

**UNITED STATES OF AMERICA
NUCLEAR REGULATORY COMMISSION**

BEFORE THE COMMISSION

**In the Matter of
South Texas Project Nuclear Operating Co.
Application for the South Texas Project
Units 3 and 4
Combined Operating License**

Docket Nos. 52-012, 52-013

March 25, 2011

**INTERVENORS' ANSWER IN OPPOSITION TO NRC STAFF'S PETITION FOR
REVIEW OF THE LICENSING BOARD'S DECISION IN LBP-11-07 DENYING NRC
STAFF MOTION FOR SUMMARY DISPOSITION**

Introduction

Pursuant to 10 C.F.R. 2.341(b)(3) the Intervenors offer this answer to the Staff's petition for review of the ASLB's decision in LB-11-07 that denied the Staff's motion for summary disposition on contention CL-2.¹ Intervenors maintain that the decision in LB-11-07 is correct as a matter of law. Accordingly, the petition for review should be denied.

The Staff's appeal raises the question whether all severe accident mitigation design alternatives (SAMDA) issues are resolved *via* the ABWR design certification rule² and related Technical Support Document (TSD).³ The central issue raised by the petition for review is whether replacement power costs are included in the scope of issues considered in the design

¹ Contention CL-2 states as follows: "The Applicant's calculation in ER Section 7.5S of replacement power costs in the event of a forced shutdown of multiple STP Units is erroneous because it underestimates replacement power costs and fails to consider disruptive impacts, including ERCOT price spikes."

² 10 C.F.R. Pt. 52, Appendix A, Section VI.B.7. Issues actually resolved in the design certification process are entitled to finality for agency purposes under 10 C.F.R. 52.63(a)(5).

³ Staff Petition for Review, p. 4.

certification process and, if not, whether such may form the basis of contentions in a combined operating license adjudication. The Board's decision and the Intervenor's position is that the ABWR design certification rule does not foreclose contentions that deal with matters that are outside the scope of the rule and have not been considered by the Design Control Document (DCD) or the TSD.

Summary of ASLB decision

The decision in LB-11-07 concluded that genuine issues of material fact are in dispute because the ABWR TSD does not include specific site parameters such as replacement power costs likely to be incurred in the event of multiple unit forced outages. This omission precludes application of 10 C.F.R. Pt. 52, Appendix A, Section VI.B.7 because that regulation only precludes contentions that address issues related to site parameters listed in the ABWR TSD.⁴

Record citations where issue on appeal was raised with the ASLB

Intervenors agree with the record citations in Staff's brief where this issue was raised with the ASLB.⁵

The ASLB's decision was correct as a matter of law.

Preclusive effect under 10 C.F.R. Pt. 52, Appendix A, Section VI.B.7 is allowed only to the extent that issues have been addressed in the course of the design certification process. Replacement power costs were not covered in the design certification document or in the related TSD.⁶ Accordingly, in order to meet the requirement to consider alternatives that reduce or avoid adverse environmental

⁴ LBP-11-07, p. 24.

⁵ Staff Petition for Review, pp. 2-4.

⁶ Intervenors argued that neither the ABWR EA nor the TSD address replacement power costs. Intervenor's Response to Staff Motion for Summary Disposition, p.5.

consequences under the National Environmental Policy Act, 42 U.S.C. 4331, et seq. (NEPA), and 10 C.F.R. 51.71(d) it was proper for the ASLB to deny Staff's dispositive motion.

Review should be denied because there is Commission precedent that controls the issue of whether replacement power costs are germane in COL proceedings.

Staff asserts that review should be granted because there is no controlling precedent “for rulings regarding the identification of site parameters in the ABWR design certification.”⁷ This assertion implies that there is no precedent for including contentions on economic impacts in the SAMA/SAMDA context. However, this argument overlooks N.R.C. precedent that anticipates SAMA/SAMDA contentions on economic costs.⁸ Accordingly, because the Commission already recognizes that a DCD SAMA/SAMDA does not preclude economic impact contentions, there is no reason to grant review here.

NEPA and 10 C.F.R. 51.71(d) require consideration of the replacement power costs in the event of forced shutdown of multiple STP units.

