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UNITED STATES OF AMERICA
NUCLEAR REGULATORY COMMISSION

BEFORE THE ATOMIC SAFETY AND LICENSING BOARD

In the Matter of	)	**Docket No. 52-007**
EXELON GENERATION COMPANY, LLC	)	**ASLBP No. 04-821-01-ESP**
(Early Site Permit for the Clinton ESP Site)	)	**May 28, 2004**

EXELON GENERATION COMPANY'S ANSWER TO PROPOSED CONTENTIONS

Exelon Generation Company, LLC ("Exelon") hereby files its Answer to the six proposed contentions ("Proposed Contentions") filed by the Environmental Law and Policy Center, Blue Ridge Environmental Defense League, Nuclear Information and Resource Service, Nuclear Energy Information Service, and Public Citizen ("Petitioners") concerning Exelon's application for an Early Site Permit ("ESP"). Although Petitioners elected to submit the Proposed Contentions in two separate submittals,[1] Exelon has elected to respond to the Proposed Contentions in this single document.

On January 26, 2004 Exelon filed its Answer to Petitioners' Hearing Request and Petition to Intervene filed on January 12, 2004. In that Answer, Exelon did not challenge Petitioners' standing but reserved its right to oppose Petitioners' intervention if

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1 The first petition was filed on behalf of Blue Ridge Environmental Defense League ("BREDL"), Nuclear Information and Resource Service ("NIRS"), Public Citizen, and Nuclear Energy Information Service ("NEIS") (the "BREDL Request"). The second petition was filed on behalf of Environmental Law and Policy Center ("ELPC"), BREDL, NIRS, NEIS, and Public Citizen (the "ELPC Request").

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Petitioners failed to plead at least one admissible contention. For the reasons discussed below, the contentions proposed by the Petitioners do not satisfy the requirements in 10 C.F.R. § 2.309(f)(1). Accordingly, their petition to intervene and request for hearing should be denied.

Our Answer to the Proposed Contentions is organized as follows:

- Section I describes the legal standards governing the admissibility of contentions in this licensing proceeding;
- Section II demonstrates that the Proposed Contentions do not satisfy the requirements in Section 2.309(f)(1); and
- Section III discusses that Petitioners have not requested the use of formal hearing procedures in 10 C.F.R. Part 2, Subpart G, and that there is no basis for applying these procedures to the Proposed Contentions.

I. LEGAL STANDARDS GOVERNING ADMISSIBILITY OF THE CONTENTIONS

In order to intervene in an NRC licensing proceeding, an individual or group must demonstrate that it has standing, and "proffer with specificity at least one admissible contention."[2] The NRC will deny a petition to intervene from a petitioner who has standing but has not proffered at least one admissible contention.[3] In accordance with

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2 10 C.F.R. § 2.309(a). *See also Yankee Atomic Electric Co.* (Yankee Nuclear Power Station), CLI-96-7, 43 NRC 235, 248 (1996); *Gulf States Utility Co.* (River Bend Station, Unit 1), CLI-94-10, 40 NRC 43, 51 (1994).

3 Notice of Hearing and Opportunity to Petition for Leave To Intervene Early Site Permit for the Clinton ESP Site ("Notice of Hearing"), 68 *Fed. Reg.* 69426, 69427 (Dec. 12, 2003); *Florida Power & Light Co.* (Turkey Point Nuclear Plant, Units 3 and 4), CLI-01-17, 54 NRC 3, 5 (2001).

long-standing Commission policy, Petitioners have the burden of showing that the contentions are admissible. As stated by the Commission, "[a] contention's proponent, not the licensing board, is responsible for formulating the contention and providing the necessary information to satisfy the basic requirement for the admission of contentions."[4]

According to the Commission's March 2, 2004 Memorandum and Order on the Dominion Nuclear North Anna LLC, System Energy Resources, Inc., and Exelon ESP applications (CLI-04-08), Petitioners' challenges to the ESP application are to be conducted in accordance with the recently revised provisions of 10 C.F.R. Part 2.[5] Under 10 C.F.R. § 2.309(f)(1), the Proposed Contentions must satisfy the following requirements:

(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 in the contention 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) Provide 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

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4 Statement of Policy on Conduct of Adjudicatory Proceedings, CLI-98-12, 48 NRC 18, 22 (1998).

5 69 *Fed. Reg.* 2812 (Jan. 14, 2004).

> 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.

A contention that fails to meet any one of these requirements must be rejected.[6]

These requirements are essentially identical to the Commission's long-standing requirements for contentions in 10 C.F.R. § 2.714(b)(2), which were superceded by Section 2.309(f)(1). Therefore, precedents under the old Section 2.714(b)(2) are equally applicable to Proposed Contentions under the new Section 2.309(f)(1).

The requirements pertaining to contentions are "strict."[7] This strict rule serves several purposes:

> First, it focuses the hearing process on real disputes susceptible of resolution in an adjudication. For example, a petitioner may not demand an adjudicatory hearing to attack generic NRC requirements or regulations, or to express generalized grievances about NRC policies. Second, the rule's requirement of detailed pleadings puts other parties in the proceeding on notice of the petitioners' specific grievances and thus gives them a good idea of the claims they will be either supporting or opposing. Finally, the rule helps to ensure that full adjudicatory hearings are triggered only by those able to proffer at least some minimal factual and legal foundation in support of their contentions.[8]

Contentions must also be set forth with reasonable specificity and particularity.[9] For a contention to be admissible, the petitioner must "include references to the specific portions of the application (including the applicant's environmental report and safety

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6 *See Arizona Public Service Co.* (Palo Verde Nuclear Generating Station, Units 1, 2, and 3), CLI-91-12, 34 NRC 149, 155 (1991).

7 *Duke Energy Corp.* (Oconee Nuclear Station, Units 1, 2 and 3), CLI-99-11, 49 NRC 328, 334 (1999).

8 *Id.* (citations omitted).

9 *Id.* at 355; 10 C.F.R. § 2.309(f)(1).

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."[10] Simply put, the petitioner must provide "supporting grounds" for its contention that the application does not consider some information required by law.[11] An issue that does not directly controvert a position taken in the application is subject to dismissal.[12]

10 C.F.R. § 2.309(f)(1) also requires that the petitioner provide sufficient information to show that a genuine dispute exists with the applicant on a material issue of law or fact.[13] The dispute at issue is "material" if its resolution would "make a difference in the outcome of the licensing proceeding."[14] A contention must be dismissed if it is determined that "the contention, if proven, would be of no consequence in the proceeding because it would not entitle petitioner to relief."[15] A contention will also be dismissed if the petitioner sets forth no facts or expert opinion on which it intends to prove its contention.[16] The NRC will not accept an expert opinion as an adequate basis for an issue if it "merely states a conclusion (*e.g.*, the application is 'deficient,' 'inadequate,' or

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10 Notice of Hearing, 68 *Fed. Reg.* at 69427.

11 *Florida Power & Light Co.*, 54 NRC at 19.

12 *See Private Fuel Storage, L.L.C.* (Independent Spent Fuel Storage Installation), LBP-98-7, 47 NRC 142, 181 (1998).

13 10 C.F.R. § 2.309(f)(1)(vi).

14 *Duke Energy Corp.*, 49 NRC at 333-34.

15 Notice of Hearing, 68 *Fed. Reg.* at 69427 - 69428.

16 *Id.* at 69427.

'wrong,') without providing a reasoned basis or explanation for that conclusion."[17] Further, a contention that challenges the validity of previously issued NRC rules or regulations will not be admitted.[18]

The scope of permissible contentions is bounded by the issues specified in the Notice of Hearing.[19] A contention that raises matters that are not within the scope defined by the notice cannot be admitted.[20] In this case, the Notice of Hearing explicitly limits the scope of the hearing, and, therefore, the scope of contentions, to the following findings:[21]

- Whether the issuance of an ESP will be inimical to the common defense and security or to the health and safety of the public (Safety Issue 1);
- Whether, taking into consideration the site criteria contained in 10 C.F.R. Part 100, a reactor, or reactors, having characteristics that fall within the parameters for the site, can be constructed and operated without undue risk to the health and safety of the public (Safety Issue 2); and
- Whether, in accordance with the requirements of Subpart A of 10 C.F.R. Part 51, the ESP should be issued as proposed.

