

September 30, 2003

Mr. Robert L. Clark
Office of Nuclear Regulatory Regulation
U.S. Nuclear Regulatory Commission
Attn: Document Control Desk
Washington, D.C. 20555-0001

Subject: Summary of Public Meeting Between RG&E and NRC Staff Held on August 19, 2003.
R.E. Ginna Nuclear Power Plant
Docket No. 50-244

Dear Mr. Clark:

On August 19, 2003 representatives of Rochester Gas and Electric Corporation (RG&E) met with members of the NRC Staff at your offices in White Flint. The purpose of the meeting was to brief the Staff and provide an overview of our Control Room Emergency Air Treatment System (CREATS) License Amendment Request (LAR) submitted on May 21, 2003. This letter is to summarize RG&E's impression of that meeting and should be docketed as a supplement to the above mentioned LAR.

The meeting was opened with introductions (Attachment 1), followed by a slide presentation outlining the modification and RG&E's plans for implementation (Attachment 2). During and subsequent to the presentation, RG&E responded to Staff questions. These questions and their response are listed in Attachment 3. The regulatory commitments made by RG&E are provided in Attachment 4.

I declare under penalty of perjury under the laws of the United States of America that I am authorized by Rochester Gas and Electric Corporation to submit this documentation and that the foregoing is true and correct.

If you have questions regarding the content of this meeting please contact Mr. Mike Ruby at 585.771.3572.

Executed on September 30, 2003

Sincerely



Robert C. Mecredy

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Attachments:

- 1. List of Attendees**
- 2. Slide Presentation**
- 3. Staff Questions and Responses**
- 4. List of Commitments**

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Attachment 1

List of Attendees

RG&E:

**Mark Flaherty
Mike Ruby
Dan Crowley
Paul Swift
Ken Rubin**

**Licensing Manager
Licensing Engineer
Systems Engineer
Electrical Engineer
Consultant to RG&E (Dose Analysis)**

NRC:

**Jay Lee
Naeem Iqbal
Kris Parczewski
Robert Dennig
Brad Harvey
Leta Brown
Janak Raval
Robert Giardina
Pete Hearn
Harold Walker
Ronaldo Jenkins
Paul Rebstock**

**NRR/SPSB
NRR/SPLB
NRR/EMCB
NRR/SPSB
NRR/SPSB
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NRR/SPSB
NRR/IROB
NRR/IROB
NRR/SPSB
NRR/EEIB
NRR/EEIB**

Attachment 2
Presentation Slides

NRC STAFF PRESENTATION

R. E. Ginna Station

August 19, 2003

Control Room Emergency Air
Treatment System (CREATS)
Modification and Alternate Source
Term (AST) Tech Spec Submittal

