



Edison Electric  
INSTITUTE

*Power by Association*<sup>SM</sup>

November 14, 2022

James S. Frederick  
Deputy Assistant Secretary of Labor  
for Occupational Safety and Health  
U.S. Department of Labor  
200 Constitution Avenue NW  
Washington, DC 20210

Submitted Electronically Via: <https://www.regulations.gov>

**Re: Comments of the Edison Electric Institute on Process Safety Management (PSM) of Highly Hazardous Chemicals;  
Docket No. OSHA–2013–0020**

Dear Mr. Frederick

The Edison Electric Institute (EEI) appreciates the opportunity to submit the attached comments on potential changes to the Occupational Safety and Health Administration's (OSHA) Process Safety Management of Highly Hazardous Chemicals standard.

EEI is the association that represents all U.S. investor-owned electric companies. EEI members provide electricity for more than 235 million Americans and operate in all 50 states and the District of Columbia. As a whole, the electric power industry supports more than seven million jobs in communities across the United States. EEI member companies invest more than \$120 billion annually to make the energy grid smarter, cleaner, more dynamic, more flexible, and more secure in order to provide affordable and reliable electricity to customers.

EEI's members have a substantial interest in any future action the Agency may take in revising the scope and provisions of the PSM standard. The attached comments focus on industry concern that potential revisions would increase the administrative burden associated with compliance without a significant increase to worker safety in the electric power sector.

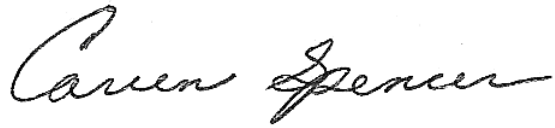
Mr. James S. Frederick

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If you have questions, please contact me at (202-508-5166, [cspencer@eei.org](mailto:cspencer@eei.org)) or Patrick McGuire (202-508-5167, [pmcguire@eei.org](mailto:pmcguire@eei.org)).

Sincerely,

A handwritten signature in black ink that reads "Carren Spencer". The signature is written in a cursive, flowing style.

Carren Spencer

Director, Safety & Health Policy

cc: Andrew Martinez, SCE  
Al Payton, CenterPoint Energy  
Scott Aaronson, EEI

Attachment

# **EI Stakeholder Comments on Proposed Revisions to Process Safety Management of Highly Hazardous Chemicals**

**Occupational Safety and Health Administration  
Docket No. OSHA-2013-0020**

The Edison Electric Institute (EEI) respectfully submits these comments to the Occupational Safety and Health Administration (OSHA) in response to the stakeholder meeting on proposed changes to the Process Safety Management (PSM) of Highly Hazardous Chemicals, October 12, 2022.

EEI is the association that represents all U.S. investor-owned electric companies. EEI members provide electricity for more than 235 million Americans and operate in all 50 states and the District of Columbia. As a whole, the electric power industry supports more than seven million jobs in communities across the United States. EEI member companies invest more than \$120 billion annually to make the energy grid smarter, cleaner, more dynamic, more flexible, and more secure in order to provide affordable and reliable electricity to customers.

EEI's members are committed to protecting the safety and health of the nearly 2.7 million men and women directly employed in the electric power industry, as well as contractors and customers. This commitment is driven by strong support from the CEO community and ongoing, collaborative efforts by EEI members and customers and stakeholders such as OSHA.

EEI and its members support the modernization of policies, regulations, and standards if the result is proven through an evidence-based approach to enhance the safety and security of the storage and handling of hazardous chemicals in the electric industry beyond existing successful efforts already in place.

## **General comments**

The major proposed changes to the PSM standard would significantly increase the burden on facilities without appreciable improvements in preventing major chemical accidents, especially as it applies to electric companies. These comments are based upon the impacts that the proposed changes may have on electric company operations.

