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USWAG

December 14, 2007

By Electronic Submission
and U.S. Mail

EPA Docket
Docket ID No. EPA-HQ-OPA-2007-0584
U.S. Environmental Protection Agency
Mail Code: 2822T
1200 Pennsylvania Ave., NW
Washington, DC 20460

Re: Comments on EPA's Proposed Rule: Oil Pollution Prevention; Spill Prevention, Control, and Countermeasure Rule Requirements—Amendments, Docket ID No. EPA-HQ-OPA-2007-0584

Dear Sir or Madam:

The Utility Solid Waste Activities Group ("USWAG")[1] submits these comments on EPA's Proposed Rule: Oil Pollution Prevention; Spill Prevention, Control, and Countermeasure Rule Requirements—Amendments. 72 Fed. Reg. 58378 (Oct. 15, 2007).

We wish to congratulate EPA for developing a number of innovative proposals that we believe will streamline the SPCC program in a number of important ways and commend the Oil Program staff for producing these generally-sound proposals. We

[1] USWAG was formed in 1978, and is an association of approximately 80 energy industry operating companies and associations, including the Edison Electric Institute ("EEI"), the National Rural Electric Cooperative Association ("NRECA"), the American Public Power Association ("APPA"), and the American Gas Association ("AGA"). EEI is the principal national association of investor-owned electric power and light companies. NRECA is the national association of rural electric cooperatives. APPA is the national association of publicly owned electric utilities. AGA is the principal national association of natural gas utilities. Together, USWAG members represent more than 85% of the total electric generating capacity of the U.S., and service more than 95% of the nation's consumers of electricity and over 93% of the nation's consumers of natural gas.

appreciate the opportunity to comment on the proposed amendments, and look forward to continuing to work with EPA staff on these critical issues.

If we can be of further assistance, please contact USWAG Executive Director Jim Roewer (202-508-5645; jim.roewer@uswag.org), or USWAG counsel, Bill Weissman (202-344-4503; wweissman@venable.com).

Sincerely yours,

Jim Roewer
USWAG Executive Director

Enclosure

Comments of
The Utility Solid Waste Activities Group,
The Edison Electric Institute,
The American Public Power Association,
The National Rural Electric Cooperative Association,
and The American Gas Association on
Oil Pollution Prevention; Spill Prevention, Control, and Countermeasure Plan Requirements—Amendments; Proposed Rule
72 Fed. Reg. 58378 (Oct. 15, 2007)

submitted to
The United States
Environmental Protection Agency

Docket No. EPA-HQ-OPA-2007-0584

December 14, 2007

Of Counsel:
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Table of Contents

Page

Comments of
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The National Rural Electric Cooperative Association,
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The Utility Solid Waste Activities Group ("USWAG")[1] submits these comments on EPA's proposed amendments to the Spill Prevention, Control, and Countermeasure ("SPCC") regulations, popularly known as the "Loose Ends" proposal. 72 Fed. Reg. 58378 (Oct. 15, 2007). This is an important rulemaking because it culminates a multi-year effort by EPA's Oil Program staff to update the SPCC program into a more narrowly-tailored, risk-based regulatory program where a facility's costs of compliance will be more closely in sync with its particular environmental risks. We congratulate EPA for publishing an innovative proposal that we believe will streamline the SPCC program in a number of important areas, and warmly commend the Agency's staff for their hard work in producing these generally-sound proposals.

Since shortly after promulgating the 2002 amendments, EPA has been publicly-committed to affording the regulated community with a full year following promulgation

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of this rule for achieving compliance.[2] Given the current compliance deadline of July 1, 2009 for the July 2002 and later SPCC amendments (*see* 40 C.F.R § 112.3, 72 Fed. Reg. 27443, 27444 (May 16, 2007)), EPA faces a daunting challenge if it is to complete this rulemaking by July 1, 2008, which is one year before the current compliance deadline. The alternative – obviously not the preferred option – would be once again to postpone the compliance deadline. One possible way of avoiding a *sixth* deadline extension is for the Agency to adopt a final rule that hews closely to the provisions of the proposed rule. Since the current proposal was itself the subject of an extended inter-agency review process, USWAG hopes that another prolonged inter-agency review process on the draft final rule can be avoided if the Agency minimizes changes from the proposed amendments.[3]

The amendments in this Loose Ends proposal are wide-ranging and many do not affect the utility industry. We will confine our comments to those amendments and preamble discussions that are either unique to the electric and gas utility industry or have a significant effect on our industry's operations.

I. Underground Emergency Diesel Generator Tanks at Nuclear Power Stations.

USWAG strongly endorses EPA's proposal to exempt from SPCC regulation completely-buried oil storage tanks at nuclear power stations that are subject to the safety requirements imposed by the Nuclear Regulatory Commission ("NRC"). *See* 72

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[2] In fact, EPA itself recommended that the regulated community be given a full year to achieve compliance with any regulatory changes to the 2002 amendments. 70 Fed. Reg. 73518, 73519, 73526 (Dec. 12, 2005).

[3] With the exception of the comments on the definition of loading rack, USWAG is not recommending major changes to EPA's proposed rule.

Fed. Reg. at 58420-21. This is not a new proposal. In 1988, EPA adopted substantially the same exclusion from the Part 280 underground storage tank ("UST") rules. *See* 40 C.F.R § 280.10(c)(3). The rationale for this action was to avoid dual regulation of a tank universe that was already comprehensively regulated, albeit by an agency other than EPA, and to avoid the dangers of overly-burdensome or inconsistent regulations. *See* 53 Fed. Reg. 37082, 37113 (Sept. 23, 1988). However, because EPA was uncertain at the time that the NRC regulatory program fully met the goals of the Part 280 UST program, EPA reserved the option of bringing those tanks back into the Part 280 universe if further study showed that the NRC controls were inadequate or incomplete, and labeled the exclusion as a deferral rather than an exemption.[4] *Id*. In the 19 years since EPA adopted the UST deferral, there has been no suggestion that the NRC program is either inadequate or incomplete or that these tanks should be regulated under Part 280.

More recently, EPA demonstrated its continuing commitment to avoiding wasteful duplication of regulation. In the 2002 SPCC amendments, EPA acted to prevent dual regulation of underground storage tanks by removing underground storage tanks subject to the RCRA Subtitle I UST program from SPCC jurisdiction.[5] But the 2002 exclusion was limited to tanks fully regulated *by EPA* under the Part 280 UST program

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[4] Although the "deferred" tanks were not subject to any regulatory requirements, they remained subject to the statutory interim prohibition and regulatory corrective action provisions. 40 C.F.R. § 280.10(c) (deferred tanks remain subject to subparts A and F of Part 280); *see* 53 Fed. Reg. 37082, 37083 & 37109 (Sept. 23, 1988).

[5] As explained in the preamble, the "rationale for exempting the storage capacity of these [underground storage tank] facilities from the SPCC regime is because 40 CFR part 280 and the approved State programs under 40 CFR part 281 provide comparable environmental protection for the purpose of preventing discharges as described in § 112.1(b)." 67 Fed. Reg. 47042, 47064 (July 17, 2002).

or by states whose program had been approved by EPA under Part 281. 40 C.F.R. § 112.1(d)(2) & (4); *see* 67 Fed. Reg. 47042, 47064-66, 47068 (July 17, 2002). Perversely, the nuclear facility EDG tanks, which received their UST deferral in 1988 to avoid dual regulation, became subject to dual regulation in 2002 because they had received the UST deferral. *Id*. at 47066. Since the 2002 preamble discussion of the SPCC exclusion did not mention the issue of dual regulation by EPA and some other agency, EPA's omission of the nuclear facility EDG tanks from the universe of SPCC-excluded underground storage tanks may have been an inadvertent oversight.[6] The present proposal corrects this omission.

The preamble describes the tanks at issue, their function at the nuclear power station, and how they satisfy the safety program required by the operating license granted to the nuclear power station by the NRC. 72 Fed. Reg. at 58420. As EPA correctly observes, these emergency diesel generator ("EDG") tanks are required to provide a seven day supply of fuel oil to fuel a redundant on-site (and off-site) electric power system to ensure a safe shut-down in case of an emergency shut-down of the plant's nuclear generation capability. Under the NRC's regulatory program, the emergency generators are classified as nuclear safety-related structures, systems, and components and are subject to the highest level of quality control and regulation under the NRC's rules. *See*, *e.g*., 10 C.F.R. Part 50. Specific requirements are implemented

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[6] Given EPA's 1988 determination that NRC regulation of the EDG tanks satisfied EPA's regulatory aims for its Part 280 UST program, EPA had a duty to explain why tanks that satisfied the aims of the UST program through regulation by EPA were eligible for the SPCC exclusion while tanks that satisfied those aims through regulation by some other agency were not similarly eligible for the exclusion. EPA's apparent concern that some of the "deferred" tanks "may, in some instances, not be regulated at all" (67 Fed. Reg. at 47066) does not justify dual regulation of a category of tanks the Agency knew to be comprehensively regulated.

through NRC operating licenses, NRC regulatory guides,[7] the ASME Code,[8] and in some cases where federal preemption does not apply, state regulations.[9]

On two occasions during the early stages of the regulatory development process of this rulemaking, USWAG submitted detailed information to EPA regarding the NRC program applicable to the EDG tank universe.[10] Rather than restate the data we provided in those two submissions, we will attach them as exhibits to these comments for the purpose of ensuring a complete administrative record. The purpose of these submissions was to demonstrate the breadth of the NRC's regulation of EDG tanks and to provide EPA with the assurance that the aims of the SPCC program are being achieved by the NRC's regulation of those tanks. EPA has independently analyzed the NRC program and has correctly documented the many similarities between the NRC and EPA approaches to underground tank regulation. *See* 72 Fed. Reg. at 58420-21. Indeed, EPA went one step beyond a paper comparison of the two programs. In 2005, EPA conducted a site visit to the North Anna Power Station in Mineral, Virginia, to view the EDG tanks at this nuclear facility. EPA's observations of the sound management of the tanks at this plant are well documented in the preamble and confirm that a second layer of regulation of these tanks is unnecessary. *See id*. at 58421.

Ultimately, the success of the NRC's regulatory program is determined not by the extent of textual similarity between the NRC's and EPA's programs, but by the extent to

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[7] *See*, *e.g*., Fuel-Oil Systems for Standby Diesel Generators, NRC Regulatory Guide 1.137.

[8] ASME Code Section XI Article IWD-5000 ("System Pressure Tests").

[9] *See*, *e.g*., 6 NYCRR Part 613 ("Handling and Storage of Petroleum").