The Notice of Hearing also states that the contentions are to focus on Exelon's environmental report and safety report.[22]

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17 *Private Fuel Storage*, 47 NRC at 181.

18 *See* 10 C.F.R. § 2.335; *Florida Power & Light Co.*, 54 NRC at 6; *Yankee Atomic Electric Co.*, 43 NRC at 252.

19 *See Georgia Institute of Technology* (Georgia Tech Research Reactor), CLI-95-12, 42 NRC 111, 118 (1995).

20 *See Portland General Electric Co.* (Trojan Nuclear Plant), ALAB-534, 9 NRC 287, 289 n.6 (1979); *see also Public Service Co. of Indiana, Inc.* (Marble Hill Nuclear Generating Station, Units 1 and 2), ALAB-316, 3 NRC 167, 170-71 (1976).

21 Notice of Hearing, 68 *Fed. Reg.* at 69427.

22 *Id.*

Exelon has not yet submitted, or even decided whether to submit, an application to construct and operate a new nuclear plant at the Clinton site. As is clearly reflected in the Notice of Hearing, approval to construct and operate a new plant would require separate NRC authorization and would be the subject of a separate licensing proceeding conducted under 10 C.F.R. Part 52 or under 10 C.F.R. Part 50.[23] Thus, only those contentions raising issues that are relevant and material to siting, not construction and operation of a new nuclear plant, are within the scope of this proceeding.

II. ANALYSIS OF CONTENTIONS

The Petitioners have identified two Proposed Contentions pertaining to the Site Safety Analysis Report ("SSAR"), three Proposed Contentions pertaining to the Environmental Report ("ER"), and one Proposed Contention pertaining to Illinois Statute 220 ILCS 5/8-406. As demonstrated below, the contentions are not admissible because they involve regulatory and policy issues that are outside the scope of this proceeding, include unauthorized challenges to Commission regulations, and are based on unsupported allegations and opinions. Therefore, all of the Proposed Contentions should be rejected.[24]

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[23] *Id.* at 69426.

[24] Under 10 C.F.R. § 2.309(f)(3), "If two or more requestors/petitioners seek to co-sponsor a contention, the requestors/petitioners shall jointly designate a representative who shall have the authority to act for the requestors/petitioners with respect to that contention." The Petitioners have not complied with this requirement. Therefore, if the Board decides to admit one or more of the Petitioners' Proposed Contentions, Exelon requests that the Board direct the

A. Contentions Regarding the Site Safety Analysis Report

Contention 2.1: Safety Assessment of Reactor Interactions

Petitioners state that the ESP application for the Clinton site fails to comply with 10 C.F.R. § 52.17 in that the safety assessment does not adequately take into account the potential effects on radiological accident consequences of co-locating an advanced reactor next to an existing reactor, as allegedly required by 10 C.F.R. § 50.34(a)(1).[25] According to Petitioners, the safety assessment should contain a comprehensive evaluation and analysis of the ways in which interaction of the existing plant with new plants under accident conditions may exacerbate the consequences of a radiological accident.[26] Petitioners assert that an accident at the existing reactor could have significant adverse effects on the operation of the new reactor, particularly in the areas of control room design and environmental qualification of electrical equipment in the new reactor, because new reactors are allegedly designed with fewer features to protect against radiation released during accident conditions.[27]

As discussed more fully below, this Proposed Contention raises matters that are outside the scope of this proceeding. It also fails to establish a material issue of law or fact relevant to the ESP.

Petitioners to designate a single representative who will act for all of the Petitioners with respect to the admitted contention[s].

25 BREDL Request at 2. Note that we assume Petitioners' reference to 10 C.F.R. § 50.23(a)(1) in Contention 2.1 is an error and they, in fact, intend to reference 10 C.F.R. § 50.34(a)(1).

26 *Id.*

27 *Id.* at 5-7.

Under 10 C.F.R. § 52.17(a)(1), "Contents of Applications," ESP applications must contain an analysis and evaluation of the major structures, systems, and components of the facility "that bear significantly on the acceptability of the site" with respect to the radiological consequence evaluation factors identified in 10 C.F.R. § 50.34(a)(1). In turn, Section 50.34(a)(1) requires a "safety assessment of the site and a safety assessment of the facility," and this subsection specifies both site-related and design-related requirements. With respect to siting issues, 10 C.F.R. § 50.34(a)(1) states that the site characteristics must comply with 10 C.F.R. Part 100, "Reactor Site Criteria," and it establishes dose limits from postulated design basis accidents ("DBA") at the exclusion area boundary and low population zone *i.e.*, off-site consequences – at the site boundary and beyond.[28]

Contrary to the claims of the Petitioners, the design-related requirements in Section 50.34(a)(1) are not applicable to ESP applications. As is clearly stated in Section 52.17(a)(1), an ESP application needs to address only those provisions in Section 50.34(a)(1) that "bear significantly on the acceptability of the site" to meet the dose limits in Section 50.34(a)(1). Exelon provided its evaluation of the off-site radiological consequences as required by 10 C.F.R. § 50.34(a)(1) in Section 3.3 of the SSAR.

Petitioners have not identified any specific elements of this analysis, or any other section of the ESP application, that does not adequately address the site characteristics in Part 100 or the off-site radiological consequences, as required by 10 C.F.R. § 50.34(a)(1). Instead, the Proposed Contention concerns in-plant radiological consequences to site

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[28] 10 C.F.R. § 50.34(a)(1) (emphasis added). *See also* NRC Review Standard RS-002, "Processing Applications for Early Site Permits," Section 15.0, "Radiological Consequences of Design Basis Accidents," May 3, 2004.

workers and reactor equipment caused by the potential interaction of the existing reactor with a new reactor. Such an evaluation, however, necessarily entails consideration of detailed reactor and plant design information which Exelon is not required to prepare or submit as part of the ESP application.[29] For example, Petitioners refer to possible adverse radiological consequences associated with control room habitability and environmental qualification of electrical components, which are governed by General Design Criteria ("GDC") 19 and 4 respectively, of Appendix A to 10 C.F.R. Part 50.[30] Exelon, however, is not required by 10 C.F.R. § 52.17(a)(1), or otherwise, to demonstrate compliance with any GDC in the application for the ESP. Compliance with the GDC is required by 10 C.F.R. § 50.34(a)(3), which is not applicable to ESPs. Exelon is only required to submit detailed reactor design information and demonstrate compliance with the GDC if it submits an application to construct and/or operate a new reactor.[31] It is not required to do so here. Therefore, this contention raises matters that are outside the scope of the ESP proceeding and is not admissible.

Further, while it is unnecessary to address GDC or any other detailed reactor design issues at the ESP stage, should Exelon decide to pursue a combined operating license ("COL"), it will be required to demonstrate compliance with all applicable GDC

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29 *See* 10 C.F.R. § 52.17.