In response to the 2013 West, Texas ammonium nitrate explosion, OSHA was directed by Executive Order (E.O.) 13650 to modernize policies, regulations, and standards to enhance safety and security in chemical facilities. One of the specific tasks assigned to OSHA was to review the PSM standard to determine if its covered hazardous chemical list in Appendix A should be expanded. However, this incident and several subsequent incidents involving ammonium nitrate explosions are unrelated to the electric industry. Also, because ammonium nitrate is not currently on the list of PSM substances, these incidents do not represent failures of the OSHA PSM standard or OSHA's PSM enforcement activity. Further, the proposed changes are unlikely to address ammonium nitrate incidents.

The proposed changes could transform the PSM standard into a prescriptive standard, nullifying the benefits of a performance-based standard. A prescriptive standard would impede the ability of covered

entities to choose the compliance strategy best suited to their situation and to incorporate innovation and entrepreneurship in compliance. Additionally, electric companies, like most organizations, manage highly hazardous chemicals under a single program encompassing both PSM and RMP requirements. Further differentiating between the PSM standard and RMP rule could cause confusion, potentially threatening worker safety.

#### **Updating and expanding the list of HHCs in Appendix A**

OSHA should provide greater detail on the extent of the proposed changes to 1910.119, Appendix A. Specifically, OSHA should include information on threshold quantities and concentrations, as these could impact electric company operations. However, the current list of chemicals in Appendix A is comprehensive and does not need to be updated. Since chemical properties do not change, the logic used to initially select the chemicals contained on this list should still be applicable today.

OSHA has proposed removing “anhydrous” forms of chemicals from Appendix A so that all forms of the listed chemicals would result in coverage under the standard. However, aqueous mixtures do not necessarily present the same hazards as non-aqueous forms. For example, there are many toxic chemicals where distances to toxic endpoint of aqueous chemicals are fractions of their anhydrous forms. Further, adding water to a substance usually makes it less toxic. Other examples include 3% hydrogen peroxide, commonly sold in stores, and diluted acids that pose no fuming respiratory hazards.

Additionally, OSHA has previously issued letters of interpretation clarifying its stance that aqueous mixtures are not covered by the PSM standard. Organizations have made decisions based on OSHA’s position and reversing that position would cause undue financial and operational burden to those organizations.

#### **Amending Paragraph (d) of the PSM Standard to Require Evaluation of Updates to Applicable RAGAGEP and Implement the Updates, and Continuous Updating of Process Safety Information:**

While PSM-covered processes at electric generating stations are far less complex compared to many other industries, they incorporate dozens of recognized and generally accepted good engineering practices (RAGAGEPs). Many of these codes are periodically updated (e.g., NEC, NFPA, ANSI, ASME and CGA). OSHA has proposed requiring a review of these RAGAGEPs annually. Requiring an annual review of RAGAGEPs would be burdensome, especially for smaller facilities. To minimize the burden, OSHA has proposed extending these reviews to either three or five years. While this may minimize the burden of the evaluation, it still does not alleviate the requirement to implement RAGAGEP updates. These constant RAGAGEP updates would be burdensome, requiring significant allocation of resources from electric companies.

Furthermore, OSHA provides no evidence that RAGAGEP updates would reduce the severity of the chemical incidents. Presently, there is no data that a failure to update RAGAGEP creates a significant risk of catastrophic harm. This is likely because the earliest versions of consensus codes nearly always address and recommend or require a core collection of measures against those circumstances that pose a significant risk of catastrophic harm. Later editions are generally directed at additional marginal

risks; they require measures addressing possibilities of harm but not necessarily events that pose a significant risk of catastrophic harm. For these reasons, there is little justification for a stand-alone requirement to periodically evaluate RAGAGEP.