[10] Letter from USWAG to R. Craig Matthiessen, P.E., Office of Emergency Management, EPA, dated May 25, 2006; Letter to Dave Evans, Oil Program Center, EPA, dated Feb. 18, 2004 (both letters attached as Appendix A).

which the performance of the NRC-regulated tank universe achieves environmental results consistent with the aims of the SPCC program. To demonstrate the overwhelming success of the NRC program, USWAG provided EPA with the results of a survey of USWAG member companies with nuclear operations to determine the number of discharges (as described in 40 C.F.R § 112.1(b)) that have occurred from EDG tanks in the past decade. We received responses from 18 companies, representing approximately 90% of the nuclear generation capacity in the United States. The survey results indicate that only one discharge (as described in 40 C.F.R § 112.1(b)) of 50 gallons of oil from underground EDG tanks occurred in the past 10 years. This single discharge was result of an accidental spill during an oil transfer and was not a result of tank failure. A copy of the survey results is attached as Appendix B.

The point of these data is that the NRC regulatory program applicable to the universe of underground EDG tanks has been highly effective in achieving the goals of the SPCC program – namely, to prevent discharges of oil into surface waters. Few other industries can boast having a single discharge of no more than 50 gallons of oil over a ten-year period. We are confident that this sterling record of tank management will be maintained for decades to come.

Two issues regarding the proposed regulatory language for the exclusion need to be addressed. First, we were advised by the Nuclear Energy Institute ("NEI") since publication of the proposal that a few of the early nuclear facility licenses predate the regulations codified at 10 C.F.R. Part 50 Appendices A & B. However, the EDG tanks at these power plants are comprehensively regulated from the time of their design and through construction and the terms of their licenses. We were also informed that most

future licenses for nuclear power stations would likely be issued under Part 52 of its regulations, not Part 50. The critical safety function of the EDG system at each plant ensures rigorous NRC oversight of the system's design, construction, and operation, regardless of the regulatory mechanism applicable to a particular plant.[11]

As we read the wording of the proposed exclusion, the exclusion would apply not only to a facility regulated under 10 C.F.R Part 50, Appendices A & B, but also to a facility that "meets the Nuclear Regulatory Commission *design criteria* at 10 CFR part 50, Appendices A & B." Proposed 40 C.F.R §§ 112.1(d)(2)(i) & (4) (emphasis added). The implication of this language is that eligibility for the SPCC exemption requires conformity with NRC design criteria that are found at 10 C.F.R. Part 50, Appendices A & B, even if the particular license is not issued under Part 50, so long as the design criteria in the license have been approved by the NRC. Nevertheless, the cross-reference to a particular NRC regulation could be misunderstood as EPA's intention to exempt only those facilities whose EDG tanks are specifically regulated by 10 C.F.R Part 50 Appendices A & B. This would have the unintended effect of denying the SPCC-exemption to all NRC-regulated facilities that are not directly regulated by Part 50, including future NRC licensees that may be regulated under Part 52, even if the applicable design criteria are identical.

Nothing in the preamble suggests that EPA intends such a strange result. The preamble itself does not explain the choice of regulatory language, but it does state that "EPA is . . . proposing to exempt completely buried oil storage tanks at NRC-regulated facilities that are subject to the safety requirements under the NRC regulations." 72

[11] For more detailed information on these early licenses or on the regulatory mechanism for future licenses, we suggest EPA contact the NRC.

Fed. Reg. at 58421. Every NRC licensee is subject to those safety requirements under NRC regulations, whether or not Part 50 is applicable to the particular facility. EPA's preamble explanation, without any cross-reference to a particular NRC regulation, strongly suggests that the Agency intends the exemption to cover all NRC licensees so long as the design criteria for the EDG tanks are subject to NRC regulatory controls. That would certainly be a sensible outcome.

We therefore suggest that EPA consult with the NRC to adopt language in the final rule that avoids confusion regarding the scope of the exemption and avoids duplicate regulation for any completely-buried EDG tank subject to NRC regulation. We realize that the 1988 UST rule used a similar cross-reference to Part 50 of the NRC rules, but the new information that Part 50 is not the sole regulatory mechanism for NRC supervision of the EDG tanks counsels us to urge EPA to take a fresh look at appropriate regulatory language that will accomplish the result of exempting all below ground EDG tanks regulated by the NRC, whether under Part 50 or some other applicable authority.[12]

Second, an uncertainty has arisen regarding completely buried EDG tanks that are enclosed in certain below ground vaults where physical inspection of the tank is not possible. We understand that as a general rule vaulted tanks are regarded as aboveground tanks under both the SPCC and UST programs and thus are excluded from the UST program. *See* 40 C.F.R § 112.2 (definition of "completely buried tank"); 40 C.F.R. § 280.12 (definition of "underground storage tank"); *see also* RCRA

[12] We understand that the NRC may propose regulatory language to accomplish this result, but because we have not seen their language, we are unable to comment on it. Xcel Energy has submitted alternative language that would successfully exempt all underground EDG tanks regulated by the NRC.

§ 9001(1)(I), 42 U.S.C. § 6991(1)(I). EPA explained the rationale for this exclusion in the preamble to the final UST rules:

> The purpose of this exclusion is to remove from UST jurisdiction tanks that are technically underground but that also are, in a practical sense, no different from aboveground tanks. They are situated so that, to the same extent as tanks aboveground, physical inspection for leaks is possible. . . .
>
> Tanks located in a below-grade structural vault, cellar, basement, mine or other underground room would be included in this exclusion if the tanks sit upon or above the surface of the floor and there is sufficient space to enable physical inspection of the tank, but not necessarily the tank bottom.

53 Fed. Reg. at 37121.

We have learned that a significant number of EDG tanks at nuclear power plants are located in a below-grade structural vault but that there is insufficient space for physical inspection of the tank. In those cases, the tanks would have remained within the definition of "underground storage tank" in the UST rules (40 C.F.R. § 280.12) and thus would have qualified for the deferral for an "UST system that is part of an emergency generator system at nuclear power generation facilities regulated by the Nuclear Regulatory Commission under 10 CFR Part 50, Appendix A." 40 C.F.R. § 280.10(c)(3). EPA can avoid confusion that would result from use of the defined term "completely buried tank" by using the descriptive phrase "completely below-grade tank" in §§ 112.1(d)(2)(i) & (4) to identify the exempted tank universe. Because many of these tanks lack sufficient space for physical inspection, they more closely resemble underground rather than aboveground storage tanks and hence should remain eligible for the proposed SPCC exclusion.

II. Tier I Qualified Facilities.

In the final 2006 SPCC amendments, EPA adopted a self-certification system for SPCC-regulated facilities with oil storage capacity of 10,000 gallons or less for which no professional engineer ("PE") plan certification would be required. 71 Fed. Reg. 77266, 77270-75 (Dec. 26, 2006) (codified at 40 C.F.R. §§ 112.3(g), 112.6). EPA identified these facilities by the name "qualified facilities" because they had to meet certain eligibility criteria.[13] *Id*. at 77269. USWAG supported the "qualified facility" proposal, and many of our utility member companies have availed themselves of this streamlined approach to SPCC compliance at small facilities.

One option that the Agency declined to adopt in 2006 was a proposal submitted by the Small Business Administration Office of Advocacy for further streamlining of the requirements for SPCC-regulated facilities with oil storage capacity of 5,000 gallons or less. *Id*. at 77269-70. In the 2006 rule, EPA indicated that it was exploring possible further streamlining for a subset of "qualified facilities," and the current proposal for Tier I qualified facilities (*i.e*., qualified facilities at which no single container exceeds 5,000 gallons) is the result of that exploration. *See* 72 Fed. Reg. at 58392. The benefit to these Tier I facilities is that these facilities may self-certify and implement a simplified SPCC plan template in lieu of a full SPCC plan. The SPCC plan template is set forth in Appendix G of the proposed rule. *See id*. at 58432-45.

USWAG welcomes this common-sense proposal that we believe further streamlines the "qualified facility" option adopted in 2006 and, as EPA correctly notes,

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[13] A facility achieves "qualified facility" status if, within the past three years, it had no single discharge of 1,000 gallons or no two discharges that each exceeded 42 gallons within a 12 month period. 40 C.F.R. § 112.3(g); *see* 72 Fed. Reg. at 77270.

strengthens environmental protection by facilitating compliance by smaller facilities. *See id*. at 58395. Because the Tier I option is defined by the aggregate volume of the facility together with a storage capacity cap for each individual container, it will have a positive effect in the electric utility industry as well. Many of our smaller power companies, especially among the rural electric cooperative and publicly-owned power sectors, will meet the eligibility criteria for Tier I qualified facilities. Some of these smaller companies lack the manpower for developing and implementing full-blown SPCC plans, and we foresee the Tier I proposal as simplifying compliance with SPCC regulation for these entities. The benefits of the proposal, however, are not limited to small companies. Nearly all electric utilities will be able to avail themselves of the Tier I approach at their service centers, at transmission substation maintenance facilities, and at smaller oil-filled electrical equipment installations.

We are concerned, however, that what may be a drafting error in the definition of Tier I qualified facility in proposed § 112.3(g)(1) may cause confusion about whether facilities with oil-filled operational equipment are eligible for the Tier I alternative, and if they are, does the 5,000 gallon cap apply to oil-filled equipment? In describing the Tier I capacity limit for each unit at a qualified facility, EPA uses the language "has no individual *oil storage container* greater than 5,000 gallons." *Id*. at 58428 (emphasis added). If by this phrase EPA is referring to a "bulk storage container," which EPA has defined as "any container used to store oil," the confusion arises because the third sentence of this definition states that "[o]il-filled electrical, operating, or manufacturing equipment is not a bulk storage container." 40 C.F.R. § 112.2; *see* 67 Fed. Reg. at 47072 ("We agree that electrical equipment is not bulk storage."). Nothing in the

preamble suggests that EPA intends to exclude facilities with oil-filled operational equipment from Tier I status; there is no doubt that they are eligible for Tier II status. The most natural reading of the definition includes them among Tier I facilities because the phrase "oil storage container" appears only in the context of the 5,000 gallon cap. EPA should confirm that qualified facilities with oil-filled operational equipment are eligible for the Tier I status. We suggest that the language be modified to read "has no individual *oil storage container* or oil-filled operational equipment greater than 5,000 gallons."

EPA points out that a Tier I qualified facility (i) may elect to use the Appendix G SPCC template as authorized by § 112.6(a)(3), (ii) may elect to prepare a self-certified SPCC plan as authorized by § 112.6(b), or (iii) prepare a full SPCC plan as required by § 112.7. 72 Fed. Reg. at 58394-95. Given the optional nature of the reduced requirements provided to Tier I or Tier II qualified facilities, we have also concluded that the proposed rule would allow a facility that qualifies for Tier I to use the Appendix G SPCC template but have it certified by a PE rather than the owner/operator of the facility.[14] We cannot conceive of any objection to allowing a facility eligible for and using the Tier I template to rely on the professional advice of a PE and providing the benefit of the PE's certification. We ask EPA to confirm that an Appendix G template may be certified by a PE.[15]

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[14] This is similar to EPA's statement in the 2006 amendments that nothing in the regulations precludes a qualified facility from having a PE certify the security and integrity testing alternatives as environmentally equivalent even though the regulation allowed self-certification of these alternatives. 71 Fed. Reg. at 77275.

