 572-75. In its Initial Scheduling Order, the Board specifically directed that a "motion and proposed new or amended contention . . . shall be deemed timely under 10 C.F.R. § 2.309(f)(2)(iii) if it is filed within thirty (30) days of the date when the new and material information on which it is based first becomes available." Initial Scheduling Order at 8. If filed thereafter, the

⁵ Pursuant to 10 C.F.R. § 2.309(c)(2), each of the factors in § 2.309(c)(1) is required to be addressed in the requestor's nontimely filing. The first factor, whether good cause exists for the failure to file on time, is entitled to the most weight. *See, e.g., State of New Jersey* (Department of Law and Public Safety), CLI-93-25, 38 NRC 289, 296 (1993). Where no showing of good cause for the lateness is tendered, "petitioner's demonstration on the other factors must be particularly strong." *Texas Utilities Electric Co.* (Comanche Peak Steam Electric Station, Units 1 & 2), CLI-92-12, 36 NRC 62, 73 (1992) (quoting *Duke Power Co.* (Perkins Nuclear Station, Units 1, 2 & 3), ALAB-431, 6 NRC 460, 462 (1977)).

motion and proposed contention shall be deemed nontimely under 10 C.F.R. § 2.309(c).” Therefore, “new and material information,” if available more than thirty (30) days prior to filing of new or amended contentions, may not be considered in support of their admissibility.

III. Admissibility and Timeliness of Proposed Contentions

The Motion and New Petition propose to amend Contentions 1, 2 and 5, which were initially rejected by the Board. Board Order at 85-99. As originally proposed, Contentions 1 and 2 concerned emergency planning, while Contention 5 concerned the effects of sea level rise. Amended Petition at 11-26, 33-36. The proposed contention amendments are based, in large part, on concerns and news reports regarding the recent events at the Fukushima Daiichi nuclear power plant in Japan. However, as discussed below, the proposed amended contentions do not meet the general contention admissibility requirements of 10 C.F.R. § 2.309(f)(1) or the timeliness criteria of 10 C.F.R. § 2.309(f)(2) or 10 C.F.R. § 2.309(c)(1) and should be denied.

A. Amended Contention 1

As originally stated in CASE’s Amended Petition of August 20, 2010, Contention 1 asserted that, “[t]he emergency plan on file with Miami-Dade County does [not] adequately protect public health of people in the Turkey Point Plume Exposure Zone following an accidental radiation release from FPL’s nuclear reactor facilities at Turkey Point.” Amended Petition at 11. In support of the original contention, CASE asserted four general bases: (1) “[e]vacuation plans are not adequate for timely evacuation of all the people who could be affected in an accidental radiation release”; (2) “[e]vacuation screening and shelter provisions lack capacity for the number of people living in the evacuation zone”; (3) “[p]otassium iodide (KI) cannot be delivered in a timely manner to provide best protection from thyroid cancer”; and (4) “[r]eactor design

proposed for TPN 6 & 7 elevates risk of radiation release and makes effective evacuation and KI plans more critical.” *Id.* at 11-12.

In its Order, the Board found that Contention 1 was inadmissible for failure to meet the contention admissibility requirements of 10 C.F.R. § 2.309(f)(1)(vi), stating “as grounded on the four arguments advanced by CASE, [Contention 1] does not raise a specific challenge to [any] particular portion of FPL’s COLA, thus failing to rebut FEMA’s finding or the information underlying that finding, and thereby rendering Contention 1 inadmissible pursuant to 10 C.F.R. § 2.309(f)(1)(vi) for failing to raise a genuine dispute of material fact with FPL’s COLA.” Board Order at 86-87.

A significant portion of the proposed Amended Contention 1 is identical to the original contention already considered by the Board. *Compare* Amended Petition at 11-15 *with* New Petition at 3-10.⁶ The Petitioners propose to amend Contention 1 by adding additional bases, asserting that “[i]t is not clear that critical emergency communications will be viable in the event of a loss of power and back-up power at the site[,]” and that “[i]t is not appropriate to assume (NUREG-0396) that the magnitude of a radiological event and the circumstances of distribution of radioactivity during that event are modified by the probability of an accident occurring in a specific year.” New Petition at 10. Additionally, the Petitioners provide further information regarding KI distribution and the locations of emergency reception centers in FL in an attempt to bolster assertions in the original petition that potassium iodide (KI) “cannot be delivered in a timely manner to provide best protection from thyroid cancer.” Amended Petition at 11-12; New Petition at 4.

⁶ As submitted, the Petitioners’ New Petition to Amend Contentions 1, 2 and 5 does not include page numbering. The Staff’s page references, therefore, reflect the page numbering of the Adobe Acrobat pdf document as received through the Electronic Information Exchange.

Staff Response: Proposed Amended Contention 1 is inadmissible because it is insufficiently supported by alleged facts or expert opinion and fails to identify a genuine dispute with the application regarding a material issue of law or fact. 10 C.F.R. § 2.309(f)(1)(v)-(vi). In addition, the contention is based, in large part, on information that was publicly available more than thirty (30) days prior to the filing, and which has not been shown to be materially different from information previously available. New Petition at 3-14. Accordingly, CASE has not shown that it has met the timeliness standards in § 2.309(f)(2).