Any expansion of the current duty by requiring evaluations of updates to consensus codes considered to be RAGAGEP would likely violate the Administrative Procedure Act, and the Federal Register Act and its implementing regulations. If a consensus standard is widely used in an industry, according to OSHA that means that it is RAGAGEP. The codes are therefore effectively rules—rules that did not go through notice-and-comment rulemaking. The Administrative Procedure Act in 5 U.S.C. § 553, however, requires that rules go through rulemaking and be published in the Federal Register; an exception to the requirement for publication is made in § 552(a) only for “matter reasonably available to the class of persons affected thereby ... when incorporated by reference therein with the approval of the Director of the Federal Register.”<sup>1</sup> The OSH Act further requires that requirements be shown by OSHA to be feasible<sup>2</sup> and to address a significant risk of harm.<sup>3</sup> All these requirements and prohibitions would be violated by any expansion of the RAGAGEP requirements in the PSM Standard in the manner proposed by OSHA.

Today, many electric companies are uncertain of what is and is not RAGAGEP because it is unclear which engineering practices OSHA considers “recognized” or “generally” or “accepted” or “good” or “engineering” practices. OSHA should ensure the standards used to determine RAGAGEP are clear, to provide certainty and predictability. Many requirements of private codes have increasingly become administrative rather than technical (for example, MOC procedures), creating confusion. OSHA could solve these problems of vagueness by stating clearly what it means by RAGAGEP, while following the APA and other legal requirements for the adoption of rules.

Requiring the continuous update of process safety information would not provide any meaningful benefit to worker safety. The PSM Standard currently requires that process safety information be compiled in preparation for a Process Hazard Analysis (PHA). Requiring that the compilation be updated more often would not serve that purpose. OSHA should not consider decoupling the requirement for compiling process safety information from the PHA process as there is no justification for this and it would not result in any benefit to worker safety. Such a change would not be justified because at present, OSHA has not provided evidence of any catastrophic accident or near miss caused by a company not continuously compiling or updating its process safety information. As stated above, this is likely because the earliest versions of process descriptions and safety data sheets nearly always address and recommend or require a core collection of measures against those circumstances that pose a significant risk of catastrophic harm. Later versions are generally directed at additional marginal risks; they require measures addressing possibilities of harm but not necessarily events that pose a significant risk of catastrophic harm. If OSHA is to make the determination regarding whether

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<sup>1</sup> See also 1 C.F.R. Part 51, which not only further requires such approval but prohibits attempts by agencies to adopt future amendments to incorporate private publications. 1 C.F.R. § 9(b)(2) (requiring “date” of incorporated material).

<sup>2</sup> Nat’l Maritime Safety Ass’n v. OSHA, 649 F.3d 743, 752 (D.C. Cir. 2011).

<sup>3</sup> Indus. Union Dep’t v. Am. Petroleum Inst., 448 U.S. 607, 642 (1980).

failing to comply with a recently revised code presents a significant risk, they must engage in notice-and-comment rulemaking with regard to the updated code provisions.

#### **Revising Paragraph (o) of the PSM Standard to Require Third-Party Compliance Audits:**

OSHA is considering a requirement that employers retain third parties to perform compliance audits.

OSHA's concern with objectivity is understandable but there would be trade-offs, principally a loss of expertise and familiarity by the auditors, resulting in inefficiencies. Inefficiencies could largely be avoided if OSHA permitted an intermediate alternative practice by the electric industry. Specifically, current industry practice is to utilize a team of trained and qualified electric company employees to perform PSM compliance audits. These employees represent various subsidiaries of the parent company. Compliance audits are conducted under the direction of a designated PSM audit team leader, selected from outside the subsidiary company being audited. This contributes to a more objective/impartial evaluation of the covered process. The audit team leader along with the other members of the audit team are chosen based upon their knowledge of the process, the auditing procedure, and the established reporting requirements. All members of this team have successfully completed PSM Compliance Audit training from a reputable third party. This method has proven to greatly enhance the consistency of PSM programs and encourages the sharing of best practices among facilities.

Requiring a third party to perform the PSM audits would not better prevent worker injuries and fatalities as it would not necessarily result in a better evaluation of PSM compliance. A third-party auditor's unfamiliarity with specific plant operations can frequently lead to omissions and misunderstandings. OSHA also has provided no evidence that such a requirement would serve a safety need.