PURPOSE

Brief NRC Staff on submittal and implementation plans

Receive feedback from the Staff

AGENDA

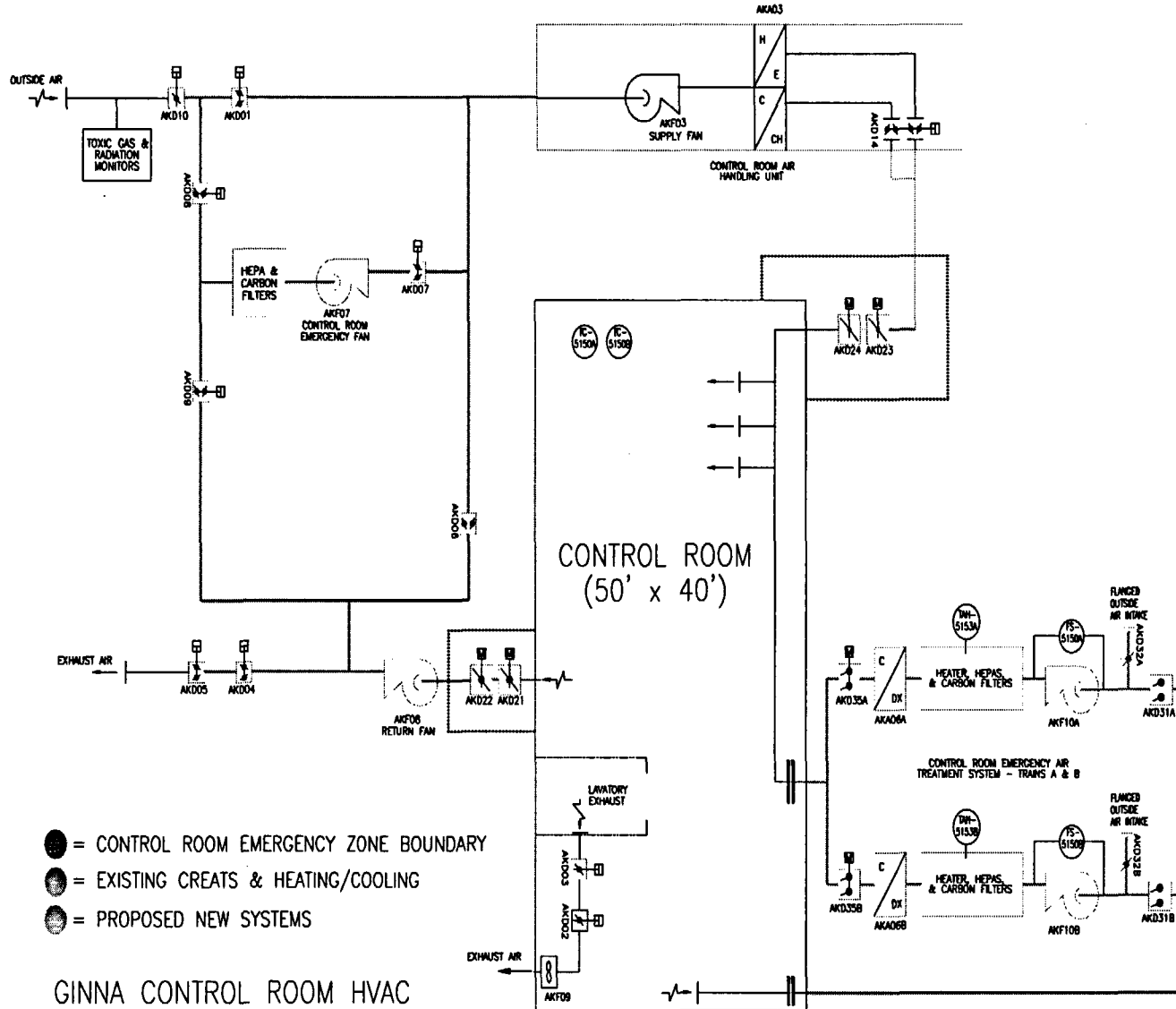
- Upgrade of CREATS
- Alternate Source Term methodology
- Revised Technical Specifications
- Schedule
- Response to Initial NRC Staff Questions
- Open Discussion

Upgrade of CREATS

Design Changes

- Location - Relay Room Annex
- Filtered Re-circulation design
- Two Trains - Fans, Filters and Coolers
- Safeguard Power
- Retains old system for normal HVAC - isolates on actuation of new system
- Add actuation signal from Safety Injection

CREATS Design



Benefit of New CREATS

- Redundancy and Reliability
- Reduce Control Room in-leakage potential
- Robust system with flexibility for future modifications
- Regulatory - Address issues associated with Generic Letter 2003-01
- Provide a safe environment for operators to perform their safety function, thereby ensuring public health and safety

Alternate Source Term

Why Change To Alternate Source Term

- Opportunity to standardize old analysis
- Widely accepted methodology
- Existing regulatory basis and guidance -
10CFR50.67 and Regulatory Guide 1.183

