FPL Energy
Seabrook Station

FPL Energy Seabrook Station
P.O. Box 300
Seabrook, NH 03874
(603) 773-7000

sent certified rec'd 6/20/08

June 18, 2008

Docket No. 50-443
SBK-L-08103

U.S. Nuclear Regulatory Commission
Attn.: J. E. Dyer, Director
Office of Nuclear Reactor Regulation
One White Flint North
11555 Rockville Pike
Rockville, MD 20852-2837

Seabrook Station
Notification of Completed Actions and Commitments Addressed in Confirmatory Action Letter In Regard to Alloy 82/182 Butt Welds in the Pressurizer at Seabrook Unit No. 1

Reference: NRC CAL No. NRR-07-001, Confirmatory Action Letter, Seabrook Station, Unit No. 1, dated March 12, 2007.

FPL Energy Seabrook, LLC (FPL Energy Seabrook) has completed the actions and commitments addressed in the above reference. FPL Energy Seabrook is providing in the enclosure to this letter the results of the pressurizer butt weld inspections and mitigation actions.

Should you have any questions regarding the examination results, please contact Michael Ossing, Engineering Support Manager, at (603) 773-7512.

Sincerely,

FPL Energy Seabrook, LLC

Gene St. Pierre
Site Vice President

cc: S.J. Collins, NRC Region I Administrator
G.E. Miller, NRC Project Manager, Project Directorate I-2
W.J. Raymond, NRC Senior Resident Inspector

A001
A110 NRR
Rec'd DCD
8/13/08

OATH AND AFFIRMATION

I, Gene St. Pierre, Site Vice President of FPL Energy Seabrook, LLC, hereby affirm that the information and statements contained within this Notification of Completed Actions and Commitments Addressed in Confirmatory Action Letter NRR-07-001 are based on facts and circumstances which are true and accurate to the best of my knowledge and belief.

Sworn and Subscribed
before me this

18th day of June, 2008

Gene St. Pierre
Site Vice President

Notary Public

SHIRLEY SWEENEY
MY COMMISSION EXPIRES OCT. 6, 2009
NOTARY PUBLIC
NEW HAMPSHIRE

ENCLOSURE TO SBK-L-08103

Summary of NDE results for Pressurizer Weld Overlay

Location	PT of Base Metal Results	PT of Barrier Layer and In-Process Repair Results	Post Overlay Surface Exam Results	Post Overlay UT Exam Results
PZR A Safety Nozzle	No Recordable Indications (NRI)	NRI, Barrier Layer – Indications adjacent to the barrier layer were identified during the barrier layer PT. Excavation performed Excavation PT – Indications identified after grinding. Excavated to a depth of ~.220" PT of Excavation area after weld restoration to base material - NRI PT of SWOL excavation to remove volumetric (UT) indication - NRI	NRI prior to excavation of volumetric indications NRI after volumetric indication removal	Five indications were recorded. Four were laminar, lack of bond (LOB) indications and one was planar. Below are the dimensions and dispositions of the indications. Ind. # 1 – 9.80"L x .30"W, Reject Ind. # 2 – 1.00"L x .30"W, Accept Ind. # 3 – 1.90"L x .30"W, Accept Ind. # 4 – 0.50"L x .30"W, Accept Ind. # 5 – 2.00"L x .30"W, Reject Indications # 1 & # 5 excavated and repaired. Indication # 3 was removed/repaired due to it's proximity to the repair cavity. Post repair UT was acceptable. Indications # 2 and # 4 remain after repairs UT examination achieved full coverage of both the ISI and PSI examination volumes.
PZR B Relief Nozzle	NRI	NRI	NRI	The UT exam was acceptable. Three indications were reported. Two were lack of bond (LOB); the other was planar and located within the ISI volume of the original dissimilar metal weld base material. Below are the dimensions and dispositions of the indications. Ind. # 1 – 1.10"L x .30"W, Accept Ind. # 2 – 0.80"L x .20"W, Accept Ind. # 3 – 1.2"L Accept per analysis of weld overlay design by vendor. UT examination achieved full coverage of both the ISI and PSI examination volumes

