POINT BEACH NUCLEAR PLANT
MEETING WITH NRC ON AST

October 14, 2008

AST

- Previous AST Submittal Issues
- Actions to ensure quality submittal
- Key Assumptions in the Analyses
- LAR Format
- Modification Summary
- Relationship to EPU
- Schedule
- Approach to RAIs

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PREVIOUS AST SUBMITTAL ISSUES

- LAR 224
  - Retracted on 1/23/03
  - Reason
    - Still relied on KI to meet control room dose limits
    - Control Room Ventilation System design relative to regulatory expectations
- LAR 241
  - Retracted on 1/30/08
  - Reason
    - Modifications required additional review and evaluation

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ACTIONS TO ENSURE QUALITY SUBMITTAL

- Review by senior, experienced engineers in Juno
- Benchmarking against other successful AST LARs
- Senior level internal challenge/calculation review by Westinghouse
- Review and incorporation of previous RAIs and industry OE as applicable
- Technical Challenge Boards
- Review by independent industry experts

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KEY ASSUMPTIONS IN AST ANALYSIS

	Current AOR (TID-14844)	AST Submittal (10/1/07)	Planned AST Submittal
Cont. leak rate	0.4 w%/day (Administratively reduced to 0.2%)	0.2 w%/day	0.2 w%/day
ECCS leakage	400 cc/min	400 cc/min to PAB	150 cc/min to PAB 250 cc/min to RWST (Industry/NRC accepted approach)
Spray flow rate on Recirculation Phase	0 gpm	900 gpm	900 gpm
Manual Throttling	N/A	Yes	No
Control Room Ventilation Recirculation Filtration	No	Yes	Yes
Analyzed Power level	1549 Mwt	1683 Mwt	1811 Mwt
Control Room Unfiltered Inleakage	10 cfm Measured 96+/-173	105 cfm Measured 77+/- 94	< ~ 200 cfm Measured 77+/-94
CR Dose Results	Thyroid: 292.7 (30 rem) (KI reduces dose 10X)	4.8 TEDE rem (LOCA)	4.9 TEDE rem (LOCA)

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LAR FORMAT

- Benchmarked to other successful AST LARs including Seabrook, Calvert Cliffs, and St. Lucie

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AST MODIFICATION SUMMARY

- Provide ability for containment spray during post LOCA sump recirculation mode
  - Requires aligning a portion of RHR flow to the suction of the Containment Spray Pumps
  - Close RHR discharge valves to a preset throttle position
  - Add a flow restricting orifice in each Containment Spray line
  - Total RHR flow will stay within GSI-191 limits
- Control Room shielding and ventilation system modifications
- Technical Specification reduction in DEI values and allowable Containment leak rate