30 BREDL Request at 5 - 6.

31 *See* 10 C.F.R. § 52.79, "Contents of Applications; Technical Information," (for Combined Operating License Applications). *See also* RS-002 at 15.0-1 (noting that radiological consequences related to control room personnel are to be evaluated as part of the COL review). *See also* NRC Letter, "Response to Letter on Early Site Permit Topic 7 (ESP-7), Guidance For Satisfying 10 C.F.R. 52.17(a)(1) Requirements," June 20, 2003 (noting that the bounding design basis radiological consequences analyses need not focus on the nature and behaviors of the source term inside containment).

for any proposed reactor, including an advanced reactor. This will include, as necessary, consideration of possible interactions of the existing reactor with a new reactor. If the COL application does not demonstrate compliance with the GDC, including GDC 19 on control room doses and GDC 4 on equipment qualification, a COL will not be issued and the plant will not be constructed or operated. In this regard, it is not appropriate to assume that a future COL application will not comply with the Commission's regulations.[32]

Petitioners have also not provided any supporting grounds, such as expert opinion or other supporting facts, that call into question the ability of any new reactor design to meet these applicable criteria. Therefore, Petitioners' speculation that siting an advanced reactor next to an existing reactor "*may*" or "*could*" result in greater radiological harm to site workers and radiological damage to plant equipment is unsupported.[33]

Based on the above, Exelon is not required to establish compliance with any GDC nor is it required to provide reactor design details impacting in-plant radiological consequences as part of the ESP application. Therefore, there is no genuine dispute on a material issue of law or fact, and this issue should be excluded from further consideration as required by 10 C.F.R. § 2.309(f)(1)(vi).

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[32] *See, e.g., GPU Nuclear Inc. et al.* (Oyster Creek Nuclear Generating Station), CLI-00-06, 51 NRC 193, 206-207 (2000) (noting that absent some documentary support, the Commission will not assume that licensees will contravene applicable regulations).

[33] BREDL Request at 4 – 7 (emphasis added).

Contention 2.2: Below-Grade Placement of Reactor Containment

Petitioners allege that it is advisable and appropriate to locate the reactor containment below grade-level in order to make it a less attractive target for possible terrorist attacks and sabotage. In support of this contention, Petitioners assert that advanced reactors have less "robust" containments than existing reactors and, therefore, are more vulnerable to a possible terrorist assault with a commercial aircraft. Accordingly, Petitioners assert that Exelon should have considered the suitability of the site for below-grade construction of the reactor containment in the ESP application.[34]

As discussed below, there are no NRC regulations that require an applicant to locate a reactor containment below grade-level. Further, NRC regulations expressly state that an applicant for a license to construct or operate a nuclear power plant is not required to provide for design features to protect against possible terrorist attacks and sabotage by an enemy of the United States.[35] Finally, this Proposed Contention is flawed because it does not focus on relevant information already contained in the SSAR. Therefore, this Proposed Contention is an unauthorized challenge to NRC's regulations.

Petitioners assert that Exelon "should be required" to evaluate the Clinton site for below-grade construction of the containment,[36] and that below-grade construction is "advisable and appropriate"[37] and a "prudent design feature."[38] Petitioners' are merely

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34 BREDL Request at 7-12.

35 10 C.F.R. § 50.13, "Attacks and Destructive Acts by Enemies of the United States; and Defense Activities."

36 BREDL Request at 8.

37 *Id.* at 7.

38 *Id.* at 11.

stating their preference for below-grade construction, and do not identify any inconsistency with NRC requirements. In fact, the only regulation cited by Petitioners in support of this contention is 10 C.F.R. § 100.21(f). That regulation, however, requires only that "site characteristics must be such that adequate security plans and measures can be developed." These site characteristics include such things as the distance from a vital structure or vital equipment to the Exclusion Area Boundary ("EAB"), and the distance from highways, railroads, or waterways (if any) that traverse the EAB to vital structures and vital equipment.[39] 10 C.F.R. § 100.21(f) does not require Exelon to evaluate the site for a possible below-grade containment. Exelon addressed compliance with § 100.21(f) in Section 3.4.1.6, Security Plans, of the SSAR. Petitioners have not even referenced this section or challenged any of the information contained therein. Therefore, Petitioners have failed to provide the requisite legal basis for this contention.

As the sole basis for their contention, Petitioners rely upon recent studies on terrorism and nuclear-related terrorism risks. This is an impermissible attempt to introduce terrorism-related reactor design issues into the siting process governed by the ESP. The regulatory requirements for physical protection of nuclear reactors against radiological sabotage, including possible acts of terrorism, are included in 10 C.F.R. § 73.55. That regulation states that the "physical protection system shall be designed to protect against the design basis threat of radiological sabotage as stated in § 73.1(a)."[40] The design basis threat, as defined in § 73.1(a), does not include any attack by

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[39] *See* NRC Regulatory Guide 4.7, "General Site Suitability Criteria for Nuclear Power Stations," Rev. 2 at 4.7-5 (1998) (noting that site characteristics are not normally limiting with regard to the ability to develop adequate security plans).

[40] 10 C.F.R. § 73.55(a).

commercial aircraft. Sections 73.55(b) – (h) provide the specific onsite physical protection system and security organization requirements necessary to protect against the defined design basis threat. None of these security requirements requires construction of a below-grade containment. Therefore, NRC's regulations pertaining to physical protection of nuclear power plants do not require consideration of airborne attacks or below-grade construction.

Further, as clearly stated in 10 C.F.R. § 50.13, an applicant is not required to provide for design features (which would include locating the containment below-grade) to protect against possible terrorist attacks and sabotage by an enemy of the United States, whether by a foreign government or other person.[41] Attacks by individual terrorists or a group of terrorists, as opposed to a particular foreign government, would constitute an attack by an enemy of the United States as referenced in 10 C.F.R. § 50.13.[42]

In particular, an applicant is not required to design a nuclear power plant to withstand crashes of airplanes by terrorists. For example, in an operating licensing proceeding, a licensing board cited Section 50.13 as the grounds for rejecting a contention that a safety analysis was deficient because it did not consider the "consequences of terrorists commandeering a very large airplane and diving it into the

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41 10 C.F.R. § 50.13.

42 *See Private Fuel Storage, L.L.C.* (Independent Spent Fuel Storage Installation), LBP-01-37, 54 NRC 476, 486 (2001) (noting that the terrorist attacks of Sept. 11, 2001 constituted acts by an enemy of the United States). The Board's decision in this case was reviewed and upheld by the Commission. *See Private Fuel Storage, L.L.C.* (Independent Spent Fuel Storage Installation), CLI-02-25, 56 NRC 340 (2002).

containment."[43] The Board in that proceeding held that the contention was barred by 10 C.F.R. § 50.13 because

> Military style attacks with heavier weapons are not a part of the design basis threat for commercial reactors. Reactors could not be effectively protected against such attacks without turning them into virtually impregnable fortresses at much higher cost. Thus Applicants are not required to design against such things as artillery bombardments, missiles with nuclear warheads, or kamikaze dives by large airplanes[.][44]

It is a fundamental principle of NRC adjudication that any contention challenging a Commission regulation, whether directly or indirectly, is outside the scope of a proceeding and impermissible.[45] This principle has been codified in 10 C.F.R. § 2.335(a) which prohibits attacks on the Commission's rules and regulations. Therefore, under 10 C.F.R. § 2.335, the Commission's determination in 10 C.F.R. § 50.13 that there is no need to provide for design features to protect against possible terrorist attacks and sabotage preclude the Petitioners from attempting to introduce any "discovery, proof, or argument" on the terrorism issue into this adjudication.

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43 *Carolina Power & Light Company and North Carolina Eastern Municipal Power Agency* (Shearon Harris Nuclear Power Plant, Units 1 and 2), LBP-82-119, 16 NRC 2069, 2098 (1982). *See also Pacific Gas and Electric Co.* (Diablo Canyon Nuclear Power Plant, Units 1 and 2), ALAB-653, 16 NRC 55, 73 – 74 n. 75 (1981) (noting that the Commission's regulations in Section 50.13 are intended to preclude the need to design plants to withstand attacks by terrorists).

44 *Carolina Power & Light Company*, 16 NRC at 2098.

45 *See* 10 C.F.R. § 2.335; *Duke Energy Corp.* 49 NRC at 343-45; *Public Service Co. of New Hampshire* (Seabrook Station, Units 1 and 2), CLI-89-8, 29 NRC 399, 416-17 (1989).