Proposed Amended Contention 1 does not meet the contention admissibility requirements of 10 C.F.R. § 2.309(f)(1)

CASE's proposed Amended Contention 1 fails to meet the general admissibility requirements of 10 C.F.R. § 2.309(f)(1). First, while much of the proposed Amended Contention 1 appears to assert inadequacies in the emergency communications plan, CASE fails to provide specific factual or other support for these claims and does not specify how its assertions actually controvert any particular portion of the COL application. In support of the amendment to proposed Contention 1, the Petitioners reference the "Emergency Communications section of the FPL COL application (Part 2 – F-2)" stating that the "COL fails to clarify which of these emergency communication systems would be functional in the event of a Station Black-Out (loss of power and power back-up) at the proposed reactor site." New Petition at 3. CASE asserts that "[s]tation black-out is responsible for 50% of the total risk of a major reactor accident, and would also likely interfere with the communications from the reactor site" and that "[i]t is not clear that critical emergency communications will be viable in the event of a loss of power and back-up power at the site." *Id.* at 4, 10. However, CASE cites no factual or expert support for these assertions. *Id.* at 3-14. The attached references discuss the events in Japan following the Fukushima Daiichi incident, including

distribution of KI and radiation concerns, but do not address how critical emergency communications at the proposed Turkey Point Units 6 and 7 could be affected by a similar event. *Id.* at 3-14; Exhibits 1, 2, 4-7. In determining contention admissibility, a “bald assertion that a matter ought to be considered or that a factual dispute exists . . . is not sufficient;” rather, “a petitioner must provide documents or other factual information or expert opinion that set forth the necessary technical analysis to show why the proffered bases support its contention.” *Private Fuel Storage, L.L.C.* (Independent Spent Fuel Storage Installation), LBP-98-7, 47 NRC 142, 180 (1998) (citing *Georgia Institute of Technology* (Georgia Tech Research Reactor, Atlanta, Georgia), LBP-95-6, 41 NRC 281, 305, *vacated in part and remanded on other grounds*, CLI-95-10, 42 NRC 1, *aff’d in part*, CLI-95-12, 42 NRC 111 (1995) (A petitioner is obligated “to provide the [technical] analyses and expert opinion” or other information “showing why its bases support its contention.”)). Here, because CASE has provided no factual or expert support for this basis of its contention, proposed Amended Contention 1 fails to comply with 10 C.F.R. § 2.309(f)(1)(v).

Proposed Amended Contention 1 also fails to identify a genuine dispute with the application regarding a material issue of law or fact. The contention states that “Emergency Communications section of the FPL COL application (Part 2 - F-2) enumerate the methods and equipment for communication during an emergency which would form the basis for implementation of the emergency plan on file -- however the COL fails to clarify which of these emergency communication systems would be functional in the event of a Station Black-Out (loss of power and power back-up) at the proposed reactor site.” New Petition at 3. However, CASE does not explain how this assertion reflects any inadequacy in either the emergency plan or station blackout analysis. Other than this reference to the Final Safety Analysis Report (FSAR), the proposed Amended Contention 1 does not cite to any specific portion of the application

with which it disagrees. "A contention must . . . identify the disputed portion of the application, and provide 'supporting reasons' for the challenge to the application. Similarly, if a petitioner believes that an application fails to contain information on a 'relevant matter as required by law,' the contention must identify each failure and the supporting reasons for the petitioner's belief." *USEC Inc. (American Centrifuge Plant)*, CLI-06-10, 63 NRC 451, 456 (2006). As explained above, the Petition does not provide support for its claims that station black-out "would also likely interfere with the communications from the reactor site" or that "critical emergency communications" may not "be viable in the event of a loss of power and back-up power at the site." New Petition at 3-14. Nor does CASE explain what specific regulatory requirement has not been met with respect to emergency communications or station blackout. See *Sacramento Mun. Util. Dist. (Rancho Seco Nuclear Generating Station)*, LBP-93-23, 38 NRC 200, 246 (1993), *review declined*, CLI-94-2, 39 NRC 91 (1994)). ("A contention that simply alleges that some matter ought to be considered does not provide the basis for an admissible contention.").

CASE thus does not clearly identify what information or analysis it alleges has not been provided in the application, much less why it renders the application inadequate. Moreover, although the Contention purports to take issue with the FSAR's Emergency Communications Section, the safety evaluation of station blackout, including what systems would be affected during such a scenario, is addressed in Chapter 8 of the FSAR. New Petition at 3; FSAR at 8.1-3; AP1000 DCD Chapter 8.⁷ Having failed both

⁷ To the extent CASE intends this basis to encompass a challenge to the adequacy of the AP1000 DCD, as codified in 10 C.F.R. Part 52, Appendix D, it raises issues that were resolved in the certified design, in violation of 10 C.F.R. § 52.63(a)(5), and otherwise impermissibly challenges established NRC regulations, in violation of 10 C.F.R. § 2.335. For these reasons, it (continued. . .)

