Addendum to LBP-03-17

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ATOMIC SAFETY AND LICENSING BOARD PANEL

Before Administrative Judges:

Ann Marshall Young, Chair
Dr. Charles N. Kelber
Lester S. Rubenstein

In the Matter of DUKE ENERGY CORPORATION (McGuire Nuclear Station, Units 1 and 2, Catawba Nuclear Station, Units 1 and 2)	Docket No's. 50-369-LR, 50-370-LR, 50-413-LR, and 50-414-LR ASLBP No. 02-794-01-LR October 7, 2003

SEPARATE OPINION
(Concurring in Part and Dissenting in Part)

Although I concur in part with my colleagues on the results they reach with regard to Amended Contention 2, I disagree with other of their rulings, and therefore must to that extent dissent from the majority decision. More broadly, and in my view more significantly in some ways, I find the approach taken by the majority to be based in some instances less on the contention admissibility criteria of 10 C.F.R. § 2.714 than on other factors, including premature merits-based considerations. I endeavor herein, among other things, to address some of the implications and potential negative effects of this approach.

Timeliness

I do agree with my colleagues that, where information giving rise to a subpart of Amended Contention 2 stems from Duke's January 31 and February 1, 2002, responses to the Staff's Requests for Additional Information (RAI responses), this constitutes good cause for failure to file on time under 10 C.F.R. § 2.714(a)(1)(i). I also agree with the implicit converse of this proposition, that information not arising out of the RAI responses will not support a finding

of such good cause absent other appropriate indications. *See* LBP-03-17, 58 NRC __ (2003), Slip op. at 6-7. And I concur that Subpart 1 is untimely and inadmissible in that it does not arise out of information in the RAI responses and could have been raised among the original contentions on the basis of the Environmental Reports (ERs), which appear to have been available at that time. Indeed, as the majority decision points out, the ERs consider the no-action alternative, and thus Subpart 1 would seem to raise no genuine dispute on a material issue of fact or law as required under 10 C.F.R. § 2.714(b)(2)(iii). *See id*. at 7-8.

On the other hand, I find the remaining subparts of Amended Contention 2 timely, in that they can properly be tied, in terms of good-cause basis, to Duke's RAI responses.[1] Even though there may be some information that might have been available earlier[2] that would provide some support for some of the contention subparts or portions thereof, and whether or not and to what degree all the RAI responses relate to the subject matter of the original Contention 2, on which I state no opinion herein, the responses were, when made, new statements of Duke, made in a new context. And the Intervenors have relied on them, stating that Amended Contention 2 describes "the extent to which Duke's RAI responses fail to

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[1]Specifically, Subpart 2 refers to RAI 1 responses, Blue Ridge Environmental Defense League's and Nuclear Information and Resource Service's Amended Contention 2 (May 20, 2002) at 5-6 (hereinafter Amended Contention 2); Subpart 3 to RAI 3 and 4 responses, *id*. at 7; Subpart 4 to RAI 3c response, *id*. at 8-9; Subpart 5 to RAI 2 response, *id*. at 10; Subpart 6 to a table submitted as part of the RAI responses for McGuire, *see* Amended Contention 2 at 14 n.6 (citing Letter from M. S. Tuckman to NRC, Attachment 1 at 11 (Jan. 31, 2002) (hereinafter Tuckman 1/31/02 Letter); Subpart 7 to RAI 1b response, *id*. at 16-17; and Subpart 8 to RAI 6 response, *id*. at 17.

[2]Regarding Duke's arguments that some of the RAI responses merely recite old information, Response of Duke Energy Corporation to Proposed Late-Filed Contentions (June 10, 2002) at 25, 34, the question arises, then why the need for the RAIs in the first place? Regarding Duke's argument that RAI responses should be treated the same as RAIs under Commission precedent to the effect that an RAI is not in itself a basis for a late-filed contention, *id.* at 5, n.13, I find the two to be distinguishable: RAIs are Staff questions, which do not provide any information themselves, whereas RAI responses generally provide information, which if new in any way would seem not to be foreclosed as possible grounds for late-filed contentions, depending upon the nature of the information and other circumstances that would be unique to each situation. In this proceeding I would find the RAI responses constitute sufficient grounds for submitting the late-filed contentions, at least Subparts 2-8, as discussed in the text of my opinion.

demonstrate adequate consideration of NUREG/CR-6427, and therefore failed to satisfy the [NEPA 'hard look' doctrine]." [BREDL's] and [NIRS's] Response to ASLB Questions Regarding Admissibility of Amended Contention 2 (Feb. 7, 2003), at 4 (hereinafter, Intervenors' 2/7/03 Response). In light of this, and given the specific references to the RAIs in Subparts 2-8, I find these timely in that they arise out of and rely on information in the RAI responses.

I also find these subparts timely based on aspects of the "widespread confusion" that has existed at various points in the history of this proceeding, *see e.g.*, LBP-03-17, 58 NRC __, Slip op. at 14 n.5, which among other things I would find gave the Intervenors "good cause to believe that filing an amended contention was unnecessary." *See* CLI-02-28, 56 NRC 373, 384 (2002).