[15] Minor modification of the certification language proposed in § 112.6(a)(1) may be necessary to address a PE certification in lieu of the owner/operator of the facility.

EPA's approach in developing the format and content of the Appendix G template is sound. Instead of simply developing a punch list of all requirements in the current SPCC regulations, EPA has wisely tailored the contents of Appendix G to the types of facilities likely to qualify as Tier I facilities. We agree with EPA's prediction of reduced potential for oil discharge for the Tier I universe because of the smaller storage containers and less complex operations at these facilities. *See id*. at 58392. Plainly, not all SPCC requirements are relevant to these facilities, and, in most cases, EPA has made sensible choices in determining which requirements to include in Appendix G and which to omit. *Id*. at 58392-95.

We offer one suggested change in the format of the Appendix G SPCC template that would make oil pollution prevention planning more flexible in those states that have their own planning requirements in addition to the federal SPCC requirements. In its present form, Appendix G appears to preclude integrating the template with a related state program. The listed requirements are all derived from the current SPCC program, and the form leaves no place for consolidated oil spill prevention planning with parallel state programs. This would result in unnecessary paperwork in those states that require additional oil pollution planning beyond the requirements of the SPCC program. This is also inconsistent with EPA's policy for allowing integration of federal and state requirements in a single document that meets the SPCC planning requirements of § 112.7 so long as all the federal requirements are cross-referenced to the particular provision in the Part 112 rules.[16] Similar consolidation can be achieved in the Appendix

[16] *See* 67 Fed. Reg. at 47079-80 ("We agree that any equivalent prevention plan acceptable to the Regional Administrator qualifies as an SPCC Plan as long as it meets all Federal requirements . . . and is cross-referenced from the requirement in part 112 to the page of the

G template by allowing states with additional planning requirements to draft additions to the form that can be inserted either at the end of the document in a separate section titled “Additional State Requirements” or at the end of each section so that state requirements appear following related federal requirements. Ultimately, having all related requirements recorded in a single document would facilitate rapid company responses to oil spill emergencies.

In sum, USWAG supports EPA’s proposed Tier I qualified facility proposal and urges the Agency to adopt it in final form with the amendments suggested above.

III. Definition of Loading Rack.

In the Loose Ends proposal, EPA seeks to codify its previous interpretations that the SPCC regulatory provisions for "tank car and tank truck loading/unloading areas" at 40 C.F.R. § 112.7(h) apply only to those areas at SPCC-regulated facilities that have loading/unloading *racks. O*ther loading *areas* would not be subject to the requirements of § 112.7(h). 72 Fed. Reg. at 58389 (citing SPCC Guidance for Regional Inspectors ("SPCC Guidance") at 4-34; 69 Fed. Reg. 29728, 29728-29 (May 25, 2004)). In order to limit the scope of this provision, EPA proposes a definition of loading/unloading rack as "a structure necessary for loading or unloading a tank truck or tank car, which is located at a facility subject to the requirements of this part. A loading/unloading rack includes a platform, gangway, or loading/unloading arm; and any combination of the following: piping assemblages, valves, pumps, shut-off devices, overfill sensors, or personnel safety devices." Proposed § 112.2, 72 Fed. Reg. at 58427-28; *see also id.* at 58390. The proposed definition of loading/unloading rack remains highly ambiguous

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equivalent plan. * * * * Examples of an ‘equivalent prevention plan’ might be, for instance, . . . a State plan . . . .”).

and therefore may unnecessarily sweep in many structures that are not commonly-understood to be loading racks.[17]

Although it is very unclear, it appears that EPA is defining the term "loading rack" as consisting of and satisfying three separate component categories, which are that the "rack" must (i) be a structure necessary for loading/unloading a tank truck or tank car, (ii) include at least one of the following: a platform, a gangway, a loading arm, or an unloading arm, and (iii) include at least one of the following: piping assemblages, valves, pumps, shut-off devices, overfill sensors, or personnel safety devices. *Id.* It appears that loading racks must meet each of the three components of the definition to be subject to the loading rack SPCC provisions. Applying these regulatory provisions to actual real-world scenarios becomes complicated and possibly contradictory for certain devices at regulated facilities.

For example, some USWAG facilities load tank trucks via rubber piping (rather than piping assemblages) at platforms or gangways, which do not contain a "loading rack" in the common understanding of what constitutes a rack. Although the SPCC Guidance describes "loading/unloading areas utilizing a single hose and connection or standpipe [as] not [constituting loading 'racks'" (SPCC Guidance at 4-33), the presence of a platform or gangway at such loading areas may satisfy the proposed definition even though platforms and/or gangways pose no more significant risk of oil discharge than piping without these structures.[18]

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[17] For simplicity, the requirements at § 112.7(h) that currently impose drainage, containment, safety measures and inspection requirements to loading racks and their adjacent areas will be identified as the "loading rack" provisions or regulations throughout these comments.

[18] This assumes that the third component of the proposed definition of loading rack is also met.

An even more troubling real world issue arises when the third component of the definition is applied. It appears that loading areas incorporating a platform would meet the definition of loading rack if the platform incorporated devices included in the third component of the loading rack definition, such as overfill sensors or personnel safety devices. It seems highly irregular and counterintuitive that the presence of safety features could be the *de facto* trigger requiring more stringent sized secondary containment than those areas that did not contain such features. In effect, the Agency would be punishing facilities for maintaining protective equipment and this policy would encourage facilities to remove such equipment in order to exempt loading areas from these provisions.

In discussions about the development of the current Loose Ends proposal, an EPA official conceded that the Agency has had difficultly defining the term "loading rack" for purposes of this rulemaking. As a demonstration of this difficulty and the ambiguity of defining devices with varied components, EPA identified 19 separate and unique definitions of "loading rack" in a background document developed for this Loose Ends proposal.[19] *See* Analysis of Loading and Unloading Rack Requirement (40 CFR 112.7(h)), dated August 31, 2007, at 8-11. Although EPA attempts to provide a level of specificity to the loading rack provisions in the current rulemaking, the Agency has instead proposed a highly ambiguous definition that does not clearly delineate the

[19] In the Loose Ends proposal, EPA applies the commonly-understood definition of loading rack to find that oil production tank batteries and farms "generally do not have the equipment meeting the proposed definition of loading/unloading rack." 72 Fed. Reg. at 58390. USWAG urges EPA to make a similar finding for utility facilities where oil-filled electrical equipment is loaded or unloaded with mineral oils.

applicability of the provisions and too broadly sweeps in loading structures and devices without regard to their oil discharge potential.

To better refine the loading rack provisions, USWAG suggests that EPA first reconsider the problem that the Agency is attempting to address. By definition all facilities that would be subject to the loading rack provisions either have general secondary containment for all on-site oil storage or have demonstrated impracticability for such containment. 40 C.F.R. §§ 112.7(c), (d) & (k). If the facility has general secondary containment, it is already protected against the most typical discharge and the most likely quantity of oil discharged (*see* 72 Fed. Reg. at 58397), a determination that would include discharges from tank truck and tank car loading/unloading operations. If the facility has demonstrated impracticability for general secondary containment, the facility would likely demonstrate impracticability for sized secondary containment as well. Subjecting these facilities to both general and sized secondary containment would not significantly reduce the facility's potential to discharge. In effect, in requiring loading/unloading racks to comply with sized secondary containment and the related provisions, EPA imposes a heightened level of restriction to address a somewhat unlikely discharge scenario with a worst case discharge potential. Given that EPA appears to have difficulty defining the scope of this provision and that there are marginal benefits associated with these provisions, USWAG recommends that EPA abandon the effort to define loading racks and drop the sized secondary containment requirement in 40 C.F.R. § 112.7(h).

If EPA decides to retain the loading/unloading rack provisions, the Agency should reexamine the scope of these provisions to more narrowly tailor the regulations to

address the oil discharge risks that EPA is intending to reduce.[20] USWAG believes that in establishing exemptions and defining the scope of the loading/unloading rack provisions, the Agency should address the *risk of discharge* from such areas rather than what specific device or structure is present at a facility if the device or structure has no greater potential for discharge than others. In the final 2002 SPCC amendments, EPA acknowledged this point in responding to comments on the scope of the loading/unloading rack provisions:

> This section is applicable to any nontransportation-related or terminal facility where oil is loaded or unloaded from or to a tank car or tank truck. It applies to containers which are aboveground … or completely buried … and to all facilities, large or small. All of these facilities have a risk of discharge from transfers. Our Survey of Oil Storage Facilities (published in July 1996) showed that as annual throughput increases, so does the propensity to discharge, the severity of the discharge, and, to a lesser extent, the costs of the cleanup. Throughput increases are often associated with transfers of oil.

67 Fed. Reg. at 47110. Although EPA did not directly rely on the point in delineating the scope of the provisions, it was clearly attempting to limit the propensity, severity and costs of oil discharges at transfer facilities, which depended directly on the "annual throughput" of such facilities. USWAG agrees with the Agency's desire to limit oil discharges and encourages EPA to codify this rationale into the regulatory text to narrowly tailor the applicability of this provision to target the risks that the Agency wishes to reduce. In particular, USWAG urges EPA to adopt a throughput restriction on the applicability of any loading rack definition and the loading rack provisions. USWAG suggests that this level should be an average of 830,000 gallons of oil loaded and

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[20] USWAG supports EPA's proposal to remove references in 40 C.F.R. § 112.7(h) to loading *areas*. *See* 72 Fed. Reg. at 58390-91.

unloaded per month calculated on an annual basis per loading area/rack. This throughput would equal less than three full tank trucks per day (at 9,000 gallons/truck) loaded/unloaded at these racks, which is significantly less than large scale operations where up to 600 tank trucks can be loaded/unloaded per day. If loading racks at facilities do not meet or exceed this average monthly throughput (as calculated annually), those areas of the facility should not be required to meet the loading rack provisions at § 112.7(h).[21]

USWAG believes that limiting the loading/unloading rack provisions to areas/racks with an monthly throughput of 830,000 gallons or less will appropriately tailor the more restrictive regulatory provisions to those loading activities involving large-scale bulk loading operations with heightened risk of discharges.[22] More limited transfer operations (*e.g.*, infrequent loading or unloading of oil-filled electrical equipment from platforms, and irregular transfers of oil to/from an on-site tank to a tank truck that remains on-site) would not be required to meet sized secondary containment requirements for their more limited operations and reduced potential for oil discharge. USWAG urges EPA to adopt an throughput volume threshold for the loading rack provision, because this will address the goal of § 112.7(h) without sweeping in operations that do not pose significant oil discharge risks.

