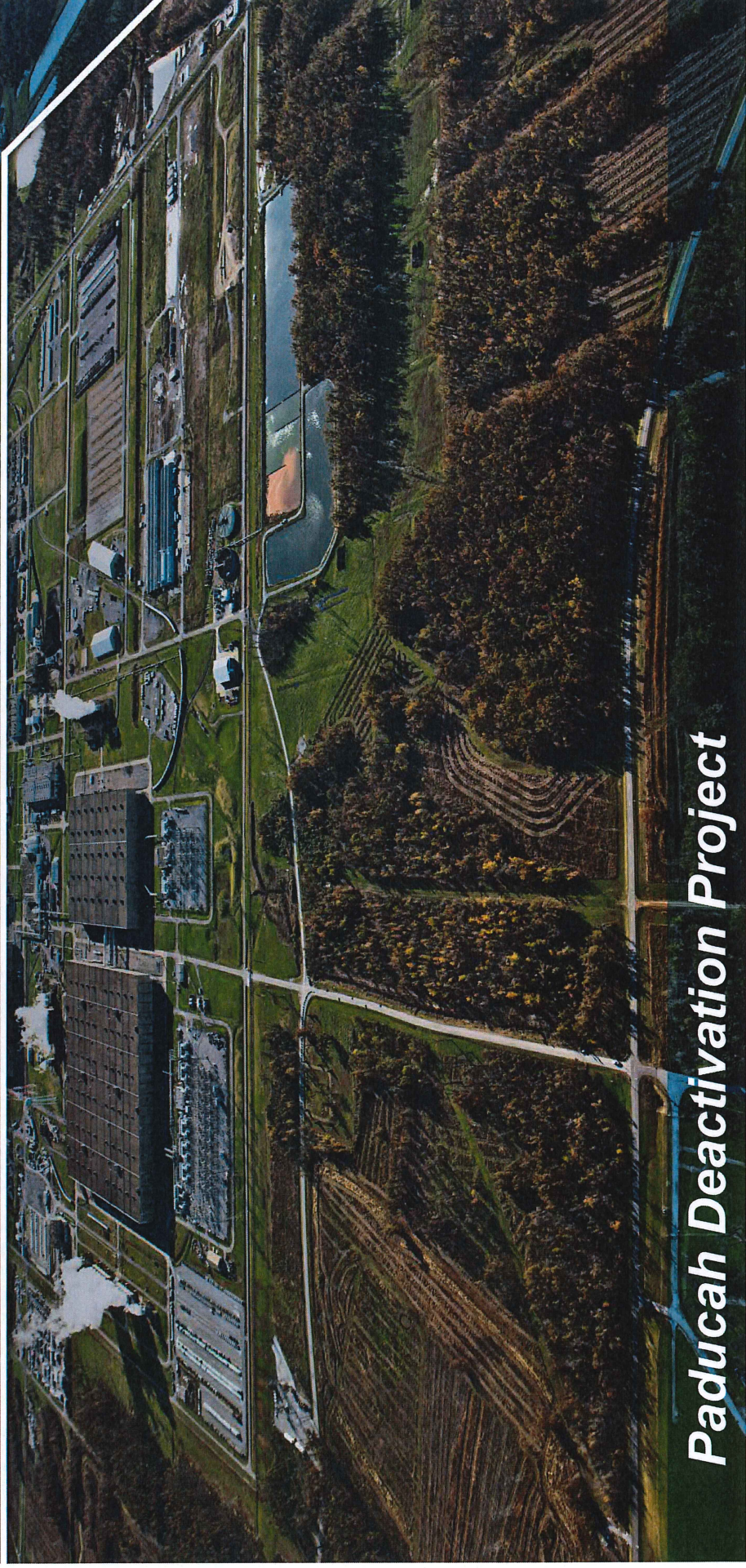


NEI-2016-02, Nuclear Criticality Safety Controls



Paducah Deactivation Project

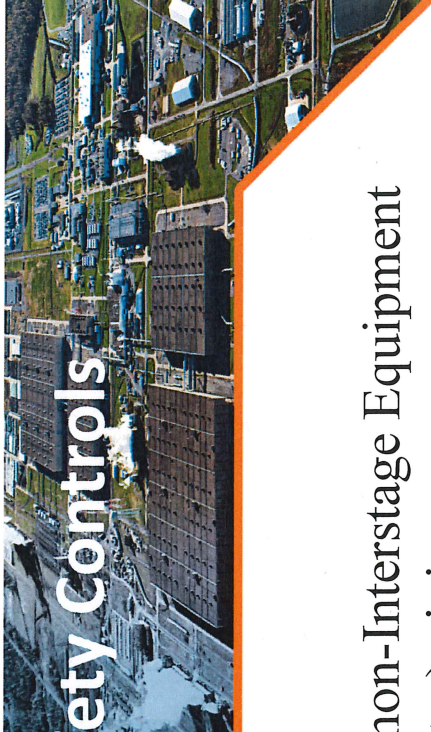
Regulatory & Enforcement Technical Subgroup Meeting

