

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

In the Matter of	)	Docket Nos.
	)	San Onofre 50-361 and 50-362-LA
SOUTHERN CALIFORNIA EDISON COMPANY	)	
	)	ASLBP No. 12-923-01-LA-BD01
(San Onofre Nuclear Generating Station)	)	
	)	January 14, 2013

**CITIZENS OVERSIGHT  
PETITION FOR REVIEW OF LBP-12-25**

**I. INTRODUCTION**

Citizens Oversight, Inc. is a nonprofit (501(c)3) organization incorporated in Delaware, and with primary offices in California. Among its missions, Citizens Oversight (or Citizens Oversight Projects, "COPS") seeks to ensure the public has an opportunity to influence the outcome of government and corporate decisions that affect the lives of many people.

The licensee (Southern California Edison Company, "SCE") submitted a license amendment request (LAR) for San Onofre Nuclear Generating Station ("SONGS"), Units 2 and 3, dated July 29, 2011, requesting approval to convert the Current Technical Specifications to be consistent with the most recently approved version of the Standard Technical Specifications for Combustion Engineering Plants, NUREG-1432.

Pursuant to 10 C.F.R. § 2.309, Citizens Oversight submitted a "Petition to Intervene and request a hearing" which, after review by the Atomic Safety and Licensing Board was denied, in LBP-12-25, dated December 21, 2012.

Pursuant to 10 C.F.R. § 2.341 "Review of decisions and actions of a presiding officer," Citizens Oversight hereby submits this petition for review of LBP-12-25. Citizens Oversight has 25 days to submit this appeal, with the deadline being January 15, 2013. Because it was

submitted before that deadline, the appeal is timely.

## **II. BACKGROUND - (A concise summary of the decision or action of which review is sought)**

On July 29, 2011, SCE applied to NRC to change many of the “technical specifications” set forth in the licenses governing SONGS Units 2 and 3. 77 Fed. Reg. at 49,464. The license amendment request covered fifteen volumes and exceeded 3000 pages. The main thrust of the license amendment request was to conform the technical specifications in the license to a set of standardized technical specifications approved by the NRC Staff in a guidance document, NUREG-1432.<sup>1</sup> In addition to converting the technical specifications, SCE asked NRC for permission to delete many of these technical specifications from the actual NRC licenses and place them in “licensee-controlled documents,” where they are no longer “technical specifications.” Instead, they become a “written commitments” by the licensee. Thus, the technical specification is being eliminated and replaced by a qualitatively different provision, a “written commitment.” Compliance with a technical specification is required and directly enforceable by the Commission, whereas compliance with written commitments contained in licensee-controlled documents is not.<sup>2</sup>

On August 16, 2012, the NRC published a notice of opportunity to request a hearing regarding the proposed amendments to the SONGS licenses in the Federal Register. Id. at 49,463.<sup>3</sup> The deadline to file a request for hearing was October 15, 2012. Id. at 49,463.

On October 1, 2012, Citizens Oversight started the submission process. Citizens Oversight contacted NRC staff and NRC staff established a docket for the petition and enabled

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1 The full title of NUREG-1432 is “Standard Technical Specifications – Combustion Engineering Plants.”

2 See LBP-12-25 at footnote 21.

3 This also served as notice that the NRC Staff proposed a “no significant hazards consideration determination” with regard to SCE’s proposed amendments. 77 Fed. Reg. at 49,471.

access to the document submission system. On October 17, 2012, Citizens Oversight, represented pro se by Mr. Raymond Lutz, filed its petition to intervene and request for a hearing<sup>4</sup>. The petition contains three contentions. Among other things, it asserts that “removing surveillance frequencies from the operating license document obfuscates the minimum requirements, may introduce human error, and limits review by the public.” Id. at 5.

On November 9, 2012, the NRC Staff filed an answer.<sup>5</sup> On November 13, 2012, SCE filed its answer asserting the same three arguments.<sup>6</sup> On November 20, 2012, Citizens Oversight filed its reply, refuting the assertions of both SCE and NRC staff.<sup>7</sup>

Meanwhile, on October 25, 2012, a Board of the Atomic Safety and Licensing Board ("Board") was established to preside over this adjudication,<sup>8</sup> and, on December 5, 2012, oral argument<sup>9</sup> was heard from the parties on the issues raised in the pleadings in the Board's hearing room in Rockville, Maryland, and was webcast to the public. Counsel for SCE and the NRC Staff participated in person. Mr. Lutz participated by video conference from San Diego, California, with his associate and member of Citizens Oversight, Martha Sullivan, who lives within 34.5

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4 Although this was two days after the deadline, it was due to a clerical error based on adding 30 days to the end of the comment period, which ended September 17. The comment period deadline was shifted two days due to the weekend. Therefore, as described in COPS Reply, this filing was substantially timely in spite of the minor deviation of the actual submission date.

5 NRC Staff's Answer to Petition to Intervene and Request for a Hearing by Citizens Oversight (Nov. 9, 2012) [Staff Answer].

6 Southern California Edison Company's Answer Opposing Petition to Intervene and Request for Hearing by Citizens Oversight (Nov. 13, 2012) [SCE Answer].

7 Citizens Oversight's Answer to Submissions by NRC Staff and Southern California Edison Opposing the Petition to Intervene and Request for a Hearing by Citizens Oversight. (Nov. 16, 2012) [Reply].

8 Southern California Edison Company; Establishment of Atomic Safety and Licensing Board, 77 Fed. Reg. 65,909 (Oct. 31, 2012).

9 [Oral Argument] - The transcript of this hearing is available as ADAMS ML12348A241 [Transcript]

Statute Miles of San Onofre.

The Board concluded in LBP-12-25 that Citizens Oversight failed to proffer a contention that is admissible under the criteria of 10 C.F.R. § 2.309(f)(1)(i)–(vi) and denied the petition. The Board did not attempt to decide the other two issues—timeliness and standing.

Under the Atomic Energy Act (AEA), the Commission must grant a hearing on a license amendment application upon “the request of any person whose interest may be affected by the proceeding, and shall admit any such person as a party to such proceeding.” 42 U.S.C. § 2239(a)(1)(A). To support the request, a petitioner must provide the Commission with information regarding “(1) the nature of the petitioner’s right under the governing statutes to be made a party; (2) the nature of the petitioner’s property, financial, or other interest in the proceeding; and (3) the possible effect of any decision or order on the petitioner’s interest.” *Entergy Nuclear Vermont Yankee, L.L.C., and Entergy Nuclear Operations, Inc. (Vermont Yankee Nuclear Power Station)*, 60 N.R.C. 548, 552 (2004) (citing 10 C.F.R. § 2.309(d)(1)). “The NRC generally uses judicial concepts of standing in interpreting this regulation.” *Entergy Nuclear Vermont Yankee*, 60 N.R.C. at 552. Thus, a petitioner may intervene if it can specify facts showing “that (1) it has suffered or will suffer a distinct and palpable harm constituting injury-in-fact within the zone of interests arguably protected by the governing statutes, (2) the injury is fairly traceable to the action being challenged, and (3) the injury will likely be redressed by a favorable determination.” *Id.* at 552–53. In determining whether a petitioner has met the requirements for establishing standing, the Commission “construe[s] the petition in favor of the petitioner.” *Id.* at 553.

Citizens Oversight hereby submits this request for review of LBP-12-25. We assert and will show below that the Board admitted in LBP-12-25 that Contention 1 is valid, but that they neglected to include legal arguments from Citizens Oversight as presented on Dec. 5, 2012, and

therefore the denial of our petition was inappropriate. We believe that with these details restated in a concise manner, we will show that our request should be granted.

### **III. STATEMENT<sup>10</sup>**

In this request for review of LBP-12-25, Citizens Oversight suggests that the review be confined to Contention 1, and therefore arguments for Contentions 2 and 3 from our original petition will not be further addressed here. To be clear in this argument, we will take up each of the provisions of 10 C.F.R. § 2.309(f)(1)(i)–(vi) and show that each one is fulfilled. (Since 10 CFR 52.103(b) applies to "Operation under a combined license" and this is not the case at San Onofre, portions of the requirements that only applies in that case are omitted below.)

#### **III.A -- 10 C.F.R. § 2.309(f)(1)(i)**

Provide a specific statement of the issue of law or fact to be raised or controverted;

Citizens Oversight has provided such a brief and specific statement of the issue of law or fact to be controverted, see Petition at 1-17.