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[21] As a possible alternative to this throughput restriction, USWAG suggests that EPA restrict the 40 C.F.R. § 112.7(h) provisions to specific "loading racks" used to transfer oil to/from tank trucks that are capable of exceeding a specific flow rate. This will allow EPA to limit these provisions to the "loading racks" that present the most risk due to large potential throughput without requiring facilities to keep records on facility transfer operations.

[22] Because we believe that EPA's primary concern in proposing the loading rack definition is with large oil distribution operations, one option for limiting the scope of the definition is to exempt loading/unloading racks where all unloaded oil is consumed on-site at an SPCC-regulated facility.

IV. Sized Secondary Containment for Tank Trucks.

In the December 26, 2006 amendments to the SPCC rules, EPA provided relief to mobile refuelers from the sized secondary containment requirement at 40 C.F.R. § 112.8(c) (2) & (11). *See* 71 Fed. Reg. at 77283-85. This exempted mobile refuelers from the requirement to "furnish a secondary means of containment…sufficient to contain the capacity of the largest single compartment or container with sufficient freeboard to contain precipitation" when they are in a stationary, unattended mode and not under the direct oversight or control of facility personnel. *Id.* at 77283; s*ee* SPCC Guidance at 4-40. This amendment originated with a 2005 proposed rule that provided the same relief limited to airport mobile refuelers. That proposal was based on safety and security concerns related to constructing sized secondary containment at airports and requiring airport refuelers to return to a single containment area between fuel transfers. 70 Fed. Reg. 73524, 73539-41 (Dec. 12, 2005). In the 2006 final rule, EPA extended this relief to all mobile refuelers, explaining that sized secondary containment requirements for stationary vehicles would detract from safety and security due to (i) the creation of barriers that would impede security monitoring, (ii) the increased risks from the grouping vehicles, and (iii) the increased driving distances with attendant accident risks. In addition, because *general* secondary containment requirements for SPCC-regulated facilities would still apply to mobile refuelers, EPA concluded that these vehicles should be exempt from sized secondary containment requirements. 71 Fed. Reg. at 77284. EPA specifically excluded "other mobile or portable oil storage containers that are not involved in fueling activities" from this relief. *Id.*

When EPA drew the boundary of the exemption, it did not explore whether other activities pose similar safety and security concerns and pose similar low risks. That

may be due to the fact that the original proposal on which the Agency sought public comment was limited to airport refuelers. It was not until the Agency expanded the exemption in the final rule to apply to *all* mobile refuelers that the problems being addressed by the exemption significantly broadened. Nothing in the final 2006 amendments provides any rationale for exempting only vehicles transporting fuel from sized secondary containment while excluding all other vehicles transporting oil. EPA now has corrected that omission by requesting comment on whether the relief provided to mobile refuelers should be extended to vehicles that contain other types of oil. 72 Fed. Reg. at 58398-99.

By way of background, many utility companies transport mineral oil via tank truck or similar vehicle to various company-owned or -operated facilities including service centers and substations to fill, filter and/or refill electrical equipment. The mineral oil provides cooling and insulation rather than fuel, but in all other respects the issues are substantially the same as with mobile refuelers. Often, transfers to and from these vehicles cannot be accomplished without the vehicle entering a "stationary and unattended mode" for which sized secondary containment for non-transportation-related mobile/portable containers would currently apply. 40 C.F.R. § 112.8(c)(11). These vehicles can travel to dozens of facilities and often spend very short time periods in a stationary and unattended mode. For vehicles that are unattended, the same host of safety and security issues applies to these vehicles as applies to mobile refuelers. In fact, the *only* difference between these vehicles and the mobile refuelers that are currently exempted from the sized secondary containment requirements is the type of oil contained in the two sets of vehicles and the purposes served by the respective oils.

There was no suggestion in the 2006 rule that EPA was basing its differentiation on the relative risks and toxicity of these oils. EPA is aware that USWAG provided the results of a study of mineral oil to EPA in 1999 that was conducted by the Electric Power Research Institute ("EPRI") demonstrating significantly lower toxicity posed by mineral oils than petroleum oils. *See* USWAG Comments, Docket No. SPCC-10P, submitted July 7, 1999. We invite EPA to review that report and we incorporate it into these comments by reference. USWAG strongly urges EPA to expand the exemption from sized secondary containment to cover vehicles transporting all types of oils for use in oil-filled operational equipment.

V. General Secondary Containment Clarifications.

In the proposed Loose Ends rule, EPA proposes to amend the general secondary containment provisions at 40 C.F.R. § 112.7(c) to clarify the appropriate design of secondary containment and/or diversionary structures in accordance with prior Agency guidance. *See* SPCC Guidance at 4-8 through 4-11. Specifically, EPA clarifies that facilities must design general secondary containment to address the "typical failure mode" and the "most likely quantity of oil that would be discharged" from the primary containment system. 72 Fed. Reg. at 58397. USWAG fully supports these clarifications because they limit confusion between this provision requiring general secondary containment for *typical* and *most likely discharge* and the numerous provisions requiring sized secondary containment for specific operations and containers (*e.g.*, loading racks, bulk storage containers, and mobile/portable containers). *Id.* at 58397-98. EPA's statement that the "most likely quantity of oil discharged is not often expected to be the maximum capacity of the container" (*id.* at 58398) is helpful clarification. USWAG

commends EPA for publishing these clarifications, which we are confident will help to eliminate potential confusion by the regulated community as well as regulatory enforcement personnel.

USWAG also supports EPA's proposal to amend the general secondary containment regulation to explicitly authorize the use of active containment measures to prevent discharges to navigable waters. *Id.* at 58398. In fact, active containment is very well-suited to utility operations because the utility industry often utilizes either a Supervisory Control and Data Acquisition ("SCADA") system that allows for the continuous monitoring of electrical system activity which alerts operating staff to electrical outages across the utility network or another type of electrical outage notification process. Because this system alerts staff to outages that occur whenever oil is spilled from oil-filled electrical equipment utility personnel can be at the site of such a spill within a short period of time to quickly deploy active containment measures and many USWAG members have accordingly included active containment measures (*e.g.*, deployment of spill kits or sorbent materials) in their SPCC plans when they can be deployed in a timely and effective manner to prevent discharges to navigable waters. Depending on facility-specific issues, these measures can be more cost-effective than constructing passive containment structures that would otherwise be required in order to satisfy the requirement for general secondary containment at these sites. Even though the SPCC Guidance approves of the use of active containment measures (*see* SPCC Guidance at 4-16 through 4-20), amending the SPCC regulations will help to provide regulatory certainty to this issue.

VI. Applicability of the SPCC Rules to Wind Turbines.

EPA has included in the preamble clarification of the applicability of the SPCC rules to wind turbines. USWAG believes that EPA's description of the wind turbines is sound and is consistent with a prior Energy Impact Statement prepared by the Argonne National Laboratory on the impact of SPCC regulation on wind power. *See* Argonne National Laboratory, Assessment of the Potential Costs and Energy Impacts of Spill Prevention, Control, and Countermeasure Requirements for Wind Energy (July 2006) ("Argonne Report"). EPA correctly points out that the total volume of oil in these turbines is relatively small – often around 100 gallons – but if aggregated with other turbines located at wind farms, the SPCC regulatory threshold of 1320 gallons aggregate oil storage capacity could be met.

The preamble discussion contains three important interpretive rulings. First, EPA has correctly determined that wind turbines meet the definition of "oil-filled operational equipment" in 40 C.F.R. § 112.2. 72 Fed. Reg. at 58421-22. The effect of this interpretation is to make them eligible for the alternative compliance option for qualified oil-filled operational equipment promulgated by EPA in 2006. *See* 40 C.F.R. § 112.7(k); *see* 71 Fed. Reg. at 77275-76. We expect nearly all existing wind turbines to meet the eligibility criteria for qualified oil-filled operational equipment based on discharge history. *See* 40 C.F.R. § 112.7(k)(1).

Second, consistent with the findings in the Argonne report, the nacelle (*i.e.*, the housing for the turbine) would contain most if not all oil that may be released from the turbine. Argonne Report at 4. Thus, EPA has correctly concluded that the nacelle "may be determined to serve as sufficient secondary containment in the event of an oil discharge." 72 Fed. Reg. at 58422. If such a determination is made, the facility would

have met the general secondary containment requirements § 112.7(c) and hence, as EPA notes, the alternative compliance option for qualified oil-filled operational equipment may ultimately be unnecessary. *Id*.

Finally, EPA also has pointed out that wind farm facilities may also meet the criteria for qualified facility status under which PE certification of the SPCC plan would be unnecessary. *Id*. Indeed, given the small quantity of oil in each turbine and the transformers located at the wind farm, many wind farm facilities are likely to qualify as Tier I qualified facilities and avail themselves of the Appendix G SPCC template. USWAG appreciates EPA's helpful clarifications.

VII. Definition of Facility.

The definition of "facility" is one of the most critical elements of SPCC regulation because in many instances it may determine whether or not a "facility" is subject to SPCC regulation. Two adjacent facilities each with less than 1320 gallons of oil storage capacity are not regulated by the SPCC rules, while the same facilities combined as one would be regulated, assuming that other threshold factors are also present. This is what has made the definition of "facility" controversial.

In the preamble to the 2002 SPCC amendments, EPA illustrated the breadth of possible interpretations of a "facility" by noting that it "may be as small as a single container or as large as all of the structures and buildings on a site." 67 Fed. Reg. at 47074. For electric utilities, the issue of what constitutes a facility often arises at customer property where oil-filled transformers that are owned or operated by the utility are placed at multiple locations on the property. The most obvious example is the large shopping mall. Oil-filled equipment at the north and south ends of a mall separated by a

half mile of department stores and specialty shops (as well as bulk oil storage containers for heating or other purposes belonging to the mall owner/operator or his lessees) should clearly result in separate facilities due to the difference of ownership or operation of the equipment and bulk storage containers and the different types of activities served by the equipment and the containers.[23] Many utilities have applied a common-sense rule of thumb – if the utility-owned or operated bulk storage devices and equipment are in physical proximity and interdependent or integrated as a single operation, they are considered to be part of the same facility.

The proposed addition to the definition of "facility" is consistent with our industry's past approach and therefore we view it as a welcome clarification.[24] It would confirm that contiguous buildings or other forms of property owned or operated by the same person may be considered separate facilities (proposed § 112.2), subject to a cautionary note in the preamble that "an owner or operator may not determine his facility boundary in such a manner as to simply avoid applicability of the SPCC rule." 72 Fed. Reg. at 58386. We construe this note to mean that the owner/operator has broad discretion to subdivide what was previously thought to be a single facility into two separate facilities, even if the result is that one or both separate facilities are below the regulatory threshold, so long as the reason for subdividing the facilities was not solely to

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[23] *See* 67 Fed. Reg. at 47074 ("specific factors to use in determining the extent of a facility may be the ownership or operation of those buildings, structures, equipment, installations, pipes or pipelines, or the types of activities being carried on at the facility.").

