Iona Gas Plant – DCS Senior CBTA Questions



CBTA

DCS Senior Questions

SP/TRN/TM110

Candidate's Name: _____

Candidates Signature: _____

Assessor's Name: _____

Assessor's Signature: _____

Date Completed:
CBTA
Reassessment: ___/__/___

For first time candidates, the entire CBTA is to be completed. For the purposes of re-assessment only the demonstrative section requires completion.

Written

Question	Answer	Assessor check
Explain the delay between pressing the Master SDS Reset and receiving the alarm on the DCS.		
What is the purpose of a device reset?		
Pressing the raise/lower will change the selected element by what %. Fast raise/lower by?		
Mass balance is a crucial part in achieving stable plant operation, what is the mass balance equation?		
How would you have a negative mass balance?		
How would you have a positive mass balance?		

Question	Answer	Assessor check
What is a Control Module?		
What is a Function Block?		
Why is the Iona Meg pumps PIC in not normal mode?		
When operating Mortlake valves in MAN which Control Module should be used? Why?		
What are the acceptable limits of; Wobbe Index HCDP Moisture content		
What is your first response to; High Moisture content High HCDP Low LTS Temp		
When pressing the SDS Reset, can the diamonds clear without the reset alarm on the DCS? Explain.		
What will "Pressure Alarm LowLow" do on PI1705?		

Can you start a pump with a device reset if required?	
Explain briefly how to bring the plant back online after an ESD1.	
Explain how C-421/422 ASV closes on start and how you can control the process using the ASV.	

Demonstrative

Question	Assessor check
Prior to accepting nominations, some calculations should be carried out for capacity and required compression.	
Change SP of a fast acting controller without the OP changing.	
Make a controller move faster.	
Set C-245 suction pressure and speed controller to MAN and change pressure OP, then have the candidate match cascading OPs to put	
back in CAS without slider valve changing.	
Change the SP of PIC2157C so it alarms, have the candidate show in the events and detail display why it alarmed.	
Perform/provide evidence of duty changes.	
Perform/provide evidence of starting an Iona Well.	
Perform/provide evidence of performing CFT's	
Prove understanding of trends. (Period. Interval. Scale. EU.)	
Demonstrate Loading up then shutting down a Recip from cold start.	
Demonstrate Loading up then shutting down C-422 in IP to HP.	
Demonstrate bringing Iona and NP gas into Train 2.	
Demonstrate the opening of UV-5002 & UV-9201.	

Fill in the following graphic with compressors and pressures you would preferably run to meet the customer demands.

Station - backup - Gas Distribution Overview(SSS.htm)
 Station Schematic SDS/BMS Edit View Control Action Configure Help

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With the following graphic what is your response to C-405 Trip.

With the following graphic what is your response to SWP changing to withdrawal.

With the following graphic discuss how the plant would react to C-422 going into discharge control.

Station Schematic SDS/BMS Edit View Control Action Configure Help

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The candidate is assessed as being:

Competent

□ Not yet competent

Areas requiring improvement:

For first time candidates only:

Department Manager's name: _____

Department Manager's signature: ______

Date: ____/____/_____