From: Robert Lazor
Sent: Monday, September 26, 2011 5:41 AM
To: Evan Vokes
Cc: David Taylor
Subject: RE: Braeside vessels

Please provide the meeting minutes from the Braeside meeting.

Related to UT, are we now going to have to have a witness for all manual UT? Who will do the witnessing, a Level II or Level III? How can this cost be justified?

Where is the deficiency in the inspections for the Braeside vessel? Which clause in TES-MATL-PV1 did they not follow for inspection?

Related to code requirements, the manufacturer should have a clause in their Quality Manual stating that they have reviewed the new Code edition and that they have made the necessary changes to their QA program if necessary.

Prequalified NDE Contractors - From previous conversations, I know that you are not prepared to review and qualify all NDE contractors. What do you propose can work to your satisfaction? You have to keep in mind that many inspections are in remote areas and in many instances you cannot get an NDE company to travel a day in each direction to do one or two welds. Can we not rely upon CGSB or ASNT qualifications for certain weld categories?

What is happening with the re-inspection of the Braeside vessels? Please pass along their re-inspection reports?

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From: Evan Vokes
Sent: Thursday, September 22, 2011 4:30 PM
To: David Taylor
Cc: Robert Lazor
Subject: RE: Braeside vessels

I am put in between a rock and a hard place but what we are looking at is a code violation that we never caught during the inspection process. This is a serious issue and is not likely a single vessel and its not the first time.

First some recent background.
The evidence from the V202 and V203 inspection reports Edson Gas storage showed that all the Cat D nozzles were inspected with manual ultrasonics in 1 hr. During the refurbishment, Andrew from TEAM took the more than an hour to scan a single 2 inch cat D with a K bevel. The 24 inch Cat D took more than 2 hrs to do a single side when one side was already inspected. At the post mortem meeting after Edson gas storage, one of the important items that was "dictated" was this lack of inspection problem was not to happen again . The only way we can ensure traditional manual UT scan results is to physically witness the scan. The assurances were put forward that it would not happen and today we are having this conversation.

The evidence from the inspection reports from Braeside show that four Cat D nozzles were inspected in ½ hr with the wrong calibration block. These vessels are only welded from the outside so thickness is not the problem, but the geometry is still hard to work with. Within this ½ hr two indications were evaluated and since Cat Ds are slow to inspect so I fail to see how IRIS could repeat these results. The subsequent inspection with by a second technician showed one nozzle inspected in one hour so that time line would not have been to far off if it was a code compliant inspection. Regardless of

how many years IRIS has been in business, IRIS had two different inspectors on two different occasions perform inspections that did not meet code. My understanding is that Bill Yang will have to inform ABSA of this inspection failure as ABSA has their QC manual.

In the past, apparently NOVA had a dedicated inspector that looked at Cat D nozzles but currently the methodology is that ABSA QA manual puts inspection responsibility in SMS care who sends a 3PI request to Moody whom is supposed to witness. As per the SCL Moody never made a site visit and even if they did we would probably still have non-code compliant Cat D nozzle inspection problems exactly the same as we have now as there was no mandate to ensure quality of this weld type.. Moody did not conform to the requirements of SCM SCL documentation and their audit did not reveal any shortcomings. The OPR requirements for section 15 are in effect for pressure vessels under the material program; the provinces only administrate them so did the delivered vessel have a sufficient quality assurance system to meet the material specification and code of construction.

Under the category of how we inspect vessels, we have a witness point for a four hour hydrotest that has a chart recorder but we don't have a witness point for the Cat D manual ultrasonics that have proven to be a problem in the past. By way of comparison of how other manufacturers handle this inspection, Maloney specifies Sectoral Scan for Cat D so there is permanent interpretable record and it is way faster. If TransCanada does not want to witness to ensure quality requirements imposed by NEB are met, then TransCanada needs an interpretable record for ultrasonics so we can audit. However, we don't dictate how our manufacturing shall inspect Cat D nozzles regardless of whether by manual UT or Sectoral Scan. We are farther ahead to witness Cat Ds and audit the pressure test, as we proved that we at least have auditable pressure test results.