to reference the portion of the FSAR to which the alleged missing information would relate and to explain the asserted significance of station blackout to the adequacy of the discussion of emergency communications, proposed Amended Contention 1 fails to provide sufficient information to show that a genuine dispute exists with the application on a material issue of law or fact. See 10 C.F.R. § 2.309(f)(1)(vi). In determining contention admissibility, “[a]ny contention that fails directly to controvert the application or that mistakenly asserts the application does not address a relevant issue can be dismissed.” See *Dominion Nuclear Connecticut, Inc.* (Millstone Nuclear Power Station, Unit 3), LBP-08-9, 67 NRC 421, 433 (citing *Rancho Seco*, LBP-93-23, 38 NRC at 247-48. Accordingly, this basis for proposed Amended Contention 1 is not admissible.

Second, as in the initial petition, CASE makes a number of assertions related to evacuation routes and times, but does not explain how its statements reflect a flaw in the COL application’s emergency plan. New Petition at 3-14. Again duplicating the original contention, CASE voices concerns regarding potential problems with the distribution of potassium iodide (KI) in the event of an emergency at the Turkey Point site. *Id.* at 7-12. However, in the proposed amended contention, CASE now also cites several reports regarding emergency response in Japan following the Fukushima Daiichi incident. *Id.* at 12-14. For example, CASE references a March 31, 2010 [sic] article by Julian Ryall asserting that Japanese evacuees were denied medical care and shelter due to concerns that they may be contaminated with radiation and also that TEPCO was offering high wages to anyone willing to work at the Fukushima Daiichi plant, asserting that those workers were referred to as “suicide squads.” *Id.* Similarly, CASE cites a

(. . .continued)

raises issues outside the scope of the Turkey Point COL proceeding, in contravention of 10 C.F.R. § 2.309(f)(1)(iii).

March 27, 2011 article indicating that shelters in Japan were testing evacuees for radiation contamination and requiring “radiation-free” certificates. *Id.*

CASE states that the “[p]urpose of pointing out ‘denial of treatment, the need to send workers on suicide missions into contaminated situations and issuance of radiation free certificates’ is to ‘point up the impossibility of ever being sufficiently prepared for what can evolve in a nuclear accident or catastrophic natural event which impacts a nuclear facility.’” New Petition at 13. CASE apparently intends these statements to assert a problem with the emergency response plans of the COL application. However, neither the Petition nor the cited references explain how the description of these circumstances in Japan would controvert any analysis or conclusion in the COL application. CASE hypothesizes, for example, that “agencies responsible for Turkey Point might someday be in the position of the government of Japan” concerning distribution of KI, but such generic and speculative comparisons fail to allege specific deficiencies in the application. *Id.* at 11. In determining contention admissibility, “[a]ny contention that fails directly to controvert the application or that mistakenly asserts the application does not address a relevant issue can be dismissed.” See *Millstone*, LBP-08-9, 67 NRC at 433. Accordingly, these bases of proposed Amended Contention 1 do not represent a genuine, material dispute with the application, contrary to 10 C.F.R. § 2.309(f)(1)(vi).

CASE also takes issue with the guidance of NUREG-0396, “Planning Basis for the Development of State and Local Government Radiological Emergency Response Plans in Support of Light Water Nuclear Power Plants” stating that “[i]t is not appropriate to assume (NUREG-0396) that the magnitude of a radiological event and the circumstances of distribution of radioactivity during that event are modified by the probability of an accident occurring in a specific year.” New Petition at 10. In support of this assertion, the Petitioners reference “Attachment C-1 Risk,” which appears to be

listed as “Exhibit 7 – Attachment C-1 Risk and probability shenanigans” in the Petitioners’ exhibit list.⁸ However, the source of the discussion and calculations in this brief “exhibit” is not clear; the Petitioners identify no references or other expert support explaining their origin or accuracy. See 10 C.F.R. § 2.309(f)(1)(v). More importantly, regardless of whether the Petitioners’ calculations and associated description of probability and potential doses are correct, neither the Petition nor the cited references explain how their assertions would controvert any analysis or conclusion in the application, contrary to 10 C.F.R. § 2.309(f)(1)(vi).

The Motion and New Petition Fail to Demonstrate That the Contention is Timely.

For the reasons discussed above, the New Petition’s failure to provide adequate factual or expert support, or to identify a material dispute with the application, is a sufficient ground to reject the contention. However, the Motion and the New Petition also fail to demonstrate the timeliness of the proposed amended contentions. Pursuant to the Board’s initial scheduling order in this proceeding, a motion for new or amended contentions “shall be deemed timely under 10 C.F.R. § 2.309(f)(2)(iii) if it is filed within thirty (30) days of the date when the new and material information on which it is based first becomes available. If filed thereafter, the motion and proposed contention shall be deemed nontimely under 10 C.F.R. § 2.309(c).” Initial Scheduling Order at 8. As discussed below, the Petitioners have not explained why the allegedly new information cited in the Petition is materially different from the information either considered in the initial intervention petition or available at the time the initial contentions were filed. Nor, for information available more than thirty (30) days prior to filing the proposed amended

⁸ Exhibits for CASE Amended Contentions 1,2, & 5, (“Exhibit List”), April 18, 2011.

contentions, have the Petitioners attempted to address the late-filing criteria of 10 C.F.R. § 2.309(c)(1).