OSHA has proposed alternatives to a third-party audit. Voluntary use of third-party auditors would lessen the burden for employers by allowing them to continue to perform compliance audits exactly as required by the existing PSM standard.

#### **Clarifying Paragraph (l) of the PSM Standard with an Explicit Requirement That Employers Manage Organizational Changes:**

Any such explicit requirement that employers manage organizational changes would be unworkable. Any such requirement would be inherently vague and subjective, and because of that vagueness and subjectivity, potentially offer the capacity for abuse and featherbedding.

It would be difficult for OSHA to draft an amendment to paragraph (l) that would properly inform employers of what kind of "organizational changes" would trigger a management-of-change (MOC) procedure. OSHA has stated "when the number of employees operating a process is to be reduced due to an organizational change, operators may not be able to continue implementation of existing operating procedures[,] indicating that only organizational changes that would result in a change in, for example, an operating procedure would require an MOC.<sup>4</sup> However, if, as is nearly always the

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<sup>4</sup> R. Fairfax, Memorandum for Regional Administrators, "Management of Organizational Change" (March 31, 2009).

case, the operating procedures do not specify, even by position title, which inside operator is to do what, then it would be difficult for an OSHA compliance officer to objectively judge whether the operating procedure needs revision and thus requires an MOC. This requirement would create uncertainty and increase the potential for abuse. OSHA has also not provided evidence that the lack of an MOC for a personnel change would create a significant risk of catastrophic harm.

Regarding budget cuts, OSHA's interpretation letter takes the position that an MOC is required if a budget cut in a maintenance budget "require[s] an employer to alter its mechanical integrity procedures concerning the timeliness or frequency of tests, inspections, repairs, or replacements of PSM-covered equipment." It would be difficult for a compliance officer to objectively disagree with an employer's contrary judgment that the budget cuts would not "require" such a change to mechanical integrity procedures. Again, OSHA has not provided evidence that the lack of an MOC in this case would create a significant risk of catastrophic harm.

Lastly, we suggest OSHA revoke paragraph (l)(2)(i), which requires consideration of the "technical basis for the proposed change." Aside from the fact that the meaning of this phrase is unclear, it seems irrelevant to OSHA's concerns, which are already adequately addressed by paragraph (l)(2)(ii), "[i]mpact of change on safety and health." The subject would, of course, be of concern to management (which is likely why it was in predecessors to the PSM Standard, such as the API and ORC standards), but not to OSHA. For example, see API 750-1990, Management of Process Hazards § 4.3(a) ("process and mechanical design basis").

#### **Amending Paragraph (m) of the existing PSM standard to require Root Cause Analysis:**

OSHA is considering adding a requirement to § 1910.119 specifying that the employer conduct a root-cause analysis (RCA) of all incidents, which either resulted in or could reasonably have resulted in, a release of a highly hazardous chemical. The existing standard already requires incident investigations to be performed on all incidents that result in, or could reasonably have resulted in, leaks of a highly hazardous chemical in the workplace. This proposed change would require additional training at all facilities. Due to employee turnover and attrition, training would need to be performed frequently. The consistency and quality of RCAs may also vary within the company. There is also the potential unintended consequence of companies not investigating incidents due to the complexity of the RCA process.

OSHA should not adopt "root cause" as a criterion for an accident investigation, as the term is unclear. Simply stating "root cause" does not convey to an employer when an analysis of an accident penetrates deeply enough into its underlying causes as to then constitute a "root" cause analysis. OSHA's Fact Sheet, "The Importance of Root Cause Analysis During Incident Investigation" (No. 3895, Oct. 2016), contains no criteria by which one can determine when one has drilled down deeply enough.