Finally, I would find that the other factors of 10 C.F.R. § 2.714(a)(1) are satisfied in that, under subsections (ii) and (iv), there would seem to be no other reasonably equivalent means whereby the Intervenors' interest with regard to the subject matter of the subparts in question of the amended contention may be protected or represented by other parties, given that they are the only Intervenors in the proceeding, and in that, under subsections (iii) and (v), the participation of the Intervenors would seem reasonably to be expected to assist in developing a sound record on the matters in dispute and should not broaden the issues or delay the proceeding.

General Contention Admissibility Requirements

Regarding the requirements for admissibility of all contentions, whether timely or late-filed, at 10 C.F.R. § 2.714(b)(2)(i)-(iii), I find subparts 2 through 8 to satisfy these requirements to one degree or another, in that they all provide: specific statements of the issues they raise, along with brief explanations of their bases; concise statements of alleged facts that support them; expert opinion to support them through the "Declaration of Dr. Edwin S. Lyman in Support

of BREDL/NIRS Amended Contention 2" (April 26, 2002), in which Dr. Lyman, who has a Ph.D in theoretical physics, states that he assisted in the preparation of Amended Contention 2; references to various documents and sources; and sufficient information to show some level of genuine dispute with regard to material issues of law or fact.

I might find cause to deny admission of Subpart 8 under the theory that even if proven it would be of no consequence because it would not entitle Intervenors to any relief, as provided at 10 C.F.R. § 2.714(d)(2)(ii), noting the Commission's comment that, "[g]iven that the draft [Supplemental Environmental Impact Statements (SEISs)] already find that an ac-independent backup power source appears to be a cost-beneficial SAMA . . . , it is unclear what additional result or remedy would prove meaningful to the Intervenors." CLI-02-28, 56 NRC at 388. The Commission, however, directed the Board to make such determinations, *see id*. at 387, and the Intervenors have pointed out that the Staff has not taken a definite position on this, *see*, *e.g.*, Tr. 1344-49, and assert that a more thorough and rigorous analysis under the "hard look" requirement of the National Environmental Policy Act (NEPA) is the relief they seek – an argument I examine below.

I would observe that several of the subparts might well be appropriate for summary disposition, either fully or in part, depending upon what facts and argument might be submitted in such a context. I suggest this would be a better avenue to address some of the merits-based considerations discussed in Duke's and the Staff's responses and in the majority decision, to which I refer above, and which I discuss in greater detail below.

In the interest of efficiency, as well as in recognition that this is merely a concurring and dissenting opinion, I will not discuss all subparts of Amended Contention 2 individually in depth or detail. Instead, I will focus my discussion on Subpart 2, because I find it presents, most clearly, most if not all of the sorts of issues that the parties and the majority decision address

with regard to Subparts 2 through 8, including those issues on which I disagree with the majority decision.

Subpart 2 of Amended Contention

The Intervenors in Subpart 2 assert, as part of its general contention that Duke's "[Severe Accident Mitigation Alternative (SAMA)] analysis is incomplete, and insufficient to mitigate severe accidents, in that it fails to provide an adequate discussion of information from NUREG/CR-6427 . . . ," that the analysis is deficient in failing "to provide adequate support for conclusory results in [Duke's] RAI responses," and that "Duke has not supported its SAMA analysis by publication of its PRA." Amended Contention 2 at 4.

Subpart 2 is, like the original Contention 2 (and like some of the other subparts of Amended Contention 2), essentially a "contention of omission,"[3] alleging "the omission of particular information" – namely, in this subpart, the Probabilistic Risk Assessment, or PRA. *See* CLI-02-28, 56 NRC at 382-83. Reading this subpart together with the introductory language, it can be seen that the Intervenors contend that this omission renders the SAMA analysis "incomplete, and insufficient to mitigate severe accidents" and, "[i]n particular," deficient in that, without the PRAs, there is "[in]adequate support for [the] conclusory results" in the RAI responses, *see* Amended Contention 2 at 4, and by extension, the SEISs, to which we may look to see whether the Staff's SAMA analyses may have cured the concern of this contention subpart. *See* CLI-02-28, 56 NRC at 385; *see also* Intervenors' 2/7/03 Response

[3]I would suggest that this, perhaps heretofore unrecognized, "omission contention" nature of parts of Amended Contention 2 may account for some confusion relating to the amended contention, given that an amendment to a previous "omission contention" might not normally be expected to be another omission contention, but rather would generally be a contention that the previously-omitted and now-supplied information is deficient in some affirmative regard. There is, however, no prohibition or requirement to such effect, and thus I treat Subpart 2 as what I view it to be, a "contention of omission" as defined by the Commission in CLI-02-28, 56 NRC at 382-83.

at 1, wherein Intervenors assert that the issues they raise "have not been mooted by the issuance of the [SEISs]."

