



*arguments regarding hardened vents and hydrogen considerations*” in the body of the Declaration of Mark Leyse submitted as Exhibit 2 of Petitioners’ Combined Reply dated December 12, 2016. [Entergy Motion to Strike, December 20, 2016 @ p.1 of 10].

Entergy argues that Mr. Leyse’s Declaration was impermissibly submitted in the Petitioners Combined Reply. [Motion to Strike @ p. 1 of 10]. Entergy further argues that the Mr. Leyse’s testimony introduces new and unsupported late filed contentions.

[Motion to Strike @ p. 7 of 10]

The Petitioners argue that the original filing of November 10, 2016 is fully sufficient and Mr. Leyse’s proffered declaration illustrates what is encompassed in the filing that we would prove at hearing for the original Contention 1C. [Petitioner’s Exhibit 2, Declaration of Mark Leyse, December 9, 2016]

Entergy can ill maintain that they were not put on notice of the scope of the original Petition’s Contention 1C as it pertains to the lack of validity of the FitzPatrick Request for an Extension to Comply with NRC Order EA-13-109 and the applicant’s silence on critical technical findings of vulnerability in the beyond design and current licensing bases contained in NRC Temporary Instruction 2515/183 Inspection Report which is absent in their Answer.

As Petitioners submitted in the original Petition to Request a Hearing and Combined Reply, the NRC clearly identified Fitzpatrick nuclear power plant’s *“beyond design and licensing bases vulnerability in that current procedures do not address hydrogen considerations during primary venting”* under severe accident conditions and *“a beyond design and licensing bases vulnerability, in that FitzPatrick’s current licensing basis did not require the plant to have a primary containment torus air space hardened vent*

*system as part of their Mark I containment improvement program.*” [“NRC Temporary Inspection Report 2515/183 Inspection Report,” May 13, 2011, ML111330455, @p. 14-15 of 25]. Mr. Leyse’s testimony speaks to and illuminates upon both these narrow aspects of Entergy’s argument.

First, towards adequately addressing and mitigating the identified vulnerability and risk to public safety as it concerns FitzPatrick operations beyond scheduled compliance with EA-13-109, it is the applicant for this request to extension to comply, not the Petitioners, that has the burden of proof to address the beyond design and current licensing basis vulnerability issues as pertains to the request for an extension to comply with scheduled compliance as required by the NRC Order EA-13-109. The Petitioners’ pleadings along with the testimony of Mr. Leyse’s expert opinion are offered as the “*basis for further inquiry.*” [United States Nuclear Regulatory Commission Staff Practice and Procedure Digest, Digest 16, June, 2011, 2.10.8.1 Burden of Proof, A licensee generally bears the ultimate burden of proof. Metropolitan Edison Co. (Three Mile Island Nuclear Station, Unit 1), ALAB-697, 16 NRC 1265, 1271 (1982), citing 10 C.F.R. § 2.325 (formerly § 2.732). *But intervenors must give some basis for further inquiry.* Three Mile Island, *supra*, 16 NRC at 1271, citing Pennsylvania Power and Light Co. and Alleghany Electric Cooperative, Inc. (Susquehanna Steam Electric Station, Units 1 & 2), ALAB-613, 12 NRC 317, 340 (1980). See Section 3.7.@ p. 213 of 794].

Petitioners have argued that Entergy, through its request for an extension to comply with EA-13-109, has not satisfied that burden of proof. The Petitioners are seeking further inquiry through their request for hearing and the Entergy submission of a License Amendment Request.

Entergy’s Motion argues that the Commission should not consider the Leyse Declaration, because the Declaration was submitted with Intervenors’ Reply Brief. While as a general matter, the Petitioners agree that a party may not present a new

contention, or a new basis for a proposed contention, in its reply, the NRC's "*contention admissibility rules do not require an intervenor to provide all supporting facts for a contention or prove its case on the merits in its original submission.*" See Louisiana Energy Servs., L.P. (National Enrichment Facility), CLI- 04-25, 60 NRC 223, 225 (2004), recons. denied by LES, CLI-04-35, 60 NRC 619 (2004).