The re-inspection of the vessel through Harry's program was the quickest response and the most reasonable for the company so Jim could get to get a code inspection before it went to the field and Peerless agreed to this in the meeting. This item is in the meeting minutes and to my knowledge has already happened. If code rejectable indications are found, there may be a dispute but Peerless knows they can witness the inspections and the vessel would have to return to Braeside for repair anyways.

The TransCanada TES MATL PV1 contains a promise to the board is to inspect the Cat D nozzles. The question is did we achieve the goal of OPR 99 section 15? There are only yes or no answers for goal oriented regulations.

From: David Taylor
Sent: Thursday, September 22, 2011 7:35 AM
To: Evan Vokes
Cc: Robert Lazor
Subject: RE: Braeside vessels

See my comments below;

There are steps you need to take within my comments. Please confirm you have address them.

Thank you

From: Evan Vokes
Sent: Friday, September 16, 2011 3:35 PM
To: Jim Platt; Greg Szuch; Ross Ennion
Cc: Cindy Guan; David Taylor
Subject: Braeside vessels

To follow up on our action items from the Peerless meeting
We need to inspect the nozzle quickly to get your vessel on site and we need to make sure any other vessels on Gold Creek or other compressor stations that have been accepted since Jan 2011 were inspected correctly. Moody did not perform this review of UT function well as an auditor, so I might find someone else to look at this and we might be able to get Sal, Evan or Dave H to look at this if there are not too many.
- Are we now having an inspector sit and watch every CGSB Level II UT operators that are completing a manual UT weld examination?

Ross, can you find someone to generate a list of vessels and find the inspection records as that is key. - Good to have SCM find out who they order from – should also recommend that they request the manufacturer to confirm the new code requirements were met (in writing)
If we have to quarantine vessels this should happen sooner than later.

I have never received a SIQ to qualify IRIS and therefore we cannot have them on our site so I suggested that Greg drop the problem in Harry Fenton's program as he has the resources to arrange removal of the coating and have it inspected with a prequalified vendor. – I do not agree with this approach – we need to find a solution that is reasonable for the company. Did we tell the manufacturer that they needed to use our pre-qualified contractors before this work was done? Evan you need to look for an alternative approach; IRIS had been doing this type of work for years. Also you can generate a SIQ to complete a review or even complete a project specific review to avoid re-work.

I can help technically but I don't think you will need too much of a hand as it is not that difficult to do and we can back-charge Peerless for this and they agreed. – TransCanada may be able to back charge some reasonable costs back to the manufacturer – the key is the costs have to be reasonable and justified.
The trick is since there is no record produced in a manual UT scan, someone needs to witness the inspection is performed with the correct block and the indications are acceptable. I suggested Harry's program as Frank Tse is the perfect resource. – See my comment above – what you are now dictating is that all (100%) of manual UT scans needs to have an inspector present to confirm they actually did the work (inspecting the inspector) – Is that a reasonable approach? Is it needed? I am not convinced!

The only solution if rejectable indications are found is to ship this vessel back for rework but the good news is there is no PWHT on this vessel so than makes life a lot easier. If there are rejectable indications, I would expect that Lorne Spate at Braeside may ask to see the indications or alternately he will reexamine them at his shop so make sure you have closed the repair issue and it is finalized before it is shipped back. Bottom line, make sure you have confirmation in writing from Peerless and Braeside before any return as there is enough evidence that the schedule may drag. – What really should be happening is that Braeside and Peerless should arrange for the inspections to be completed. If in fact these were completed incorrectly they are responsible to arrange for the appropriate inspection not TransCanada. By ensuring they do the inspections you avoid any argument about whether the weld is acceptable or not.