AST vs Old (TID) Method

- More realistic timing, magnitude and chemical form of the release
- Iodine release is predominately particulate
- HEPA filters are credited to remove the particulate
- Iodine removal from spray is mechanical, reducing importance of NaOH

Analysis Summary

Accident	EAB	LPZ	Cont Rm
LOCA	5.92 (25.0)	1.06 (25.0)	3.03 (5.0)
FHA - CNMT	1.10 (6.3)	0.07 (6.3)	1.20 (5.0)
FHA - AUX	0.31 (6.3)	0.02 (6.3)	0.09 (5.0)
MSLB (a)	1.05 (2.5)	0.15 (2.5)	0.64 (5.0)
MSLB (b)	0.15 (25.0)	0.03 (25.0)	0.18 (5.0)
SGTR (a)	0.22 (2.5)	0.02 (2.5)	0.14 (5.0)
SGTR (b)	0.71 (25.0)	0.05 (25.0)	0.88 (5.0)
Lkd Rotor	2.75 (2.5)	0.55 (2.5)	3.72 (5.0)
Rod Ejection	1.47 (6.3)	0.24 (6.3)	1.04 (5.0)
SFP TMA	0.07 (6.3)	N/A	0.06 (5.0)
GDT Rupture	0.28 (0.5)	0.02 (0.5)	0.10 (5.0)

a Accident Initiated Spike

b Pre-Accident Spike

Locked Rotor Dose Analysis

- Artificially High Due to Conservative Fuel Failure Assumptions
- Exceeds Reg Guide and SRP guidance of 2.5 rem TEDE, but well below regulatory limit of 25 rem
- Locked Rotor not currently in Ginna's licensing basis

Proposed Changes to Ginna Technical Specifications

New Considerations

- TSTF-448 (pending), Reg Guide 1.196, Reg Guide 1.197, and Generic Letter 2003-01 issued since submittal.
- RG&E will review/resubmit applicable sections of this submittal based on approved TSTF-448

Section 1.1 - Definitions

- Change Dose Equivalent I-131 to reflect ICRP-30 standards

Section 3.3.6 - CREATS Instrumentation

- Add new CREATS initiation signal from SI
- Remove note allowing 1/24 hour unisolation of Control Room - Not needed, new system has redundant trains.
- Remove Core Alteration Applicability consistent with Standard Tech Specs

Section 3.4.16 - RCS Specific Activity

- Remove Figure 3.4.16-1, I-131 vs Power
- Replace curve with single limit
- Changes consistent with new analysis methodology and assumptions

Section 3.6.6 - CNMT Systems

- Remove CNMT Post Accident Charcoal Filters
- Change NaOH Tank volume requirement consistent with analysis
- Move upper NaOH Tank concentration limit from TRM to Tech Specs

Section 3.7.9 - CREATS

- Complete rewrite to reflect new system configuration based on WOG Standard Tech Specs (will revise to approved TSTF-448).

Section 5.5.10 - VFTP

- Delete CNMT Post Accident Charcoal System
- New surveillance criteria for CREATS DP - format consistent with STS

Section 5.5.15

- Add requirement for a Control Room Integrity Program

Section 5.6.7

- Add reporting requirement for control room boundary inoperability

Summary of Proposed Changes

- Modify/Replace the CREATS
- Update Control Room and Off-Site Dose Analysis for Accidents using AST Methodology per Reg Guide 1.183
- Revise Ginna Technical Specifications to reflect changes and realize benefits of AST