Location	PT of Base Metal Results	PT of Barrier Layer and In-Process Repair Results	Post Overlay Surface Exam Results	Post Overlay UT Exam Results
PZR C Safety Nozzle	NRI	NRI, Barrier Layer PT of SWOL excavation to remove volumetric (UT) indication - NRI	NRI prior to excavation of volumetric indications NRI after volumetric indication removal	One circumferential lack of bond indication was reported in the nozzle radius to taper transition area. The indication dimensions and disposition is below. Ind. # 1 – 13.2"L x .40"W, Reject Indication # 1 excavated and repaired. The UT of the repair area was acceptable. Two lack of bond indications were reported, their dimensions are listed below Ind. # 1 – .50"L x .30"W Ind. # 2 - .40"L x .30"W UT examination achieved full coverage of both the ISI and PSI examination volumes
PZR D Safety Nozzle	NRI	NRI, Barrier Layer PT of SWOL excavation to remove volumetric (UT) indication - NRI	NRI prior to excavation of volumetric indications NRI after volumetric indication removal	Two circumferential lack of bond indication were reported. One was at the nozzle radius to taper transition area and the other was over the safe end material at the interface of the weld overlay and the base material. Below are the dimensions and dispositions of the indications. Ind. # 1 – 4.7"L x .30"W, Reject Ind. # 2 – 29.0"L(360°) x .40"W, Reject Indications # 1 & # 2 excavated and repaired. The UT of the repair areas was acceptable. Two lack of bond indications were reported, their dimensions are listed below Ind. # 1 – .70"L x .20"W Ind. # 2 - .70"L x .20"W UT examination achieved full coverage of both the ISI and PSI examination volumes
PZR Spray Nozzle	NRI	NRI	NRI	The UT exam was acceptable. Three indications were recorded in the original dissimilar metal weld base material. These indications are below the ISI examination volume. UT examination achieved full coverage of both the ISI and PSI examination volumes.

Location	PT of Base Metal Results	PT of Barrier Layer and In-Process Repair Results	Post Overlay Surface Exam Results	Post Overlay UT Exam Results
PZR Surge Nozzle	NRI	NRI, Barrier Layer PT of SWOL excavation to remove volumetric (UT) indication - NRI	NRI prior to excavation of volumetric indications NRI after volumetric indication removal	Four circumferential indications were reported/recorded. One was a lack of bond (LOB) and the other three were located within the original dissimilar metal weld base material outside the ISI examination volume. Below are the dimensions and dispositions of the indications. Ind. # 1 – 51.8'L (360°)x .30"W, Reject Ind. # 2, # 3 and # 4 were recorded for future reference and were not evaluated. Indication # 1 excavated and repaired. The UT of the repair was acceptable. UT examination achieved full coverage of both the ISI and PSI examination volumes.

Mitigation Summary

The Seabrook Station pressurizer has six piping nozzle welds that were originally made with alloy 82/182 material as identified in the table below. During OR12 refueling outage all six piping nozzles were mitigated using alloy 52 by the method shown below.

Nozzle		Mitigation Completed	Mitigation Performed
Function/Designation	**Susceptible Material Description**	**Outage Designation**	
Surge "S" Line # RC-49-01	Nozzle to safe end weld only	OR12	Structural Weld Overlay
Spray "SP" Line # RC-48-03	Nozzle to safe end weld only	OR12	Structural Weld Overlay
Safety "A" Line # RC-74-01	Nozzle to safe end weld only	OR12	Structural Weld Overlay
Relief "B" Line # RC-80-01	Nozzle to safe end weld only	OR12	Structural Weld Overlay
Safety "C" Line # RC-75-01	Nozzle to safe end weld only	OR12	Structural Weld Overlay
Safety "D" Line # RC-76-01	Nozzle to safe end weld only	OR12	Structural Weld Overlay