In its Motion, CASE states that the proposed amended contentions are timely, but does not specifically address the timeliness criteria for new or amended contentions in 10 C.F.R. § 2.309(f)(2) or the criteria of 10 C.F.R. § 2.309(c)(1) for nontimely filings. Failure to address the criteria of 10 C.F.R. § 2.309(c)(1) is a sufficient ground to find that the criteria are not met, and does not comply with the Board's Initial Scheduling Order. Initial Scheduling Order at 8. In the subject New Petition, some of the information cited by the Petitioners in support of proposed Amended Contention 1 was available either at the time the original contentions were filed or more than thirty (30) days before the proposed amended contentions were filed on April 18, 2011. For example, in addition to the other exhibits, the Petitioners include a March 14, 2011, e-mail from the Emergency Operations Center (DEM) of Miami Dade County (Attachment 3) indicating that potassium iodide (KI) is "stored in a secure location within Miami-Dade County," "is available in a number sufficient to provide the required dosage for the emergency planning zone population" and is "available to the public at its Emergency Reception Center." New Petition at 11. This e-mail is dated more than thirty (30) days before the Petitioners' filing, making it untimely under the Board's Initial Scheduling Order, but in any event there is no indication that the underlying information provided by Miami Dade County in the e-mail was not available to the Petitioners much earlier. In fact, CASE follows its quotation of the e-mail with a reference to the Miami Dade County DEM publication and to CASE's original "revised Petition at 14" for the assertion that "one Emergency Reception Center is located at Tamiami Park in Miami Dade County which Google Maps shows to be 30 or 35 miles driving distance to the north from Turkey Point" and CASE's subsequent statement that "we can only conclude that the positioning of the KI and the plan are lacking." *Id.* In sum, this e-mail was dated more than 30 days in

advance of the filing of CASE's motion and appears to contain no information which was unavailable prior to the filing of the initial contentions. As such, it fails to support the claim that proposed Amended Contention 1 is timely. See 10 C.F.R. §§ 2.309(c)(1) and (f)(2).

B. Amended Contention 2

As originally stated, Contention 2 addressed the alleged “[f]ailure and omission [sic] of the FPL COL for the proposed Turkey Point Nuclear Reactors 6&7 to provide for the safe and orderly evacuation of the population during or following a nuclear event (unusual nuclear occurrence [sic]).” Amended Petition at 15. CASE stated that “[t]he evacuation plan does not meet the criteria of protect(ing) [sic] the health and safety of the public as prescribed by the Atomic Energy Act of 1954, and as exemplified by 10 CFR 50.47” and that “the increase in population, and findings of studies of actual population and institutional response to actual emergencies are not adequately reflected in the FPL emergency response plan.” *Id.* at 16. Further, CASE alleged that “[t]he plan, particularly with respect to evacuation/population response is therefore incomplete and also does not follow NUREG 0654 guidelines.” *Id.*

In support of the original contention, CASE asserted six general bases: (1) that the Applicant has simply made “minor modification[s]” to the existing Turkey Point emergency plan rather than preparing a new one for the COL application, *id.* at 18; (2) that “the use of the existing Turkey Point evacuation plan does not reflect the LARGE population expansion in permanent population that has occurred between 1970 and now,” *id.* at 16, (Emphasis in original); (3) that “NUREG 0654 advocates evacuation over sheltering yet the FPL COL indicates that sheltering is an acceptable alternative for some part of the population,” *id.*; (4) that “[t]hese [population] figures do not include seasonal visitors, migrant workers, or people attending sports events and visiting parks and tourist attractions,” *id.* at 17; (5) that “[e]vacuation from a nuclear plant is far different

from other events,” *id.* at 23, due to “actual population and institutional response to actual emergencies,” *id.* at 16; and (6) that the evacuation plan does not protect the “health and safety of the public” because it does not meet the requirements of the Atomic Energy Act, 10 C.F.R. § 50.47, and “does not follow NUREG 0654 guidelines.” *Id.*

Additionally, CASE restated concerns raised in its original Proposed Contention 1 regarding the time to evacuate the population and the routes of the evacuation.” Amended Petition at 16; New Petition at 15. These reassertions did not change the Staff’s analysis of the inadmissibility of CASE’s claims in the original Proposed Contention 1 regarding the evacuation plan, nor did the Staff address them as raising additional bases to support the original Proposed Contention 2. CASE also made a “closing statement” in which it raised concerns regarding the location of Turkey Point. Amended Petition at 25-26; New Petition at 28.