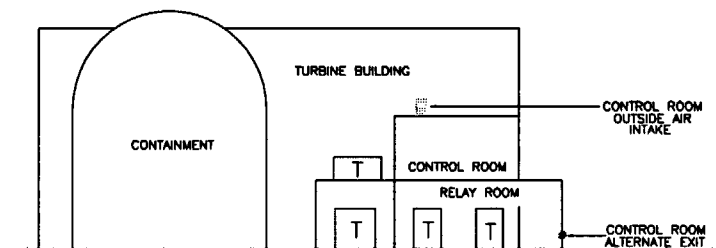
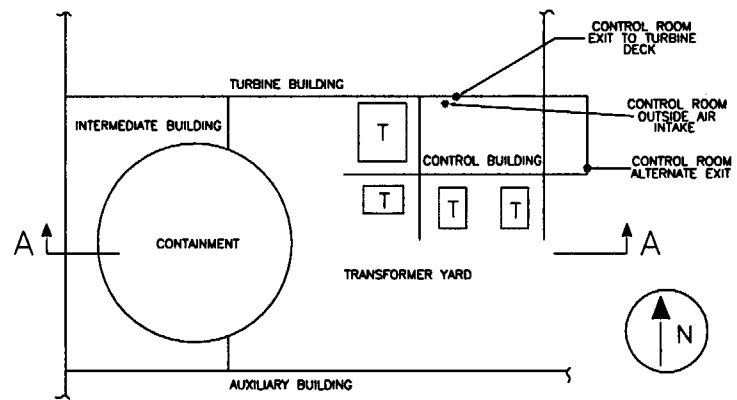
Tentative Schedule

- Issue detailed design - January 2004
- Complete construction and implement Tech Spec - June 2004
- Complete initial Tracer Gas inleakage testing - September 2004

Responses to Initial Staff Questions

Appendix R

- Is the modification modifying any Appendix R fire areas?
 - The Ginna modification process requires a thorough Appendix R review.
However, no change to current licensing basis is anticipated
- How is smoke handled by the modification?
 - Smoke will be addressed in accordance with Reg Guide 1.196 and NEI 99-03



SECTION A-A

A STAIRWELL CONNECTS THE CONTROL & RELAY ROOMS.
EXIT FROM CONTROL ROOM CAN BE TO:

- 1) TURBINE DECK (NORMAL ENTRANCE/EXIT)
- 2) TURBINE BLDG. MIDDLE LEVEL, VIA THE RELAY ROOM (ALTERNATE)
- 3) OUTSIDE, VIA THE RELAY ROOM (ALTERNATE)

GINNA CONTROL BUILDING ARRANGEMENT

Electrical

Will a design modification package be provided to allow the staff to determine if electrical design requirements for an ESF ventilation system are met ?

- Yes, a design package will be submitted addressing all aspects of IEEE-603

Question - In Attachment 5 to the submittal, you committed to perform a tracer gas in-leakage test of the control room envelope after completion of the planned installation of new Control Room Emergency Air Filtration System. Discuss in detail how you intend to meet the guidelines provided in new Regulatory Guide 1.197, “Demonstrating Control Room Envelope Integrity at Nuclear Power Reactors,” in performing such planned test.

RG&E Plans-Reg Guide 1.197

- Ginna is isolation/re-circulation design
- CRE boundary will be evaluated/inspected
- Initial inleakage testing per ASTM E741
- Subsequent assessment/testing per Reg Guide 1.197, Figure 1 (TSTF-448)

Question - In your submittal, you re-analyzed the radiological dose and toxic gas consequences of the modified CREATS to the control room operators. Discuss in detail how you met the guidelines provided in new Regulatory Guide 1.196, “Control Room Habitability at Light-Water Nuclear Power Reactors.”

RG&E Plans-Reg Guide 1.196

- Licensing basis redefined per new Tech Specs
- System designed to meet licensing basis
- Doses calculated considering new design using Reg Guide 1.183
- Chemicals verified for assumed inleakage
- CR remains habitable for dose/chemical
- Smoke will be addressed per Reg Guide 1.196 and NEI 99-03

Reg Guide 1.196 Continued

- Maintenance and monitoring per Tech Spec prescribed program
- Configuration control and training - prescribed program, training established by modification process
- Degraded or non-conforming conditions - compensatory measures will be defined in plant procedures

Question - In your submittal, you proposed to revise, among other things, Ginna Technical Specification Sections 5.7.9, 5.5.16, and 5.6.7 as prescribed in proposed traveler TSTF-448 proposed by the Owner's Group. The staff has not accepted the proposed TSTF-448. The NRC response to the proposed TSTF-448 is provided in an NRC letter to NEI dated July 1, 2003. Discuss in detail how you intend to meet the guidelines provided in Appendix B to RG 1.196, "Acceptable Technical Specification and Bases Revision for Westinghouse Plants."

