

Steps showing how
Exam Team influence
led to PORV and TE130
comment being on the
White Board and
deciding to grade non-
contested

** (PORV critical and TE-130
understanding – suggested
by Region II Exam Team)

Binder 11 created by exam team to give to the review panel ON FIRST MEETING, notice how PORV BEING CRITICAL added TO WHITE BOARD discussions based on this info presented to them

-PI-456 failing high caused pressurizer PORV 456 to OPEN. As part of the scenario design, the PORV block valve, HV-8000B, automatic closure feature on low pressurizer pressure was disabled.

-At time 08:18:17, Carla released the in-hold-out switch and informed [REDACTED] of the pressurizer pressure malfunction.

-As part of immediate operator actions, Carla verified the pressurizer spray valves were closed, and then mis-operated the pressurizer PORV 456 handswitch by taking it to the OPEN position.

-Carla then turned to look at [REDACTED] without taking further actions.

-[REDACTED] pointed at the PORV handswitch, and loudly stated: "Carla, shut that valve!"

-Carla then correctly closed the PORV using the handswitch on the control board.

During post-scenario follow-up questions, the examiner asked Carla "what were your immediate operator actions?" Carla correctly stated the immediate operator actions for a pressurizer channel failure. During her statement, Carla indicated that she had initially turned the PORV handswitch in the wrong direction.

B. EXAMINER EVALUATION AND COMMENTS

During the review of Carla Smith's 303 documentation following the issuance of the exam report, the exam team identified that this event had been mis-graded, because it was a failed critical task.

In accordance with NUREG 1021, Appendix D, D.1.a states that a critical task in a simulator scenario must have safety significance:

In reviewing each proposed CT, assess the task to ensure that it is essential to safety. A task is essential to safety if its improper

Binder 13 created by exam team to give to the review panel ON FIRST MEETING, notice how (RF 1b) TE-130-understanding comment added TO WHITE BOARD discussions based on this info presented to them

During post-scenario follow-up questions, the examiner asked what procedure guidance was used to manually control TE-130? Carla looked through the LETDOWN HX OUTLET HI TEMP ARP. During this discussion, Carla stated that she had initially pressed the “up” button, and then subsequently pressed the “down” button. The examiner asked “walk me through the diagnosis and the plant response?” Carla stated that demand goes down, causing flow through the heat exchanger to lower, it’s a reverse-acting controller.

From Exhibit NRC-038, page 2

B. EXAMINER EVALUATION AND COMMENTS

The examiner downgraded the applicant in rating factor 3.c, which is related to the ability to take manual control of automatic functions. This competency is different from manual rod control or PORV valve operation (other errors placed in different rating factors) in that a plant parameter is controlled in automatic under normal circumstances.

The examiner considered that there were elements of rating factor 1.b demonstrated during this event. Rating factor 1.b. relates to the applicant’s “...actions demonstrate an UNDERSTANDING of how the PLANT, SYSTEMS, and COMPONENTS OPERATE AND INTERACT (including set points, interlocks, and automatic actions)?” More specifically, during this event, Carla specifically stated, “there is nothing else we can do but call C&T...,” demonstrating a lack of understanding that the controller could be operated in a manual mode. Furthermore, the SRO was then required to instruct the applicant in the correct operation of the controller, which demonstrated that the applicant had a deficiency in understanding how the controller operated.

Quick Clarification

From Exhibit NRC-038, page 2

The examiner considered that there were elements of rating factor 1.b demonstrated during this event. Rating factor 1.b. relates to the applicant's "...actions demonstrate an UNDERSTANDING of how the PLANT, SYSTEMS, and COMPONENTS OPERATE AND INTERACT (including set points, interlocks, and automatic actions)?" More specifically, during this event, Carla specifically

EXAMINER MADE A TYPING ERROR HERE, he puts Rating Factor 1b when obviously meant 1c, below provides the description for 1c and it is the exact same description as the examiners notes from the binder