In its Order, the Board found that Contention 2 was inadmissible for failure to meet the contention admissibility requirements of 10 C.F.R. § 2.309(f)(1)(vi). In doing so the Board characterized the Contention as asserting three bases: “(1) the plan ‘does not reflect the LARGE expansion in permanent population that has occurred between 1970 and now’ (Amended Petition at 16) (emphasis in original); (2) the plan improperly accepts sheltering over evacuation as an option in an emergency, thus rendering the plan inadequate under NUREG-0654 (*id.* at 16, 19); and (3) the plan disregards the results of studies dealing with responses to actual emergencies (*id.* at 22-25).” Board Order at 89-90. The Board concluded that for each basis, the Petitioners had failed to “raise a genuine dispute of material fact” with respect to the COL application. *Id.* at 91-93. As noted above, with respect to the Amended Petition the Petitioners’ reiteration of concerns from Contention 1 did not support the admissibility of Contention 2, and those

portions of the proposed Amended Contention 2 remain inadmissible for the same reasons articulated by the Board. *Id.* at 90, n. 94.

The Petitioners now propose to amend Contention 2 by asserting that, in recommending that U.S. citizens in Japan evacuate the area within a 50-mile radius of the Fukushima Daiichi plant, instead of the 10-mile radius Emergency Planning Zone (EPZ) contemplated in the Turkey Point emergency plan, “[t]he NRC might be violating the 14th Amendment to the U.S. Constitution and making a change in NRC policy.” New Petition at 21-23. The Petitioners also assert that, while NUREG-0396 requires no special “planning or preparation beyond the 10 mile EPZ in the 50 mile EPZ,” consideration of a “shadow evacuation” zone should be considered in emergency planning. *Id.* at 33-36.

As an initial matter, the Petitioners assert that “CASE is amending Contention 2 to propose that, if the NRC and the U.S. Department [sic] of State believe a 50 mile radius of safety is necessary for U.S. Citizens near the crippled Fukushima plant, the Fourteenth Amendment requires equal protection under the law, so the same 50 mile are[a] must be addressed for safety for all U.S. nuclear power plants.” New Petition at 31-32. In addition, CASE quotes a State Department travel warning as stating that “[c]onsistent with the NRC guidelines that would apply to such a situation in the United States, we are recommending, as a precaution, that U.S. citizens within 50 miles (80 kilometers) of the Fukushima Daiichi Nuclear Power Plant evacuate the area or to take shelter in doors if safe evacuation is not practical.” *Id.* at 21. However, the Petitioners have failed to explain why these recommendations represent any discrepancy between protections for U.S. citizens abroad and in the U.S., much less how they constitute any change in relevant Commission regulations or policy. *Id.*

CASE appears to believe that the area of evacuation recommended under the circumstances of the Fukushima Daiichi incident contradicts U.S. regulations regarding the EPZs, or represents a change in policy which should be addressed in the COL application for Turkey Point Units 6 and 7. However, the NRC regulations to which CASE alludes concerning the 10-mile radius simply define the plume exposure pathway emergency planning zone for which potential evacuation plans must be formally established. See 10 C.F.R. §§ 50.47(b)(10) and (c)(2); 10 C.F.R. Part 50 App. E. Those regulations are consistent with, and in no way preclude, the recommendations issued in response to the Fukushima Daiichi incident. As the reference cited by the Petitioners themselves indicates, similar protective steps (including a more extensive evacuation area as warranted by actual developments during an emergency) could be recommended in a comparable situation in the United States, including at the proposed Turkey Point facility. NUREG-0396 at 16. Accordingly, even assuming a situation in which evacuation is necessary at a U.S. facility, the Petitioners have not identified any disparity in the anticipated recommendations to protect members of the public as compared to those recommended in connection with the Fukushima incident.

In essence, the Petitioners' "equal protection" claim merely recasts CASE's challenge to the NRC's emergency planning regulations and the Application's reliance on them. Just as it was before the Fukushima incident, establishment of the 10-mile plume exposure pathway EPZ for nuclear power plants is specifically required by regulation and discussed in Commission guidance. See 10 C.F.R. § 50.47(c)(2); NUREG-0396. Therefore, to the extent that the Petitioners intend these assertions to be a challenge to the establishment of the 10-mile EPZ, this is an impermissible challenge to Commission regulations and cannot serve as a basis for the admissibility of proposed

Amended Contention 2. See 10 C.F.R. § 2.335; *Tennessee Valley Auth.* (Bellefonte Nuclear Power Plant, Units 3 and 4), CLI-09-03, 69 NRC 68, 75 (2009).⁹

In proposed Amended Contention 2, CASE also appears to make broader claims regarding the adequacy of evacuation preparations. CASE quotes NUREG-0396 in asserting that “[i]f the engineered safety features are lost [in Class 9 accidents], then the LPZ has no meaning with regard to the size of the areas around the plant in which emergency response would be appropriate[;]” CASE also questions the prudence of failing to require specific emergency “planning or preparation beyond the 10 mile EPZ in the 50 mile EPZ.” New Petition at 33-35. Just as it did in the original proposed Contention 2, CASE references “Evacuation Behavior in Response to Nuclear Power Plant Accidents,” by Donald Zeigler and James Johnson, Jr. and quotes the authors as saying that “[t]o plan for only a 10 mile evacuation is to significantly under plan for a nuclear power station accident” and that a “shadow evacuation effect” has been identified in which people outside the 10 mile evacuation radius will also leave the area. Amended Petition at 23-24; New Petition at 29-30. CASE states that a “shadow evacuation” zone of 50 miles, including an analysis of potential traffic evacuation patterns up to 50 miles away, should be considered in emergency planning. New