In the context of SAMDA issues, NEPA and 10 C.F.R. 51.71(d) require consideration of alternatives that are available to mitigate adverse environmental impacts. 10 C.F.R. 51.71(d) addresses the contents of a draft environmental impact statement and it requires consideration of the economic benefits and costs of operation of STP Units 3 & 4. One such impact related to operation of these units concerns the costs of replacement power if multiple units are forced from service. Staff asserts that consideration of this impact is precluded because the ABWR design certification process yielded a rule that decided all SAMDA related environmental issues. Staff further contends that the LB-11-07 decision effectively nullifies the preclusive aspect of the ABWR design certification rule.⁹

⁷ Id. at p. 9.

⁸ *In the Matter of Entergy Nuclear Generation Co. and Entergy Nuclear Operations, Inc.* (Pilgrim Nuclear Power Station), CLI-10-11, 2010 WL 1235387 at 17-18 (remand to determine economic cost issues related to SAMA analysis).

⁹ Staff Petition for Review, p. 9.

Intervenors opposed the Staff dispositive motion and argued, *inter alia*, that the Staff failed to cite to any part of the DCD or the TSD to support a conclusion that the replacement power cost projections were considered in the design certification process.¹⁰ Hence, the preclusive effect of 10 C.F.R. Pt. 52, Appendix A, Section VI.B.7 does not apply.

The ASLB's decision was predicated on the requirement that preclusion of the replacement power cost issue required that such be included in the ABWR TSD, which it was not.¹¹ The absence of this issue from the ABWR list of site parameters in the TSD preclude application of the exclusionary effect of 10 C.F.R. Pt. 52, Appendix A, Section VI.B.7.¹²

The ASLB's decision was also made in light of the requirement of NEPA that alternatives be considered if such are determined to alter the cost-benefit conclusions related to SAMDA candidates.¹³ In this regard, the Staff's argument that consideration of replacement power costs is precluded by the DCD rule overlooks the NEPA requirement to consider alternatives that is codified at 10 C.F.R. 51.71(d). Staff does not discuss the requirements of 10 C.F.R. 51.71(d). Nor does Staff discuss NEPA requirements related to consideration of available mitigative alternatives; Staff instead restricts its argument to the scope of preclusive effects of the ABWR DCD.¹⁴

The number of reactors at the STP site and offsite economic impacts are germane in the context of SAMDA and NEPA alternatives analyses.

Staff asserts that because the number of reactors proposed for the STP and offsite economic impacts are not included in the DCD and TSD such may not be raised in a COL.¹⁵

While the general rule is that SAMA/SAMDA issues discussed in the DCD and TSD are not

¹⁰ Intervenor's Response to Staff Motion for Summary Disposition, pp. 3-4.

¹¹ LPB-11-07, p. 24.

¹² Id.

¹³ Id. at p. 10.

¹⁴ Staff Petition for Review, p.10-13.

¹⁵ Id at pp. 22-25.

material in a COL proceeding, Commission precedent recognizes an exception when there is a plausible basis to conclude that “inclusion of an additional factor or use of other assumptions or models may change the cost-benefit conclusions for the SAMA candidates evaluated....”¹⁶

The Intervenors’ expert determined that the Applicant’s projected cost of replacement power utilized an incorrect inflation rate and an unrealistic dispatch model. These errors have the effect of understating the costs of replacement power. Application of the Intervenors’ expert’s analysis results in a lowest-cost SAMDA of \$131,000 which is approximately \$10,000 lower than the Applicant’s lowest cost SAMDA.¹⁷ This plausible basis fits squarely within the exception specified in *Pilgrim* that anticipates there may be “other assumptions or models” that can alter cost-benefit ratios and form the basis for a SAMDA contention.¹⁸ Further, the difference between the Applicant’s and Intervenors’ bases for lowest-cost SAMDA raises a material dispute that is not amenable to summary disposition, particularly when there are conflicting expert opinions.¹⁹

This conclusion is not affected by the Staff’s assertion that the only site parameter that requires consideration is the population dose risk from a severe accident.²⁰ This is an unjustifiably narrow view of relevant site-specific parameters. Even the General Electric generic SAMDA analysis includes replacement power costs as a consideration.²¹ Given this circumstance, it follows that a site specific analysis of replacement power costs is a material consideration in the SAMDA aspect of the COL adjudication. The location of proposed STP Units 3 & 4 in the ERCOT service area means it has unique replacement power cost

¹⁶ *Pilgrim*, CLI 10-11 at 2010 WL 1235387 at 18.