10 C.F.R. § 2.335(b) provides a means for individuals to request a waiver or exception to a rule.[46] Specifically, Petitioners must submit a petition asking for an exception or waiver of a rule based upon "special circumstances with respect to the subject matter of the particular proceeding . . . such that . . . the rule . . . would not serve the purposes for which [it] was adopted."[47] It is not enough to merely allege "special circumstances;" such circumstances must be set forth with particularity and supported by proof.[48] Here, Petitioners have not shown why this proceeding presents such special circumstances. Therefore, under 10 C.F.R. § 2.335, this issue should be excluded from further consideration as an impermissible challenge to the Commission's regulations in 10 C.F.R. § 50.13.

Finally, Petitioners are incorrect in asserting that Exelon "[did] not evaluate the suitability of the site to locate the reactor below-grade level."[49] As noted in Sections 2.4.13.3 and 2.5.4.12 of the SSAR, Exelon evaluated the suitability of the site for placement of the basemat up to 140 feet below the ground surface as part of its analyses of hydrologic engineering and subsurface conditions. Petitioners have not cited to these sections or challenged any of the information contained therein. Therefore, this contention fails to satisfy 10 C.F.R. § 2.309(f)(1)(vi), which requires contentions to cite and dispute particular statements in the application.

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46 *Florida Power and Light Co.*, 54 NRC at 10 (2001).

47 10 C.F.R. § 2.335(b).

48 *Carolina Power and Light Co. and North Carolina Eastern Municipal Power Agency*, 16 NRC at 2073.

49 BREDL Request at 7.

B. Contentions Regarding the Environmental Report

Petitioners' environmental contentions generally fall into two categories: (1) disagreement with Exelon's consideration of energy alternatives and (2) disagreement with NRC regulations regarding the need to consider "need for power" and storage of spent fuel in an application for an ESP. With regard to Exelon's consideration of energy alternatives, Petitioners do not demonstrate any factual or legal deficiencies in the alternatives analysis. With regard to the "need for power" and storage of spent fuel, Petitioners' arguments are inconsistent with governing regulations. Therefore, none of the environmental contentions satisfy the requirements for admissibility under 10 C.F.R. § 2.309(f)(1).

Contention 3.1: Evaluation of Reasonable Alternatives

Petitioners allege several "shortcomings" in the ER. Specifically, Petitioners allege that (a) NRC must consider energy alternatives as part of its environmental analysis of the ESP application under the National Environmental Policy Act ("NEPA") and 10 C.F.R. § 51.45(b)(3); (b) NRC's regulations which state that ESP applicants do not have to analyze the "need for power" violate NEPA; (c) the ER must consider energy efficiency and renewable energy resources both individually and in combination; (d) the ER improperly rejects energy efficiency alternatives; and (e) the ER improperly rejects viable renewable energy alternatives, including wind and solar power, and distributed generation.[50] As we show below, none of these issues satisfies Section 2.309(f)(1).[51]

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[50] ELPC Request at 2.

[51] If the Licensing Board nevertheless finds that one or more elements are admissible, Exelon requests that the Board reject those elements that are not admissible.

(a) NRC Staff Consideration of Energy Alternatives

Petitioners assert that the NRC is legally required under NEPA and 10 C.F.R. § 51.45(b)(3) to consider energy efficiency and renewable energy resource alternatives in its environmental analysis for the ESP.[52] This element is inconsistent with 10 C.F.R. § 2.309(f)(2) because it focuses on the actions of the NRC rather than the content of the ER.[53]

Section 2.309(f)(2) states that any environmental issues raised in a contention must pertain to the ER. Therefore, this element of the contention should be rejected because, contrary to 10 C.F.R. 2.309(f)(2), this contention focuses on the actions of the NRC, not on the ESP application. Specifically, Petitioners state that the NRC is legally required to consider energy alternatives prior to granting an ESP.[54] As noted in the Notice of Hearing for this proceeding, contentions are to focus on Exelon's ER.[55] Therefore, this element of Contention 3.1 should be rejected under Section 2.309(f)(2).[56]

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52 ELPC Request at 3.

53 As noted below in section (c) in Exelon's response to this Proposed Contention, Section 9.2 of the ER appropriately considers energy efficiency and renewable energy sources.

54 ELPC Request at 3.

55 Notice of Hearing, 68 *Fed. Reg.* at 69427.

56 It is also a fundamental principle of NRC adjudication that a petitioner may not demand an adjudicatory hearing to express generalized grievances about NRC policies. *See Duke Energy Corp.*, 49 NRC at 334. Petitioners have attempted to do so here and this Contention should be rejected for that basis alone.

(b) Consideration of Need for Power

Petitioners assert that it is impossible to engage in an evaluation of alternatives required by NEPA without first analyzing the need for power.[57] This argument is unsupported and inconsistent with 10 C.F.R. §§ 52.17 and 52.18.

Sections 52.17(a)(2) and 52.18 authorize an applicant to defer consideration of the benefits of the proposed facility, including the need for power, until later licensing proceedings. Therefore, Exelon has the flexibility under 10 C.F.R. §§ 52.17 and 52.18 to choose to defer consideration of need for power to the time (if ever) that the ESP is referenced in a combined license or a construction permit application.[58] Petitioners' arguments on need for power constitute an impermissible attack on the Commission's regulations in Section 52.17 and 52.18. Therefore, under 10 C.F.R. § 2.335, this issue should be excluded from further consideration.

In this regard, it should be emphasized that exclusion of the need for power from this ESP proceeding does not mean that need for power will go unconsidered before any such power generation is authorized. As indicated in 10 C.F.R. § 52.79(a), an environmental issue that is not addressed and resolved during an ESP proceeding must be addressed in the combined license ("COL") proceeding. Therefore, prior to receipt of NRC authorization of construction of a new reactor at the Clinton site, Exelon will need to demonstrate a need for the facility. This fully satisfies the requirement in Section

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57 ELPC Request at 4.

58 *See* Letter, from J. Lyons, Director, NRC New Reactor Licensing Project, to M. Kray, Exelon Vice President, Project Development, June 2, 2003. *See also* NRC Proposed Rule, 10 C.F.R. Part 2, et al., 68 Fed. Reg. 40025, 40029 (July 3, 2003).

102(2)(C) of NEPA for consideration of environmental impacts and alternatives prior to any action "significantly affecting the quality of the human environment."

In summary, this element of Contention 3.1 should be rejected as an impermissible attack on NRC's regulations.

(c) Consideration of Energy Efficiency and Renewable Energy Resources in Combination

Citing statements on page 9.2-6 of the ER, Petitioners allege that the ER is legally "flawed" because Exelon fails to consider energy efficiency and various alternative energy resources in combination.[59] Petitioners' contention is without basis and is inconsistent with the clear statements in the ER.

Page 9.2-6 of the ER merely states that the ER does not contain an "expansive consideration" of combinations of energy alternatives, because it would be too unwieldy for the purposes of the alternatives analysis. In the same paragraph, the ER similarly states that Exelon has not evaluated "mixes" of generating sources. Petitioners have taken such statements in the ER out-of-context. Contrary to Petitioners' allegation, the ER does consider various energy alternatives in combination. For example:

- With respect to coal and gas generation, page 9.2-6 states that the ER evaluates the environmental impacts of each type of generator and that the evaluation "bounds the impacts from any generation mixture of the two technologies."
- With respect to the alternative of wind power, page 9.2-7 of the ER considers "[w]ind power, in conjunction with energy storage mechanisms."

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[59] ELPC Request at 5.

- Similarly, with respect to the alternative of solar power, page 9.2-8 of the ER considers solar power "[i]n conjunction with energy storage mechanisms."
- With respect to purchased power, page 9.2-5 of the ER considers the ability of purchased power to "meet a portion of [the] service territory demand" for power.
- With respect to conservation, page 9.2-3 of the ER considers the ability of conservation to "reduce demand for electricity."