One commentator, Gary G. Jing, stated the following of "root" cause analysis:

- "[T]he so-called root cause in practice is something subjectively chosen to serve in the root cause role."
- "[T]he challenge for people is to know when and where to stop drilling down and conclude they have reached a root cause."

- “[W]hat might be unclear to many people is ... how to decide when and where to put an end to the chain.”
- [In speaking of a cause-and-effect matrix:] “Most of the time, the impact scores are subjective, but in some cases, they might be objective.”<sup>5</sup>

Mr. Jing also stated that, “In practice, the span of control principle can be used to identify where to stop drilling down the chain of causation....” The “span of control principle” extends to those causes believed to be within one’s control.<sup>6</sup> The author then points out, however, that what actually determines the matter is a more amorphous concept called “sphere of influence” (as opposed to control), which he characterizes as “expandable.”

Accordingly, it would be difficult for OSHA to objectively determine when an analysis of an accident penetrates deeply enough into its underlying causes as to then become a “root” cause analysis. An objective criterion is, however, legally required. OSH Act § 6(b)(5) requires that when OSHA adopt performance standards (which it has said the PSM Standard is<sup>7</sup>), the performance criteria be “objective,” which means “expressing or involving the use of facts without distortion by personal feelings or prejudices.”<sup>8</sup> The Second Circuit held that, “Objective data ... are independent of what is personal or private in our apprehension and feelings, that use facts without distortion by personal feelings or prejudices and that are publicly or intersubjectively observable or verifiable, especially by scientific methods.”<sup>9</sup> An objective proposition is “susceptible of exact knowledge and correct statement”<sup>10</sup> and “can be discovered and substantiated by external testing.”<sup>11</sup> To be “objective,” legally-required characteristics must be measurable by specified instruments.<sup>12</sup> OSHA must therefore ensure adoption of “performance standards” with objective performance criteria.

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<sup>5</sup> Gary G. Jing, “Digging for the Root Cause,” *Six Sigma Forum Magazine* 19-24 (May 2008).

<sup>6</sup> *Id.* at 20.

<sup>7</sup> See the preambles to the PSM Standard’s proposed (55 Fed. Reg. 29150, 29161 (July 17, 1990)) and final (57 Fed. Reg. 6356, 6387, 6403 (Feb. 24, 1992)) (“performance oriented”), both of which state that the standard was “written in general, performance-oriented terms” that would give “considerable flexibility” to “employers to use ... methods of compliance ... appropriate to the working conditions covered by the standard.”

<sup>8</sup> WEBSTER’S THIRD NEW INTERNATIONAL DICTIONARY 1555-1556 (1966) (“expressing or involving the use of facts without distortion by personal feelings or prejudices (an ~ analysis) (~ tests)”); AMERICAN HERITAGE DICTIONARY 905 (1st ed. 1969) (sense 3a, “Uninfluenced by emotion, surmise, or personal prejudice”); RANDOM HOUSE DICTIONARY 993 (1st ed. 1981; orig. copyright 1966) (“free from personal feelings or prejudice; based on facts; unbiased”); NEW OXFORD AMERICAN DICTIONARY 1180 (2001) (“not influenced by personal feelings or opinions in considering and representing facts”); ENCARTA WORLD ENGLISH DICTIONARY 1247 (1999) (“1. Free of bias[:] free of any bias or prejudice caused by personal feelings; 2. Based on facts[:] based on facts rather than thoughts or opinions”).

<sup>9</sup> *Ass’n of Bar of City of N.Y. v. Comm’r*, 858 F.2d 876, 880 (2d Cir. 1988). Thus, a statement that a candidate is “able” and has “proper” character and temperament is not objective. *Id.* See also *Soto v. Contreras*, 880 F.3d 706, 712 (5th Cir. 2018) (“[w]ithout bias or prejudice,” quoting BLACK’S LAW DICTIONARY (10th ed. 2014)).

<sup>10</sup> *United Ben. Life Ins. Co. v. Knapp*, 175 Okla. 25, 26, 51 P.2d 963, 964 (1935).