¹⁷ LBP-11-07, pp. 18-20.

¹⁸ *Pilgrim*, CLI 10-11 at 2010 WL 1235387 at 18.

¹⁹ LBP-11-07, pp.7-8, fns. 42, 43.

²⁰ Staff Petition for Review, p.13.

²¹ LBP-11-07, p.24, fn.148.

considerations that are not resolved by a one-size-fits-all generic analysis. The SAMDA analysis properly should consider the site specific variables such as the number of units at a particular site to more accurately compute replacement power costs. Only in this way is it possible to determine the threshold for consideration of SAMDA candidates for STP Units 3 & 4.

The Staff argues that the ASLB's consideration of the number of units at the STP site and offsite economic costs was impermissible.²² Staff contends that these parameters are not site characteristics.²³ However, the number of units at a site can have an effect on the replacement power costs depending on the number of units that are in a forced shutdown. In the context of forced shutdown of multiple units there is the necessity of replacing power to accommodate the units that are unavailable for service; and the more units that are unavailable and cause supply shortages, the greater the potential increases in replacement power costs may become. These economic considerations are material NEPA issues as recognized by 10 C.F.R. 51.71(d). Ignoring these issues is not permitted under NEPA.²⁴

Staff also contends its opportunity to contest inclusion of the number of units and economic impacts was precluded by the ASLB's "independent evaluation as support for its order."²⁵ In support of this argument Staff relies on *Exelon Generation Co. (Early Site Permit for Clinton ESP Site)*, CLI-05-17, 62 NRC 5, 45, n.99 (2005). However, this case recognizes that under some circumstances the Board is justified in conducting an independent analysis when Staff 's review is incomplete or insufficiently explained. *Id.*

²² Staff petition for Review, p.20.

²³ *Id.*

²⁴ *Ohio River Valley Environmental Coalition v. Kempthorne*, 473 F.3d 94, 102 (4th Cir. 2006)(Administrative Procedure Act directs review of agency action to determine if agency action is product of consideration of relevant factors and whether a clear error of judgment has occurred); *Druid Hills Civic Association, Inc. v. Federal Highway Administration*, 772 F.2d 700, 709 (11th Cir. 1985)(NEPA requires environmental analyses not be constrained by an "artificial framework").

²⁵ Staff Petition for Review, p.15, fn.10.

In the instant case, the Staff's review was incomplete and inadequately explained because it unilaterally limited its site parameter consideration to offsite radiological consequences.²⁶ As the Board noted, "NRC Staff provides no explanation why these additional [economic losses and replacement power] costs are not relevant in determining the appropriate TSD site parameters to compare to the STP site."²⁷ This lack of Staff explanation justified the Board's determination of appropriate site parameters under *Exelon Generation Co*, CLI-05-17.²⁸ Under these circumstances, there was nothing impermissible in the Board's determination that relevant site parameters include replacement power costs.

Conclusion

The essential consideration in disposition of the Staff's Petition for Review is whether the TSD includes site parameters that resolve questions concerning replacement power costs. Staff concedes the TSD does not include a list of site parameters.²⁹ Therefore, the ASLB's decision is correct that Intervenors' SAMDA related CL-2 contention regarding replacement power costs is a material consideration in the COL adjudication.³⁰

For these reasons the Staff's petition for review should be denied.

Respectfully submitted,

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²⁶ LBP-11-07, p.24.

²⁷ Id.

²⁸ 62 NRC 5, 45.

²⁹ Id. at p. 24, fn. 145.

³⁰ Id. at 24.

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CERTIFICATE OF SERVICE

I hereby certify that on March 25, 2011 a copy of “INTERVENORS’ ANSWER IN OPPOSITION TO NRC STAFF’S PETITION FOR REVIEW OF THE LICENSING BOARD’S DECISION IN LBP-11-07 DENYING NRC STAFF MOTION FOR SUMMARY DISPOSITION” was served by the Electronic Information Exchange on the following recipients:

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