

**UNITED STATES OF AMERICA  
NUCLEAR REGULATORY COMMISSION  
BEFORE THE ATOMIC SAFETY AND LICENSING BOARD PANEL**

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**In the Matter of  
Luminant Generation Company, LLC  
Comanche Peak Nuclear Power Plant  
Units 3 and 4  
Combined License Adjudication**

**Docket Nos. 52-034 and 52-035**

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**Petitioners' Response to Luminant's Motion to Strike Portions of Petitioners' Reply**

The Petitioners present the following as their Response to the Applicant Luminant's Motion to Strike Portions of Petitioners' Reply.

**Overview**

The Petitioners' Reply does not impermissibly expand on the contentions as originally framed in their Petition. Generally, the additional information is a legitimate amplification of the points raised in the Petition. In other instances, the reply material is in direct and logical/legal response to issues raised in the Staff's and Applicant's Answers. Accordingly, the materials complained of by the Applicant in the subject motion should be determined to be either legitimate amplifications of the original contentions in the Petition or a logical/legal response to the Answers of the Staff and Applicant. Accordingly, the Motion to Strike should be denied.

**Contention Two**

The Applicant objects to the Petitioner's Reply related to Contention Two because it calls out the requirements of 10 C.F.R. 52.79(a)(3) as such would apply to the Applicant's projections of the kinds and quantities of radioactive materials expected to be generated at Comanche Peak Units 3 and 4. The Petitioner concedes the point that in the Petition 10 C.F.R. 52.79(a)(3) was

not specifically cited. However, the Petition does raise the issue of the inadequacy of the Applicant's Environmental Report because it fails to project and analyze the consequences of managing high-level waste and spent nuclear fuel on-site on the premise that a federal geologic repository would not be available for this waste stream. (Petition, p.17) Therefore, the citation to 10 C.F.R. 52.79(a)(3) is a legitimate amplification of the issue raised in the Petition. *In the Matter of Nuclear Management Co., LLC (Palisades Nuclear Plant)* 63 N.R.C. 314, 328 (2006). To the extent the Commission requires the Applicant to fully consider the environmental and public health consequences of long-term/indefinite duration management of high-level waste and spent nuclear fuel on-site, it would logically follow that an analysis of the kinds and quantities of radioactive materials that would accumulate over time would be necessary in order to meet the specification requirements of 10 C.F.R. 52.79(a)(3).

The Applicant also objects to Petitioners' citation to Dr. Arjun Makhijani's comments dated February 6, 2009, regarding the Waste Confidence Rule. The premise of Petitioners' Contention Two is that the Environmental Report is inadequate because it presumes that off-site geologic repository capacity will be available for spent nuclear fuel and high-level waste originating at Comanche Peak Units 3 and 4. Dr. Makhijani's comments are supportive amplifications of the premise related to the inadequacy of the Environmental Report and are consistent with the arguments made in the Petition. Dr. Makhijani's primary findings in his comments on the Waste Confidence Rule relate to the Applicant's assumptions that a) there will be no undue risk to the public health and safety related to disposal of spent fuel, b) spent fuel can be isolated in a repository with no releases of radiation and 3) there is a reliable basis for the assumption that there is no significant impact related to spent fuel storage on site. (Makhijani Comments, summary, pp. 1-2.) There is nothing in the Dr. Makhijani's comments that contradicts or expands the scope of the contention and as such they are legitimate amplifications of the points raised in Contention Two. 63 N.R.C. at 328. Memorandum and Order In the Matter

### **Contention Three**

The thrust of Petitioners' Contention Three is that the Applicant's Environmental Report is deficient because it fails to comprehensively analyze the consequences related to long-term management of spent fuel on site in spent fuel pools and dry cask storage. (Petition, pp.17-19) The Petitioners contend that the regulatory requirements under 10 C.F.R. 50.54(hh) related to projecting loss of large areas of a nuclear plant related to explosions/fires and mitigative measures related thereto should also be applied to dry cask storage units. A comprehensive analysis of the environmental and public health consequences of long-term/indefinite duration of spent fuel on site in dry cask storage units would logically include postulated attacks by terrorists or others with a malicious motive. The Petitioners contend that it is inconsistent, logically and as a policy matter, to differentiate between maintaining the integrity of the spent fuel pool and maintaining the integrity of dry cask storage in the event of attacks on either. In the event that the Commission agrees that the Application requires an elaboration on the consequences of long-term/indefinite duration of on-site management of spent fuel, it seems reasonable that such would include an analysis of the means by which to protect dry cask storage units from malicious attacks. This is particularly the case considering the "changing threat environment" premise of the new requirements specified at 10 C.F.R. 50.54(hh). 74 Fed. Reg. 13926, 13928 (March 29, 2009)

### **Contention Eight**

The premise of Contention Eight is that the Squaw Creek Reservoir is a radiological problem that is acknowledged by the Applicant but then ignored by the Environmental Report. The Petitioners contend that the admission by the Applicant that it discharges radioactive particulate into Squaw Creek Reservoir requires further information related to the kinds and

quantities of the discharged radioactive particulate. This is not inconsistent with Contention Eight as it was framed in the Petition. (Petition, pp. 26-28) Citation to 10 C.F.R. 52.79(a)(3) in the Reply is to demonstrate that the specification called for in Contention Eight would necessarily require identification and quantification of radioactive materials discharged into Squaw Creek Reservoir. Additionally, this is consistent with the Petitioner's contention that in the event Squaw Creek Reservoir becomes a dry lake bed and allows airborne transport of the radioactive particulates there should be disclosures as to the kinds and quantities that would be involved. Accordingly, the citation to 10 C.F.R. 52.79(a)(3) does not materially change Contention Eight because it is a legitimate amplification of the points raised in the contention. IN THE MATTER OF PPL SUSQUEHANNA, LLC (Susquehanna Steam Electric Station, Units 1 and 2) 65 N.R.C. 281, 301.