In summary, the main thrust of the license amendment request was to conform the technical specifications in the license to a set of standardized technical specifications approved by the NRC Staff in a guidance document, NUREG-1432.<sup>11</sup>

Citizens Oversight has no objection to the changes to the technical specifications in an attempt to conform them to a set of standardized technical specifications approved by the NRC Staff in a guidance document, NUREG-1432, to the extent that the actual specifications are not changed unreasonably or deleted.

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10 "A statement (including record citation) where the matters of fact or law raised in the petition for review were previously raised before the presiding officer and, if they were not, why they could not have been raised;"

11 The full title of NUREG-1432 is "Standard Technical Specifications – Combustion Engineering Plants."

In addition to converting the technical specifications per NUREG-1432, SCE asked NRC for permission to delete many of these technical specifications from the actual NRC licenses and place them in “licensee-controlled documents,” where they are no longer “technical specifications.” Instead, they become “written commitments” by the licensee. Thus, those technical specifications are being eliminated and replaced by qualitatively different provisions, “written commitments.” Compliance with a technical specification is required and directly enforceable by the Commission, whereas compliance with written commitments contained in licensee-controlled documents is not.<sup>12</sup> Citizens Oversight objects to this action.

Furthermore, deletion of those specifications from the Tech Specs documents means that any changes to those specs will not be disclosed to the public, no license amendment process will be invoked, and the public then does not have any recourse to stop changes that are unsafe.

Citizens Oversight's primary objection is that once these specifications are deleted from the technical specifications documents, then the licensee will be able to modify those with no oversight by the public and no approval from the NRC. The Board concluded in LBP-12-25 (page 11):

The “key issue” raised by Contention 1 is that “relocating” the surveillance frequency requirements from the license to a licensee-controlled document is improper because it will deprive the public of any opportunity to scrutinize or challenge further changes to the surveillance frequencies. It is clear to us that Citizens Oversight is correct on one point—If SCE’s license amendment request is granted, then SCE will be able to make future changes to the surveillance frequencies with no opportunity for public scrutiny and oversight. See Tr. at 49–50 (SCE), 89 (NRC Staff). Indeed SCE and the NRC Staff state that SCE will not even need to inform the NRC Staff of such changes. 222 See Tr. at 74–75 (SCE), 90 (NRC Staff).

Thus, the Board agreed with Citizens Oversight that issue of law or fact to be raised or controverted had been presented. This then satisfies 10 C.F. R. § 2.309(f)(1)(i)

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<sup>12</sup> See LBP-12-25 at footnote 21.

### **III.B -- 10 C.F.R. § 2.309(f)(1)(ii)**

Provide a brief explanation of the basis for the contention;

Citizens Oversight has provided in the Petition 1-17 an explanation for why keeping these surveillance frequency specifications in the technical specifications is necessary from our point of view to maintain the proper level of public scrutiny and oversight, as well as to insure that NRC staff is informed of the changes. Therefore, we assert that we fulfill the criteria for 10 C.F.R. § 2.309(f)(1)(ii)

### **III.C-- 10 C.F.R. § 2.309(f)(1)(iii)**

Demonstrate that the issue raised in the contention is within the scope of the proceeding;

This has been demonstrated in the Petition 1-17. We estimate that 750 such surveillance frequencies are being deleted from the technical specifications, and replaced with the same sentence: "As specified by the Surveillance Frequency Control Program". The ultimate goal of this change is to allow the licensee "free rein" (i.e. without approval of NRC or review by the public) to change these surveillance frequencies, and avoid a license amendment for each change. This is a substantive change to the technical specifications, and the issue raised in the contention is therefore within the scope of the license amendment proceeding. This therefore satisfies the requirements for 10 C.F.R. § 2.309(f)(1)(iii).

### **III.D -- 10 C.F.R. § 2.309(f)(1)(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;

Citizens Oversight asserts in its Contention 1 (see Petition 1-17) that the Surveillance Frequencies should not be deleted from the technical specifications and replaced with "written commitments" in licensee-controlled documents as proposed by the license amendment request. Therefore, if we are successful in supporting this contention in our hearing, then those

specifications will not be deleted, but maintained in some fashion so that the public can perform their duty to provide oversight and also so the NRC will be informed of changes, so they can provide their official regulatory duties.

To further support the materiality of the issue, we have shown (and will summarize below) that:

1. "NO GRANDFATHERING" -- The proposal is not automatically appropriate and lawful just because it is being done already or endorsed by the industry or NRC staff.
2. "NOT MILLSTONE" -- This case is substantially different from Millstone, which is cited as rationale for finding that the issue is immaterial.
3. "ILLEGAL" -- The deletion of surveillance frequencies from the technical specification is in direct conflict with NRC regulations and commission statements.

**III.D.1 -- ITEM 1: "NO GRANDFATHERING" -- The proposal is not automatically appropriate and lawful just because it is being done already or endorsed by the industry or NRC staff.:**

The Board in LBP-12-25 already agreed with our assertion that the admissibility of our contention is not dependent upon whether similar actions had been performed at other plants, whether NRC Staff or the industry endorses it. In LBP-12-25, Footnote 23:

[W]e do reject the suggestions by SCE and the NRC Staff that the "relocation" of these surveillance frequency requirements is necessarily legal because (a) the nuclear industry endorses this practice, (b) NRC policy endorses it, or (c) everybody else is doing it.

Citizens Oversight would further assert that you can't have a surveillance requirement without any of three components:

1. What you are checking



2. The Limiting Condition for Operation [LCO] -- i.e. What measurement is considered "acceptable"
3. How often you check it -- the surveillance frequency.

The licensee claims that deleting the surveillance frequency from the Surveillance Requirement is appropriate, but is unable to cite any legal basis for doing so (Transcript, p70 lines 10-20):

JUDGE KARLIN: I mean, has it been decided? I mean, is there some legally authoritative proposition that says surveillance requirements in three, that that doesn't include frequency? I mean, I know staff has said that. Let's posit that staff says that.

MR. FRANTZ: Yeah.

JUDGE KARLIN: How about us? How about some case law?

MR. FRANTZ: I don't know that there isn't any case law on that, but again, the staff at the NRC as an agency has done this for other plants, and, of course, the staff has endorsed the tech spec improvement program that the industry has establish. All we're doing is using the standard industry process endorsed by the NRC standard.

Citizens Oversight asserts that there is no support for the notion that it is appropriate to suggest that you can split up the Surveillance Requirement into two parts. Both parts are required or you can't do the surveillance.

**III.D.2 -- ITEM 2: "NOT MILLSTONE" - This case is substantially different from Millstone, which is cited as rationale for finding that the issue is immaterial.**

CLI-01-24 was a review of the original decision, LBP-01-10, 53 NRC 273 (2001), that denied a petition for leave to intervene and request for hearing filed by the Connecticut Coalition Against Millstone and the STAR ("Standing for Truth About Radiation") Foundation.

The petitioners submitted a two-paragraph contention:

"Relocating" the selected radiological effluent Technical Specifications and the associated Bases to the Millstone Radiological Effluent Monitoring and Offsite Dose Calculation Manual will deprive the public, and the membership of the Connecticut Coalition Against Millstone and STAR Foundation, of notice of proposed changes to the Millstone radiological

liquid and gaseous effluent monitoring instrumentation. It will deprive them of the opportunity for hearing and to comment and object to changes, which can only be projected to lower standards of radiological effluent monitoring in the era of deregulation and electric restructuring. The amendment request is particularly objectionable in light of the record levels of radiological effluent released to the environment by the Millstone reactors.

This amendment will degrade protection of the public health and safety from radiological effluents. Even according to the applicant, NNECO, the amendment opens the door to increases in the type and amounts of effluents that may be released offsite as well as individual and cumulative occupational radiation exposures. NNECO's amendment requests states [sic] that such increases will not be "significant." (Application, Feb. 22, 2000, cover letter, page 3). However, as there will be no opportunity for hearing or public comment, the public will be exposed to greater risk of radiation doses from the routine operations of the Millstone nuclear reactors if NNECO obtains the amendment requested. The Petitioners are prepared to establish through expert testimony that any increase in routine radiological effluent to the air and water by the Millstone nuclear reactors will expose the public to greater risk of cancer, immunodeficiency diseases and other adverse health effects.