The Intervenors contend that the summary results of the PRA that Duke has provided are "insufficient to support the SAMA analysis, because there is no way to determine whether the assumptions underlying the calculations are reasonable." Amended Contention 2 at 5. The Intervenors provide a number of examples, which they characterize as the "most obvious and severe ones" of areas of possible faulty assumptions. *Id.* I will concentrate here on one of the Intervenors' examples, that regarding diesel generator reliability, in order to examine more closely their contention in this regard.[4]

In this example, the Intervenors refer to a statement in Duke's response to the Staff's RAIs, in which they say that "Duke states that data changes in Revision 2 improve diesel generator reliability, resulting in reduced core damage frequency ('CDF') caused by loss of offsite power ('LOOP'), tornados and earthquakes." Amended Contention 2 at 5. In the response in question, Duke indeed states that it had made certain "Level 1 changes associated with the McGuire PRA Revision 2," including updating certain data, the "most significant" of

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[4]Other examples provided by the Intervenors include: (a) Duke stating only that data changes in Revision 2 "*improve* diesel generator reliability, resulting in reduced core damage frequency (CDF) caused by loss of offsite power (LOOP), tornadoes and earthquakes"; (b) Duke's re-evaluation of failure rates caused by interfacing systems loss-of-coolant-accidents (ISLOCA) and indicating that these are considered by Duke to be "an *important* risk contributor"; (c) Duke's use, in its January 31, 2002, response to RAI 1a, of other such qualitative and relative terms as "significantly reduced" and "slight increase"; (d) Duke's provision of tables containing only summary estimates of core damage and containment failure frequencies; (e) Duke's qualitative explanation for the anomaly of the ISLOCA containment failure frequency being 27 times higher after Revision 2; (f) Duke's statement in its January 31, 2002, response to RAI 1b that "*in general*, the review team [that reviewed the IPE and PRA] found that the Duke PRA processes are sufficient to support applications requiring risk significance determination"; (g) Duke's statement that its SAMA analysis was based partially on Revision 3 and partially on Revision 2 of the PRA, with no indication as to which was used for which parameters or why; (h) Duke's statement in its January 31, 2002, response to RAI 1c that CDF induced by steam generator tube rupture (SGTR) was found after Revision 3 to be 7.8E-10 rather than 7.0E-6 as before; and (i) the absence in Duke's analysis of fully documented assumptions and inputs, without which the Intervenors argue there can be no meaningful evaluation of Duke's consequence analysis. Amended Contention 2 at 5-6 (emphasis added); *see* LBP-03-17, 58 NRC, Slip op. at 10-11.

which were "those related to diesel generator performance." Tuckman 1/31/02 Letter, Attachment 1 at 1. The response continues:

> Following the IPE, Duke proceeded with a program to improve the DG reliability at McGuire. The reliability improvement that occurred significantly reduced the CDF contributed by the LOOP and Tornado initiators. . . .

Id.

Looking to the McGuire SEIS, to see whether the Intervenors' concern in subpart 2 of Amended Contention has been cured, I find the statement that "[t]he Level 1 PRA changes associated with the McGuire PRA Revision 2 model" included "incorporation of updated data for component reliability, unavailabilities, initiating event frequencies, common cause failures, and human error probabilities." NUREG-1437, Generic Environmental Impact Statement for License Renewal of Nuclear Plants, Supplement 8, Regarding McGuire Nuclear Station, Units 1 and 2, Final Report (2002), at 5-6 (hereinafter SEIS). The SEIS continues:

> The most significant data changes are those related to diesel generator (DG) performance. Following the IPE, Duke proceeded with a program to improve the DG reliability at McGuire. The reliability improvement that occurred significantly reduced the CDF contributed by the loss of offsite power (LOOP) and tornado initiators. . . .

Id. The SEIS includes a table in which the "breakdown of the CDF from Revision 2 to the PRA" is provided, listing various initiating events, their individual frequencies, and the percentage of the total CDF they represent. *Id.* at 5-7, Table 5-3. The text following the table refers to the "Level 2 (also called containment performance) portion of the McGuire PRA model, Revision 2, [being] essentially the same as the IPE Level 2 analysis," but with some "modifications," which are described quite generally.[5] *Id.* Sections of the SEIS discuss the Staff's review and

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[5]The modifications are described as follows:

"• modifications to reflect an emergency operating procedure change that reduced the likelihood of restarting a reactor coolant pump following core damage, thus reducing the potential for thermally induced steam generator tube rupture

"• modification of the containment event tree (CET) logic regarding the potential for corium

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evaluation of various aspects of Duke's SAMA analysis, making various references to, among other things, documents the Staff had considered, telephone conferences it had held with Duke, and the results of various calculations. *See generally id*. at 5-9–5-32.

Near the end of the SAMA analysis portion of the SEIS, the following statements are made, which I quote in their entirety given their relevance to the diesel generator issue (for example, in their references to a back-up generator and "ac-independent power source"), as well as their relevance generally to the matters at issue in Amended Contention 2:

> The NRC has recognized that ice condenser containments like McGuire's are vulnerable to hydrogen burns in the absence of power to the hydrogen ignitor system. This issue is sufficiently important for all PWRs with ice condenser containments that NRC has made the issue a Generic Safety Issue (GSI), GSI-189–Susceptibility of Ice Condenser and Mark III Containments to Early Failure from Hydrogen Combustion During a Severe Accident (NRC 2002b). As part of the resolution of GSI-189, NRC is evaluating potential improvements to hydrogen control provisions in ice condenser plants to reduce their vulnerability to hydrogen-related containment failures in SBO. This will include an assessment of the costs and benefits of supplying igniters from alternate power sources, such as a back-up generator, as well as containment analyses to establish whether air-return fans also need an ac-independent power source, as part of this modification. The need for plant design and procedural changes will be resolved as part of GSI-189 and addressed for McGuire and other ice condenser plants as a current operating license issue.
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> **5.2.7 Conclusions**
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> Duke completed a comprehensive effort to identify and evaluate potential cost-beneficial plant enhancements to reduce the risk associated with severe accidents at McGuire. As a result of this assessment, Duke concluded that no additional mitigation alternatives are cost-beneficial and warrant implementation at McGuire.
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> Based on its review of SAMAs for McGuire, the staff concurs that none of the candidate SAMAs are cost-beneficial with the possible exception of one SAMA related to hydrogen control in SBO events. This conclusion is consistent with the low level of risk indicated in the McGuire PRA and the fact that Duke has already implemented numerous plant improvements identified from previous plant-