Response

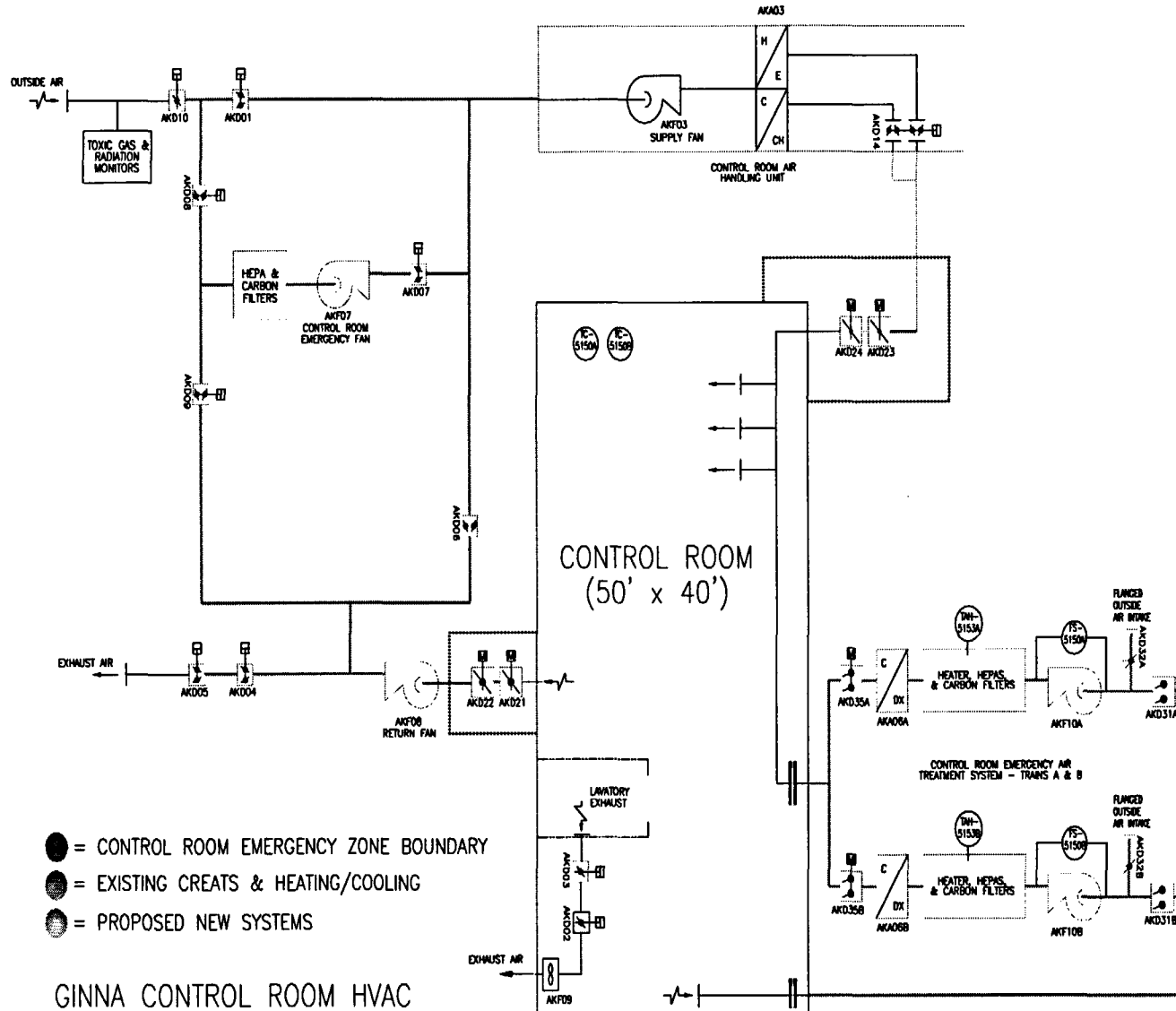
- RG&E will review/resubmit applicable sections of this submittal based on approved TSTF-448