The relocation of the monitoring specifications from the technical specifications document to a licensee-controlled document is part of a long-term project to "improve" the technical specifications. According to CLI-01-24:

In 1968, the NRC promulgated 10 C.F.R. § 50.36, a rule outlining the required contents of technical specifications. See 33 Fed. Reg. 18,610 (Dec. 17, 1968). As originally issued, however, § 50.36 lacked well-defined criteria. Cleveland Elec. Illuminating Co. (Perry Nuclear Power Plant, Unit 1), CLI-96-13, 44 NRC 315, 318 (1996)(citing Final Policy Statement on Technical Specifications Improvements for Nuclear Power Reactors, 58 Fed. Reg. 39,132, 39,132 (July 22, 1993)). This caused the number of items included in technical specifications to "mushroom[] after the rule was issued." Perry, 44 NRC at 318. Over time, technical specifications essentially came to include all Commission requirements governing the operations of nuclear power reactors... Id. (citing Policy Statement, 58 Fed. Reg. at 39,133).

As a result, the NRC staff attempted to rid technical specifications of excessive detail and confine them to the most safety-significant matters:

By the early 1980s, the NRC staff concluded that the burgeoning number

of items commonly included in standard technical specifications was both diverting Staff and licensee attention from the most significant safety requirements and unnecessarily burdening agency and industry resources with a severalfold increase in license amendment applications. To remedy this trend, the Staff initiated a Technical Specifications Improvement Project. The project resulted in a policy to limit technical specifications to those items deemed most important to safety. (Perry, 44 NRC at 318 (citations omitted).)

The review of the Millstone case in CLI-01-24 (page 15) rejected the contention in the petition:

In short, in seeking to maintain low-level effluent monitoring procedures in the Millstone technical specifications, the petitioners may not simply complain generally of lost hearing opportunities causing future safety risks. An admissible contention must explain, with specificity, particular safety or legal reasons requiring rejection of the contested license amendments. As the Board majority emphasized, .there is no general right to a hearing for a hearing.s sake.. 53 NRC at 282.

But there is a substantial difference between removing surveillance requirements for low-level monitoring procedures in the Millstone case and the surveillance requirements being deleted from the technical specifications in the current license amendment. These differences were brought out in Oral Argument, but these were not included in LBP-12-25.

The difference comes down to the simple fact that the surveillance requirements being changed in the current license amendment proposal are related to Limiting Conditions of Operation (LCOs).

From Transcript, Page 30 and 31, Citizens Oversight draws a distinction between the Millstone Case and the current license amendment.

MR. LUTZ: ...[The petitioners in Millstone] were talking about effluent coming out of the plant somewhere and they were worried about whether or not it was being measured well enough by the licensee there. And the question is -- that was being entertained and that whole decision was -- if the licensee did not check that frequently enough, would that actually do anything? Well, it might disturb the residents in the area because they want to know how much effluent is coming out. But it certainly would not necessarily result in an accident at the plant because checking the effluent coming out of the plant and into the streams is not directly related to the

operation of the plant.

In contrast, the surveillance frequency specifications that are being proposed to be removed by the licensee in this case, are within the containment building itself. And these are very, very critical systems that have to be checked on a regular basis. And to say that we're going to put this into a closed system where only the NRC and the licensee are going to know how often these critical things are going to be checked, I think is inappropriate and unacceptable to the public. We want to know if they are saying we're not going to check the reactor coolant system, we're going to start checking that instead of 12 hours, we're going to go down to once every three days or a month. That's unacceptable for the public. We want to know that that's happening, and so to move this over into the surveillance frequency control program, which we then have no ability to monitor at all, is unacceptable.

Therefore, the Millstone case is substantially different from this case because in Millstone, they were concerned with radioactive effluent from the plant. Indeed, it may be the case that by monitoring the effluent flow and radioactivity, it may be possible to deduce other problems in the plant itself. Such discharges are not what the public wants to see, and so for that reason, we find it unfortunate that these surveillance frequencies and also monitoring levels were deleted from the Technical Specifications.

But as stated in testimony during Oral Arguments quoted above, the surveillance frequencies proposed by SCE at San Onofre are inside the containment building and largely deal with the minute-by-minute operation of the nuclear reactor, cooling, and safety systems, and are related to conditions of operation, that if not met, result in required actions, such as "shutdown" (transition from Mode 1 to Mode 3, for example).

On December 2, 2012, Citizens Oversight filed an addendum to its reply, "Addendum to Citizens Oversight's Answer to Submissions by NRC Staff and Southern California Edison Opposing the Petition to Intervene and Request for a Hearing by Citizens Oversight" (Dec. 2, 2012). This addendum is provided in Exhibit I. The changes condensed into Exhibit I can also be seen by referring directly to the proposed changes to the Technical Specifications, Attachment 1,

Volume 7, Chapter 3.4, Reactor Coolant System (ADAMS accession number ML11251A100).

These surveillance requirements are proposed to be changed by deleting the actual surveillance frequency and substituting the phrase "According to the Surveillance Frequency Control Program." The example we cited in our opening remarks of Oral Arguments (Transcript Page 20, Line 22)

For example, consider specification 3.4.4.1 on pages 88, 89, and 95 of the submitted document from Edison, which is, to quote, "verify each RCS loop is in operation" and the frequency is "12 hours."

See also Exhibit II where the original page from the license Tech Specs is provided. This entire spec is called a "Surveillance Requirement" in the Technical Specification document, and the shorthand designation SR3.4.4.1. It consists of two parts, the Surveillance and the Surveillance Frequency. (We must note that the use of the term "frequency" is in fact inaccurate because a frequency is normally defined as a rate per unit time, like "two times a day," whereas these specifications are in fact "periods," that is the maximum time interval between surveillance inspections, like "12 hours," which is 1/frequency. Despite this confusing terminology, we will use the term "Frequency" and imply "Maximum Period Between Each Surveillance")

According to 10 CFR 76.4 Definitions and the terminology used in 10 CFR 50.36:

*Surveillance requirements* means requirements relating to test, calibration, or inspection to ensure that the necessary quality of systems and components is maintained, that plant operation will be within the safety limits, and that the limiting conditions of operation will be met.

And:

*Limiting conditions for operation* [LCO] means the lowest functional capability or performance levels of structures, systems, components, and their support systems required for normal safe operation of the plant.

There is no definition in 10 CFR 76.4 for "Surveillance Frequency." The only definition is the entirety of the Surveillance Requirement, and therefore, the Surveillance Frequency is part of

the surveillance requirement.

In our Oral Argument testimony, (Transcript Page 100, line 13):

On page 88 [of Technical Specifications, Attachment 1, Volume 7, Chapter 3.4, Reactor Coolant System] it has a title that says "Surveillance Requirement 3.4.4.1." That's the number of the surveillance requirement. It actually says SR3.4.4.1 for surveillance requirement. And on the first column it says surveillance, and in the second column it says surveillance frequency. The definition of a surveillance requirement SR3.4.4.1 is both the surveillance -- what's going to be checked -- and how often it's checked. Those two things are not something that they can split up. A surveillance requirement has to incorporate both things, both what you're checking and the fact that you're going to check it.

It is appropriate to turn to a page of the operating license, as provided in Exhibit II. This is the same surveillance requirement mentioned above. You will note that this is related to operation in Mode 1 (Power operation) or Mode 2 (Startup). the "Limiting Condition of Operation" is described as "Two RCS Loops shall be in operation". If they are not in operation, then the ACTION is to move to Mode 3 (hot standby) within 6 hours. (See Exhibit III for page 25 from the operating license for the definition of the modes.)

In fact, the design of the plant includes the requirement to safely recover from "Design Basis Accidents (DBA)". One of the most significant is the "Loss of Coolant Accident" or "LOCA". From the NRC Glossary (<http://www.nrc.gov/reading-rm/basic-ref/glossary/loss-of-coolant-accident-loca.html>, emphasis added):

**Loss of coolant accident (LOCA)**

Those postulated accidents that result in a loss of reactor coolant at a rate in excess of the capability of the reactor makeup system from breaks in the reactor coolant pressure boundary, up to and including a break equivalent in size to the double-ended rupture of the largest pipe of the reactor coolant system.

Thus, this particular surveillance, SR3.4.4.1 checks that the reactor coolant system is in operation, and it must be checked every 12 hours (or more frequently) to make sure that no Loss

of Coolant Accident (LOCA) is in progress. This surveillance is directly related to plant operation. If the surveillance is not made in a timely manner, the action of moving from Mode 1 or 2 (Power or Start-up) to Mode 3 (Hot Standby) will not be completed, and a dangerous accident may result.

In contrast, in Millstone, the surveillance of the effluent is not with regard to processes and equipment inside the containment building, is not regarding systems that relate to safety, and do not have related actions that must be accomplished in a specified period of time. Therefore, the finding in that case cannot be extrapolated to this case.

