

Part 52 Testing Pre-Op & Start-up/Ascension

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in NRO

Objectives

- Develop NRC inspection guidance for Initial Test Program (pre-operational and startup/power ascension)
- Develop NRC inspection guidance for pre-operational (RG 1.68 Rev. 3) testing of AP1000
- Consult and Communicate during development
- Facilitate implementation

Part 52 Testing Working Group

NRO/DCIP

- Tom Kendzia
- Rich Laura
- Bill Raymond
- Frank Talbot
- Marlayna Vaaler

NRC Region 2

- Caudle Julian
- LaDonna Suggs

NRR

- Jim Isom (NRR)

Initial Test Program (Preoperational & Start-up/Power Ascension Testing)

- Program review similar to other IMC 2504 program reviews
- COL and DCD has Initial Test Program consisting of construction/installation tests, preoperational tests, and start-up/power ascension tests
- IMC 2504 has program inspection for preoperational test program (proposed IP 70367) and start-up/power ascension test program (IP TBD)
- Coordinate with the Transition working group (lead by Tom Kozak) to develop inspection guidance for the startup/test program

Pre-Operational Testing

- Construction, installation, and most preoperational tests are included in ITAAC covered by IMC 2503
- ITAAC pre-operational test program is Implemented by IP 65001.D (Operational testing)
- 40 of 99 pre-operational tests with ITAAC, are targeted for inspection.
- RG 1.68 preoperational (system level) tests not covered by ITAAC covered by MC 2504
- Developing IP 70702 for inspection of the AP1000, RG 1.68 preoperational (system level) tests not covered by ITAAC

License Conditions - Testing

- First Plant Only Testing (FPOT) & First 3 Plant Only Testing (F3POT)
 - 5 preoperational (IRWST heatup test, Przr surge line stratification, Rx vessel internals vibration test, Core makeup tank heated recirculation test, and ADS blowdown test)
 - These tests should be inspected by NRC
 - Revise IMC2504 and develop IP 70702 to address inspection of testing related license conditions.

Operating Experience (Testing)

- China AP1000 test insights
- Recent Part 50 construction and startup experience (Browns Ferry Unit 1, Watts Bar Unit 1)
- Various searches of the OpE database such as international, INPO, and NRC documents
- Apply OpE lessons learned to develop Just in Time inspector training

Conclusion

- Scheduled to complete inspection guidance for pre-operational test program by September 1, 2013
- Work closely with Region 2 and NRR
- Apply construction and OpE lessons learned as appropriate
- External stakeholder briefings