May 11, 2017

Nevada National Security Site DOE/NNSA Nevada Support Facility in Las Vegas, NV

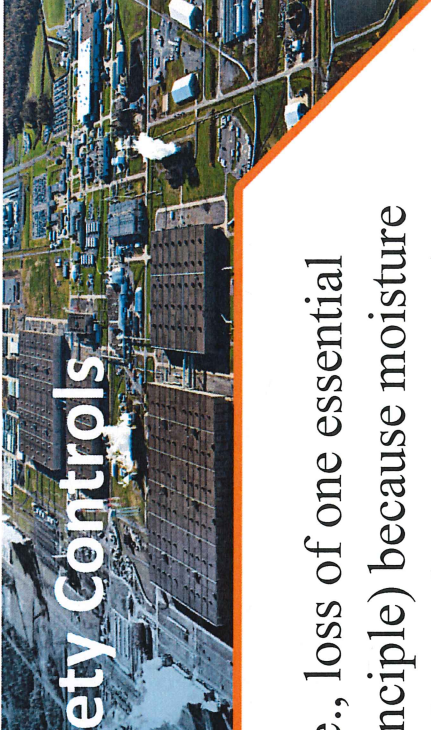
NEL-2016-02, Nuclear Criticality Safety Controls Summary

- Loss of moderation control in some sections of non-Interstage Equipment (non-ISE) large diameter (i.e., 14 inches or greater) piping.
- NCS control and surveillance requirements ensure moderation control in this piping by verifying the existence of a dry environment (i.e., moisture content below a set level) or fluorinating environment (i.e., fluorinating gas content above a set level) in all volumes of non-ISE piping through representative samples every 6 months.
- FFS discovered that improper configuration control had resulted in closed valves that isolated sections of non-ISE piping and prevented them from being sampled.



NEL-2016-02, Nuclear Criticality Safety Controls Timeline

- 8/6/15 – Identified a Level 3 NCS violation (i.e., loss of one essential element of the double contingency principle) because moisture levels had exceeded the limit for over 6 months.
- 8/7/15 – Issued EM--PPPO-FPDP-PGDPDEAC-2015-0016, NCS Level 3 Violation Due to Excessive Moisture Content in Non-Interstage Equipment
- 10/21/15 – Discovered improper configuration control had resulted in closed valves that isolated sections of non-ISE piping and prevented them from being sampled.
- 10/22/15 – Issued EM--PPPO-FPDP-PGDPDEAC-2015-0019, NCS Level 3 Violation Identified in C-409 during Characterization

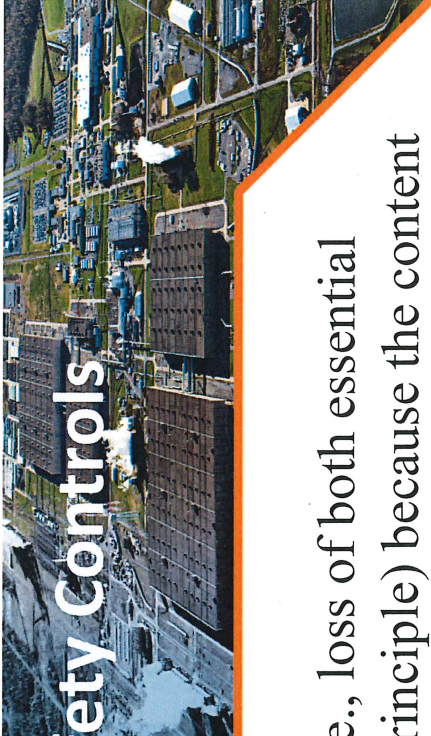


NEL-2016-02, Nuclear Criticality Safety Controls Timeline (cont'd)

10/27/15 – Identified a Level 2 NCS violation (i.e., loss of both essential elements of the double contingency principle) because the content of some sections of piping was unknown for an indeterminate amount of time and moisture limits were exceeded for a time frame beyond that set for either reestablishing a dry environment or establishing a fluorinating environment.