Consider the proposed Technical Specifications, Attachment 1, Volume 7, Chapter 3.4, Reactor Coolant System (RCS). Here, we will support the notion that these surveillance frequencies relate to important safety systems:

From Transcript, Page 31, Line 19

JUDGE KARLIN: All right, let me ask another question on that same page. If you can pull that up, Mr. Welkie. The bottom of the page, the last paragraph. The last paragraph reads, quote, "Technical specification is therefore should be reserved for those reactor operation conditions or limitations necessary to obviate the possibility of an abnormal situation or event, giving rise to an immediate threat to the public health and safety," close quote.

The Commission goes on to say, "Not every detail needs to be in the license, only those which have a significant safety impact." Now what I was looking for in your petition, or your reply, was for you to identify specific surveillance frequencies, like checking x every 12 hours. And you would say, well that's a problem because that isn't sufficient because that's a safety -- important safety issue -- and explaining to us and helping us with that....

MR. LUTZ: I did -- I assume it's fair for me to refer to the actual document that's being proposed to be approved. On Page 88, 89 and 95 of volume -- what is it? It's the RCS volume, which I sent in my addendum. And I'm referring to that here because I don't want to have to leaf through so many pages. It is the one that's called the Reactor Cooling System. And on Page 88, 89 and 95, they refer to the same specification, which is 3.4.4.1. And it is "verify each reactor cooling system or RCS loop that is in operation." We

want that done. We want the reactor cooling system to be in operation.

...I'm saying here that verifying that the reactor cooling system loop is in operation is extremely important. This is different than looking at the effluent is running into the stream. If the effluent runs into the stream or not, even if we didn't check that in a year, it wouldn't make any difference. If the RCS loop is not in operation, the plant is going to melt down. And this is extremely important and no one will deny this.

JUDGE KARLIN: How do we know that? How do we know that? I don't know that. Mr. Lutz, I don't know that. You say it's going to melt down. And the regs say -- 2.309F1 says you have to provide alleged facts or expert opinions to support your allegation that it's going to melt down. Have you done that? I don't know. And that's what I'm asking for.

First, Citizens Oversight would like to apologize for not realizing that this (that the Reactor Coolant System must be operational or the plant may enter a "Loss of Cooling Accident") was not an obvious fact, particularly for those who work for the NRC, and so we did not think expert opinions on this point would be required. Please see EXHIBIT V for testimony from a nuclear expert regarding the critical nature of the Reactor Coolant System. Please also see EXHIBIT VI for a review of the Reactor Coolant System and some references that point out its importance. In fact, this is probably the most important and critical single system in a nuclear power plant.

### **III.D.3 -- ITEM 3: "ILLEGAL" -- The deletion of surveillance frequencies from the technical specification is in direct conflict with NRC regulations and Commission policy statements**

The question is whether the Reactor Coolant System meets the requirement quoted by Judge Karlin (Transcript, Page 31 line 20), specifically (from CLI-01-24 "Millstone" page 25):

JUDGE KARLIN: Technical specifications, therefore, should be reserved for those reactor operation conditions or limitations ... necessary to obviate the possibility of an abnormal situation or event giving rise to an immediate threat to the public health and safety

We may note that in Millstone, the surveillance under contention was for effluent and was not related to those reactor conditions or limitations. But the operation of the Reactor Coolant



System, for example is.

MR. LUTZ: Sir, yes, actually, as I said before in my original opening arguments, the Federal Register final statement on technical specs, it says, "In the Commission policy, licenses must retain in their technical specs LCO's action statements and surveillance requirements for the following systems, which operating experience and PSA have generally shown to be significant to public health and safety." I assume this would be an expert opinion. It's your own group here.

JUDGE KARLIN: Final Policy on Technical Specifications, Improvements for Nuclear Power Reactors, 58 Fed Reg 39132, issued in the Federal Register July 22, 1993.

...

MR. LUTZ: Where it says, "It is a Commission policy that licensees retain in their technical specifications LCOs, action statements and surveillance requirements for the following systems, which operating experience and PSA have generally shown to be significant to public health and safety, and any other structure, systems or components that meet this criterion: reactor core, isolation and cooling." Okay, I'm stopping right there because the reactor cooling system has to do with reactor core, isolation and cooling.

JUDGE KARLIN: Okay.

MR. LUTZ: And so, by your own documents, you support this.

JUDGE KARLIN: All right. That's a useful point.

From this, it is clear that removal of the surveillance frequencies from the technical specifications for in the proposed license amendment is not in concert with the commission policy as stated in the "Final Policy on Technical Specifications, Improvement for Nuclear Power Reactors," and therefore, their removal is illegal.

1. The surveillance Frequency Specs are an integral component of the Surveillance Requirement specification, and can not be extracted and deleted from the Surveillance Requirement. Indeed, there is really not much left of the Surveillance Requirement if it is removed.

2. The Surveillance Frequency Specs in the RCS attachment are concerned with "Reactor

core, isolation and cooling"

3. The Final Policy on Technical Specifications, Improvements for Nuclear Power Reactors, 58 Fed Reg 39132, issued in the Federal Register July 22, 1993, [1993 Policy Statement] explicitly states that these specifications must be maintained in the Technical Specifications.

Therefore, the issue raised in Contention 1 is material to the findings the NRC must make to support the approval of the license amendment request, and 10 C.F.R. § 2.309(f)(1)(iv) is fulfilled.

#### **III.D.4 -- WHAT ARE THE ALTERNATIVES**

Citizens Oversight would like to address some misconceptions regarding other alternatives that would maintain the surveillance frequency specifications in the Technical Specifications while still allowing use of the Surveillance Frequency Control Program. Although these points do not directly address our request for an appeal, they are useful to review so as to provide a stronger basis for granting our request for a hearing, and in turn, for agreeing that it is improper to delete the Surveillance Requirement specs from the Technical Specifications.

The licensee asserts that it is essential to delete surveillance frequency specifications from the Technical Specifications and maintain these in licensee-controlled documents, so that these frequencies could be modified according to the Surveillance Frequency Control Program (SFCP), that is, NEI04-10 "Risk-Informed Method for Control of Surveillance Frequencies" (without the need for a license amendment, without NRC review or approval.) However, Citizens Oversight does not agree with that assertion.

We would like to turn to the existing license for these plants. In Exhibit IV we have reproduced the pages from the license technical specifications document that define the terms Surveillance Frequencies and Surveillance Requirements. In example 1.4-1, a typical case of the

use of the surveillance frequency specification is described. This example states:

Example 1.4-1 contains the type of SR most often encountered in the Technical Specifications (TS). The Frequency specifies an interval (12 hours) during which the associated Surveillance must be performed at least one time.

It is clear from this description, that most surveillances can be performed more often than the frequency specified in the Technical Specifications, which should be considered a "Not to Exceed" time interval. Even with the surveillance frequencies in the Technical Specifications (i.e. not removed per the request by the licensee), there is nothing to stop the licensee from making the surveillances more often than that "not-to-exceed" value, and that means the SFCP can be in place for those instances, so as to determine the proper rate of surveillance. So there is no inherent conflict between the SFCP and leaving the not-to-exceed surveillance frequency specifications in the Technical Specifications.

Citizens Oversight mentioned this issue in our original petition, paragraphs 14-15, regarding the low frequency of surveillances of critical parameters of plant operation:

For example, checking leakage from the steam generators only once every 72 hours is ridiculously infrequent. A leak can progress quickly within only a matter of hours during a Steam Generator Tube Rupture (SGTR), and if the operator waits for 72 hours to detect that failure, the plant will certainly be experiencing a full Loss of cooling Accident (LOCA)

(This is not a separate contention and is included to further prove the point about Contention 1)

So we find it incomprehensible that the licensee will want to check this LCO less often than once every 72 hours. The SFCP can be implemented WITHOUT deleting those specifications from the license, as long as the frequencies are more often than the not-to-exceed values in the Technical Specifications. If the licensee wants to check critical subsystems LESS OFTEN, then we consider this a very dangerous step, particularly since we believe the time

periods in the technical specifications are much too long to be reasonable anyway, provide no barrier for appropriate use of the SFCP, but do serve as a valuable not-to-exceed value to guarantee that the operator does not inappropriately set these inspections to be too infrequent.

The licensee, represented by Mr. Franz, stated in Oral Arguments on December 5, 2012, that the SFCP may increase the frequency of surveillances (Transcript Page 97 line 16):

MR. FRANTZ: Judge Karlin, can I make one more statement in response to something that Mr. Lutz raised? He said we're going to be using this program to reduce surveillance frequencies. That may be true in some cases, but in other cases --

JUDGE KARLIN: No, I didn't say that. I don't think I did.