[24] A few utilities have assumed that the SPCC definition of "facility," like that of other EPA programs (*e.g.*, 40 C.F.R. § 260.10 (property-wide definition of "facility" at RCRA facilities)), requires a fence-to-fence property boundary scope. Although USWAG interpreted the existing SPCC definition as not mandating a property-wide scope, the proposed new language dispels all remaining doubt and permits greater flexibility on the part of the owner/operating in defining the scope of a facility.

escape applicability of SPCC regulation and the decision to subdivide is based on the factors listed in the definition or other similar considerations. *See* proposed § 112.2 (The boundaries of a facility depend on several site-specific factors, *including but not limited to*, the ownership or operation of buildings, structures, and equipment on the same site and types of activities at the site.") (emphasis added).

Utilities will benefit from this clarification at locations where multiple operations occur, such as at utility service centers, transmission substation maintenance shops and distribution operations co-located at the same site, and transmission switchyards co-located with power plant generation operations. These operations are typically managed by different groups of company personnel, and it makes sense for oil-spill prevention planning to be the responsibility of those who manage these separate operations.

VIII. Facility Diagram Flexibility.

USWAG supports EPA's efforts to increase flexibility for facility diagramming requirements. 72 Fed. Reg. at 58388-89. These requirements can often be the most challenging components of SPCC plans, especially where regulated companies may own or operate potentially hundreds of sites, each requiring separate facility diagrams, as is the case with most utility companies. Any Agency effort to provide greater flexibility in diagramming these sites will represent significant time savings for utilities. As EPA correctly recognizes, it can be very difficult to represent mobile/portable containers, complicated piping, and/or oil-filled equipment on facility diagrams. *Id.* at 58389. USWAG fully supports the Agency's proposal to allow regulated facilities to indicate on facility diagrams the work areas, the estimated number, and anticipated

contents of mobile/portable containers rather than the specific location, exact number and exact contents of such containers. *Id.* This amendment will allow facility owner/operators to develop SPCC plans that more closely represent the actual facility operations without requiring constant amendments to plans when oil storage practices change through the range of normal and anticipated operations at sites.

USWAG also supports the added flexibility for diagramming oil-filled operational equipment and complex piping at regulated facilities that EPA provided in section 6.2 of the SPCC Guidance. SPCC Guidance at 6-3 through 6-5. In that Guidance and in the current proposal, EPA has authorized the use of simplified schematic representations of complicated piping and oil-filled equipment when the needs and the complexity of the facility warrant. 72 Fed. Reg. at 58389. EPA also allows owners and operators to reference detailed drawings in the SPCC plan and/or describe in narrative form the piping and/or oil-filled equipment at SPCC-regulated facilities. *Id.* USWAG supports this flexibility, and believes that EPA should specifically codify this flexibility in the SPCC regulations to ameliorate any potential confusion regarding these requirements.

Finally, we fully agree with EPA's proposal to dispense with a facility diagram at Tier I qualified facilities. As EPA states, "A facility diagram is not needed to understand the facility layout and locate areas of potential discharge at such facilities. *Id*. at 58393.

IX. Incorporation of Industry Standards into SPCC Program.

Throughout the Loose Ends proposal and consistent with the design and intent of the SPCC program, EPA encourages regulated facilities to rely on and incorporate industry standards into SPCC plans and procedures. In particular, the Loose Ends proposal would amend the integrity testing requirements at 40 C.F.R. §§ 112.8(c)(6) &

112.12(c)(6) to provide facilities with the option to utilize less stringent industry standards in lieu of the existing regulatory requirements. 72 Fed. Reg. at 58399-400. The proposal also establishes the "Tier I" SPCC plan template through which owner/operators are required to certify that a facility's SPCC Plan "was prepared in accordance with accepted and sound industry practices." *Id.* at 58432. USWAG supports EPA's proposals to allow regulated facilities to rely on industry standards in lieu of specific regulations and commends the Agency's efforts to authorize the use of industry standards even where they may be less stringent than current regulations.

One difficulty with incorporating and deferring to industry standards for a regulatory program, however, is that regulated facilities often have problems identifying all currently applicable industry standards, especially when these standards are revisited, revised and updated by standard-setting organizations. To help address this issue, USWAG urges EPA to maintain a list of references and contacts for all applicable industry standards in a centralized and publicly-accessible location (*e.g.*, EPA's Oil Program website) and include with this list references to the proposed and final revisions, updates and expirations of these standards. This will significantly assist the regulated public in complying with the SPCC program mandates to consider and incorporate industry standards into SPCC plans.

X. Extension of Qualified Facility Streamlined Integrity Testing to All SPCC-Regulated Facilities.

USWAG endorses EPA’s proposal to extend to all SPCC-regulated facilities the streamlined integrity testing option that EPA promulgated in 2006 for qualified facilities. Specifically, EPA proposes to replace the current §§ 112.8(c)(6) and 112.12(c)(6) with the language found at § 112.6(c)(4)(ii). The principal effect of this change is to allow a

facility owner/ operator to rely on industry standards for integrity testing, such as the Steel Tank Institute ("STI") SP001, *Standard for Inspection of Aboveground Storage Tanks*, and American Petroleum Institute ("API") Standard 653, *Tank Inspection, Repair, Alteration, and Reconstruction*. *See* 72 Fed. Reg. at 58399-400. As EPA correctly points out, a facility owner/operator could rely on these standards today if a PE certified that the inspection procedures in those or other industry standards are environmentally equivalent to the requirements in the existing §§ 112.8(c)(6) and 112.12(c)(6). The amendment would drop the requirement for a PE certification of environmental equivalence. *Id*. at 583400.

XI. Extension of Qualified Facility Security Standards to All SPCC-Regulated Facilities.

Like the proposal to extend the current qualified facility integrity testing provisions to all SPCC-regulated facilities, EPA also proposes to extend the qualified facility security standards to all facilities. *Id*. at 58399-400. The current rule at § 112.7(g) contains a prescriptive set of requirements applicable to all SPCC facilities other than qualified facilities, including specific requirements for fencing and lighting. In 2006, EPA promulgated a performance-based alternative option for security at qualified facilities. 40 C.F.R. § 112.6(c)(3); *see* 71 Fed. Reg. at 77274-75. That performance-based alternative would replace the current prescriptive requirements at all facilities.

Implementation of the qualified facility alternatives has demonstrated their effectiveness. Although the prescriptive fencing requirement has not been a significant issue for utilities, the lighting requirement is a serious concern in some parts of the country where transformers and other pieces of oil-filled operational equipment are visible from public thoroughfares and lighting often attracts the attention of vandals who

may regard well lit electrical equipment as excellent targets for demonstrating good marksmanship. The qualified facility alternative does not prejudge the need for lighting but does allow the facility owner/operator to find the right balance between preventing vandalism and discovering oil discharges. USWAG agrees with EPA that a performance-based approach to security would be effective and we therefore support the proposal to extend the qualified facility security provisions to all SPCC-regulated facilities.

XII. Man-Made Structures.

USWAG has on a number of occasions communicated its views to EPA on what we believe to be an unwise prohibition on the use of man-made structures that provide containment from the determination whether a facility, "due to its location, could reasonably be expected to discharge oil in quantities that may be harmful . . . into or upon the navigable waters of the United States or adjoining shorelines." 40 C.F.R. § 112.1(b). In our view, the prohibition penalizes voluntary steps an owner or operator may take to enhance environmental protection for the sake of maximizing regulatory control of oil-handling facilities. We have even proposed to limit our suggestion to allow consideration of man-made features to those structures that are an essential feature of the facility's operations unrelated to environmental management of the facility. For electric utilities, the prime example of a man-made structure that is integral to the utility's operations is the gravel bed at electrical substations. *See* 56 Fed. Reg. 54612, 54621 (Oct. 22, 1991). In the preamble to the Loose Ends proposal, EPA adheres to its long-held position that man-made structures may not be considered in determining whether a facility is subject to regulation. 72 Fed. Reg. at 58419. We continue to

disagree with EPA's reasoning as a matter of sound public policy, but appreciate that the hardship posed by this interpretation to utilities that resulted from that position has been addressed by EPA in other ways. *See*, *e.g.*, 40 C.F.R § 112.7(k).

In the current proposal, EPA addresses the role of man-made structures beyond the initial decision whether a facility is subject to SPCC regulation. EPA explains that a facility located within a building may take into consideration the containment provided by the building walls and drainage system to satisfy secondary containment requirements in the rules. In addition, EPA acknowledges that for facilities designed to satisfy fire codes, such as NFPA 30, the building may serve as both general and sized secondary containment. 72 Fed. Reg. at 58419-20. USWAG welcomes this additional guidance, which we believe will have a positive effect at the numerous SPCC-regulated facilities located in buildings.

XIII. Exemption for Pesticide Mix Containers and Equipment.

In the proposed rule, EPA would exempt pesticide application equipment and containers used to mix pesticides with oil ("mix containers") from the SPCC requirements and exempt the capacity of such containers/equipment when determining the oil storage capacity of facilities, but *only* when these pieces of equipment and containers are used at farms. 72 Fed. Reg. at 58383-84. In proposing to exempt these containers, EPA notes that while the Federal Insecticide, Fungicide, and Rodenticide Act ("FIFRA") grants EPA the authority to set use, reuse, storage and disposal standards for pesticide containers, the Agency decided in a recent rulemaking not to regulate pesticide containers at farms due to the rarity of on-farm storage of pesticides and the lack of evidence suggesting that the storage of these containers at farms

contributes to contamination. *Id.* at 58384 (citing 71 Fed. Reg. 47330 (Aug. 16, 2006)). In the current rulemaking, EPA bases its conclusion to exempt pesticide containers and equipment from the SPCC rule on the same rationale as the FIFRA rule and because "EPA does not believe that the regulation of pesticide application equipment and related mix containers used at a farm is appropriate under the SPCC rule." *Id.*

Nowhere in the preamble, however, does EPA address why farms are unique from other industries that also use pesticide equipment and mix containers and are also exempted from the FIFRA pesticide container program. In fact, it would appear that other industries would have similar or stronger claims for SPCC exemption based on the presumably reduced capacity of pesticide containers for non-farm applications.

EPA's desire to accommodate the farm community is laudable and appropriate, but in granting an exemption from SPCC regulation, EPA needs to determine whether similar containers in other industries are deserving of the same accommodation granted to farms. One of the basic principles of administrative law is that comparable circumstances should be regulated similarly. The converse, of course, is the familiar principle that failure to treat comparable circumstances in a similar manner without explanation is arbitrary and capricious and hence unlawful. *See*, *e.g.*, *Motor Vehicle Mfrs. Ass'n v. State Farm Mut. Auto. Ins. Co.*, 463 U.S. 29, 43 (1983); *Greater Boston Television Corp. v. FCC*, 444 F.2d 841, 852 (D.C. Cir. 1970), *cert. denied*, 403 U.S. 923 (1971). EPA's own experience with proposed exemptions that target a single industry often lead to a broadened exemption to cover other similarly situated industries. *See* 71 Fed. Reg. at 77283-84 (expansion of proposed exemption from sized secondary containment for airport refuelers to mobile refuelers at other types of facilities).