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[5](...continued)
contact with the containment liner

"• modification of the CET logic and quantification to reflect that the refueling water storage tank inventory would drain through a failed reactor vessel in some sequences (e.g., SBO)"

> specific risk studies. Duke's position is that SAMAs that provide hydrogen control in SBO events are not cost-effective because back-up power would also need to be supplied to the air-return fans from ac-independent power sources in order to ensure mixing of the containment atmosphere; the cost of powering both the igniters and the air return fans would exceed the expected benefit. However, based on available technical information, it is not clear that operation of an air return fan is necessary to provide effective hydrogen control. If only the igniters need to be powered during SBO, a less-expensive option of powering a subset of igniters from a back-up generator, addressed by Duke in responses to RAIs (Duke 2002a; NRC 2002a), is within the range of averted risk benefits and would warrant further consideration. Even if air-return fans are judged to be necessary to ensure effective hydrogen control in SBOs, the results of sensitivity studies suggest that this combined SAMA might also be cost-beneficial.
>
> The staff concludes that one of the SAMAs related to hydrogen control in SBO sequences (supplying existing hydrogen igniters with back-up power from an independent power source during SBO events) is cost-beneficial under certain assumptions, which are being examined in connection with resolution of GSI-189. However, this SAMA does not relate to adequately managing the effects of aging during the period of extended operation. Therefore, it need not be implemented as part of license renewal pursuant to 10 CFR Part 54. The need for plant design and procedural changes will be resolved as part of GSI-189 and addressed for McGuire and all other ice condenser plants as a current operating license issue.

Id. at 5-29–5-30.[6] NUREG-1437, Generic Environmental Impact Statement for License

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[6]Regarding the statement in the quoted material from the McGuire SEIS indicating that SAMAs that do not "relate to adequately managing the effects of aging" need not be implemented as part of license renewal, to the extent this statement speaks only to implementation and not to the contents of the SEIS, I express no opinion, except to suggest that, as stated in the section of the text on NEPA, an EIS would still appear to be required to address all SAMAs in a manner that meets NEPA requirements.

With regard to the statement referring to GSI-189, I would note that this has been the subject of numerous discussions among the parties, and updates from the Staff at the Board's request. *See*, *e.g.*, Tr. 756-57, 868, 927, 1152. The Commission has also referred to GSI-189 in CLI-02-28, 56 NRC at 388 n.77. To provide the most recent example of the Licensing Board's reference to it, in May of this year the Board issued an Order in which we stated:

> Given that since early on in this proceeding the parties have often referred to GSI-189 in their oral and written arguments on Amended Contention 2, currently under consideration by the Board, and given that the purpose of the June 18 meeting is "[t]o discuss the NRC staff plans for resolution of GSI-189 . . . ," the Board considers it appropriate to encourage all parties to attend this meeting, and to consider and communicate with each other about the possibility of settlement with regard to Amended Contention 2 based upon any information forthcoming from the June 18 meeting.

Order (Regarding June 18, 2003, Meeting on GSI-189, and Deadline to Report to Licensing Board) (May 30, 2003), at 1. In this Order we required the parties to notify the Board, by June 25, whether resolution of Amended Contention 2 appeared to be a reasonable possibility, as well as of any other new developments arising out of the meeting. *Id*. at 2. On June 24, 2003, the parties filed a Joint Report to Licensing Board, stating that at the meeting there was a technical discussion of GSI-189, including

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Renewal of Nuclear Plants, Supplement 9, Regarding Catawba Nuclear Station, Units 1 and 2, Final Report, contains similar language. *Id*. at 5-28–5-29.

Looking back to the example of the diesel generator reliability, although my colleagues conclude (more or less as a factual determination on the merits of the issue) that the reliability is supported by certain raw data in a table in the "published summary of revision 2 of the McGuire PRA" (with no citation provided), *see* LBP-03-17, 58 NRC __, Slip op. at 12, there does not appear to be specific original data in the actual SAMA analyses of Duke and in the SEIS that might arguably support such reliability, although, as indicated above, there is a reference to Revision 2 of the PRA. The conclusion is made in the SEIS that diesel generator reliability has been improved, but even assuming one has the summary of Revision 2 to the PRA (which, along with other similar documents, the Intervenors' counsel has indicated they have consulted, *see* Tr. 1161), without the actual raw data from the most current PRA from

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[6](...continued)
stakeholder comments, as well as an indication that a "Task Action Plan" was to be issued shortly, but that there was no prospect for settlement of Amended Contention 2 at that time. Joint Report to Licensing Board (June 24, 2003), at 1-2.

