

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 <sub>4</sub>
	(c) N/O	= 0.43	

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## 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 of

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.<sup>11</sup>

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  
(not contested)

3.9

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

**ADDED COMMENT for TE 130 1c –  
Understanding**

**Doesn't look like theses 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 (operator  
switch in wrong direction)

Error Y or N?

Don	Dave	Chris
Y	Y	Y

Corr RF? (assigned 3a) is a correct

Follow up? Make sure closing PORV not critical But not stopping a CORA  
perhaps a critical by Westinghouse guidance

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 (was one was up arrow)  
on controller

Error Y or N?

Don	Dave	Chris
3Y	3Y	3Y
1Y	1Y	1Y

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

1c maybe

Follow up? Where is TEC (TIC) 130 controller in relation  
to being able to monitor Sx, Taux ...

Check SRO / uO 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**