MR. FRANTZ: I said Mr. Lutz did. Mr. Lutz did. I want to respond to something Mr. Lutz said. In some cases, of course, we actually may be increasing the surveillance frequency.

We hope this is true, because we object strenuously to the concept that these surveillances should be decreased in frequency, and in fact will likely be much more frequent than specified. But it is also clear that there is no need to push for deleting the surveillance frequency specifications unless the licensee intends to reduce the frequencies (increase the periods between inspections).

The representative for the licensee stated (Transcript 118 line 23):

MR. FRANTZ: Yes, thank you, Judge Karlin. It seems to be the position of Mr. Lutz that once the provision is in the tech spec, it can never be removed. And is just flatly inconsistent with the Commission's 1993 policy statement, which explicitly encourages licensees to remove the necessary details from the technical specifications.

We disagree with this statement. We have not said that "once the provision is in the tech spec, it can never be removed" because that is too global a statement. In our petition, we stated that there are two classes of surveillances, CLASS 1 and CLASS 2, which we defined based on whether they were critical. CLASS 1 would meet the requirements that we understand the Commission has supported to keep in the Technical Specs, those specs that relate to safety, and in

the example cited, the Reactor Coolant System, which is critical to the safety of the plant. These should not be removed, but maintained in the Tech Specs. However, it is clear that the SFCP could still be implemented as long as the surveillance frequency is at least as often as specified in the Technical Specifications.

The 1993 Policy Statement did encourage the removal of details that were unrelated to critical safety systems. The Millstone decision is an example of that, because measuring the effluent coming out of the plant is an important environmental concern, but is not related to the operation of the plant, as is the operation of the Reactor Coolant System, which is a critical safety system.

If the licensee wishes to decrease the frequency that is stated in the Technical Specifications, then this represents an important loosening of the regulations, and a license amendment would then be required, as it should be. In fact, this was the approach originally envisioned in for the SFCP. We brought this up in Oral Argument (Transcript Page 40 Line 9):

in the Regulatory Guide 1.177, called "An Approach for Plant Specific Risk Informed Decision Making, Technical Specifications," it says, throughout this, that the steps that were involved in applying risk-informed decision making, which is what they're trying to deploy here, is that the final step would be that it would be put forward for the license amendment process. Here's one thing I'd like to quote:

PRA evaluations in support of regulatory decisions should be realistic as practicable and appropriate supporting data should be publicly available for review.

It goes on to say

this regulatory guide, use of which is voluntary, provides guidance concerning an approach that the NRC has determined to be acceptable for analyzing issues associated with proposed changes to the plant's technical specifications and for assessing impact with such proposed changes under risk associated with plant design and operations.

You understand that. But the final element involves documenting the analyses and submitting the license amendment request.

NRC will review the submission to NRC's standard review plan.

So throughout this document which they originally envisioned of allowing the plants to modify the surveillance frequencies per the surveillance frequency control program, and the plant specific risk-informed decision making for technical specifications, included the concept that these would come forward to a hearing, or at least be announced to the public what was going on, and the public would have an opportunity to request a hearing.

This passage really includes two important points that have been lost in the rush to implement the SFCP. First, it makes the case that "supporting data should be publicly available for review." It is unfortunately the case that with the implementation proposed by NRC Staff that the supporting data will not be available for review, and even the resulting surveillances will not be available, even for review by NRC staff.

Second, this passage asserts that the resulting spec changes would be processed in the normal review process. That has also been lost in the implementation plan by NRC staff and the licensee. The normal review process means they would be submitted to the license amendment process, be publicized, and the public would have an opportunity to comment on those changes and/or submit a petition to intervene and request a hearing.

### **III.E -- 10 C.F.R. § 2.309(f)(1)(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;

We believe that we have provided this in the arguments provided in our Petition, our reply, and the further elucidation above.

### **III.F -- 10 C.F.R. § 2.309(f)(1)(vi)**

[P]rovide 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 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;

Please note that the Surveillance Frequencies can be maintained in the Technical Specifications and treated as not-to-exceed values, while still implementing the SFCP if those frequencies are to be increased. If the petitioner plans to decrease these frequencies (inspect more rarely), then we believe this endangers the safety of the public, and we insist that the public should have the opportunity to review these changes before they are implemented. We therefore believe that the proposed license amendment illegally deletes important safety system specifications from the technical specifications, a dispute exists, and we therefore resubmit this request for Commission review.

#### **IV. A concise statement why Commission review should be exercised.**

The decision of LBP-12-25 is defective because it did not consider arguments that Citizens Oversight provided to the Board, and which clearly show that the deletion of surveillance frequency specifications (a) cannot be grandfathered in, (b) is substantially and significantly different from Millstone, and (c) is illegal, in that it conflicts with NRC Regulations and Policy statements.

Citizens Oversight would like to apologize for not being as adept with the process as you are probably accustomed. However, we do believe it should be possible for members of the public to engage with the NRC with regard to important safety issues.

There has been some question about standing and timeliness. We have addressed these issues in our original Reply and have no additional arguments to present. We hope that the Commission will overlook our clerical mistake in calculating the deadline for submission of our petition by two days.

This is our first attempt to intervene in any processing of applications by the NRC. Mr. Lutz is not an attorney and is not well practiced in the traditions and customs of such an attempt, Citizens Oversight and Mr. Lutz requests additional discretion and broad interpretation so as to allow Citizens Oversight and Mr. Lutz to engage with the NRC and the licensee on these issues.

## **V. CONCLUSION**

For the foregoing reasons, Petitioner has demonstrated that it has standing and that its contention should be admitted. The Petitioner should be permitted to intervene in this proceeding and is entitled under 10 C.F.R. §2.309 to a hearing on its contentions.

The trend of moving critical safety-related specifications to licensee-controlled documents, as exemplified by the deletion of hundreds of surveillance frequency specifications from the Technical Specification, in clear violation of regulations and Commission policy statements, must stop and be reversed.

President Obama, on January 21, 2009, the first day of his administration, issued the memo "Transparency and Open Government"<sup>13</sup> which promoted that:

*Government should be transparent.*

*Government should be participatory.* Public engagement enhances the Government's effectiveness and improves the quality of its decisions. Knowledge is widely dispersed in society, and public officials benefit from having access to that dispersed knowledge.

*Government should be collaborative.*

Subsequent to that initial action, the President issued "Executive Order 13579 -- Regulation and Independent Regulatory Agencies" on July 14, 2011<sup>14</sup>, which explicitly provided for members of the public to participate in independent agencies, such as the NRC:

**Section 1. Policy.** (a) Wise regulatory decisions depend on public

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13 <http://www.gpo.gov/fdsys/pkg/FR-2009-01-26/pdf/E9-1777.pdf>

14 <http://www.gpo.gov/fdsys/pkg/FR-2011-07-14/pdf/2011-17953.pdf>



participation and on careful analysis of the likely consequences of regulation. Such decisions are informed and improved by allowing interested members of the public to have a meaningful opportunity to participate in rulemaking.

Indeed, the NRC states that it embraces the concepts of openness and transparency<sup>15</sup>.

Yet, the NRC has a long-standing practice of limiting oversight by the public which still persists, and is the underlying dispute of our Contention #1, as it appears that the primary impetus for moving the frequency specifications to the licensee-controlled document is not to facilitate the SFCP, but instead to move these important specifications out of public view.

Respectfully submitted,

/s/ Raymond Lutz

Raymond Lutz

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Date: January 14, 2013

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<sup>15</sup> <http://www.nrc.gov/public-involve/open/transparency.html>

## EXHIBIT I - TABLE OF CHANGES TO THE RCS TECHNICAL SPECIFICATIONS

The following table is an extraction from the proposed changes to the San Onofre License Technical Specifications regarding the Reactor Cooling System (RCS). This is a direct extraction from Attachment 1 Vol 7, Chapter 3.4 "Reactor Coolant System (RCS)" - (ADAMS accession number ML11251A100).

In this table, the licensee proposes that the Surveillance Frequency specification is to be replaced with the phrase "According to the Surveillance Frequency Control Program." There are approximately 53 instances of specifications being relocated in this single attachment of the Technical Specifications, and there are a total of 15 such attachments.