The utility industry regularly uses and/or mixes pesticides containing oil that would be subject to SPCC requirements if stored or used in containers of at least 55 gallons. Among other uses, utilities apply pesticides to maintain their right-of-way networks and to preserve treated wood poles that are used in transmitting and distributing electricity. Through the FIFRA program, EPA closely regulates pesticides by requiring pesticide registration and narrowly tailoring the approved uses of pesticides to ensure that no authorized application can cause unreasonable harm to the environment. EPA should limit the potential for duplicative regulation of pesticides by the FIFRA and SPCC programs by exempting pesticide mix containers and equipment from the SPCC program requirements and capacity calculations for *all* potentially covered industries, and not restrict this exemption to farms.

CONCLUSION

The Loose Ends proposal is a multi-faceted set of amendments that in most cases are well thought out and merit final adoption. As a general rule, we have been able to endorse EPA's proposed regulatory language, but in a few cases, we have endorsed the concept being proposed but have suggested either some changes in the regulatory language or some minor revisions to make a good proposal even better. We are in full support of the proposal for exempting below ground nuclear facility emergency diesel generator tanks regulated by the NRC, but as we explained in these comments, information we recently received from the NRC demonstrates that the proposed amendment may not cover all existing and future NRC licensees. The only portion of the proposed rule that we believe to be unsound is the proposed definition of

loading rack, and we respectfully suggest that EPA return to the drawing board for determining how to address secondary containment requirements for such racks.

If the Agency desires additional information, please contact USWAG's Executive Director, Jim Roewer (202-508-5645) (jim.roewer@uswag.org) or its counsel, Bill Weissman at Venable LLP (202-344-4503) (wweissman@venable.com).

APPENDIX A

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July 9, 2007

Via E-Mail

Mr. R. Craig Matthiessen, PE
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Re: Your E-Mail Message of June 27, 2007

Dear Craig:

Thank you for your E-Mail message of June 27, 2007, clarifying some of the issues we discussed at our meeting on June 22. I was away for a few days when it arrived so I apologize for the delayed response.

1. Integrity and Leak Testing for Underground Emergency Diesel Generator ("EDG") Tanks.

You are, of course, correct that the integrity testing requirement in § 112.8(c)(6) applies only to aboveground tanks. That is not the provision that concerned our industry. Our concern stems from the practical reality that most existing underground EDG tanks do not have the bulk storage container secondary containment prescribed by § 112.8(c)(2) and hence the facilities must avail themselves of the impracticability alternative authorized by § 112.7(d). The integrity testing requirement, triggered by the § 112.7(d) alternative, is not limited to aboveground tanks. Similarly, the requirement in § 112.8(c)(4) for periodic leak testing explicitly applies to underground tanks whether or not they rely on the § 112.7(d) alternative.

You indicate that the frequency of integrity testing in the context of an impracticability determination may be governed by industry standards, but we are not aware of any industry standard applicable to integrity testing of these EDG tanks at nuclear power plants. In the past, development of a tank testing schedule was typically the responsibility of the power plant's system engineer, who often was not a professional engineer ("PE"). Whoever will make this determination in the future, it will be a professional judgment about which there can be honest differences of opinion.

While we appreciate the flexibility available to the PE, the level of comfort of many PEs is fairly low with fully exercising such flexibility. We are not necessarily asking for a rigid

structure, but offer that observation as indicative of the real-world difficulties with implementing the SPCC requirements to EDG tanks. The SPCC Guidance for Regional Inspectors does not specify any particular timetable for such integrity testing, but it does signal EPA's expectation that "good engineering practice may suggest a more stringent leak testing schedule than would be required if secondary containment were in place." SPCC Guidance § 4.5.2, at 4-43; *see also id*. § 7.2.1 Table 7-1, at 7-2. The preamble to the 2002 SPCC amendments similarly fails to specify a schedule for periodic leak testing, but does point to the Part 280 Underground Storage Tank ("UST") regulations as an acceptable standard. *See* 67 Fed. Reg. 47042, 47118 (July 17, 2002). That standard, however, according to the Argonne National Laboratory ("ANL") assessment of potential costs and energy impacts of the SPCC rules on nuclear plant EDG tanks prepared for the Department of Energy ("DOE"), is "UST and piping integrity/leak testing every 30 days, or at a minimum, once per year depending on the circumstances." ANL, *Assessment of the Potential Costs and Energy Impacts of Spill Prevention, Control, and Countermeasure Requirements for Nuclear Power Plant Emergency Diesel Generator Tanks* at 11 (May 2006). Given the absence of more precise guidance on the timing of integrity and leak testing for EDG underground tanks, the ANL Report expresses concern, which we share, that PEs will simply default to the Part 280 standard as the presumptive standard for EPA inspectors and the power plants will face prolonged and recurring outages. *Id*. at 10-11.

2. The Role of NRC Regulatory Guide 1.137.

Your E-Mail suggested that compliance with the SPCC regulations could be achieved by compliance with the performance requirements of Regulatory Guide 1.137 or an NRC-approved equivalent, and that any timetable for tank and piping testing used to comply with the Guide would be deemed by EPA to satisfy the requirement for "regular" testing under the SPCC rules. That would appear to be a simple solution for those nuclear plants subject to Regulatory Guide 1.137, but Guide 1.137 is not applicable at all nuclear plants and does not constitute an industry standard. Guide 1.137 was adopted in 1978 and revised the following year. It applies only to those plants that formally committed to adhering to this Guide as part of the basis for issuance of the plant's license. If the plant is not subject to Guide 1.137, the theory of SPCC equivalence with the NRC guide will not work.

* * * *

Thank you again for meeting with us and listening to our concerns. I am sure you appreciate the industry's concerns about potentially inconsistent requirements resulting from multiple layers of regulatory requirements imposed by multiple agencies. The industry's

belief that multiple agency regulation of these tanks serves no beneficial purpose has been reinforced by the positive discharge history data we recently assembled and provided to EPA. With data showing only a single discharge of 50 gallons of oil from an underground tank in the past 10 years (resulting from an accidental spill during oil transfer, not a structural defect in the tank), EPA can safely conclude that the NRC program has been effective and that no environmental problem exists requiring an EPA solution. EPA need not worry that granting an exclusion from SPCC regulation for this small universe of highly specialized NRC-regulated tanks will lead to similar exclusions for other industries regulated by other agencies. We frankly doubt that the exceptional performance of the nuclear industry's EDG tanks will be duplicated by many other industries.

If you have any questions or wish to discuss our concerns further, please do not hesitate to call either me or USWAG Executive Director, Jim Roewer, jim.roewer@uswag.org., 202-508-5645.

Sincerely,

Bill

William R. Weissman
Counsel for USWAG

cc: Art Fraas (OIRA)
Jim Roewer (USWAG)
Terry Coss (Xcel Energy)
George Oliver (NEI)
EPA Staff Listed on June 27 E-Mail

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USWAG

February 18, 2004

By E-Mail

Mr. Dave Evans
Director, Oil Program Center
U.S. Environmental Protection Agency
Ariel Rios Building
1200 Pennsylvania Ave., NW
Mail Code 5203G
Washington, DC 20460

Re: Dual Regulation of Emergency Generator Tanks at Nuclear Power Stations

Dear Mr. Evans:

In previous discussions between USWAG and your staff, we called to your attention USWAG's concern that application of the SPCC rules to underground storage tank ("UST") systems that are part of an emergency generator system at a nuclear power generation facility regulated by the Nuclear Regulatory Commission ("NRC") under 10 C.F.R Part 50, Appendix A, would lead to unnecessary dual regulation of these tank systems.

Under 40 C.F.R § 112.1(d)(2) & (4), as promulgated by the July 2002 amendments, UST systems that are subject to all technical requirements of Part 280 of EPA rules or a State program approved under Part 281 of the rules are excluded from regulation under the Part 112 SPCC rules (other than inclusion on facility diagrams for emergency response purposes). EPA explained that the rationale for this exclusion is that Parts 280 and 281 "provide comparable environmental protection for the purpose of preventing discharges as described in § 112.1(b)." 67 Fed. Reg. 47042, 47064 (July 17, 2002). However, preamble language states that this exclusion does not extend to tanks deferred from compliance with Parts 280 and 281, including UST systems within nuclear power generation facility emergency generators. It appears that in identifying this category of tanks systems as "remain[ing] potentially subject to the SPCC program" (*ibid*.), EPA may have overlooked the fact that the reason they are not regulated under the Parts 280/281 UST program is that they are comprehensively regulated by the NRC under 10 C.F.R Part 50, Appendix A.

When EPA promulgated the UST rules in 1988, EPA explained that it was deferring application of the Part 280 requirements "pending completion of a review of the NRC regulations (10 C.F.R Part 50, Appendix A) governing these tanks to determine whether further

regulation is necessary to protect human health and the environment or would be inconsistent with NRC regulations . . . ." 53 Fed. Reg. 37082, 37113 (Sept, 23, 1988). The Agency noted two concerns if the UST rules were applied to these tanks: (1) Dual regulation by two agencies under separate regulatory programs, and (2) the possibility of a shut down of the entire nuclear power plant if structural changes to the tanks to comply with EPA regulations required an amendment to the NRC license. *Ibid*. EPA stated that if further study showed the NRC controls are inadequate or incomplete, EPA reserved the option of bringing those tanks within the Part 280 universe or developing a separate set of standards applicable to these tanks. *Ibid*. In the 15 years since promulgation of the Part 280 rules, EPA has taken no action to bring these tanks within the Part 280 regulated universe and has not developed a separate set of regulations applicable to these tanks.

I. Nuclear Regulatory Commission Requirements for Emergency Diesel Generator Systems.

A. As your staff requested, we are pleased to summarize for you the scope of the NRC regulatory program under Part 50 of the NRC rules as they relate to the emergency diesel generator tanks. Part 50 establishes the regulations applicable to the NRC's licensing of nuclear power plants. *See* 10 C.F.R. § 50.1 All persons that operate or supervise operation of a commercially owned nuclear power plant must be licensed by the NRC. 10 C.F.R. § 50.10. Detailed information on the design of the facility, including the emergency diesel generator tanks, must be provided to the NRC as part of the licensing process. 10 C.F.R. §§ 50.33, 50.34. The license, when issued, may include environmental conditions. 10 C.F.R. § 50.36b.