⁹ The Commission has established a Task Force to perform a review of the Fukushima Daiichi event. SRM-COMGBJ11-0002 (March 21, 2011) (ADAMS Accession No. ML110800456). The Task Force has been charged with conducting a near-term and longer-term review that will “evaluate all technical and policy issues related to the event to identify potential research, generic issues, changes to the reactor oversight process, rulemakings, and adjustments to regulatory framework that should be conducted by the NRC.” *Id.* It is anticipated that ongoing review and evaluation of the events in Japan by the NRC staff and the Task Force will identify actions to further enhance the safety of U.S. nuclear facilities based on the lessons from the Japanese event.

If the Task Force’s recommendations result in changes to applicable regulations, an applicant’s compliance with those regulations would become part of the staff’s technical review. Now, however, challenges to the Commission’s existing regulations are not cognizable in individual license proceedings. See 10 C.F.R. § 2.335.

Petition at 23. CASE also reiterates its concerns from the original proposed Contention 2 about the size of the population near the Turkey Point facility, cites a March 17, 2011, Voice of America News report regarding shortages of food and water in the wake of the Fukushima incident, and provides a link to a New York Times interactive article providing a map of evacuation zones around the Fukushima Daiichi plant. *Id.* at 35-36. In questioning the 10-mile EPZ as applied to the Fukushima incident, CASE states that “in real time, 10 miles was far too conservative an estimate of what would be required for public safety.” *Id.* at 36.

Although CASE states that “the Station Blackout event at the Fukushima Daichi [sic] site in Japan demonstrates the loss of engineered safety features is possible and the CASE contentions on emergency planning and evacuation should be heard in full,” CASE fails to explain how the articles and statements cited in support of this proposition constitute any specific disagreement with an assumption, analysis or conclusion in the Turkey Point COL application, much less demonstrate an inadequacy in the emergency plan. New Petition at 14-36. Rather, CASE’s statements concerning events in Japan amount to reiteration of their vague, generalized claim that evacuation plans in response to a radiological release from a nuclear power plant are not “realistic,” a claim that the Board has already found to be inadmissible for failure to meet the contention admissibility requirement that the assertion “raise a genuine dispute of material fact with a particular portion of the COLA.” See, Amended Petition at 25; New Petition at 14-36; Board Order at 92-93. Without identifying any specific disagreement with the application itself, contrary to 10 C.F.R. § 2.309(f)(1)(vi), this basis does not support the admissibility of proposed Amended Contention 2.

C. Amended Contention 5

As originally stated in CASE’s Amended Petition of August 20, 2010, Contention 5 asserted that “[t]he FPL COL application for two new nuclear reactors at Turkey Point

must be considered invalid – both the FSAR (for instance Chapter 2) and also the ER analyses (these matters are relevant to nearly every chapter of the ER) because neither considers and neither incorporates any scientifically valid projection for sea level rise through this century and beyond. Doing so will dramatically diminish and likely negate the viability of this proposal.” Amended Petition at 33. The contention relied primarily on a statement from Dr. Harold Wanless (“Wanless Statement”), which asserted that sea level is rising at a rate faster than that accounted for in the COL application. Amended Petition at 33-36. Now, in its motion to amend Contention 5, CASE continues to rely, in large part, on the same statement from Dr. Wanless and the same assertions regarding the rate of sea level rise. New Petition at 37-40.

In its Order, the Board found that Contention 5 was inadmissible for failure to meet the contention admissibility requirements of 10 C.F.R. § 2.309(f)(1)(iv) and (vi). Board Order at 96-99. Regarding the contention’s assertion that FPL’s COL application does not address sea level rise, the Board found that the contention failed “directly to controvert FPL’s sea level rise analysis” and that it failed “to demonstrate why its broad and unsupported assertions regarding the implications of sea level rise would be material to the NRC’s analysis of the COLA[.]” Board Order at 99 (internal citations omitted).

A significant portion of the proposed Amended Contention 5 is identical to the original contention. *Compare* Amended Petition at 33-36 *with* New Petition at 37-40. The Petitioners propose to amend Contention 5 by asserting that the events at Fukushima Daiichi demonstrate that there is a potential for inundation of Turkey Point Units 3 and 4 to affect operation of proposed Units 6 and 7, and by providing articles related to the Fukushima incident as additional support for the underlying assertions regarding the consequences of an increasing rate of sea level rise. New Petition at 41-50.

Staff Response: Proposed Amended Contention 5 is inadmissible because it does not explain why this issue is material to the findings that the NRC must make in this proceeding; is insufficiently supported by alleged facts or expert opinion; and fails to identify a genuine dispute with the application regarding a material issue of law or fact. 10 C.F.R. § 2.309(f)(1)(iv)-(vi). In addition, the contention is based, in large part, on information that was publicly available more than thirty (30) days prior to the filing. Motion at 39, 46-49. However, it does not address or meet the timeliness standards in 10 C.F.R. § 2.309(c)(1) or 10 C.F.R. § 2.309(f)(2).