It is apparent from the various updates the Board has received on GSI-189 that the issues involved in it (and in Amended Contention 2) are in some particulars quite thorny and difficult ones. And given that GSI-189 does appear to address some of the same issues involved in both the original Contention 2 and Amended Contention 2, if there were a pending or imminent rule-making relating to GSI-189, this might have been grounds to defer to the Staff's rulemaking and deny admission of Amended Contention 2, under the authority of a Commission's statement, in an earlier license renewal proceeding, that a matter subject to a pending (or impending) rulemaking is not an appropriate subject for a contention unless waiting for the rulemaking to be final would delay the license renewal proceeding. *See Duke Energy Corporation* (Oconee Nuclear Station, Units 1, 2 and 3), CLI-99-11, 49 NRC 328, 345 (1999). Duke has argued to this effect. Response of [Duke] to July 15, 2002 Licensing Board Order (July 22, 2002) at 2-8. Intervenors, on the other hand, argue that this proceeding is different in that it involves a NEPA issue whereas GSI-189 concerns a safety issue, with differing standards. [BREDL's] and [NIRS's] Concise Written Filing in Response to Order of July 15, 2002 (July 20, 2002) at 1-4 (hereinafter Intervenors' 7/20/02 Filing). The Staff asserts simply that GSI-189 is "not relevant to this proceeding." NRC Staff's Response to the Board's July 15, 2002 Order (July 22, 2002) at 2. In any event, according to a recent article, although certain rule-making changes to 10 C.F.R. § 50.44 (relating to standards for combustible gas control system in light-water-cooled power reactors) were expected soon (after some delay) to become final, the Staff is planning to "wait until after a November presentation to the Advisory Committee on Reactor Safeguards (ACRS) before resolving [GSI-189]." *GSI nearing resolution*, Inside NRC, Sept. 8, 2003, at 16. Thus, in the absence of more information on the status and approach of GSI-189, I would not at this point find it to constitute reason to deny admission of any part of Amended Contention 2.

which the summary is drawn, one would seem to be left in a position of relying on the accuracy of the summary, with no way to determine whether it is indeed accurate or based on valid inputs and calculations.

It may well be quite true that the diesel generators are now more reliable. It may well also be quite true that the data in the second revision of the McGuire PRA support such a conclusion. This does not, however, appear to be ascertainable from the face of either Duke's or the SEIS SAMA analysis, or, indeed, from the majority decision. The same general observation would also apply to other examples provided by the Intervenors in Subpart 2.[7]

If in fact there are publicly available documents that on their face contain information directly showing no genuine dispute with regard to the diesel generators and other issues raised by the Intervenors, one may question why information on how to find them was not provided as a matter of course, as well as wonder why, in NUREG/CR-6427, the NRC-contracted study that was the basis for the original Contention 2, no apparent reference is made to such documents, leading to the further question why the authors either did not know about them or knew but did not take them into account.

Considering this in light of the "ironclad obligation" of petitioners and intervenors "to examine the publicly available documentary material . . . with sufficient care to enable [them] to uncover any information that could serve as the foundation for a specific contention," *see* LBP-02-4, 55 NRC at 65; Rules of Practice for Domestic Licensing Proceedings – Procedural Changes in the Hearing Process, 54 Fed. Reg. 33,168, 33,170 (Aug. 11, 1989), cited in the NRC Staff's Answer to [BREDL's] and [NIRS's] Amended Contention 2 (June 10, 2002) at 11; if the persons with whom the NRC contracted to produce NUREG/CR-6427 were not aware of the documents in question, one may question the holding of intervenors to a higher standard,

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[7] *See* note 4, *supra.*

notwithstanding the differing contexts of an NRC-contracted study and the filing of contentions by petitioners for an adjudicatory hearing. Surely a standard of reasonableness applies to this obligation. In any event, as indicated above, it appears the Intervenors did have access to the summary documents at some point, and have still maintained that these are not sufficient under NEPA.

Moreover, in all the discussions of the PRAs in this proceeding, although reference is made to various publicly available documents, there appears to be no dispute that the entire actual PRAs, or relevant portions of the documents themselves as opposed to summaries of them, have not in fact been available.[8] *Whether* they *are* required in order to provide adequate support for the results of the SAMA analyses, RAI responses, and SEISs is, of course, the central issue with regard to Subpart 2 of Amended Contention 2. There is manifestly a genuine dispute between the parties on this issue; despite their declarations to the contrary, many of the arguments of the Applicant and Staff actually illustrate the dispute, on which, had a hearing been granted, evidence and argument would be presented before a decision on the merits were made on this issue.

My colleagues rule Subpart 2 to be inadmissible because (1) it is "in the nature of a discovery dispute" (noting precedent that "contentions shall not be admitted if at the outset they are not described with reasonable specificity or are not supported by 'some alleged fact or facts'

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[8]As the Commission notes in CLI-02-28, the Intervenors' request for the PRAs first arose during the course of settlement discussions with Duke, 56 NRC at 386, which discussions the Board had encouraged and on the progress (but not the substance) of which the Board had requested updates. *See*, *e.g.*, Tr. 756, 868. Although the Commission provides some guidance on the PRA issue, reminding the Board that the contention rule bars "anticipatory" contentions, "where petitioners have only 'what amounts to generalized suspicions, hoping to substantiate them later,'" and that a petitioner "is not permitted 'to file a vague, unparticularized contention, followed by an endeavor to flesh it out through discovery,'" it further states that the issues relating to the PRAs involves "fact- and record-specific" inquiries, which it left to the Board to resolve. CLI-02-28, 56 NRC at 387. For the reasons stated in the text of my opinion, I find the issues raised by the petitioners to be more than merely anticipatory, generalized, vague or unparticularized, notwithstanding that, of course, reasonable parties may differ on their merits, but in my view preferably after considering the merits arguments in an appropriate context of summary disposition motions and/or a hearing.