Page	Desig	Desc	Surveillance Frequency	Comment
6, 9	3.4.1.1	Verify pressurizer pressure is within the limits specified in the COLR.	12 hours	
6, 9	3.4.1.2	Verify RCS cold leg temperature is within the limits specified in the COLR.	12 hours	
7, 10	3.4.1.3	Verify RCS total flow rate is greater than or equal to the limits specified in the COLR.	12 hours	also deletes phrase stating check performed in Mode 1.
31, 32	3.4.2.1	Verify RCS Tc in each loop $\geq$ 522 degrees F.	30 minutes	
39	3.4.2.1	Verify RCS Tc in each loop $\geq$ 522 degrees F.	12 hours	
		-----NOTE----- Only required to be performed during RCS heatup and cooldown operations and RCS inservice leak and hydrostatic testing. ----- Verify RCS pressure, RCS temperature, and RCS heatup and cooldown rates within limits specified in the PTLR.		
51, 59, 72	3.4.3.1		30 minutes	
	3.4.3.2			Removed requirement to check irradiation specimen
88, 89, 95	3.4.4.1	Verify each RCS loop is in operation.	12 hours	
108, 111, 121	3.4.5.1	Verify RCS loop is in operation.	12 hours	
108, 111, 121	3.4.5.2	Verify secondary side water level in each steam generator $\geq$ 50%	12 hours	

108, 111, 121	3.4.5.3	Verify correct breaker alignment and indicated power available to each required pump (that is not in operation)	7 days	
138, 143, 155	3.4.6.1	Verify required RCS loop or SDC train is in operation.	12 hours	
138, 143, 155	3.4.6.2	Verify secondary side water level in required SG(s) is $\geq 50\%$	12 hours	
		-----NOTE----- Not required to be performed until 24 hours after a required pump is not in operation. -----		
138, 143, 155	3.4.6.3	Verify correct breaker alignment and indicated power available to each required pump.	7 days	
174, 179, 192	3.4.7.1	Verify required SDC train is in operation	12 hours	
174, 179, 192	3.4.7.2	Verify required SG secondary side water level is $> 50\%$	12 hours	
		-----NOTE----- Not required to be performed until 24 hours after a required pump is not in operation. -----		
174, 179, 192	3.4.7.3	Verify correct breaker alignment and indicated power available to each required SDC pump.	7 days	
208, 211, 221	3.4.8.1	Verify required SDC train is in operation	12 hours	
		-----NOTE----- Not required to be performed until 24 hours after a required pump is not in operation. -----Verify correct breaker alignment and indicated power available to required SDC pump (that is not in operation)	7 days	
208, 211, 221	3.4.8.2	Verify correct breaker alignment and indicated power available to required SDC pump (that is not in operation)	7 days	
234, 236, 244	3.4.9.1	Verify pressurizer water level $\leq 57\%$ .	12 hours	
234, 236	3.4.9.2	Verify capacity of each group of pressurizer heaters $\geq 150$ kW	92 days	
244	3.4.9.2	Verify capacity of each group of pressurizer heaters $\geq 150$ kW	18 months	differs from other sections
262, 266	3.4.12.2.1	Verify that the SDCS Relief Valve isolation valves 2HV9337, 2HV9339, 2HV9377, and 2HV9378 are open.	72 hours	
262, 266	3.4.12.2.2	Verify relief valve setpoint		In accordance with the Inservice Testing Program (no constraints )

262, 266	3.4.10.1 or 3.4.10.3	Verify each pressurizer safety valve is OPERABLE in accordance with inservice testing program. Following testing, asfound lift settings shall be within +3% or -2%. However, pressurizer safety valves shall be set to within $\pm 1\%$ of the specified setpoint.		In accordance with the Inservice Testing Program (no constraints )
297, 302, 318	3.4.12.1.1	Verify a maximum of two HPSI pumps are capable of injecting into the RCS.	12 hours	
297, 302, 318	3.4.12.1.2	Verify each SIT is isolated	12 hours	
297, 302, 318	3.4.12.1.3	Verify RCS vent $\geq 5.6$ square inches is open	12 hours for unlocked open vent valve(s) AND 31 days for locked, sealed, or otherwise secured open vent valve(s), or open flanged RCS penetrations	
297, 302, 318	3.4.12.1.4	Verify the OPERABLE SDCS Relief Valve isolation valve pair (valve pair 2HV9337 and 2HV9339, or valve pair 2HV9377 and 2HV9378) is in the power-lock open condition.	12 hours	Not proposed moved to SFCP
297, 302, 318	3.4.12.1.5	Verify that SDCS Relief Valve isolation valves 2HV9337, 2HV9339, 2HV9377, and 2HV9378 are open	72 hours	
297, 302, 318	3.4.12.1.6	Verify required SDCS System relief valve Setpoint is within limits.		In accordance with the Inservice Testing Program

336-340	3.4.12.1 & 3.4.2	To minimize the potential for a low temperature overpressure event by limiting the mass input capability, not more than two HPSI pumps are verified OPERABLE with the other pump locked out with power removed and the SIT discharge incapable of injecting into the RCS. The HPSI pump is rendered incapable of injecting into the RCS through removing the power from the pump by racking the breakers out under administrative control. An alternate method of LTOP control may be employed using at least two independent means to prevent a pump start such that a single failure or single action will not result in an injection into the RCS. This may be accomplished through the pump control switch being placed in pull to lock and at least one valve in the discharge flow path being closed	12 hours	
336-340	3.4.12.3	requires verifying that the required RCS vent is open $\geq [1.3]$ square inches is proven OPERABLE by verifying its open condition or the valve is locked closed and power is removed. Additionally, the SIT discharge isolation valves are verified closed and deactivated	See below	
		a. Once every 12 hours for a valve that is unlocked open (valves that are sealed or secured in the open position are considered "locked" in this context) or b. Once every 31 days for other vent path(s) (e.g., a vent valve that is locked, sealed, or secured in position, a removed pressurizer safety valve, or open manway).		
336-340	3.4.12.4	This SR verifies the valves are open to confirm the flow paths.	see above	
336-340	3.4.12.5	The SDC System relief valve setpoint is verified periodically to be within limits	72 hours	
347, 349, 357	3.4.13.1	Not required to be performed in MODE 3 or 4 until 12 hours of steady state operation. Not applicable to primary to secondary LEAKAGE. Verify RCS operational LEAKAGE is within limits by performance of RCS.	72 hours	page 360 has a description of leakage, page 443 says this SR is performed at increased frequency of 24 and 12 hours. There is no note about move to

				SFCP.
347, 349, 357	3.4.13.2	<p>-----NOTE-----  Not required to be performed until 12 hours after establishment of steady state operation.</p> <p>----- Verify primary to secondary LEAKAGE is &lt; 150 gallons per day through any one SG.</p>	72 hours	
377, 385, 399	3.4.14.1	<p>-----NOTES-----</p> <ol style="list-style-type: none"> <li>1. Not required to be performed in MODES 3 and 4.</li> <li>2. Not required to be performed on the RCS PIVs located in the SDC flow path when in the shutdown cooling mode of operation.</li> <li>3. RCS PIVs actuated during the performance of this Surveillance are not required to be tested more than once if a repetitive testing loop cannot be avoided.</li> </ol> <p>-----</p> <p>Verify leakage from each RCS PIV specified in Table 3.4.14-1 is equivalent to # 0.5 gpm per nominal inch of valve size up to a maximum of 5 gpm at an RCS pressure \$ 2215 psia and # 2255 psia.</p>	In accordance with the Inservice Testing Program or 24 months AND Prior to entering MODE 2 whenever the unit has been in MODE 5 for 7 days or more, if leakage testing has not been performed in the previous 9 months AND Within 48 hours following valve actuation due to automatic or manual action or flow through the valve for valves	
377, 385, 399	3.4.14.2	Verify SDC System interlock function prevents the valves from being opened with a simulated or actual RCS pressure signal $\frac{24}{12}$ 380 psia	18 months	
407	3.4.14.1	[PIV Valve]	9 to 18 months	

409	3.4.14.2	[SDC Interlocks]	18 months	
420, 425, 437	3.4.15.1	Perform CHANNEL CHECK of the required containment atmosphere gaseous radioactivity monitor.	12 hours	
420, 425, 437	3.4.15.2	Perform CHANNEL CHECK of the required containment atmosphere particulate radioactivity monitor.	12 hours	
420, 425, 437	3.4.15.3	Perform CHANNEL FUNCTIONAL TEST of the required containment atmosphere gaseous radioactivity monitor.	92 days	
420, 425, 437	3.4.15.4	Perform CHANNEL FUNCTIONAL TEST of the required containment atmosphere particulate radioactivity monitor.	92 days	
420, 425, 437	3.4.15.5	Perform CHANNEL CALIBRATION of the required containment sump monitor.	24 months	
420, 425, 437	3.4.15.6	Perform CHANNEL CALIBRATION of the required containment atmosphere gaseous radioactivity monitor.	24 months	
420, 425, 437	3.4.15.7	Perform CHANNEL CALIBRATION of the required containment atmosphere particulate radioactivity monitor.	24 months	
458, 463, 476	3.4.16.1	Verify reactor coolant DOSE EQUIVALENT XE-133 specific activity $\leq 500$ mCi/gm.	7 days	
458, 463, 476	3.4.16.2	Verify reactor coolant DOSE EQUIVALENT I-131 specific activity # $1.0 \mu\text{Ci/gm}$ .	14 days (+ text)	

EXHIBIT II - SONGS OPERATING LICENSE, PAGE 159 of 380

ADAMS ACCESSION: ML053140357

RCS Loops—MODES 1 and 2  
3.4.4

3.4 REACTOR COOLANT SYSTEM (RCS)

3.4.4 RCS Loops—MODES 1 and 2

LCO 3.4.4 Two RCS loops shall be OPERABLE and in operation.