In addition to Dr. Wanless's statement, the CASE motion provides articles and links to articles regarding the Fukushima incident. Motion at 37-50. A number of articles referenced in proposed Amended Contention 5 discuss the events at the Fukushima Daiichi plant, which resulted from the March 11, 2011 tsunami. *Id.* However, the Petitioners fail to identify facts or expert opinion or other sources and documents that support the specific assertion on which proposed Amended Contention 5 is based, which is that inundation of Turkey Point Units 3 and 4 could affect operation of proposed Turkey Point Units 6 and 7. *Id.*

In support of proposed Amended Contention 5, CASE appears to rely primarily on three references. CASE provides (1) the text of a Wikipedia article regarding the tsunami waves which struck Japan preceding the Fukushima incident; (2) a March 24, 2011 Onearth article titled "Sea Level Rise Brings Added Risks to Coastal Nuclear Plants" in which, according to the Petitioners, Dr. Wanless provided "comments on Fukushima"; and (3) information from a March 28, 2011 blog posting on the Nuclear Power Plants website stating that "high levels of radiation from contaminated water hindered work on restoring the cooling pumps and other power systems to [Fukushima Daiichi] reactors 1-4." Motion at 49. However, CASE fails to explain in what way any of these articles support or even address the amended contention's assertion that there is

a potential for inundation of Turkey Point Units 3 and 4, let alone how or why such an occurrence could subsequently affect operation of proposed Units 6 and 7. *Id.* at 41-50. Nor does CASE explain how the comments of Dr. Wanless, that are referenced in the Onearth article, relate the events at the Fukushima Daiichi plant to the FPL COL application or to the Turkey Point site. *Id.* at 41. Indeed, the referenced “testimony” of Dr. Wanless noted in the article appears to be identical to the statements provided and considered in conjunction with the original version of Contention 5, and does not appear to specifically refer to the Fukushima Daiichi incident or how similar impacts could occur at the Turkey Point site. *Id.*

The Onearth article purports to raise questions about the adequacy of the FPL COL application’s analysis of the implications of sea level, stating that “the rate of sea level rise around Turkey Point is already about 15 percent higher, or about 1.1 feet-per-century, than what FPL used in its assessment.” New Petition at 47. Based on this difference in the rate of sea level rise, the article concludes that “FPL’s assessment that Turkey Point can withstand a worst-case scenario storm might fall short.” *Id.* However, the only cited sources of information which appear to specifically discuss possible impacts at the Turkey Point site are CASE’s original Contention 5 and the original statement of Dr. Wanless. *Id.* at 48. These bases for the contention were already rejected by the Board, and neither asserted how, or explained why, sea level rise could cause problems at Turkey Point Units 3 and 4 in a way that could impact operation of proposed Units 6 and 7.

In addition, it appears that the information upon which the Onearth article’s assessment is based include a 2008 study which was published in January 2011, an undated “Climate Central analysis of sea level rise in the same region,” and a 2010 report from the National Academy of Sciences. New Petition at 41-49. These references either do not meet the 10 C.F.R. § 2.309(f)(2)(i) requirement that new or

amended contentions be based on information which was not previously available or do not meet the 10 C.F.R. § 2.309(f)(2)(iii) requirement that a new or amended contention be submitted in a timely fashion based on the availability of the subsequent information. Nor do they satisfy the criterion in the Board's Initial Scheduling Order that a "motion and proposed new or amended contention . . . shall be deemed timely under 10 C.F.R. § 2.309(f)(2)(iii) if it is filed within thirty (30) days of the date when the new and material information on which it is based first becomes available." Initial Scheduling Order at 8. In short, the "new" references provided are neither timely nor do they support the contention's central claim.

In determining contention admissibility, "a petitioner must provide documents or other factual information or expert opinion that set forth the necessary technical analysis to show why the proffered bases support its contention." *PFS*, LBP-98-7, 47 NRC at 180 (citing *Georgia Institute of Technology* (Georgia Tech Research Reactor, Atlanta, Georgia), LBP-95-6, 41 NRC 281, 305, *vacated in part and remanded on other grounds*, CLI-95-10, 42 NRC 1, *aff'd in part*, CLI-95-12, 42 NRC 111 (1995) (A petitioner is obligated "to provide the [technical] analyses and expert opinion" or other information "showing why its bases support its contention.")). Here, because CASE has not demonstrated that any of its alleged facts or referenced documents support the stated basis for its contention, and because neither the statement of Dr. Wanless nor the referenced articles provide adequate support for the assertion that flooding of Turkey Point Units 3 and 4 could have any impact on the proposed new units, proposed Amended Contention 5 does not satisfy 10 C.F.R. § 2.309(f)(1)(v).