demonstrating a genuine material dispute"); (2) "NRC regulations do not require Duke to publish its entire PRA, and the Intervenors fail to provide any legal support for that proposition"; (3) "as a factual matter, Duke submitted portions of its PRA in 1991, 1992, and 1994 for Staff review, and these submittals (and the Staff's reviews) are, indeed, publicly available"; (4) "[t]hese publications include data sought by BREDL/NIRS," stating as an example that "the increase in Emergency Diesel Generator reliability is supported by the raw data in Table 3.1.5.1-1 of the published summary of revision 2 of the McGuire PRA"; (5) "[i]n its RAI responses, Duke provided supplementary, quantitative, and qualitative information regarding changes to its PRAs (although it did not attach the full PRAs)"; and (6) the "Intervenors have not established there is a genuine dispute as to why this information is inadequate to assure the reliability of Duke's PRAs." LBP-03-17, 58 NRC __, Slip op. at 11-12.

Dealing with these findings in order, I would note, first, that the circumstance that a given matter may at some point be the subject of a discovery dispute does not negate it for all other purposes – to take a simple example, in a lawsuit over a traffic accident, the fact that one party may seek discovery of facts related to the accident does not render the same facts irrelevant as allegations in a complaint or evidence in a hearing. Second, the fact that no specific regulation requires Duke to publish its entire PRA is irrelevant if as a result of such omission it might be argued or found, for example, that the SAMA analysis required under 10 C.F.R. Part 51, Appendix B, is inadequate as a factual and technical matter, or that the SEIS is inadequate under NEPA – one of the primary arguments of the Intervenors.[9] Third, although

[9]The majority in various parts of its decision also refers to the lack of any NRC regulatory requirements for, to give examples, "adopt[ing] the assumptions and findings of a study produced by an independent contractor of the Staff," LBP-03-17, 58 NRC __, Slip op. at 16; "uncertainty analyses in the situation before us," *id*. at 19; "peer review of PRAs," *id*. at 28. But just as with Subpart 2, the lack of a specific regulatory requirement for a given action is irrelevant if a petitioner or intervenor contends and provides some basis for a contention that such action is required as a technical or scientific matter, or under NEPA, for example (assuming, of course, the contention involves no challenge to an existing NRC rule). As the Commission has stated, "the contention rule does not require 'a specific allegation or

(continued...)

the majority states that "as a factual matter" various portions of the PRA have been submitted, no citation is provided for any of these, as indicated above, nor is it clear to what extent, if one had these in hand, one would indeed have a current PRA sufficient to support the statements and conclusions in the RAI responses and SEISs – a matter on which the parties are in obvious dispute. Fourth, nor are the conclusions that such documents include the data sought by the Intervenors, and that such data supports "the increase in Emergency Diesel Generator reliability," supported by any explanation or generally accepted citation. Fifth, nor is the referenced "supplementary, quantitative, and qualitative information regarding changes to its PRAs" described with any specificity.

Moreover, and in a sense more importantly, with regard to the third, fourth and fifth considerations listed, these appear to me to be conclusions on the merits of the dispute raised in subpart 2 of Amended Contention 2. And it would, in addition, seem that the majority's statement that the "Intervenors have not established there is a genuine dispute *as to why this information is inadequate* to assure the reliability of Duke's PRAs," LBP-01-17 at 12 (emphasis added), either (1) assumes the information is inadequate and questions whether there is a dispute on *why* the information is inadequate, or (2) is really a statement to the effect that the intervenors *have not shown why* the information is inadequate – which, again, would appear to

[9](...continued)
citation of a regulatory violation,'" although "supporting reasons" for a contention are, of course, required. *Dominion Nuclear Connecticut, Inc.* (Millstone Nuclear Power Station, Units 2 and 3), CLI-01-24, 54 NRC 349, 361-62 (2001).

be a judgment on the merits of the dispute over the adequacy of the SAMA analysis without the inclusion of the complete PRA.[10]

In contrast to the majority decision, I would find Subpart 2 admissible. First, it consists of a "specific statement of the issue of law or fact to be raised or controverted," as required at 10 C.F.R. § 2.714(b)(2). It identifies both the factual issue of whether Duke's SAMA analysis (or, looking to them to see whether they have cured any deficiency, the final SEISs) "provide adequate support for conclusory results in [Duke's] RAI responses" in the absence of the actual PRAs, and the legal issue of whether support in such form is required in this proceeding under NRC license renewal regulations and/or NEPA law regarding the contents of an EIS. *See* Amended Contention 2 at 4-5. The Intervenors also provide a brief explanation of the bases of the contention, as required at 10 C.F.R. § 2.714(b)(2)(i). *See*, *e.g.*, the summary of examples listed in LBP-03-17, 58 NRC __, Slip op. at 10-11. And they provide, as required at 10 C.F.R. § 2.714(b)(2)(ii), both the concise statement of the alleged fact that the results of the SAMA analysis are inadequately supported as a result of the absence of the complete PRA (giving, as noted above, various specific examples of this), as well as the supporting expert opinion provided through Dr. Lyman's Declaration. They make specific reference to Duke's RAI responses, as also required at § 2.714(b)(2)(ii).

