

October 1, 2013

NOTE

FROM: Christopher Ryder, Licensing Project Manager  
SUBJECT: Summary of Conference Call Regarding Basic Components in the Context of Part 21

Date and Time

Monday, August 19, 2013, at 9:00 AM (eastern)

Participants

<u>NRC</u>	<u>Westinghouse</u>
Sabrina Atack	Nancy Parr
Christopher Ryder	

Background

C. Ryder reminded the participants that we will not be giving advice or consulting. The NRC staff (Staff) is limited in what they can say because of rulemaking activities regarding Part 21.<sup>1</sup>

Discussion

The licensee discussed the context of issues that they are inquiring about. In recent months, the industry has had discussion with NRC about the treatment of ocular and dermal exposure in the Integrated Safety Analysis (ISA). The licensee had requested an exemption from considering dermal and ocular exposure in the ISA. With the exemption request now withdrawn, dermal and ocular exposures have been evaluated in the ISA. Because some sequences have intermediate consequences, items relied on for safety (IROFS) are necessary to prevent or mitigate the consequences of accident sequences.

In light of the ongoing efforts to consider rulemaking to 10 CFR Part 21, the licensee identified this as an area that may be worth discussion and consideration by the Staff. The licensee referred to a presentation given by the Staff at a public meeting on April 10, 2013 (Refs. 1 and 2), asking if personal protective equipment (PPE) would be considered basic components under Part 21. A copy of the particular slides is in the Attachment to this note.<sup>2</sup>

The Staff asked questions related to the PPE and other controls in place to prevent or mitigate accident consequences. The licensee stated that PPE would be an IROFS in certain situations, but not a sole-IROFS. For dermal and ocular exposure, emergency response (e.g., first aid, eye wash station, shower station, on-site medical treatment, off-site medical treatment) could also be an IROFS credited in the scenario.

As the licensee drafts accident sequence of the ISA, the initiating event frequency has a likelihood index of (-1). This results from the chemical safety program and engineered controls

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<sup>1</sup> After the call, C. Ryder notes for the record that the licensee is not bound by any statements made during this call.

<sup>2</sup> The Staff did not have the slides during the call.

such as flange guards. PPE is considered a control with a mitigation factor of (-2). In response to the licensee asking if emergency response is an engineered control or an administrative control, the Staff stated that the classification is determined by Westinghouse, not NRC.

The licensee stated that the use of the PPE and emergency response have administrative and engineered components. The donning or use of the equipment is administrative. The PPE itself or the eye wash station is engineered. The licensee asked if the PPE would be a basic component based on the presentation slides from the April 13, 2013, public meeting if the emergency response is identified as an engineered control. The Staff replied that the PPE would not be a basic component based on the presentation slides if there is more than one engineered IROFS capable of preventing or mitigating the accident (e.g., PPE plus another engineered control). Staff noted that the determination of whether or not PPE is a basic component depends on how the licensee classifies the emergency response controls. For instance, an eye wash station could be an engineered control to mitigate a chemical exposure, while administration of first aid by medical personnel could be a separate administrative IROFS, depending on the licensee's designation of IROFS. The combination of administrative and engineered IROFS would determine the outcome of what, if any, IROFS would be considered basic components under the potential rulemaking text and guidance.

The Staff asked about the procurement controls on PPE. The licensee responded that PPE is specified by the Industrial Safety Engineer at Westinghouse. The purchasing is done by a third party that is independent of Westinghouse, who verifies that is PPE is the equipment that was ordered. Westinghouse has procurement controls. Procedures describe a "chemical PPE matrix". The procedures define levels of safety. For example, Level A respirators are positive pressure and NIOSH approved. Standards, such as ASTM and ANSI, are used. Gloves have a chemical resistance rating. Safety glasses meet an ANSI standard.

Management measures for emergency response include weekly testing as prescribed by OSHA and preventive maintenance.

#### Closing Remarks

C. Ryder suggested the PPE could be viewed and discussed during a future site visit. The licensee would like the Staff to consider notions, such as discussed during this call, in the rulemaking.

#### References

1. Memorandum from Victor E. Hall, NRC, "Summary Of April 10, 2013, Category 3 Public Meeting To Discuss Area 10 "10 CFR 50.55(E) Redundancy" Of The Draft Regulatory Basis To Clarify The Requirements Of Title 10 Of The Code Of Federal Regulation, Part 21", April 19, 2013. ADAMS Accession Number ML13107B466.
2. S. Atack, NRC, "10 CFR Part 21 Rulemaking". ADAMS Accession Number ML13099A052.

# Appendix

## Selected Slides From the April 10, 2013 Meeting



### Basic Component: Proposed Definition

<p><b>IROFS A</b> (engineered)</p> <p>Capable of Independently preventing/mitigating accident</p> <p><i>IROFS A is a basic component</i></p>	<p><b>IROFS A</b> (administrative)</p> <p><b>IROFS B</b> (engineered)</p> <p>Capable of Independently preventing/mitigating accident</p> <p><i>IROFS B is a basic component</i></p>	<p><b>IROFS A</b> (administrative)</p> <p><b>IROFS B</b> (engineered)</p> <p><i>Not</i> capable of Independently preventing/mitigating accident</p> <p><b>IROFS C</b> (engineered)</p> <p>Capable of Independently preventing/mitigating accident</p> <p><i>IROFS C is a basic component</i></p>
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### Basic Component: Proposed Definition

<p><b>IROFS A</b> (administrative)</p> <p><b>IROFS B</b> (engineered)</p> <p><i>Not</i> capable of Independently preventing/mitigating accident</p> <p><b>IROFS C</b> (engineered)</p> <p><i>Not</i> capable of Independently preventing/mitigating accident</p> <p><i>IROFS B and C are basic components</i></p>	<p><b>IROFS A</b> (administrative)</p> <p><b>IROFS B</b> (engineered)</p> <p>Capable of Independently preventing/mitigating accident</p> <p><b>IROFS C</b> (engineered)</p> <p>Capable of Independently preventing/mitigating accident (identical to IROFS A above)</p> <p><i>Both IROFS B and C are basic components (lack diversity)</i></p>	<p><b>IROFS A</b> (administrative)</p> <p><b>IROFS B</b> (engineered)</p> <p>Capable of Independently preventing/mitigating accident</p> <p><b>IROFS C</b> (engineered)</p> <p>Capable of Independently preventing/mitigating accident; NOT identical to IROFS B</p> <p><i>No IROFS are basic components</i></p>
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