Therefore, both explicitly and implicitly, the ER does consider combinations of alternatives.

More importantly, the ER does not reject any alternative on the ground that it is insufficient to supply the entire capacity of a potential nuclear power plant at the Clinton site. Instead, alternative energy sources are rejected on either environmental or technological grounds. These same grounds apply, whether the alternative is considered individually or in combination - - *e.g.*, an alternative that is environmentally inferior to nuclear power does not become environmentally superior simply by being considered in conjunction with other energy sources.

In summary, the ER does give consideration to combinations of energy alternatives.[60] Furthermore, the reasons given in the ER for rejecting an alternative are valid, whether the alternative is considered individually or in combination. Therefore, Petitioners' contention should be rejected because it does not identify any genuine issue of material fact as required by 10 C.F.R. § 2.309(f)(1).

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[60] The alternatives evaluation in the ER is entirely consistent with NRC guidance contained in NUREG-1555, Environmental Standard Review Plan, Section 9.2, Energy Alternatives.

In addition, the Petitioners' contention should be rejected because it lacks any basis. The contention alleges that "a combination of wind power, solar power, energy efficiency, distributed generation, and 'clean coal' technology would be a better, lower-cost, and environmentally preferable alternative to a new nuclear plant."[61] However, contrary to 10 C.F.R. § 2.309(f)(1), the Petitioners have not provided any "facts or expert opinions" or any references to "specific sources and documents" to support its contention that such a combination would be preferable.[62]

In summary, Petitioners have not met their burden under 10 C.F.R. 2.309(f)(1)(vi) to show that a genuine dispute exists with the applicant on a material issue of law or fact. Therefore, this element of Contention 3.1 should be rejected.

(d) Consideration of Energy Efficiency Alternatives

Petitioners cite various studies regarding energy efficiency technologies for, among other things, commercial and residential lighting, heating, ventilation and cooling, industrial motors, and refrigerators, and other appliances. Based upon these studies, Petitioners assert that energy efficiency can substantially reduce energy demands and is a reasonable alternative to the proposed action.[63]

Contrary to Petitioners' assertions, neither Exelon nor the NRC is required by regulations or precedent to consider alternatives, such as energy efficiency, that are not within Exelon's reasonable ability as a merchant generator to implement and that are directly contrary to the stated economic goals of the project.

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61 ELPC Request at 5.

62 It is also not clear what Petitioners mean by a "better" alternative.

63 ELPC Request at 5 – 9.

As stated in Exelon's ER, the purpose of the ESP is to set aside the proposed site for future large-scale (approximately 6800 MWt), base load electrical generation for sale on the wholesale energy market.[64] The Commission has held that agencies need only discuss alternatives that are reasonable and "will bring about the ends" of the proposed action.[65] When the purpose is to accomplish one thing, "it makes no sense to consider the alternate ways by which another thing may be achieved."[66] Similarly, the Courts have held that any discussion of alternatives must be moored to "some notion of feasibility."[67] An agency "cannot redefine the goals of the proposal that arouses the call for action; it must evaluate alternative ways of achieving *its* goals, shaped by the application at issue[.]"[68] Where a federal agency is not the sponsor of a project, the "consideration of alternatives may accord substantial weight to the preferences of the applicant . . . in the . . . design of the project."[69] Further, an agency is allowed to consider the economic goals of the project's sponsor in determining the scope of alternatives to be evaluated.[70]

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64 *See* Section 1.1, "Purpose of the ESP Submittal," and Sections 1.1.2 and 9.2.2 of the ER. Note that 6800 MWt corresponds to more than 2000 MWe assuming a plant operates at more than 30% thermal efficiency (which is low for a nuclear plant).

65 *Hydro Resources, Inc.*, CLI-01-04, 53 NRC 31, 55 (2001) (citing *Citizens Against Burlington v. Busey*, 938 F.2d 190, 195 (D.C. Cir. 1991), cert. denied, 502 U.S. 994 (1991)).

66 *Id.*

67 *See Citizens Against Burlington, Inc.* 938 F.2d at 195 (citing *Vermont Yankee Nuclear Power Corp. v. Natural Resources Defense Council, Inc.*, 435 U.S. 519, 551 (1978)).

68 *Id.* at 199.

69 *City of Grapevine, Texas v. Department of Transportation*, 17 F.3d 1502,1506 (D.C. Cir. 1994) (citing *Citizens Against Burlington*, 938 F.2d at 197-198).

70 *Id.* at 1506.

As noted above, the stated purpose of this project is to set aside a site for future, large scale, highly-reliable, base load energy generation. Base load generation is intended to run near full rating continuously, day and night, with high availability. Therefore, in accordance with the above-cited precedent regarding an appropriate set of alternatives to the proposed action, Exelon considered in detail discrete, large scale, highly reliable, technically reasonable and commercially viable, base load electric generators.[71] Neither energy conservation nor energy efficiency meet the goals of this project, because they do not supply electrical power. Therefore, they are not reasonable alternatives to a new nuclear power plant at the Clinton site and may be excluded from consideration.

Petitioners claim that Exelon is required to consider alternatives, whether or not Exelon is able to carry them out, citing the 7th Circuit's decision in *Simmons*.[72] *Simmons,* however, does not support this too broad proposition. In *Simmons*, the 7th Circuit held that the Army Corps of Engineers failed to comply with its duty under NEPA by unduly constricting the definition of the project's purpose, thereby excluding truly reasonable alternatives to meet the general goals of the project (*i.e.*, consideration of alternate water supply line paths to meet increased water demands).[73] *Simmons* does not hold that the Corps should have considered alternatives outside the authority of the project's sponsor. Therefore, Petitioners' claim that Exelon must consider alternatives involving promotion of energy efficiency technologies, many of which are not under

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71 *See* Section 9.2.2 of ER.

72 ELPC Request at 6 (emphasis added) (citing *Simmons v. U.S. Army Corps of Engineers*, 120 F.3d 664, 666 (7th Cir. 1997)).

73 *Simmons*, 120 F.3d at 666.

Exelon's control (*e.g.*, appliance efficiency standards), is both unsupported and unreasonable.

In this regard, the purpose of a merchant generating plant (such as proposed for the Clinton site) is to *generate revenue for Exelon from the sale of electricity.*[74] Alternatives involving conservation do not involve the sale of electricity, and therefore will not serve Exelon's economic purpose for the Clinton project. Instead, energy conservation is the responsibility of other entities (in general, the choices of private consumers). As a result, as stated on pages 9.2-2 and 9.2-3 of the ER, conservation is not a reasonable alternative to the Clinton project because it will not serve Exelon's economic goals. As the Commission has recently stated with respect to another project sponsored by a private applicant:[75]

> The Intervenors entirely ignore the nature of the ISL project — it is a project proposed by a private applicant, not the NRC. "Where the Federal government acts, not as a proprietor, but to approve . . . a project being sponsored by a local government or private applicant, the Federal agency is necessarily more limited." Citizens Against Burlington, 938 F.2d at 197. The NRC is not in the business of crafting broad energy policy involving other agencies and non-licensee entities. Nor does the initiative to build a nuclear facility or undertake ISL uranium mining belong to the NRC.
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> When reviewing a discrete license application filed by a private applicant, a federal agency may appropriately "accord substantial weight to the preferences of the applicant and/or sponsor in the siting and design of the project." Id. The agency thus may take into account the "economic goals of the project's sponsor." City of Grapevine v. U.S. Dept. of Transportation, 17 F.3d 1502, 1506 (D.C. Cir.), *cert. denied,* 513 U.S. 1043 (1994); see also Citizens Against Burlington, 938 F.2d at 196 ("the agency should take into account the needs and goals of the parties involved in the application").

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74 *See* ER at 9.2-2 (emphasis added).

75 *Hydro Resources, Inc.*, 53 NRC at 55-56.

Since Petitioners do not dispute that conservation will not serve the economic goals of the Clinton project, there is no basis for litigating the issue of conservation in this proceeding.