Appendix A to Part 50 contains general design criteria for nuclear power plans – the requirement to provide emergency generation capacity derives from Appendix A – while Appendix B contains quality assurance criteria. The licensee's compliance with these criteria must be incorporated into the license application. *See* 10 C.F.R. Part 50, Appendices A & B, Introduction. As a condition of the operating license, each licensee must develop and implement an ongoing quality assurance program that fully satisfies Appendix B.

Appendix B establishes broad, over-arching requirements, which are then implemented via a myriad of interwoven NRC inspection procedures, technical instructions, program documents, licensee inspection, and surveillance programs, etc. The NRC program is oriented toward achieving defined results rather than prescribing specific implementation measures in its regulations. Although this performance-based approach differs somewhat from the more prescriptive rulemaking approach EPA often employs in its programs, the deviation clause in section 112.7(a)(2) of the SPCC rules seeks to achieve a similar degree of owner/operator flexibility that the NRC achieves for its licensees.

The emergency diesel generator systems, including the diesel fuel storage and supply system and associated tanks and piping, fall under the definition of Nuclear Safety-related Structures, Systems and Components ("SSCs"). "Safety-related structures, systems and components" are defined in the NRC rules as

> structures, systems and components that are relied upon to remain functional during and following design basis events to assure:
>
> (1) The integrity of the reactor coolant pressure boundary
>
> (2) The capability to shut down the reactor and maintain it in a safe shut-down condition; or
>
> (3) The capability to prevent or mitigate the consequences of accidents which could result in potential offsite exposures comparable to the applicable guideline exposures set forth in §50.34(a)(1) or §100.11 of this chapter, as applicable.

10 C.F.R. § 50.2. Safety-related SSCs are considered critical to maintaining nuclear safety and therefore are subject to the highest level of Appendix B quality control and NRC regulatory oversight.

We quote from several provisions of Appendix B that address quality assurance, testing, and corrective action requirements that the licensee must develop and adhere to.

Appendix B Section II (Quality Assurance Program):

> The applicant shall establish…a quality assurance program which complies with the requirements of this Appendix. This program shall be documented by written policies, procedures, or instructions and shall be carried out throughout plant life in accordance with those policies, procedures, or instructions.
>
> The quality assurance program shall provide control over activities affecting the quality of the identified structures, systems, and components, to an extent consistent with their importance to safety.
>
> The program shall take into account the need for special controls, processes, test equipment, tools, and skills to attain the required quality, and the need for verification of quality by inspection and test. The program shall provide for indoctrination and training of personnel performing activities affecting quality as necessary to assure that suitable proficiency is achieved and maintained.

Appendix B Section XI (Test Control):

> A test program shall be established to assure that all testing required to demonstrate that structures, systems, and components will perform satisfactorily in service is identified and performed in accordance with written test procedures which incorporate the requirements and acceptance limits contained in applicable design documents. The test program shall include…operational tests during nuclear power plant or fuel reprocessing plant operation, of structures, systems, and components.

Appendix B Section XVI (Corrective Action):

> Measures shall be established to assure that conditions adverse to quality, such as failures, malfunctions, deficiencies, deviations, defective material and equipment, and nonconformances are promptly identified and corrected. In the case of significant conditions adverse to quality, the measures shall assure that the cause of the condition is determined and corrective action taken to preclude repetition. The identification of the significant condition adverse to quality, the cause of the condition, and the corrective action taken shall be documented and reported to appropriate levels of management.

B. We also call to your attention Appendix R to 10 C.F.R. Part 50, which deals with fire protection for nuclear power facilities. This appendix requires nuclear plants to have a fire protection program in place that, among many other things, requires control of combustibles (including prompt clean-up of oil leaks or spills) and training of personnel to respond to fires or emergencies that could increase the probability or consequence of a fire (such as oil spills). Appendix R also requires redundant systems to supply water to fight fires, which typically include diesel-driven fire pumps in case electrical power is lost. These diesel-driven fire pumps typically share their fuel supply systems with the emergency diesel generators. Thus a problem with the diesel generator fuel system could also impair fire-fighting capability.

We quote from several of the provisions of Appendix R that, despite their focus on fire safety, are also relevant to goals of the SPCC program:

Appendix R Section I (Introduction and Scope):

> Criterion 3 of appendix A to this part specifies that "Structures, systems, and components important to safety shall be designed and located to minimize, consistent with other safety requirements, the probability and effect of fires and explosions."

Appendix R Section II (General Requirements):

> The fire protection program shall extend the concept of defense-in-depth to fire protection in fire areas important to safety, with the following objectives:
>
> - To prevent fires from starting;
> - To detect rapidly, control, and extinguish promptly those fires that do occur;
> - To provide protection for structures, systems, and components important to safety so that a fire that is not promptly extinguished by the fire suppression activities will not prevent the safe shutdown of the plant.

Appendix R Section III (Specific Requirements):

> I. *Fire brigade training.* The fire brigade training program shall ensure that the capability to fight potential fires is established and maintained. The program shall consist

of an initial classroom instruction program followed by periodic classroom instruction, fire fighting practice, and fire drills.

1. *Instruction.*

a. The initial classroom instruction shall include:

(1) Indoctrination of the plant fire fighting plan with specific identification of each individual's responsibilities.

(2) Identification of the type and location of fire hazards and associated types of fires that could occur in the plant.

(3) Identification of the location of fire fighting equipment for each fire area and familiarization with the layout of the plant, including access and egress routes to each area.

* * * * *

d. Regular planned meetings shall be held at least every 3 months for all brigade members to review changes in the fire protection program and other subjects as necessary.

e. Periodic refresher training sessions shall be held to repeat the classroom instruction program for all brigade members over a two-year period. These sessions may be concurrent with the regular planned meetings.

* * * * *

K. *Administrative controls.* Administrative controls shall be established to minimize fire hazards in areas containing structures, systems or components important to safety. These controls shall establish procedures to:

1. Govern the handling and limitation of the use of…flammable gases and liquids…in safety related areas.

* * * * *

3. Govern the handling and limit transient fire loads such as combustible and flammable liquids…during all phases of operating, especially during maintenance, modification or refueling activities.

* * * * *

6. Control the removal from the area of all…oil spills…resulting from the work activity immediately upon completion of the activity, or at the end of each shift, whichever comes first.

* * * * *

12. Define the strategies for fighting fires in all safety-related areas and areas presenting a hazard to safety-related equipment. These strategies shall designate:

* * * * *

g. Potential radiological and toxic hazards in fire zones.

II. Additional Nuclear Regulatory Commission Requirements.

A. The NRC issues Generic Letters ("GL") as a means to quickly disseminate urgent information or in some cases regulatory requirements to licensees without the delay associated with Federal rulemaking. GL 91-18 contained new NRC inspection manual instructions for NRC Inspectors that established new standards to ensure that licensees promptly evaluate any condition that potentially involved the degradation of a safety-related SSC to determine if there has been any loss of quality or functional capability. STS10OP.STS (Oct. 31, 1991). GL 91-18 was revised in 1997 to provide additional clarification and requirements. STS30DEG.TG (Oct. 8, 1997).

Conditions such as leaks, structural damage, or corrosion to emergency diesel generator system tanks or piping would fall under GL 91-18 and the associated NRC inspection manual procedures. Leaks or conditions that could lead to leaks are serious because they create the potential for loss of the fuel inventory needed to run the emergency diesel generators and for contaminants such as water or dirt to get into the fuel supply. If such a condition arose, the licensee would be required to complete a Justification for Continued Operation ("JCO") analysis and, if the conclusion was that the degradation to the safety-related SSC would impair or prevent the proper function of the SSC, the plant would have to be placed in a condition where the SSC is not needed until repaired. In the case of the emergency diesel generator fuel supply, this would typically require the plant to be placed in a cold-shutdown condition.

Forced shutdowns of nuclear plants result in huge losses to the utility due to labor costs, lost revenue, and the need to arrange for more costly replacement power. Such events also reflect poorly on the plant's NRC scorecard, which can lead to increased NRC regulatory oversight, operating costs, and insurance premiums. Plant operators implement robust preventive maintenance, inspection, and testing programs to avoid such conditions.

GL 91-18 also requires corrective action and appropriate documentation to prevent recurrence of the degraded condition. If the degraded condition is attributable to inadequate design, maintenance, or repairs, the plant operator would also be subject to NRC enforcement action in the form of fines or other penalties.

Excerpts from the two NRC Inspection Manual documents that are also relevant to the objectives of the SPCC program are:

STS30DEG.TG, § 4.8, Final Corrective Action:

ENFORCEMENT.

* * * * *

> If the licensee, without good cause, does not correct the non-conformance at the first available opportunity, the staff concludes that the licensee has failed to take prompt corrective action and, thus, is in violation of 10 C.F.R. Part 50, Appendix B (Criterion XVI) [footnote omitted]. When the NRC concludes that corrective action to implement the final resolution of the degraded or nonconforming condition is not prompt, or that the operability determination is not valid, enforcement action (Notice of Violation, orders) will be taken. Enforcement action may include restrictions on continued operation
>
> Implementation of complete corrective action within a reasonable time frame does not mitigate the potential for taking enforcement action for the root causes that initially created the degraded or nonconforming condition or for violations of other regulatory requirements. The nonconforming condition may have resulted from (1) earlier changes performed without a 10 C.F.R. 50.59 evaluation or (2) inadequate reviews; or may be a *de facto* change for which the facility never met the [Safety Analysis Report] SAR description. The staff may determine that the "change" from the [Final Safety Analysis Report] FSAR-described condition to the discovered nonconforming condition involved a[n Unresolved Safety Question] USQ (or a [Technical Specifications] TS change), and that enforcement action is appropriate for the time frame up to time of discovery.

STS10OP.STS, § 3.1, Operability Definition:

> A system, subsystem, train, component or device shall be OPERABLE or have OPERABILITY when it is capable of performing its intended functions, and when all necessary attendant instrumentation, controls, electrical power, cooling to seal water, lubrication or other auxiliary equipment that are required for the system, subsystem, train component or device to perform its function(s) are also capable or performing their related support function(s) [internal quotation marks omitted].

* * * * *

§ 3.3, Specified Function(s):

* * * * *

> In addition to performing the specified safety function, a system is expected to perform as designed, tested and maintained. When system capability is degraded to a point where it cannot perform with reasonable assurance or reliability, the system should be judged inoperable, even if at this instantaneous point in time the system could provide the specified safety function.

§ 4.0, Background:

> The purpose of the Technical Specifications is to ensure that the plant is operated within its design basis and to preserve the validity of the safety analyses, which are concerned with both the prevention and mitigation of accidents. Because both prevention of

accidents and the ability to mitigate them must be continuously ensured, the process of ensuring OPERABILITY for safety or safety support systems is ongoing and continuous. The focus of operability is foremost on the capability to ensure safety.

The process of ensuring operability is continuous and consists of the verification of operability whenever a verification or other indication calls in question the system's or component's ability to perform its specified function.