I find, in all of the preceding information, that the Intervenors have provided sufficient information to show, as required at 10 C.F.R. § 2.714(b)(2)(iii), a genuine dispute on whether

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[10]Although, as stated above, I do not deal with subparts 3 through 8 of Amended Contention 2 individually, I would point out just two examples from them that I view as being more in the nature of addressing merits issues than the contention requirements, to illustrate that this approach pervades the majority decision beyond just in its discussion of Subpart 2. First, in its discussion of Subpart 6, the majority states that the "the Intervenors have made no showing either that the models used by Duke are defective or incorrect for the purpose used or that those models were used incorrectly by Duke. Nor have the Intervenors demonstrated that the models they are recommending are superior in any way to those employed by Duke." LBP-03-17, 58 NRC __, Slip op. at 25. Then, in its discussion of Subpart 7, the majority refers to "the fact that an *adequate* peer review appears to have been performed." *Id.* at 28 (emphasis added).

the SAMA analysis is or is not adequately supported both as a factual scientific/technical matter, and as a legal matter under NRC regulations and NEPA law (which, given its significance in this proceeding, I address in a separate section below). To summarize, they provide this information both in the statement of the contention that the SAMA analysis is inadequately supported by virtue of the absence of the actual PRA, and in the list of specific examples of conclusory and qualitative (as opposed to quantitative[11]) statements illustrating such inadequacy, *see* LBP-03-17, 58 NRC __, Slip op. at 10, which spell out some of what the Intervenors contend is not contained in the SAMA analysis, and include reasons for the Intervenors' belief that both the larger omission of the PRA and the individual omissions provided in the examples render the SAMA analysis inadequate.

In addition, I find the Intervenors have fulfilled the purposes of the contention rule as defined by the Commission in CLI-02-28: They have clearly (1) provided notice to the opposing parties of the issues they seek to litigate; (2) provided more than minimal factual and legal foundations for their claims; and (3) shown the requisite "genuine dispute" with the applicant on material issues of fact and law. *See* CLI-02-28, 56 NRC at 383.

[11]In their basis for Subpart 5 the Intervenors point out that a draft EIS is, under 10 C.F.R. § 51.71(d), "to the fullest extent practicable, [to] quantify the various factors considered." Amended Contention 2 at 11. *See also* Intervenors' 7/20/02 Filing at 6. Although there may certainly be differing views on what would constitute "the fullest extent practicable" in a given EIS, this would seem to be integrally related to the "genuine dispute" with regard to Subpart 2, as well as, in other particulars, Subpart 5 and others: i.e., the dispute between the parties on whether the SAMA analysis is or is not adequately supported in the absence of the actual PRAs both as a factual scientific/technical matter and as a legal matter. The practicability of including, excerpting from, and/or providing meaningful references to the actual PRAs in order to "quantify the various factors" "to the fullest extent possible," and whether this would thus be required under § 51.71(d), would play into and require resolution itself as part of the resolution of the central dispute between the parties, had Amended Contention 2 been admitted and there were further proceedings on it.

NEPA Requirements for an EIS

As indicated above, the Intervenors rely upon NEPA with regard to several subparts of Amended Contention 2, including subpart 2. As the Commission has noted, NEPA does not mandate the particular decision an agency must reach on an issue, only the process it must follow while reaching its decisions. CLI-02-28, 56 NRC at 388 n.77 (citing *Committee to Save the Rio Hondo v. Lucero*, 102 F.3d 445, 448 (10th Cir. 1996); *Robertson v. Methow Valley Citizens Council*, 490 U.S. 332, 350 (1989)). Based on this, and also on the Staff's statement in the SEISs that the SAMA in question might in fact be cost-beneficial, *see* McGuire SEIS at 5-29–5-30, Catawba SEIS at 5-29, it has been argued that Amended Contention 2 should not be admitted because, under 10 C.F.R. § 2.714(d)(2)(ii), even if proven the contention would be of no consequence in the proceeding because it would not entitle the Intervenors to relief.

As indicated above, the Intervenors have argued, on the relief issue, that the SEIS is not definite in supporting the SAMA in question, *see*, *e.g.*, Tr. 1344-49, and that a "more thorough," Tr. 1314, "rigorous, disciplined, and well-supported evaluation of accident risks at Catawba and McGuire," disclosure of which would have value in itself, *see* [BREDL's] and [NIRS's] Reply to Responses by [Duke] and NRC Staff to ASLB Questions Regarding Admissibility of Amended Contention 2 (Feb. 12, 2003) at 2-3, and which they argue is mandated under the NEPA requirement that an EIS must incorporate a "hard look" at the environmental factors affecting its decision, would constitute the relief they seek. *See* Amended Contention 2 at 3, 4 (citing *Foundation on Economic Trends v. Heckler,* 756 F.2d 143, 151 (D.C. Cir. 1985)).

In this regard, I note the NEPA requirement at 42 U.S.C. § 4332(C) that an EIS include a "detailed statement" of, among other things, the environmental impact of any major Federal action. The EIS must "be written in language that is understandable to nontechnical minds and yet contain enough scientific reasoning to alert specialists to particular problems within the field

of their expertise." *Environmental Defense Fund, Inc., v. Corps of Engineers*, 348 F.Supp. 916, 933 (5th Cir. 1972). The amount of detail required has also been described as "that which is sufficient to enable those who did not have a part in its compilation to understand and consider meaningfully the factors involved." *Limerick Ecology Action, Inc., v. NRC*, 869 F.2d 719, 737 (3rd Cir. 1989); *Environmental Defense Fund, Inc., v. Corps of Engineers*, 492 F.2d 1123, 1136 (5th Cir. 1974).