Furthermore, energy conservation is now the province of the marketplace and is not subject to regulation. As noted in Section 9.2.2 of the ER, Illinois enacted the Illinois Electricity Choice Act in 1997 which "deregulated" the retail electricity market. Electrical generation supply is now based on customer's needs and preferences, and market forces are expected to drive the appropriate supply/demand balance. Further, conservation and load-management incentive programs formerly dictated by Illinois regulatory bodies are no longer required and are generally not economically feasible, given the competitive nature of the electricity market. As a result of these market-driven changes, alternatives that do not require additional generating capacity are not reasonable alternatives to locating a merchant power plant in Illinois.

Based on the above, Petitioners have not met their burden under 10 C.F.R. 2.309(f)(1)(vi) to show that a genuine dispute exists with the applicant on a material issue of law or fact. Therefore, this element of Contention 3.1 should be rejected.

(e) Consideration of renewable energy alternatives, including wind and solar power, and distributed generation.

Petitioners assert that Exelon improperly rejected a number of viable renewable energy resources including wind and solar power and distributed generation.[76]

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[76] ELPC Request at 9.

Petitioners further assert that these resources, in combination with other energy alternatives, represent a reasonable alternative to a new generating plant at Clinton.[77]

The renewable energy alternatives cited by Petitioners in this Proposed Contention cannot, due to environmental and technical limitations, meet the stated goals of this project – large scale, highly-reliable, base load energy generation. Petitioners do not contest the statements on pages 9.2-7 and 9.2-8 of the ER, which state that solar and wind cannot provide baseload generation, without unduly expensive storage systems. Similarly, Petitioners do not allege that distributed generation could provide baseload generation. Therefore, this contention does not demonstrate a genuine dispute with the applicant on a material issue of law or fact.

As indicated by Petitioners' own exhibits, wind "blows steadily at times and not at all at other times."[78] As a result, most modern utility-scale wind turbines operate with a capacity factor of 25% - 40%.[79] Similarly, solar power cannot operate continuously and cannot provide baseload power. Therefore, these intermittent forms of energy are plainly not a reasonable and feasible alternative, even in combination with renewable or efficiency alternatives, to the base-load generation proposed by Exelon.

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77 ELPC Request at 9 – 10. Petitioners also assert that the NRC's Generic Environmental Impact Statement for License Renewal of Nuclear Plants ("GEIS"), which is referenced in the ER, represents an "outdated view" of the viability and environmental impacts of renewable energy resources. ELPC Request at 10. However, Petitioners have not cited to any specific data in the GEIS that it considers incorrect and have not provided any supporting facts or expert testimony to support this vague assertion. Therefore, there is no basis under Section 2.309(f)(1) to consider this issue further in this proceeding.

78 American Wind Energy Association, *The Most Frequently Asked Questions About Wind Energy* (2002), P. 5 (ELPC Exhibit 15).

79 *Id.*

With regard to solar power, Petitioners have not even asserted that this is an environmentally preferable alternative or that it could reasonably meet the stated goals of the project. Instead, Petitioners assert only that the ER is "distorted" in stating that 77,000 acres of photovoltaic cells or 30,800 acres of solar thermal systems would be needed to replace the power that would be produced by a new Clinton reactor.[80] Petitioners have not provided any "facts or expert opinion" or "references to specific sources and documents" to show that solar is technologically capable of supplying base load power or that it is environmentally preferable to a nuclear power plant. Absent a showing that an alternative is environmentally preferable, the NRC is under no obligation to consider the alternative.[81]

Finally, with regard to distributed generation, Petitioners assert that on-site natural gas-fired generation, district energy systems (*e.g.*, steam pipes), co-generation plants, and fuel cells could address base load generation needs.[82] Again, Petitioners have not provided any "facts or expert opinion" or "references to specific sources and documents" as required by Section 2.309(f) to show that distributed generation is technologically capable of meeting base load demand or that it is environmentally preferable to a nuclear power plant.

Based on the above, Petitioners have not met their burden under 10 C.F.R. 2.309(f)(1)(vi) to show that a genuine dispute exists on a material issue of law or fact. Therefore, this element of Contention 3.1 should be rejected.

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80 ELPC Request at 13.

81 *Virginia Electric and Power Co.* (North Anna Power Station, Units 1 and 2), ALAB-584, 11 NRC 451, 456 – 458 (1980).

82 ELPC Request at 13.

Contention 3.2: The Waste Confidence Rule

Petitioners allege that the ER is deficient because it fails to discuss the environmental implications of the lack of options for permanent disposal of spent fuel from the proposed reactor. Petitioners further allege that the NRC's Waste Confidence Rule ("WCR") is inapplicable to the ESP application because (1) the WCR does not apply to new plants, (2) spent fuel generated by a new Clinton reactor could not be disposed of at Yucca Mountain, given its limited capacity, and (3) NRC has not expressed confidence that a second repository will open.[83]

As demonstrated below, the Commission, in the WCR, expressed confidence that sufficient new repository capacity will be available when necessary to store spent fuel, including spent fuel generated by new reactors. Therefore, the WCR directly applies to this proceeding, and Petitioners' contention is an unauthorized challenge to NRC's rules and regulations in violation of 10 C.F.R. § 2.335 and should be rejected.

By longstanding practice, repeatedly upheld on judicial review, the Commission has generically considered and addressed through rulemaking specific environmental issues that would otherwise have been addressed in individual licensing proceedings.[84] With regard to consideration of high level waste disposal in licensing proceedings, the Commission chose to address that issue generically through a rulemaking, known as the "waste confidence" determination or Waste Confidence Rule.[85] The Waste Confidence Rule, 10 C.F.R. § 51.23(b), states as follows:

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83 *Id.* at 14-18.

84 *Florida Power and Light Co.*, 54 NRC at 14.

85 *See Duke Energy Corp.* (Oconee Nuclear Station, Units 1, 2, and 3), 49 NRC at 345.

> . . . no discussion of any environmental impact of spent fuel storage in reactor facility storage pools or independent spent fuel storage installations (ISFSI) for the period following the term of the reactor operating license or amendment or initial ISFSI license or amendment for which application is made, is required in any environmental report, environmental impact statement, environmental assessment or other analysis prepared in connection with the issuance or amendment of an operating license for a nuclear reactor or in connection with the issuance of an initial license for storage of spent fuel at an ISFSI, or any amendment thereto.

Petitioners state that this rule should not apply because a new Clinton nuclear power plant would create high level nuclear waste that was not considered during the promulgation of the WCR, and because the proposed Yucca Mountain repository will not have sufficient capacity to hold all of the high-level nuclear waste from existing nuclear power plants, much less a new Clinton reactor.[86] As discussed below, Petitioners' claims are directly contrary to the history and language of the WCR.

The NRC, in its 1990 interim review and revisions to the WCR, specifically considered and addressed the possible limited disposal capacity at Yucca mountain and spent fuel from new plants.[87] Specifically, NRC found that a second repository may be necessary to store spent fuel from existing reactors and "spent fuel discharged from any new generation of reactor designs,"[88] and that Congress will, if necessary, "provide the needed institutional support and funding [for additional capacity], as it has for the first repository."[89]

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86 ELPC Request at 15-16.

87 55 *Fed. Reg.* 38474.

88 *Id.* at 38503.

89 *Id.* at 38502.

These conclusions are reflected in revised Finding 2 of the WCR, which states:[20]

> The Commission finds reasonable assurance that at least one mined geologic repository will be available within the first quarter of the twenty-first century, and that sufficient repository capacity will be available within 30 years beyond the licensed life for operation...of *any* reactor to dispose of the commercial high-level radioactive waste and spent fuel originating in such reactor and generated up to that time.