Verification of operability is supplemented by continuous ongoing processes, such as:

- Day-to-day operation of the facility
- Implementation of programs such as in-service testing and inspection
- Plant walkdowns or tours
- Observations from the control room
- Quality assurance activities such as audits and reviews
- Engineering design reviews including design basis reconstitution.

* * * * *

The determination of operability for systems is to be made promptly, with a timeliness that is commensurate with the potential safety significance of the issue.

§ 5.0, Additional Guidance for Operability Determinations:

* * * * *

Licensees should make an operability determination and take corrective action in the following circumstances:

Discovery of degraded conditions of equipment where performance is called into question.

§ 5.1, Focus on Safety:

The immediate and primary attention must be directed to safety concerns. Reporting and procedural requirements should not interfere with ensuring the health and safety of the public.

§ 5.4, Determining Operability and Plant Safety is a Continuous Decision-Making Process:

Licensees are obligated to ensure the continued operability of SSCs as specified by [Technical Specifications], or to take the remedial actions addressed in the [Technical Specifications]. . . . Operability is verified . . . by day-to-day operation, plant tours, observations from the control room, surveillances, test programs, and other similar activities. . . . The [operability determination] process, in one form or another, is ongoing and continuous.

B. Section 50.65 of the NRC's rules, often referred to as the "Maintenance Rule," requires that licensees have effective monitoring and preventive maintenance programs in place to ensure that safety-related SSC's are operable and will function as designed in an emergency. The emergency diesel generators and their fuel supply system fall under this program.

Commercial nuclear power plants rely on "defense in depth" to maintain safety by ensuring that there are multiple and redundant means to respond to and mitigate emergencies. Unplanned loss of critical equipment or systems can degrade this defense in depth by unexpectedly eliminating some of the redundant protections. It is therefore desirable that all maintenance on safety-related SSCs be performed on a pre-planned basis when plant conditions can be established and the risk of removing equipment from service is minimized or eliminated.

The Maintenance Rule is designed to ensure that equipment monitoring and preventive maintenance programs at nuclear power plants are developed and implemented to detect and allow for repair of emerging problems in a deliberate and pre-planned manner, at a time that minimizes operational risk, rather than deferring repairs until the equipment has actually failed, which could occur at a critical time.

The Maintenance Rule also requires plant operators to track and trend equipment availability, failure rates, and equipment out of service times to ensure pre-determined reliability and availability targets are met.

An excerpt from the Maintenance Rule that is relevant to the objectives of the SPCC rule states:

> Each holder of a license to operate a nuclear power plant under §§50.21(b) or 50.22 shall monitor the performance or condition of structures, systems, or components, against licensee-established goals, in a manner sufficient to provide reasonable assurance that such structures, systems, and components, as defined in paragraph (b), are capable of fulfilling their intended functions. Such goals shall be established commensurate with safety and, where practical, take into account industry-wide operating experience. When the performance or condition of a structure, system, or component does not meet established goals, appropriate corrective action shall be taken.

10 C.F.R § 50.65(a)(1).

C. NRC Inspection Manual IP 62002 establishes inspection procedures for structures, passive components, and other civil engineering features at nuclear power plants. Tanks, piping, and secondary containment structures for emergency diesel generating systems would generally be covered by this manual.

IP 62002 is one of many NRC inspection procedures that verify licensee implementation of 10 C.F.R. Part 50, Appendix B, and the Maintenance Rule. IP 62002 is noteworthy from the SPCC standpoint because it broadly addresses the types of "passive" equipment and structures of concern to the SPCC rule, such as buried piping and cathodic protection, aboveground pipe

supports, concrete and earthen berms, tank or dike liners, etc. As with most NRC inspection procedure manuals, IP 62002 is used as the basis by which NRC inspectors judge the effectiveness of the licensee's own program, *i.e.*, the NRC inspector is checking to ensure the licensee has developed and implemented an acceptable program using plant-specific inspection, testing, and work control procedures. Excerpts from IP 62002 that are relevant to the objectives of the SPCC rule include:

Inspection Objectives:

> 01.01 Evaluate by visual examination and/or review of licensee documentation the condition of structures, passive components, and civil engineering features that are within the scope of Section 50.65 of Title 10 of the Code of Federal Regulations (10 C.F.R. 10.65), "Requirements for Monitoring the Effectiveness of Maintenance at Nuclear Power Plants.
>
> 01.02 Verify implementation of 10 C.F.R. § 50.65 (the Maintenance Rule) with regard to structures, passive components, and civil engineering features, herein referred to as "structures."

Inspection Requirements:

> 02.01 . . . To meet the requirements of the maintenance rule, structures, passive components, and civil engineering features may be categorized into 10 groups for inspection purposes, on the basis of maintenance requirements, expected degradation, and previous industry observations. Possible inspection groups are as follows:
>
> (a) Containment structures
> (b) Concrete (reinforced and prestressed) structures other than containment structures
> (c) Intake and pumphouse structures
> (d) Masonry walls
> (e) Steel structures and connections
> (f) Water storage tanks
> (g) Dams, embankments, and canals . . . .

Specific Guidance:

> 03.01(b) Concrete (Reinforced and Prestressed) Structures Other Than Containment[1] Structures (e.g. fuel-handling buildings, spent fuel pool areas, diesel generator buildings)
>
> Review the documentation constituting the licensee's maintenance program to ensure that the licensee has implemented goal setting, monitoring, and preventive maintenance for

---

[1] The reference to "containment" in this context is to reactor containment.

concrete structures other than containment in accordance with the requirements of 10 CFR 50.65.

* * * *

On the basis of previous industry experience documented in NUREG-1522, the following areas should be addressed, as a minimum, in maintenance programs:

1) Condition of concrete slabs, beams, columns, base plates, and foundations
2) Condition of the prestressing system (for grouted and greased prestressing elements)
3) Condition of metallic and nonmetallic liners
4) Leakage through water retaining structures and through portions of structures below grade
5) Differential settlement of walls and foundation slabs . . . .

03.01(e) Buried Piping, Pipe Supports, and Equipment Anchorages

Review the documentation constituting the licensee's maintenance program to ensure that the licensee has implemented goal setting, monitoring, and preventive maintenance for buried piping, pipe supports, and equipment anchorages in accordance with the requirements of 10 CFR 50.65.

* * * *

As a minimum, the licensee's maintenance program should address the following topics for buried piping, pipe supports, and equipment anchorages:

* * * *

> The cathodic protection system (CPS) (if present) should be functional. The inspector should review the licensee's documentation and surveillance to ensure that the system is protecting all elements served by the CPS. Licensees should include acceptance criteria for corrosion of piping, pipe supports, and anchorages.
>
> Buried piping maintenance programs should include visual examinations when piping is accessible. Connections and joints of buried piping should show no signs of separation, environmental degradation, or leakage. There should be no appreciable settlement between the piping segments that could inadvertently cause pipe stress and leakage. . . . When leakage is discovered in underground piping, the inspector should review the licensee's inspection methods and corrective actions to ensure the licensee considered both leakage in and leakage out of the pipe in its evaluation.

* * * *

03.01(g) Steel Structures and Connections (including safety-related cranes, crane rails and supporting structures, and blowout panels)

Review the documentation constituting the licensee's maintenance program to ensure that the licensee has implemented goal setting, monitoring, and preventive maintenance for steel structures and connections in accordance with the requirements of 10 CFR. 50.65.

* * * *

As a minimum, the licensee's maintenance program should address the following areas pertaining to steel structures and connections:

* * * * *

> Acceptance criteria pertaining to corrosion of metal components and connectors to be inspected under the maintenance rule. Connectors are the means of making structural connections and may include welds, rivets, bolts and rods, studs and wire ropes.

03.01(h) Dams, Embankments, and Canals

Review the documentation constituting the licensee's maintenance program to ensure that the licensee has implemented goal setting, monitoring, and preventive maintenance for dams, embankments, and canals in accordance with the requirements of 10 CFR 50.65.

Fluid-retaining structures that provide water storage and transfer areas during normal operating, severe environmental, and accident conditions are considered Seismic Category I "safety-related" structures.

USNRC Regulatory Guide 1.127 provides inspection guidance for water-retaining structures that could be useful for reviewing their serviceability. The regulatory guide suggests the following criteria which, as a minimum, should be part of the licensee's maintenance program:

* * * *

> Drainage Systems. All drainage systems should be examined to determine whether the systems can freely pass discharge and to ensure that the discharge is not carrying embankment or foundation material. Systems used to monitor drainage should be examined to ensure they are operating correctly.

* * * *

In general, all massive water-retaining structures should not have areas of differential settlement or construction joint gaps that allow water to leak beneath the structure thereby causing soil erosion and concrete deterioration.. . . . Reinforced and unreinforced

concrete surfaces should be visually inspected in accordance with ACI Committee 207 Report, "Practices for Evaluation of Concrete in Existing Massive Structures for Service Conditions."

III. Conclusion.

This survey of NRC regulations, guidance, inspection manuals and generic letters demonstrates the comprehensive regulatory system to which emergency diesel generator systems at nuclear power stations are subject. Despite the different regulatory approach of the NRC program, the NRC fully addresses each of the objectives of the SPCC program, and dual regulation of the systems by EPA and NRC is not warranted. Proposed language that would eliminate this unnecessary duplication of regulation is appended to this letter.

We hope that this information will be helpful to EPA. If you have any additional questions, please contact me (jim.roewer@uswag.org) or USWAG counsel, Bill Weissman (202-861-3878) (william.weissman@piperrudnick.com). If you are interested in visiting a nuclear power station to observe these systems, I would be happy to arrange for such a visit.

Sincerely,

James R. Roewer
Executive Director

Attachment

cc: Hugo P. Fleischman (EPA)(Mail Code 5203G)
Mark W. Howard (EPA)(Mail Code 5203G)
Jeff Spillyards, Entergy Services
William R. Weissman, Esq., Piper Rudnick LLP
USWAG Tanks Subcommittee

APPENDIX B

Discharges from Emergency Diesel Generator Tanks at Nuclear Facilities

Company Number	Number of Discharges	Discharges from Aboveground ("A") or Underground ("U") Storage Tanks	Volume of Discharge	Number of Aboveground Tanks (Volume in Gallons)	Number of Underground Tanks (Volume in Gallons)
1	0			0	2 (60,000)
2	0			2	10
3	0			28	19
4	0			3	3
5	0			5(550), 1(2200), 1(1200)	4(50,000), 1(80,000), 1(550)
6	0			35	9
7	0			45	28
8	2	U, A	50, 2	14(15,975 tot)	14(720,000 tot)
9	0			2(3355)	1(50,758), 1(30,000)
10	0			20	12
11	0			6(500)	6
12	0			2	2
13	0			2	12
14	1	A	13	24	12
15	0			6	2
16	0			0	4
17	0			0	4
18	1	A	4500	29	18