APPLICABILITY: MODES 1 and 2.

ACTIONS

CONDITION	REQUIRED ACTION	COMPLETION TIME
A. Requirements of LCO not met.	A.1 Be in MODE 3.	6 hours

SURVEILLANCE REQUIREMENTS

SURVEILLANCE	FREQUENCY
SR 3.4.4.1 Verify each RCS loop is in operation.	12 hours



EXHIBIT III - SONGS OPERATING LICENSE, PAGE 25 of 380

ADAMS ACCESSION: ML053140357

Definitions  
1.1

Table 1.1-1 (page 1 of 1)  
MODES

MODE	TITLE	REACTIVITY CONDITION ( $k_{eff}$ )	% RATED THERMAL POWER <sup>(a)</sup>	AVERAGE REACTOR COOLANT TEMPERATURE (°F)
1	Power Operation	$\geq 0.99$	$> 5$	NA
2	Startup	$\geq 0.99$	$\leq 5$	NA
3	Hot Standby	$< 0.99$	NA	$\geq 350$
4	Hot Shutdown	$< 0.99$	NA	$350 > T_{avg} > 200$
5	Cold Shutdown <sup>(b)</sup>	$< 0.99$	NA	$\leq 200$
6	Refueling <sup>(c)</sup>	NA	NA	NA

(a) Excluding decay heat.

(b) All reactor vessel head closure bolts fully tensioned.

(c) One or more reactor vessel head closure bolts less than fully tensioned.

EXHIBIT IV - SONGS OPERATING LICENSE, PAGES 42-44 of 380

ADAMS ACCESSION: ML053140357

Frequency  
1.4

1.0 USE AND APPLICATION

1.4 Frequency

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**PURPOSE** The purpose of this section is to define the proper use and application of Frequency requirements.

---

**DESCRIPTION** Each Surveillance Requirement (SR) has a specified Frequency in which the Surveillance must be met in order to meet the associated LCO. An understanding of the correct application of the specified Frequency is necessary for compliance with the SR.

The "specified Frequency" is referred to throughout this section and each of the Specifications of Section 3.0, Surveillance Requirement (SR) Applicability. The "specified Frequency" consists of the requirements of the Frequency column of each SR, as well as certain Notes in the Surveillance column that modify performance requirements.

Situations where a Surveillance could be required (i.e., its Frequency could expire), but where it is not possible or not desired that it be performed until sometime after the associated LCO is within its Applicability, represent potential SR 3.0.4 conflicts. To avoid these conflicts, the SR (i.e., the Surveillance or the Frequency) is stated such that it is only "required" when it can be and should be performed. With an SR satisfied, SR 3.0.4 imposes no restriction.

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**EXAMPLES** The following examples illustrate the various ways that Frequencies are specified. In these examples, the Applicability of the LCO (LCO not shown) is MODES 1, 2, and 3.

(continued)

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1.4 Frequency

EXAMPLES  
(continued)

EXAMPLE 1.4-1

SURVEILLANCE REQUIREMENTS

SURVEILLANCE	FREQUENCY
Perform CHANNEL CHECK.	12 hours

Example 1.4-1 contains the type of SR most often encountered in the Technical Specifications (TS). The Frequency specifies an interval (12 hours) during which the associated Surveillance must be performed at least one time. Performance of the Surveillance initiates the subsequent interval. Although the Frequency is stated as 12 hours, an extension of the time interval to 1.25 times the stated Frequency is allowed by SR 3.0.2 for operational flexibility. The measurement of this interval continues at all times, even when the SR is not required to be met per SR 3.0.1 (such as when the equipment is inoperable, a variable is outside specified limits, or the unit is outside the Applicability of the LCO). If the interval specified by SR 3.0.2 is exceeded while the unit is in a MODE or other specified condition in the Applicability of the LCO, and the performance of the Surveillance is not otherwise modified (refer to Example 1.4-3), then SR 3.0.3 becomes applicable.

If the interval as specified by SR 3.0.2 is exceeded while the unit is not in a MODE or other specified condition in the Applicability of the LCO for which performance of the SR is required, the Surveillance must be performed within the Frequency requirements of SR 3.0.2 prior to entry into the MODE or other specified condition. Failure to do so would result in a violation of SR 3.0.4.

(continued)

1.4 Frequency

EXAMPLES  
(continued)

EXAMPLE 1.4-3

SURVEILLANCE REQUIREMENTS

SURVEILLANCE	FREQUENCY
<p style="text-align: center;">-----NOTE-----                      Not required to be performed until                      12 hours after <math>\geq</math> 25% RTP.                      -----</p> <p>Perform channel adjustment.</p>	<p>7 days</p>

The interval continues, whether or not the unit operation is < 25% RTP between performances.

As the Note modifies the required performance of the Surveillance, it is construed to be part of the "specified Frequency." Should the 7 day interval be exceeded while operation is < 25% RTP, this Note allows 12 hours after power reaches  $\geq$  25% RTP to perform the Surveillance. The Surveillance is still considered to be performed within the "specified Frequency." Therefore, if the Surveillance were not performed within the 7 day (plus 25% per SR 3.0.2) interval, but operation was < 25% RTP, it would not constitute a failure of the SR or failure to meet the LCO. Also, no violation of SR 3.0.4 occurs when changing MODES, even with the 7 day Frequency not met, provided operation does not exceed 12 hours with power  $\geq$  25% RTP.

Once the unit reaches 25% RTP, 12 hours would be allowed for completing the Surveillance. If the Surveillance were not performed within this 12 hour interval, there would then be a failure to perform a Surveillance within the specified Frequency; MODE changes then would be restricted in accordance with SR 3.0.4 and the provisions of SR 3.0.3 would apply.

**EXHIBIT V - EXPERT TESTIMONY REGARDING REACTOR COOLANT  
SYSTEM**

The following questions were asked of Mr. Rath by email. He is available to testify at the hearing. He is an expert on nuclear technology and is knowledgeable concerning the Reactor Coolant System.

**1. What is your name, address, etc.?**

Udaya Krishna Rath,  
4351 Gila Ave, San Diego, CA 92117  
Tel: (Home) 858 274 5540  
Email: [ukr114@juno.com](mailto:ukr114@juno.com)

**2. What your education and experience with respect to nuclear technology?**

I have an MS in Mechanical design engineering from University of California, Berkeley, CA (MSME). I had one year graduate level work in Nuclear engineering / on the job training.. I had worked in the radioactive waste treatment division of BARC, India. I worked for General Atomic Complay for three years in piping system of a High Temperature Gas Cooled Reactor (HTGR) Projects.

**3. Have you worked with the sort of Pressurized Water Reactor used as San Onofre?**

I have worked in Nuclear power projects utilizing the PWR technology. But most extensively in HTGR projects.

**4. Is your knowledge comparable, even if on differing reactors?**

Yes

**5. Are you familiar with the Reactor Coolant System?**

Yes

**6. What is it for?**

The RCS is for primarily it takes the heat generated in the reactor from chain reactions. The coolant (Pressurized Water in PWRs and helium gas in HTGRs) carries the heat to exchange

to a separate and closed secondary coolant system to convert secondary coolant (water) into superheated steam to drive the stem turbine (Generator Shaft).

**7. Is this a critical part of a nuclear power plant?**

Yes, Very critical!

**8 .If the Reactor Coolant System was not operational, would this be a concern?**

Yes. This may result in meltdown / explosion, escape of radio activity into the secondary containment and beyond.