Petitioners contend that it may take decades to develop a second repository to dispose of waste from a new nuclear plant.[21] Even if that were assumed arguendo to be true, it was not unreasonable for the Commission to find that sufficient additional repository space would be available within 90 years of operation of a new nuclear plant (40 years of initial operating life plus 20 years of extended life plus 30 years of storage).[22]

Therefore, contrary to Petitioners' assertions, the limited capacity of Yucca Mountain, the construction of new reactor plants, and the generation of spent fuel from new reactor plants were all fully considered by the NRC as part of its 1990 review of and revisions to the WCR, and the WCR is directly applicable to this proceeding. Therefore, under 10 C.F.R. § 2.335, the Commission's generic environmental rulemaking determinations governing high level waste storage preclude the Petitioners from

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20 *Id.* at 38474 (emphasis added); 10 C.F.R. § 51.23(a).

21 ELPC Request at 17.

22 *See* 55 *Fed Reg.* at 38504 (noting that the 30 year storage period is beyond the end of the period of *extended* life).

attempting to introduce such waste issues into this adjudication.[93] Consequently, Petitioners' contention should be rejected.

Contention 3.3: Reconsideration of the Waste Confidence Decision

Petitioners allege that the findings of the WCR, if applicable to this proceeding, should be reconsidered under NEPA in light of significant and unexpected events involving the increased threat of terrorist attacks against U.S. facilities.[94]

It is not clear from this contention whether Petitioners are seeking a waiver or exception to the WCR in this proceeding or a change to the WCR itself. In either case, Petitioners have not complied with the requirements of 10 C.F.R. § 2.335.

As noted in Exelon's response to Contention 2.2, 10 C.F.R. § 2.335(b) provides a means for individuals to ask for an exception or waiver of a rule based upon special circumstances with respect to the subject matter of the *particular proceeding.*[95] Petitioners have not complied with this requirement, and therefore, this contention should be rejected. Specifically, Petitioners cite to "homeland security risks posed by indefinite temporary storage of spent fuel."[96] Petitioners, however, make no mention of any particular threat to the Clinton site. In this case, Petitioners would have to show that the actual threat to the plant in question is greater than that which the Commission determined should be postulated for nuclear plants in general *i.e.*, Petitioners would have

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93 *Duke Energy Corp.* 49 NRC at 344-45 (precluding consideration of the availability and viability of off-site high level waste disposal sites in a license renewal proceeding by referencing 10 C.F.R. § 51.23).

94 BREDL Request at 12-14.

95 *See Pacific Gas and Electric Company*, 16 NRC at 71 (emphasis added).

96 BREDL Request at 13.

to show a particularized threat to a plant at the Clinton site rather than a generic threat.[97] Clearly, Petitioners have not done so here, and therefore have not shown "special circumstances" that would justify a waiver or exception in this case under 10 C.F.R. § 2.335(b).

This Proposed Contention is essentially a generic challenge to the WCR itself. Such a challenge should be reserved for a petition for rulemaking, rather than litigation in an individual proceeding.[98] However, even if Petitioners' generic concerns were cognizable in this proceeding, they would not provide an adequate basis for overturning the WCR. As the sole basis for their contention, Petitioners cite an overall threat of a terrorist attack on spent nuclear fuel.[99] However, in this contention, Petitioners acknowledge that the Commission has ruled that environmental impacts of terrorist attacks "are not cognizable under NEPA."[100] In *Private Fuel Storage,*[101] the Commission detailed four principal reasons for holding that NEPA does not require a terrorism review: (1) the possibility of a terrorist attack is speculative and too far removed from the natural or expected consequences of agency action to require a study under the "rule of reason" inherent in NEPA; (2) the risk of a terrorist attack at a nuclear facility cannot be adequately determined; (3) NEPA does not require a "worst case" analysis, which

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97 *See Pacific Gas and Electric Company*, 16 NRC at 72 - 74.

98 *See Duke Energy Corporation* (Oconee Nuclear Station, Units 1, 2, and 3), CLI-99-11, 49 NRC 328, 345 (1999).

99 BREDL Request at 13.

100 BREDL Request at 14 (referencing *Pacific Gas & Electric Co.* (Diablo Canyon Independent Spent Fuel Storage Installation), CLI-03-01, 57 NRC 1 (2003); *Private Fuel Storage, L.L.C.* (Independent Fuel Storage Installation), CLI-02-25, 56 NRC 340 (2002)).

101 *Private Fuel Storage*, 56 NRC at 346 – 57.

creates a distorted picture of the project's impacts; and (4) NEPA is not an appropriate forum for considering sensitive security issues. Thus, Petitioners are seeking a reconsideration of the WCR based upon a ground (*i.e.*, terrorism) that the Commission has already concluded need not be considered under NEPA.

Petitioners also request the Commission to reconsider its decisions in *Private Fuel Storage.*[102] As a threshold matter, this request is not a sufficient basis for a contention before the Licensing Board, because the Licensing Board is bound by Commission precedent.[103] In any event, the Petitioners have not provided a sufficient basis for their request. In particular, they have not presented any information that would call into question *any* of the four principal reasons in *Private Fuel Storage* for rejecting consideration of terrorists attacks under NEPA, let alone showing that *all* four reasons are no longer valid. Therefore, Petitioners have not provided any basis for the Commission to overturn its well-reasoned decision in *Private Fuel Storage.*

In summary, the Petitioners have not complied with 10 C.F.R. § 2.335(b), have not identified any special circumstances for an exception to the WCR, and have not provided any basis for reconsidering the Commission's decision in *Private Fuel Storage.* Therefore, this contention should be rejected.

C. **Miscellaneous Contention**

Contention 5.1: The Illinois Statute Imposing a Moratorium on Construction

Petitioners assert that the NRC must deny the ESP application because it would

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102 BREDL Request at 14.

103 *See, e.g., Virginia Electric and Power Co.*, 11 NRC at 465 (noting that the Board's obligation to follow Commission precedent would preclude acceptance of Intervenor's contention).

violate Illinois Statute, 220 ILCS 5/8-406(c), which prohibits any new nuclear power plant within the state until such time as the Director of the Illinois Environmental Protection Agency ("IEPA") finds that the U.S. government has identified and approved a demonstrable technology or means for the disposal of high-level nuclear waste. Petitioners further assert that the Director of the IEPA has not made the requisite finding.[104]

The Illinois Statute cited by Petitioners is part of the Illinois Public Utilities Act ("Act"), 220 ILCS 5/1-101 *et seq*. As explained below, this statute only prohibits *construction* of a new nuclear power plant in Illinois until a demonstrable technology for the disposal of high level waste is developed. It does not prohibit NRC approval of an ESP, and does not discuss siting or site approvals.[105]

Section 8-406(c) of the Illinois Statute states as follows:

> After the effective date of this amendatory Act of 1987, no *construction* shall commence on any new nuclear power plant to be located within this State, and no certificate of public convenience and necessity or other authorization shall be issued therefor by the [Illinois Commerce] Commission [ICC], until the Director of the Illinois Environmental Protection Agency [Illinois EPA] finds that the United States Government, through its authorized agency, has identified and approved a demonstrable technology or means for the disposal of high level nuclear waste, or until such construction has been specifically approved by a statute enacted by the [Illinois] General Assembly.[106]

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104 ELPC Request at 18 – 19.

105 Petitioners claim that the Illinois Statute does not discuss siting because it was enacted prior to promulgation of the Commission's ESP regulations in Part 52. ELPC Request at 19-20. However, the NRC has had provisions for separately approving sites (*i.e.*, 10 C.F.R. Part 50 Appendix Q and Subpart F to 10 C.F.R. Part 2) since 1977, well before enactment of the Illinois statute in 1987.