The Petitioners have not submitted a new contention nor amended the current contention by providing Mr. Leyse's Declaration in their Combined Reply.

Mr. Leyse's Declaration along with the Combined Reply support the original Contention 1C and reassert that Entergy has failed to provide a valid logical argument in its extension to comply request and in its Answer to the Petitioners' submission of findings of the NRC Temporary Instruction inspection report regarding FitzPatrick vulnerability in its beyond design and current licensing basis arising from the lack of hydrogen control and lack of hardened containment venting under post severe accident conditions for the requested interim operational period.

Entergy's Answer inadequately falls back upon,

*"Although Petitioners point to statements in an NRC Temporary Instruction 2515/183 Inspection Report about hydrogen considerations during primary venting, the same quotation explains the immediate corrective actions that were taken by Entergy. Petitioners make no attempt to explain why the immediate corrective actions do not resolve the issue raised in the inspection report. As explained above, the presiding officer 'is not to accept uncritically the assertion that a document or other factual information or an expert opinion supplies the basis for a contention.' As Petitioners failed to provide any expert opinion or any reasoned basis, their bare assertion fails to provide the support required by 10 C.F.R. § 2.309(f)(1)(v).*

*Petitioners also point to other statements in the NRC Temporary Instruction 2515/183 Inspection Report about the design of the containment regarding a primary containment torus air space hardened vent system. However, Petitioners provide no explanation of*

*how this relates to the requested extension or why the requested extension (which even falls within the hard deadline for EA-13-109) cannot be granted.*

*Notably, Petitioners misread the EA-13-109 Extension Request as claiming that the FitzPatrick containment vent—as it existed in 2011—is ‘being proposed as Entergy’s compensatory actions to support the [EA-13-109 Extension Request].’ This misreading completely ignores the actual compensatory actions proposed in the EA-13-109 Extension Request (e.g., revisions to emergency operating procedures, FLEX support guidelines), and completely disregards the additional features that the EA-13-109 Extension Request notes will be added during the upcoming outage—i.e., before the current implementation deadline—including seismic design modifications and HCVS mechanical and electrical tie-ins and testing.” [Entergy Answer @ p. 38-39 of 41]. (Emphasis added)*

Again, the Petitioners argue that in this matter the burden of proof for the adequacy of post-severe accident and post-fuel damage corrective actions for the interim period beyond NRC Order EA-13-109 scheduled compliance is upon Entergy and not the Petitioners. However, as the Petitioners did identify in their original November 10, 2016 request for hearing as regards operating the FitzPatrick existing partially hardened containment vent under accident conditions for the interim period beyond scheduled compliance as regards Mr. Leyse’s Declaration,

*“As an immediate corrective action the licensee revised TSG-9 to provide a caution for operators to consider the presence of hydrogen gas.” NRC Temporary Inspection Report, p.8 [Emphasis added].*

*The Petitioners understand this to mean that FitzPatrick operators, as advised, may in fact not be able to reliably and safely vent a severe accident where hydrogen gas is present in FitzPatrick’s only partial vent line.”*

[Petitioners’ Request for Hearing, November 10, 2016 @ p. 37 of 58] (Emphasis added).

As Petitioners argue and Mr. Leyse’s testimony illuminates in his Declaration, this “caution for operators to consider the presence of hydrogen gas” must include that

Entergy operators cannot reliably vent the containment of hydrogen gas because industry and NRC computer models currently “*under-predict hydrogen gas generation rates*” during severe accident conditions where a “*2001 OECD Nuclear Energy Agency report advises that high hydrogen generation rates ‘must be taken into account in risk analysis and in the design of hydrogen mitigation systems.’*” [Petitioners’ Exhibit 2, Declaration of Mark Leyse, December 9, 2016, @ pp. 10-13 of 27] (Emphasis added)

This illustrates Petitioners’ and their expert’s understanding of Entergy’s Answer to Petitioners Request for Hearing to fail to logically argue that its “*corrective*” action for controlling hydrogen gas releases while operating an only partially hardened containment vent is “*to provide caution*” has failed to consider “*high hydrogen generation rates*” [Petitioners’ Exhibit 2 @ p.10 of 27] in its analysis. This is, in fact, as Petitioners and their expert supports, a significant lack of and even an abandonment of “*caution*” by Entergy for the proposed period of interim power operations beyond scheduled compliance with NRC Order EA-13-109.