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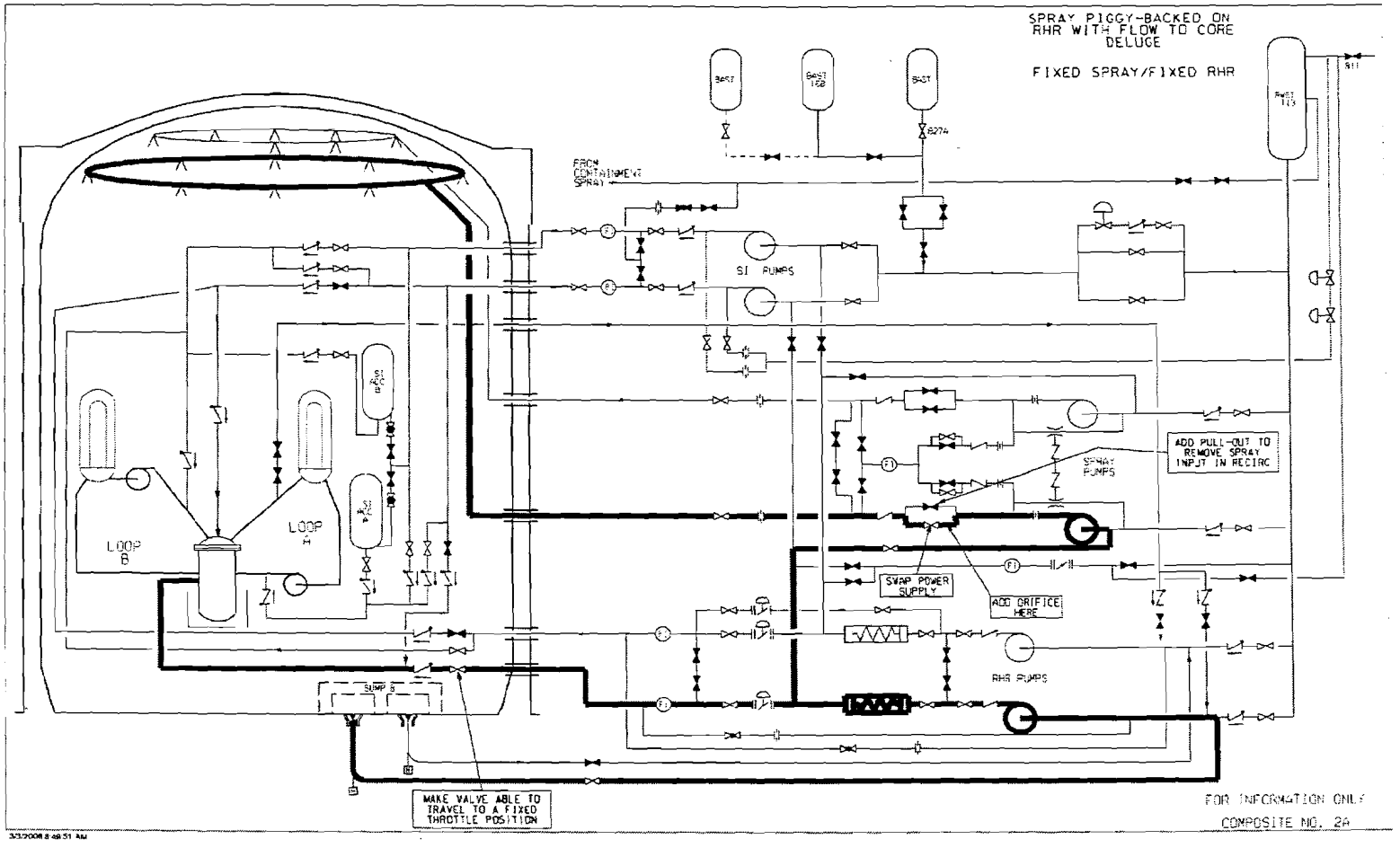
SPRAY PIGGY-BACKED ON RHR WITH FLOW TO CORE DELUGE
FIXED SPRAY/FIXED RHR
FROM CONTAINMENT SPRAY
SI PUMPS
LOOP B
LOOP A
SUMP B
SPRAY PUMPS
ADD PULL-OUT TO REMOVE SPRAY INPUT IN RECIRC
SWAP POWER SUPPLY
ADD ORIFICE HERE
RHR PUMPS
MAKE VALVE ABLE TO TRAVEL TO A FIXED THROTTLE POSITION
FOR INFORMATION ONLY
COMPOSITE NO. 2A

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AST RELATIONSHIP TO EPU

- LAR based on EPU conditions
- Can be approved independent of EPU

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AST SCHEDULE

– AST Licensing	
LAR Submittal	October 2008
NRC review complete	January 2010
AST implementation	Spring 2010
– Control Room Ventilation System Modifications	
Engineering Complete	Spring 2009
Installation	Spring 2010
– Containment Spray During Sump Recirculation	
50.59 Evaluation Complete	Prior to AST Submittal
Engineering Complete	Spring 2010
Installation Unit 2	Fall 2009
Installation Unit 1	Spring 2010
– Control Room Shielding Modification	
Engineering Complete	January 2009
Installation	Spring 2009

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AST APPROACH TO RAIs

- Dedicated team to address RAIs
- Face-to-Face meetings to review draft RAIs
- Face-to-Face meetings to review draft RAI responses

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Closing Discussion

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AST Discussion items

- Control Room Filtration system classified non safety related (one filter train)
  - Two fans
  - D/G power available manually

- A portion of ECCS Leakage pathway is the PAB vent X/Q
  - Two sets of fans
  - D/G power available manually

- New operator action to place containment spray piggy back on RHR
  - Operator action on Loss of instrument air to close caustic tank valves in PAB
  - New Operator action to position RHR deluge valve to preset throttle position

- FHA fuel exceeds RG 1.183 footnote 11 criteria