10/28/15 – Issued EM--PPPO-FPDP-PGDPDEAC-2015-0020, NCS Level 2
Violation Discovered While Performing Extent of Condition

11/18/15 – Issued NTS--PPPO-FFS-FPDP-2015-0001, NCS Level 2
Violation



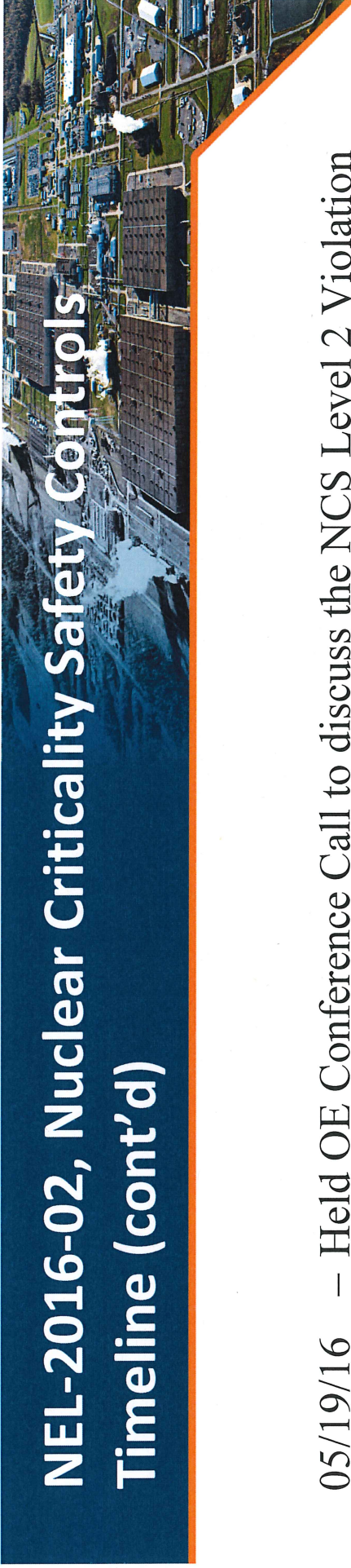
NEL-2016-02, Nuclear Criticality Safety Controls Timeline (cont'd)

05/19/16 – Held OE Conference Call to discuss the NCS Level 2 Violation

7/25-27/16 – Hosted OE Fact Finding Visit

10/14/16 – Issued Enforcement Letter by OE

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**Swift & Staley Team/DOE Paducah Site
Classification Office (CO)/Technical Information Office (TIO)
and Operations Security (OPSEC) Release Form**

To Be Completed by Person Requesting Release
(Required to be completed prior to submittal to CO/TIO/OPSEC)

Date 05/03/2017 Date Release is Required 05/03/2017
 Person Requesting Release Gregory L. Bell Phone Number 270.441.5040
 Mailing Address 5511 Hobbs Rd. Kevil, KY 42053
 Organization Contractor Performance Assurance Program (CPAP)
 Document Number N/A Number of Pages 15 11/3/17
 Accession Number (DMC only) _____
 Document Title/Date NEL-2016-02, Nuclear Criticality Safety Controls, Regulatory & Enforcement Technical Subgroup Meeting May 11, 2017

Author Gregory Bell Corporate Author NA
Media (Check all that apply)
 Paper Photo Diskette Drawing Video CD Report/Letter Other Power Point
 Project Subcontract/Task Order DE-DT0007774
 Requestor/Purpose of Release EFCOG Workshop Presentation

DO NOT WRITE BELOW THIS LINE – CO/TIO/DC/OPSEC USE ONLY

Classified	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No	UCNI	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No
ECI	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No	OUO	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No

Type of Release (Check One)

Public Release Internal Release Only Limited Release

Reason/Exemption(Check all that apply)

3. Statutory 5. Privileged 7. Law Enforcement Other¹ N/A
 4. Commercial/Proprietary 6. Personal Privacy OPSEC

Other/Comments N/A

DC *Terrell D. Sancee* Date 05/03/17
 TIO *Terrell D. Sancee* Date 05/03/17
 Reviewing Official² N/A Date N/A
 OPSEC N/A Date N/A

¹ Provide exemption number and category; contact CO prior to use of circumvention of statute.
² Signature of UCNI Reviewing Official required for documents containing information in UCNI subject area.