By this example, the Petitioners argue that Mr. Leyse’s expert testimony does narrowly focus on a specific aspect of the Entergy Request for Extension to Comply and Answer’s failure to provide a valid argument as cited in Petitioners’ Hearing Request [Petitioners’ Request for Hearing @ p.31 of 58] and again in Petitioners’ Combined Reply [Petitioners’ Combined Reply @ p.6 of 39].

To that goal, the Petitioners’ Exhibit 2 seeks to assist the Commission in developing a sound and accurate hearing record on why Entergy’s conclusions in its request for extension to comply with Order are not valid and should instead be appropriately reviewed per NRC standard rules and procedures only after the applicant submits a

license amendment request and provides the adversely affected parties an opportunity for hearing.

Thus, Petitioners' provide the concise statement of Mr. Leyse's expert opinion, including references to specific updated sources and documents, that support their original position and upon which they intend to rely at the hearing. This is clearly what Section 2.309(f)(1)(v) demands.

As such, the Petitioners' Combined Reply together with Mr. Leyse's testimony have complied with the requirement that replies should be "*narrowly focused on the legal or logical arguments presented in the [answer] on a request for hearing/petition to intervene.*" South Carolina Elec. and Gas Co. (Virgil C. Summer Nuclear Station, Units 2 and 3), CLI 10-01, 70 NRC , (slip op. at 7 n. 32) (Jan. 27, 2010) (quoting "Final Rule, Changes to Adjudicatory Process," 69 Fed. Reg. 2182, 2203 (Jan. 14, 2004)). See also PPL Bell Bend, LLC (Bell Bend Nuclear Power Plant), CLI 10-07, 70 NRC, (slip op. at 8) (Jan. 7, 2010).

Petitioners' pleadings and the submission of expert testimony establish that Entergy has now repeatedly and significantly overstated the validity of its argument for safe operation and the reliability of its corrective actions for the 18-month interim period beyond the scheduled compliance in Order EA-13-109 to compensate for not implementing a reliable severe accident capable hardened containment vent and hydrogen gas control on the time line made "immediately effective" per NRC Order that Entergy originally consented to.

As such, Entergy's Request for Extension to Comply and its Answer establish a pattern of invalid and overstated conclusions with regard to the existing and identified beyond design and current licensing bases vulnerability from the lack of hydrogen gas control and an only partially hardened containment vent as identified in the NRC Temporary Instruction Inspection Report as brought forward in the original Contention 1C and Mr. Leyse's expert testimony submitted in the Petitioners' Combined Reply.

Petitioners therefore request that Entergy's motion to strike portions of the Petitioners' Combined Reply should itself be stricken and that Petitioners with their expert be allowed to proceed to hearing.

Respectfully submitted on this 30th day of December, 2016 in accordance with 10 CFR 2.304(d).

---/Electronically signed through the EIE/---

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**UNITED STATES OF AMERICA**  
**NUCLEAR REGULATORY COMMISSION**  
**BEFORE THE NUCLEAR REGULATORY COMMISSION**

December 30, 2016

In the Matter of Fitzpatrick 50-333-EA Entergy's Request for Extension to Comply with  
NRC Orders EA-12-049, E-12-051 and EA-13-109,  
James A. Fitzpatrick Nuclear Power Station

**CERTIFICATE OF SERVICE**

Pursuant to 10 C.F.R. § 2.305 (revised), I hereby certify that copies of the foregoing BEYOND NUCLEAR & THE ALLIANCE FOR A GREEN ECONOMY OPPOSITION TO ENTERTY NUCLEAR OPERATIONS MOTION TO STRIKE PORTIONS OF DECEMBER 12, 2016 COMBINED REPLY OF THE INTERVENORS dated December 30, 2016 have been filed and certified for service to all appropriate parties through the Electronic Information Exchange, the NRC's E-Filing System in the above-captioned proceeding on December 30, 2016.

---/Electronically Signed through the EIE/---

Paul Gunter

Beyond Nuclear