The Applicant further objects to the Petitioners' references to the a) American Society of Civil Engineers statement of the obvious that man-made structures deteriorate, b) well-publicized failures of coal slurry retention structures, c) uranium tailing dam failure in Church Rock, New Mexico, d) infrequency of dam inspections in Texas, and e) impact of drought on operations of nuclear plants. The reference to the American Society of Civil Engineers regarding dams is related to the Petitioners' argument that there is no legal or logical necessity for expert witness testimony to establish that dams and like structures fail. 69 Fed. Reg. 2182, 2203 (Jan. 14, 2004) Additionally, the reference to the American Society of Civil Engineers amplifies the contention; it does not materially expand its scope. 65 N.R.C. at 301.

Likewise, the reference to information related to the failures of similar structures used to impound coal slurry liquids and uranium tailing liquids is to illustrate that man-made structures have limited useful life durations. In this regard, the Petitioners' citation to the American Society of Civil Engineers and reference to other structures like Squaw Creek Reservoir dam that have

failed in the past is a logical response to the Answers both of the Applicant and Staff that effectively asked the Commission to ignore the common knowledge that man-made retention structures have a limited useful life. The reference to dam inspections in Texas is further amplification of the premise that these structures do not last indefinitely and to extend their useful lives, inspections and maintenance are required. This information amplifies the contention. Additionally, a logical response to an answer is permissible in the context of a reply. 69 Fed. Reg. 2182, 2203 (Jan. 14, 2004)

The Applicant objects to the citation to the information related to nuclear plants being vulnerable during times of protracted drought because of diminished water flows and an article from *Science* published in 2007 that projects possible permanent drought by the year 2050 in southwest portions of the United States. Citation to these references is a logical extension and legitimate amplification of the issues raised by the Petitioners in Contention Eight because the contention focuses on water quality and quantity. The availability of water for nuclear plants is a central issue in the Applicant's Environmental Report. See eg. Environmental Report Sections 2.3.2.2.4, Plant Surface Water Use; 2.3.2.4, Future Water Use; 5.2.1.7, Surface Water and Ground Water Users; 5.2.2.3.1, Downstream Water Availability Impacts; Table 10.1-2 (Sheet 2 of 9) Operational-Related Unavoidable Adverse Environmental Impacts, 9.3.2.1 Initial Site Screening Evaluation. Given the crucial relationship between water availability and plant operations assumptions made by the Applicant in the Environmental Report about these matters is therefore subject to this adjudication. The materials offered in support of the Petitioners' Reply related to scientific studies about projections of climate change in the geographic area that includes Comanche Peak are legitimate amplifications of the issues raised in Contention Eight that address availability of water for plant operations. IN THE MATTER OF CROW BUTTE RESOURCES, INC. (License Amendment for the North Trend Expansion Project) 67 N.R.C. 241, 247 (2008)

## **Contention Nine**

The Applicant objects to the citation to Dr. Makhijani's analysis of the LADTAP II in the Petitioner's Reply. However, a fair reading of Dr. Makhijani's analysis reflects specific responses to criticisms that were raised by the Applicant in the Answers; but it does not raise any new contention and only legitimately amplifies on his original report attached to the Petition for Intervention. In that regard, Dr. Makhijani's LADTAP II attachment to the Petition is not materially different from his attachment in the Petitioner's Reply. For example, Dr. Makhijani is taken to task because he focuses on radiation doses related to saltwater invertebrates and commercial fish. (Staff Answer, p. 35) Dr. Makhijani responds directly to this criticism by pointing out that accurately determining the exposure to members of the public should be the primary consideration related to radiation doses rather than whether the particular exposure comes from a saltwater invertebrate, commercial fishing operation or recreational fishing. This is a legitimate elaboration of the conclusions stated in his original attachment to the Petition. IN THE MATTER OF PPL SUSQUEHANNA, LLC (Susquehanna Steam Electric Station, Units 1 and 2) 65 N.R.C. 281, 301.

The staff is also critical of the lack of literature support in Dr Makhijani's attachment to the Petition. However, as pointed out by Dr. Makhijani, the documentation he relies on originates with the NRC. Accordingly, to the extent his literature support is from the NRC, Petitioners maintain it should be administratively noticed pursuant to 10 C.F.R. 2.337(f).

## **Conclusion**

Petitioners respectfully request that the Applicant's Motion to Strike be denied on the grounds that the support materials in the Petitioners' Reply legitimately amplify their contentions or the Reply constitutes logical and/or legal responses to the subject Answers.

Respectfully submitted,

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