For similar reasons, proposed Amended Contention 5 also fails to identify a genuine dispute with the application regarding a material issue of law or fact. 10 C.F.R. § 2.309(f)(1)(vi). Like the original contention, the proposed amended contention again states that neither the FSAR nor the ER "considers and . . . incorporates any

scientifically valid projection for sea level rise through this century and beyond”; it now also asserts that “[t]he events at Fukushima make the potential impact of the inundation of Turkey Point 3 & 4 on the operation of the proposed Turkey Point 6 & 7.” New Petition at 49. As support, the Petitioners reference a statement from the March 28, 2011 blog that “high levels of radiation from contaminated water hindered work on restoring the cooling pumps and other power systems to [Fukushima Daiichi] reactors 1-4.” *Id.* However, the Petitioners fail to explain how this statement regarding the Fukushima Daiichi site and reactors supports the assertion that inundation of Turkey Point Units 3 & 4 (from a tsunami or other event) is a plausible scenario. Nor do they explain why, even if such inundation were to occur, it could affect the operation of the proposed Turkey Point Units 6 & 7 given the characteristics of the Turkey Point site and the design of the proposed new units. *Id.* The Petitioners also fail to acknowledge or controvert Section 2.2.3.1.6.1 of the FSAR which specifically discusses Radiological Hazards and the possibility that a radiological release from Units 3 and 4 could affect operation of proposed units 6 and 7. *Id.*; FSAR at 2.2-47.

Section 2.309(f)(1)(vi) requires that, “if the petitioner believes that the application fails to contain information on a relevant matter as required by law,” the Petitioner must identify “each failure and the supporting reasons for the petitioner’s belief.” 10 C.F.R. § 2.309(f)(1)(vi); *USEC, CLI-06-10, 63 NRC at 456.* In support of proposed Amended Contention 5, the Petitioners assert that sea level is rising at a rate faster than that considered in the FPL COL application and that there is a potential for inundation of Turkey Point Units 3 and 4 to affect operation of proposed Units 6 and 7. New Petition at 41-50. However, the assertion that the COL application has failed to consider the accelerated rate of sea level rise was raised in Proposed Contention 5 as it was originally pled. Amended Petition at 33-36. As noted by the Board, “Section 2.4 of the FSAR addresses the ‘probable maximum flooding as a result of hurricanes, tsunamis,

seiches, and other flooding events,” which includes a “detailed consideration of sea level rise.” Board Order at 98; FSAR Section 2.4.

The New Petition does not provide support for its apparent assertion that the Fukushima Daiichi events have any bearing on the likelihood of sea level rise at Turkey Point, and fails to explain how the alleged new information indicates that the COL application’s analyses regarding sea level rise is inadequate. As discussed above, while the Onearth article purports to question the adequacy of the FPL COL application’s analysis of the implications of sea level rise, it does not specifically cite or controvert the sea level rise calculations included in the FSAR. New Petition at 37-50.

In short, the alleged new information does not directly controvert a specific portion of the Application or explain why any of the Applicant’s analyses or conclusions is incorrect or inadequate. “A contention must . . . identify the disputed portion of the application, and provide ‘supporting reasons’ for the challenge to the application. Similarly, if a petitioner believes that an application fails to contain information on a ‘relevant matter as required by law,’ the contention must identify each failure and the supporting reasons for the petitioner’s belief.” *USEC, CLI-06-10*, 63 NRC at 456. Moreover, with respect to the other portions of the contention that simply duplicate the original contention, the Board has already found that they failed to articulate a genuine dispute with the application. Board Order at 96-99. Therefore, proposed Amended Contention 5 does not articulate a concrete, material dispute for litigation and thus does not provide the basis for an admissible contention, contrary to 10 C.F.R. § 2.309(f)(1)(vi). For the foregoing reasons, proposed Amended Contention 5 is inadmissible.

CONCLUSION

For the above reasons, the Staff submits that the Motion and New Petition should be denied, as the proposed amended contentions do not meet the contention admissibility requirements of § 2.309(f)(1) and fail to meet the late-filed contentions criteria of 10 C.F.R. §§ 2.309(c)(1) and (f)(2).

Respectfully submitted,

/Signed (electronically) by/

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**Executed in Accord with 10 CFR §
2.304(d)**

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Dated at Rockville, Maryland
this 13th day of May, 2011

UNITED STATES OF AMERICA
NUCLEAR REGULATORY COMMISSION

BEFORE THE ATOMIC SAFETY AND LICENSING BOARD PANEL

In the Matter of)
)
FLORIDA POWER AND LIGHT COMPANY) Docket Nos. 52-040 & 52-041
)
(Turkey Point Nuclear Plant, Units 6 & 7))

CERTIFICATE OF SERVICE

I hereby certify that copies of the "NRC STAFF ANSWER TO 'CITIZENS ALLIED FOR SAFE ENERGY, INC. MOTION TO AMEND CONTENTIONS 1,2 AND 5 OF THE CASE REVISED PETITION TO INTERVENE' AND 'AMENDED CONTENTIONS 1,2 AND 5'" have been served on the following persons by Electronic Information Exchange on this 13th day of May, 2011:

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Dated at Rockville, Maryland
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