The Intervenors have consistently contended that the amount of detail that has been provided is not sufficient to enable their expert to "understand and consider meaningfully the factors involved," arguing that the summary results of the PRA that Duke has provided are "insufficient to support the SAMA analysis, because there is no way to determine whether the assumptions underlying the calculations are reasonable." Amended Contention 2 at 5; *see also*, *e.g.*, Tr. 990-91; Intervenors' 7/20/02 Filing, at 5-7.[12]

Based on the Intervenors' arguments and the preceding case law, I find (without stating any opinion on the ultimate merits question of how the issue should be resolved were it still a pending issue in this proceeding) that the Intervenors have shown a genuine dispute of law on the issue of whether the "hard look" and "detailed statement" requirements of NEPA mandate provision of any underlying raw data contained in the Duke PRAs.

Conclusion

In conclusion, Petitioners are required at the contention stage of NRC adjudicatory proceedings to support their allegations and claims sufficiently to ensure that they raise genuine issues and are grounded in adequate bases. As the Commission has stated, the "contention

[12]Dr. Lyman has stated, for example, on the cited transcript pages, that "what is or is not necessary for a full understanding of this is a subjective judgment and therefore a large part of the PRA or proprietary that are being withheld is a subjective judgment whether the proprietary information [sic] is just allowing to filter into the public domain is sufficient for the public to understand this. . . . Some of the summary information that has been provided by Duke is generally simply numerical results and it is very difficult to establish the entire reasoning behind some of the numerical results that are produced."

rule is strict by design," having been "toughened . . . in 1989 because in prior years 'licensing boards had admitted and litigated numerous contentions that appeared to be based on little more than speculation.'" *Millstone*, 54 NRC at 358 (citing *Oconee*, 49 NRC at 334). But to go beyond the requirements and purposes of the rule[13] and in effect to judge the merits of contentions, as I believe my colleagues have done in their decision – prior to being presented, either through the summary disposition process or a hearing, actual evidence on issues in dispute – is in my view inappropriate. As we recognized in our decision on the original contentions in this proceeding, and as the Commission observed in *Oconee*, the "contention rule should [not] be turned into a 'fortress to deny intervention'," and contentions "that are material and supported by reasonably specific factual and legal allegations" – which I find significant parts of Amended Contention, including Subpart 2, to be – should be admitted. *See* LBP-02-4, 55 NRC at 65; *Oconee*, 49 NRC at 335.

The majority decision has the effect of requiring petitioners and intervenors to meet a virtually impossible burden of proving their case at the outset, prior to any opportunity either to prepare for the presentation of well-developed evidence in a hearing, or even to respond appropriately to a motion for summary disposition. It would also seem to negate the actual intent and purposes of the law and rules on hearings in NRC matters, and to severely curtail the public's rights under the Atomic Energy Act with regard to matters that may rightly concern the

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[13] *See*, *e.g.*, 54 Fed. Reg. at 33,170, wherein the Commission, in its Statement of Consideration for the 1989 Rules of Practice amendments, stated that the requirement at 10 C.F.R. § 2.714(b)(2)(ii) "does not call upon the Intervenor to make its case at this stage of the proceeding," although it is required "to indicate what facts or expert opinions, be it one fact or opinion or many, of which it is aware at that point in time which provide the basis for its contention." Perhaps even more notable is the Commission's statement in the SOC, in response to a "number of commenters" disagreeing with language in the originally-proposed rule providing that a presiding officer was to refuse to admit a contention if it "appears unlikely that petitioner can prove a set of facts in support of its contention," objecting "because it suggest[ed] that the presiding officer [wa]s to prejudge the merits of a contention before an intervenor has an opportunity to present a full case." The Commission stated that it recognized the "potential ambiguity of the proposed phrasing" and that "the paragraph has been deleted." *Id*. at 33,171.

public, especially those who have, generally through residence near nuclear plants, shown standing to participate in adjudicatory proceedings. I believe the approach taken in the majority decision has the potential to make such results more likely, and for this reason as well as those discussed above, I cannot concur with significant parts of it.

/RA/

Ann Marshall Young
ADMINISTRATIVE JUDGE

Rockville, Maryland
October 7, 2003[14]

[14]Copies of this Opinion were sent this date by Internet e-mail or facsimile transmission, if available, to all participants or counsel for participants.

UNITED STATES OF AMERICA
NUCLEAR REGULATORY COMMISSION

In the Matter of	)	
	)	
DUKE ENERGY CORPORATION	)	Docket Nos. 50-369/370/413/414-LR
	)	
(McGuire Nuclear Station, Units 1 and 2;	)	
Catawba Nuclear Station, Units 1 and 2)	)	

CERTIFICATE OF SERVICE

I hereby certify that copies of the foregoing LB SEPARATE OPINION (CONCURRING IN PART AND DISSENTING IN PART) (ADDENDUM TO LBP-03-17) have been served upon the following persons by deposit in the U.S. mail, first class, or through NRC internal distribution.

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