106 Illinois Statute § 220 ILCS 5/8-406 (emphasis added). Contrary to Petitioners' claim (ELPC Request at 19), the Illinois Statute does not contain a "legal determination that there is no appropriate site for a new nuclear plant." Instead, it

"Construction" is not defined in the above statute, the Act, or the General Provisions of the Illinois Compiled Statute.[107] In the absence of a definition of "construction" in either the statute or Act, it would be reasonable to apply the NRC definition of construction in 10 C.F.R. Part 50. The NRC defines construction to include "pouring the foundation for, or the installation of, any portion of the permanent facility on the site." 10 C.F.R. § 50.10(b).

Under this definition, an ESP does not permit construction of a new nuclear power plant. At most, an ESP allows only the activities permitted by 10 C.F.R. § 50.10(e)(1), which include: (1) preparation of the site for construction (including grading and construction of temporary access roads); (2) installation of temporary construction support facilities (including warehouses and concrete mixing plants); (3) excavation; (4) construction of service facilities such as roads; and (5) construction of structures, systems and components that do not prevent or mitigate accidents. 10 C.F.R. § 52.25 (citing 10 C.F.R. § 50.10(e)(1)).[108] Such activities do not constitute "construction" as defined in 10 C.F.R. § 50.10(b). Accordingly, the activities permitted by an ESP are not prohibited by the Illinois Statute.

Further, issuance of an ESP is not inconsistent with the intent of the Illinois Statute. Specifically, the statute does not impose an absolute bar to construction of new

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only prohibits construction and issuance of an ICC Certificate authorizing construction.

107 The "General Provisions" section of the Illinois Compiled Statutes does not contain a definition section. 5 ILCS. The Public Utilities Act contains a definition section, but that section does not define "construction." 220 ILCS 5/Art. III. Definitions.

108 These activities are permitted only if the ESP includes a site redress plan. 10 C.F.R. § 52.25.

nuclear plants. Instead, it only prohibits construction until such time as the IEPA finds that there is an approved means for disposal of high level waste or until the Illinois General Assembly specifically approves construction. An ESP is intended to "bank" a site for up to 20 or more years for possible later use in an application for a construction permit or combined license for a new reactor plant. 10 C.F.R. § 52.27(a). Accordingly, an ESP has value even though the IEPA and Legislature have not yet taken action, because an ESP could be used to obtain approval of a site pending state action, thereby saving time in the application review process with NRC. Therefore, an ESP is not inconsistent with the intent of the Illinois Statute.

Finally, in 2002, Congress and the President of the United States approved Yucca Mountain as the location for a high level waste repository, and the Department of Energy ("DOE") is expecting to submit a license application for the Yucca Mountain repository in 2004, which could lead to NRC approval of the repository and commencement of construction by 2008.[109] Therefore, under the Illinois Statute, approval of "a demonstrable technology or means of disposal of high level nuclear waste" could occur well before the expiration of an ESP for the Clinton site. This would lift the bar on construction on new nuclear plants in Illinois, and permit use of the Clinton site for construction of a new nuclear plant.

Petitioners also imply that approval of Yucca Mountain will not be sufficient to satisfy the Illinois Statute, because it will not have enough capacity to hold all of the waste produced by current plants, much less new plants.[110] The Illinois Statute, however,

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109 http://www.ocrwm.doe.gov/ymp/la/index.shtml.

110 ELPC Request at 20.

does not require construction and operation of a repository sufficient to hold the spent fuel from a new nuclear plant – it only requires approval of a "demonstrable technology or means of disposal."[111]

Based on the above, issuance of an ESP is not prohibited by or inconsistent with the intent of the Illinois Statute. Therefore, there is no genuine dispute on a material issue of law or fact, and this issue should be excluded from further consideration as required by 10 C.F.R. § 2.309(f)(1)(vi).

III. PETITIONERS HAVE NOT JUSTIFIED USE OF THE HEARING PROCEDURES IN SUBPART G

The Commission's recent revision to 10 C.F.R. Part 2 established several hearing tracks. Of particular relevance to ESPs, Subpart L establishes informal hearing procedures and Subpart G establishes formal hearing procedures. The selection of the appropriate hearing track depends upon the nature of the contentions. 10 C.F.R. § 2.309(g) states as follows:

> A request for hearing and/or petition for leave to intervene may also address the selection of hearing procedures, taking into account the provisions of § 2.310. If a request/petition relies upon § 2.310(d), the request/petition must demonstrate, by reference to the contention and the bases provided and the specific procedures in subpart G of this part, that resolution of the contention necessitates resolution of material issues of fact which may be best determined through the use of the identified procedures.

In turn, Section 2.310(d) states

> In proceedings for the grant, renewal, licensee-initiated amendment, or termination of licenses or permits for nuclear power reactors, where the presiding officer by order finds that resolution of the contention or contested matter necessitates resolution of issues of material fact relating to the occurrence of a past activity, where the credibility of an eyewitness may reasonably be expected to be at issue, and/or issues of motive or intent of the party or eyewitness material

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111 *See* Section 8-406(c) of the Illinois Statute.

to the resolution of the contested matter, the hearing for resolution of that contention or contested matter will be conducted under subpart G of this part.

When it issued the new Part 2 rule, the Commission stated that given the provision in Section 2.310(d), "Subpart L procedures would be used, as a general matter, for hearings on power reactor construction permit and operating license applications under Parts 50 and 52."[112] Petitioners have chosen not to address the selection of any hearing procedures in their Petitions. Therefore, by default, this proceeding should be conducted under Subparts C and L.

In any event, the Proposed Contentions largely raise issues of law pertaining to the scope of NEPA (Contentions 3.1 and 3.3), applicability of the WCR (Contentions 3.2 and 3.3), compliance with Illinois Statute 220 ILCS 5/8-406(c) (Contention 5.1), and the scope of an ESP proceeding under 10 C.F.R. Part 52 (Contentions 2.1 and 2.2). Furthermore, to the extent that the Proposed Contentions raise factual issues, none of the Proposed Contentions, if admitted, would require eyewitness or other fact-specific testimony pertaining to a past activity, motive, or intent. Therefore, under Section 2.310(d), there is no basis for applying the formal hearing procedures in 10 C.F.R. Part 2, Subpart G. Instead, the hearing procedures in 10 C.F.R. Part 2, Subpart C and L should be applied to this proceeding.

IV. CONCLUSION

For the reasons discussed above, none of the Proposed Contentions submitted by the Petitioners satisfies the requirements in 10 C.F.R. § 2.309(f)(1). As stated in the notice of this proceeding, a petitioner who fails to satisfy "the requirements of 10 C.F.R.

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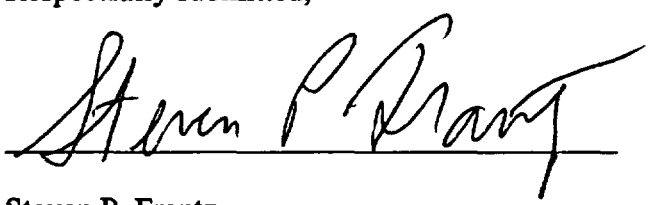
112 69 *Fed. Reg.* 2182, 2206 (Jan. 14, 2004).

2.714(b)(2) [now 2.309(f)(1)] with respect to at least one contention will not be permitted to participate as a party."[113] Since the Petitioners have not offered at least one admissible contention, their petition to intervene and request for hearing should be denied.

Respectfully submitted,



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[113] 68 *Fed. Reg.* 69426, 69427 (December 12, 2003).

UNITED STATES OF AMERICA
NUCLEAR REGULATORY COMMISSION

BEFORE THE ATOMIC SAFETY AND LICENSING BOARD

In the Matter of	)	**Docket No. 52-007**
EXELON GENERATION COMPANY, LLC	)	**ASLBP No. 04-821-01-ESP**
(Early Site Permit for the Clinton ESP Site)	)	

CERTIFICATE OF SERVICE

I hereby certify that copies of "Exelon Generation Company's Answer to Proposed Contentions" in the captioned proceeding have been served as shown below by deposit in the United States mail, first class, this 28th day of May 2004. Additional service has also been made this same day by electronic mail as shown below.

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