**9. What might the result be?**

See ans to 8 above.

**10. The NRC says**

Technical specifications, therefore, should be reserved for those reactor operation conditions or limitations ... necessary to obviate the possibility of an abnormal situation or event giving rise to an immediate threat to the public health and safety

**Based on this statement, would Reactor Coolant systems "Operation Conditions or limitations" be considered those that are necessary to be included in the Technical Specifications?**

Yes, most certainly, in my understanding.

**11. If the Reactor Coolant System were not operational, is there a chance that the plant may experience a "Loss of Coolant Accident" (LOCA) and what is commonly called a "meltdown"?**

If the coolant system is in tact, but not functional, it may not be called a LOCA. But the heat of the reactor may cause substantial damage to the RCS, and meltdown may occur.

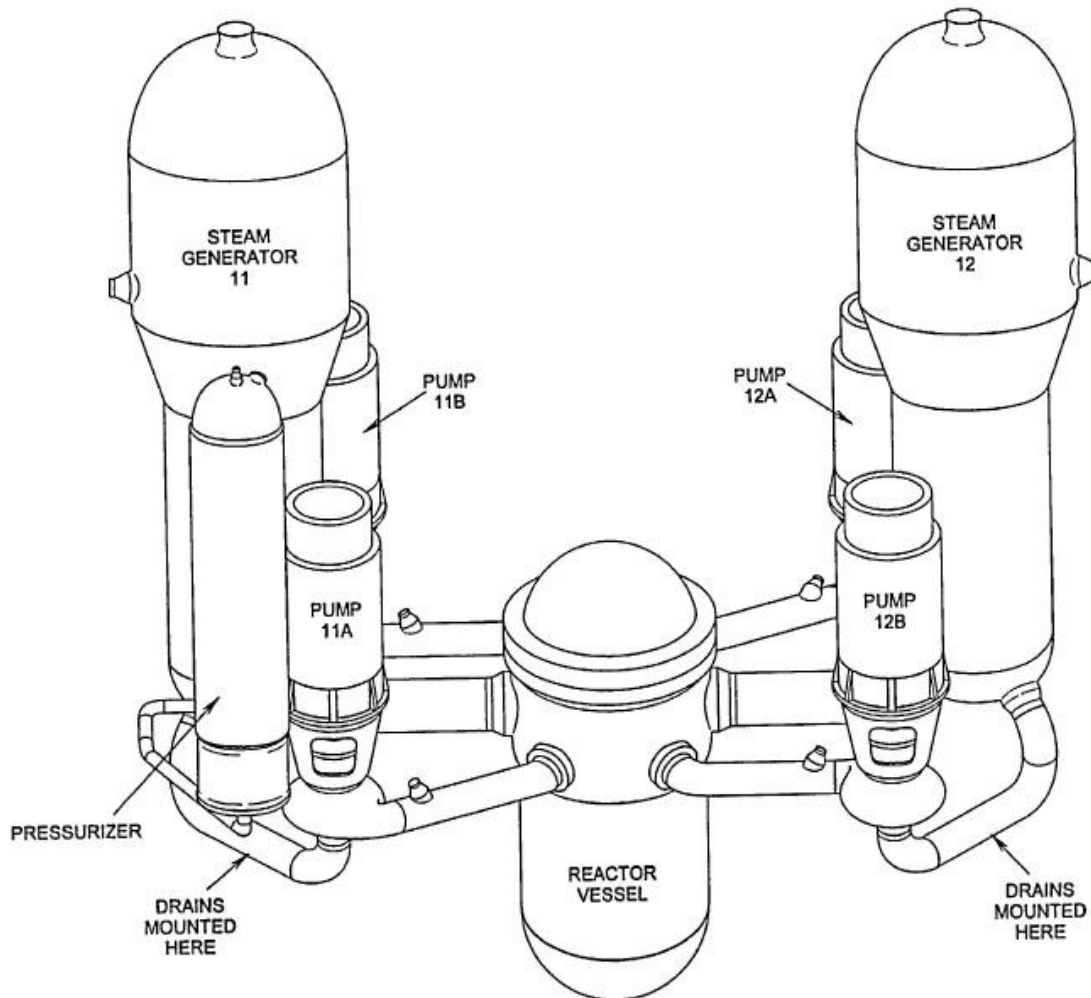
/s/

Udaya Krishna Rath

## EXHIBIT VI - REACTOR COOLANT SYSTEM

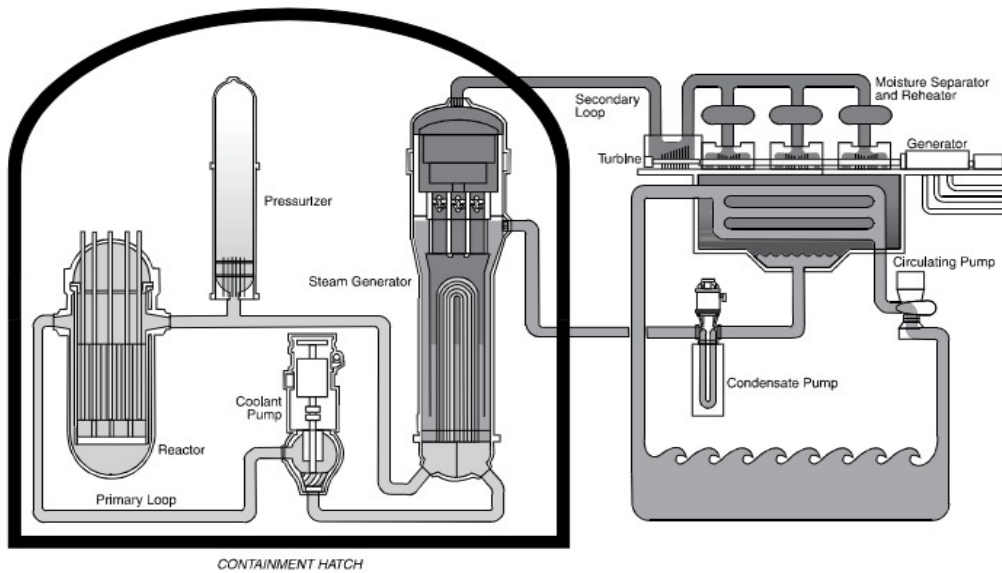
Citizens Oversight asserts that the Reactor Coolant System is critical to the safe operation of the San Onofre Nuclear Generating Station. This Exhibit is provided to supply background information to support that assertion.

Illustration 1 below provides a substantially accurate view of one Unit at the San Onofre Nuclear plant, in terms of the equipment inside the containment building. Most of this equipment is part of the Reactor Coolant System.



*Illustration 1: Reactor and Reactor Coolant Systems of San Onofre Nuclear Generating Station*

**Figure FE1. Nuclear Steam Supply System  
(U-bend Design Steam Generator)**



Source: Westinghouse Corporation.

Each unit has a single Reactor Vessel and two reactor coolant systems. High pressure water is pumped through the Reactor Vessel, to the Steam Generators, and then back to the Reactor Vessel. There are redundant pumps to allow the system to continue to work with one pump in a failed condition. All of these components, the Primary Loop, Steam Generator, Pressurizer, coolant pumps, are part of the Reactor Coolant System. These components are within the containment building and are critically important for the safe operation of the reactor.

For more information, please see the following references:

REGULATORY GUIDE 1.45 -- GUIDANCE ON MONITORING AND  
RESPONDING TO REACTOR COOLANT SYSTEM LEAKAGE (2008) --  
ADAMS ML073200271

Behavior of PWR Reactor Coolant System Components, Other than Steam Generator  
Tubes, under Severe Accident Conditions - Phase I Final Report (2003) -  
NUREG/CR-6792 (ADAMS ML031500699)



UNITED STATES OF AMERICA  
NUCLEAR REGULATORY COMMISSION

In the Matter of )  
 )  
SOUTHERN CALIFORNIA EDISON, CO. )  
 )  
(San Onofre Nuclear Generating Station - ) Docket Nos. 50-361-LA and 50-362-LA  
Units 2 and 3) )

CERTIFICATE OF SERVICE

I hereby certify that copies of the foregoing document "**CITIZENS OVERSIGHT'S ANSWER TO SUBMISSIONS BY NRC STAFF AND SOUTHERN CALIFORNIA EDISON OPPOSING THE PETITION TO INTERVENE AND REQUEST FOR A HEARING BY CITIZENS OVERSIGHT**" have been served upon the parties by the Electronic Information Exchange.

Respectfully submitted,

/s/ Raymond Lutz

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