From Exhibit CCS-005A, page 153

1. Interpret/Diagnose Events and Conditions Based on Alarms, Signals, and Readings				
Rating Factors		Weighting Factors		RF Scores
(a)	Did the applicant RECOGNIZE AND ATTEND TO off-normal trends and status in order of their importance and severity?	N/O	= 0	3
		Nominal	= 0.20	2
		(b) N/O	= 0.25	1
		(c) or (d) N/O	= 0.29	
(b)	Did the applicant ensure the collection of CORRECT, ACCURATE, and COMPLETE information and reference material on which to base diagnoses?	N/O	= 0	3
		Nominal	= 0.20	2
		(a) N/O	= 0.25	1
		(c) or (d) N/O	= 0.28	
(c)	Did the applicant's directives and actions demonstrate an UNDERSTANDING of how the PLANT, SYSTEMS, and COMPONENTS OPERATE AND INTERACT (including set points, interlocks, and automatic actions)?	N/O	= 0	3
		Nominal	= 0.30	2
		(a) or (b) N/O	= 0.38	1
		(d) N/O	= 0.43	
(d)	Did the applicant correctly INTERPRET/DIAGNOSE plant conditions based on control room indications?	N/O	= 0	3
		Nominal	= 0.30	2
		(a) or (b) N/O	= 0.37	1 ₄
		(c) N/O	= 0.43	

Quick Clarification

From Exhibit NRC-038, page 2

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Here are the titles of the Rating Factors

From Exhibit CCS-005A, page 141

Applicant Docket Number: 55- Page 07

Senior Reactor Operator Simulator Operating Test Grading Details					
Competencies/ Rating Factors (RFs)	RF Weights	RF Scores	RF Grades	Comp. Grades	Comment Page No.
1. Interpretation/Diagnosis					
a. Recognize & Attend	-----	-----	-----		-----
b. Ensure Accuracy	-----	-----	-----	-----	-----
c. Understanding	-----	-----	-----		-----
d. Diagnose	-----	-----	-----		-----

From Exhibit NRC-002, page 40 **STEP 3**

During the Interviews the Exam Team identifies to the Review Panel that the PORV should have been CRITICAL

which resulted in the lowest possible score of "1" for that RF. During the initial grading, if the PORV error would have been correctly designated as a CT, the score for that RF would have remained a "1" because that is the lowest possible score. The Region II exam team discovered their grading error when preparing to be interviewed by the informal review panel, and provided documentation of the PORV CT to the informal review panel as part of the "Binder" document.¹¹

During those interviews, the Region II exam team admitted to the review panel that the PORV error should have been designated as a CT error. The Region II exam team informed the review panel that the error was required to be graded as a failed CT in accordance with NUREG-1021.

WHITE BOARD DISCUSSIONS NEXT



Look at: PORV and that it was pointed out as non contested – decision to include noncontested at bottom

#7 PORV ops, takes H/S wrong direction 3.9
(not contested)

#8 Letdown HX TE failure, Doesn't promptly 3.C
take manual control + presses wrong button 1.C


Make sure to integrate with original ES-303
[ie "non contested" errors must be included!]

Look at: C. Smith original test had 3c as an error for the TE 130

ADDED COMMENT for TE 130 1c – Understanding

Doesn't look like these items were determined independently

#7 PORV ops, takes H/S wrong direction 3.9
(not contested)

#8 Letdown HX TE failure, Doesn't promptly take manual control + presses wrong button 3.C
1.C 

Make sure to integrate with original ES-303
[ie "non contested" errors must be included!]

Look at: Says make sure closing PORV not CRITICAL-----D-2 says NO--
--put as followup

Error #7 as OATC

NOT CONTESTED BY APPLICANT

During Ppar failure operator PORV in wrong direction, corrected by SRO (with operator's switch in wrong direction)

Error Y or N?		
Don	Dave	Chris
Y	Y	Y

Correct RF? (assigned 3a) ^{is a correct}

Follow up? Make sure closing PORV not critical ^{but not stopping a CORA maybe a critical by Westinghouse guidelines}

D-2 says NO

Error #8 as OATC

During Letdown HX TE-0130 failure does NOT ID Manual control available AND then hits wrong button (wrong one was up arrow) on controller

Error Y or N?		
Don	Dave	Chris
3Y	3Y	3Y
1CY	1CY	1CY

Correct RF? (assigned 3c) Two hits??

1c maybe

Follow up? Where is TEC (TIC) 130 controller & relation to being able to monitor Sa, Tave ...

Check SRO / VO write-ups too

**NRC Staff presents that
Review team added those
two comments early on with
no input from the Exam
Team**

**Those items were discussed
as a result of interaction
with the Region II Exam
Team PRIOR**

This was not independent