<sup>11</sup> *Thompson v. Sullivan*, 987 F.2d 1482, 1488-89 (10th Cir. 1993).

<sup>12</sup> *Chrysler Corp. v. Dep’t of Transp.*, 472 F.2d 659, 678 (6th Cir. 1972).

**Revising Paragraph (n) of the existing PSM standard to require coordination of emergency planning with local emergency-response authorities:**

OSHA is considering adding additional requirements for emergency response planning, including coordination with local responders, conducting emergency drills, and evaluation of local emergency response capabilities. Electric companies are already subject to these requirements as part of the existing RMP rule. Therefore, OSHA should avoid duplicative requirements and not move forward with these additional requirements.

Further, full staff annual mock emergency disaster drills being considered by OSHA would be infeasible for certain electric company operations due to a minimum number of individuals required to continue to operate facilities. OSHA should not move forward with requirements for full staff drills.

**Expanding Paragraph (c) to give stop-work authority to operators:**

OSHA is considering changing the current employee participation element in § 1910.119(c) to give to an operator in charge of a process the authority to shut down an operation or process based on safety or health concerns. Such a requirement would be unlawful. First, OSHA cannot delegate authority that it does not have. Second OSHA does not possess stop-work authority, having been expressly denied such authority by Congress. Rather, Congress provided stop-work authority to the federal district courts in OSH Act § 13. The requirement would also potentially invade constitutionally-protected property rights, for a property owner has an intangible right to control its assets.<sup>13</sup>

Moreover, even if OSHA had stop-work authority or the authority to delegate it, it may not delegate governmental power to private persons.<sup>14</sup> Under such a requirement, operators would have the right to determine for themselves whether there is a sufficiently large risk to justify a shutdown. Such a delegation would be especially unlawful for it would grant governmental authority to those with economic and other interests often adverse to their employers.<sup>15</sup> Such a delegation would be further illegal because there does not appear to be any intelligible principle that could narrowly guide the behavior of the private persons granted the authority.<sup>16</sup>

Many employers have given their operators stop-work authority. OSHA should not thereby infer that a legally enforceable provision for such authority will work smoothly. The legal complications that will ensue from making stop-work authority legally required will assure that it will become a source of dispute and litigation rather than safety. Today, an operator who abuses stop work authority or even unwisely stops a process (our hypothetical assumes that the employee would not fit within the narrow

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<sup>13</sup> See *Crane v. Commissioner*, 331 U.S. 1, 6 (1947). “[A] defining feature of most property is the right to control the asset”, *United States v. Carlo*, 507 F.3d 799, 802 (2d Cir. 2007).

<sup>14</sup> *Ass’n of Am. Railroads v. U.S. Dep’t of Transp.*, 721 F.3d 666, 670 (D.C. Cir. 2013).

<sup>15</sup> *Cf. Carter v. Carter Coal Co.*, 298 U.S. 238, 311 (1936) (delegation to competitors is “legislative delegation in its most obnoxious form, for it is not even delegation to an official or an official body, presumptively disinterested, but to private persons whose interests may be and often are adverse”).

<sup>16</sup> *Mistretta v. United States*, 488 U.S. 361, 373 (1989) (“intelligible principle to which the person or body authorized to [exercise the delegated authority] is directed to conform”).

confines of § 1977.12(b)(2)) can be disciplined by his or her employer, a prospect that helps ensure that the power is used wisely. But under OSH Act § 11(c), such discipline might well trigger a discrimination complaint and ensuing litigation, for the stop-work standard would arguably afford to the employee “a right afforded by this Act.” Every disputed exertion of stop-work authority could thus become a federal case. This result would not benefit worker health and safety.

Please contact me (202-508-5166, [cspencer@eei.org](mailto:cspencer@eei.org)) or Patrick McGuire (202-508-5167, [pmcguire@eei.org](mailto:pmcguire@eei.org)) if you have any questions about EEI’s comments.