Question - In Section 3.0, “Background” of the submittal, you briefly discussed the procedures for installing the new CREATS during plant operation. Discuss it in more detail with appropriate supporting drawings and figures how you intend to maintain the control room integrity during installation of the new CREATS.

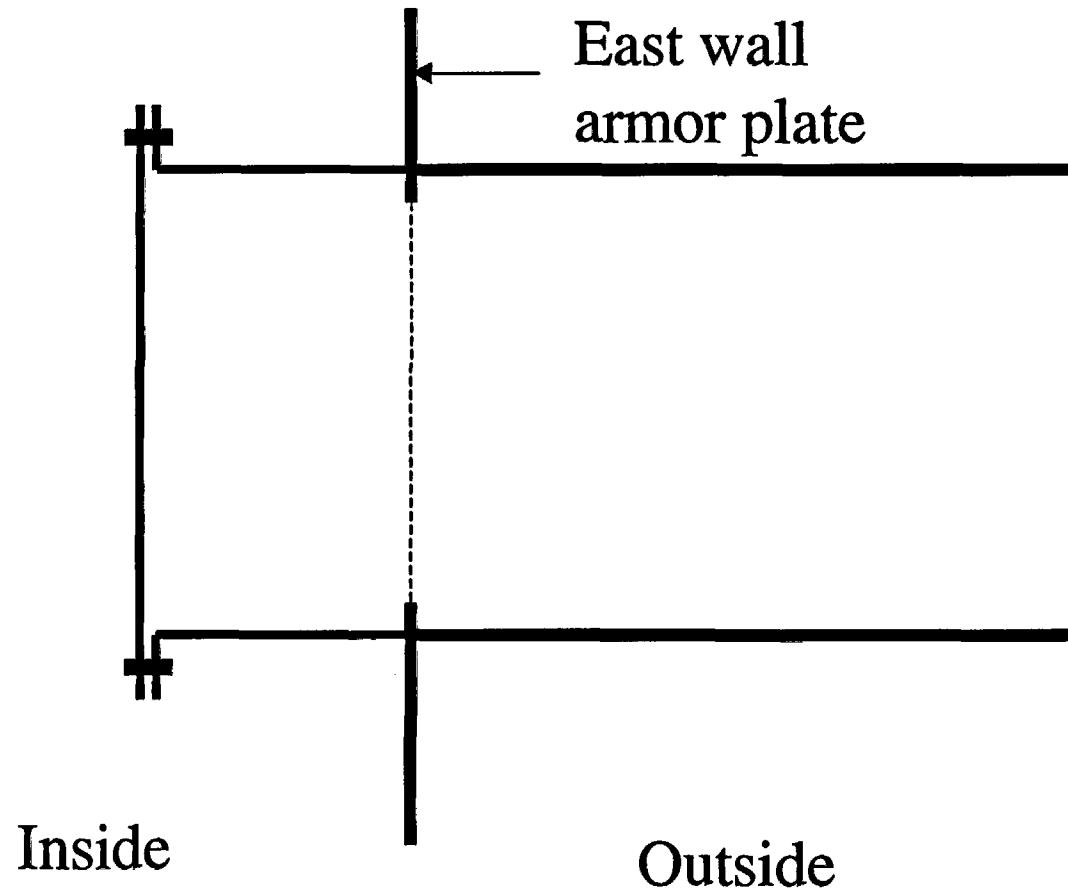
Overview

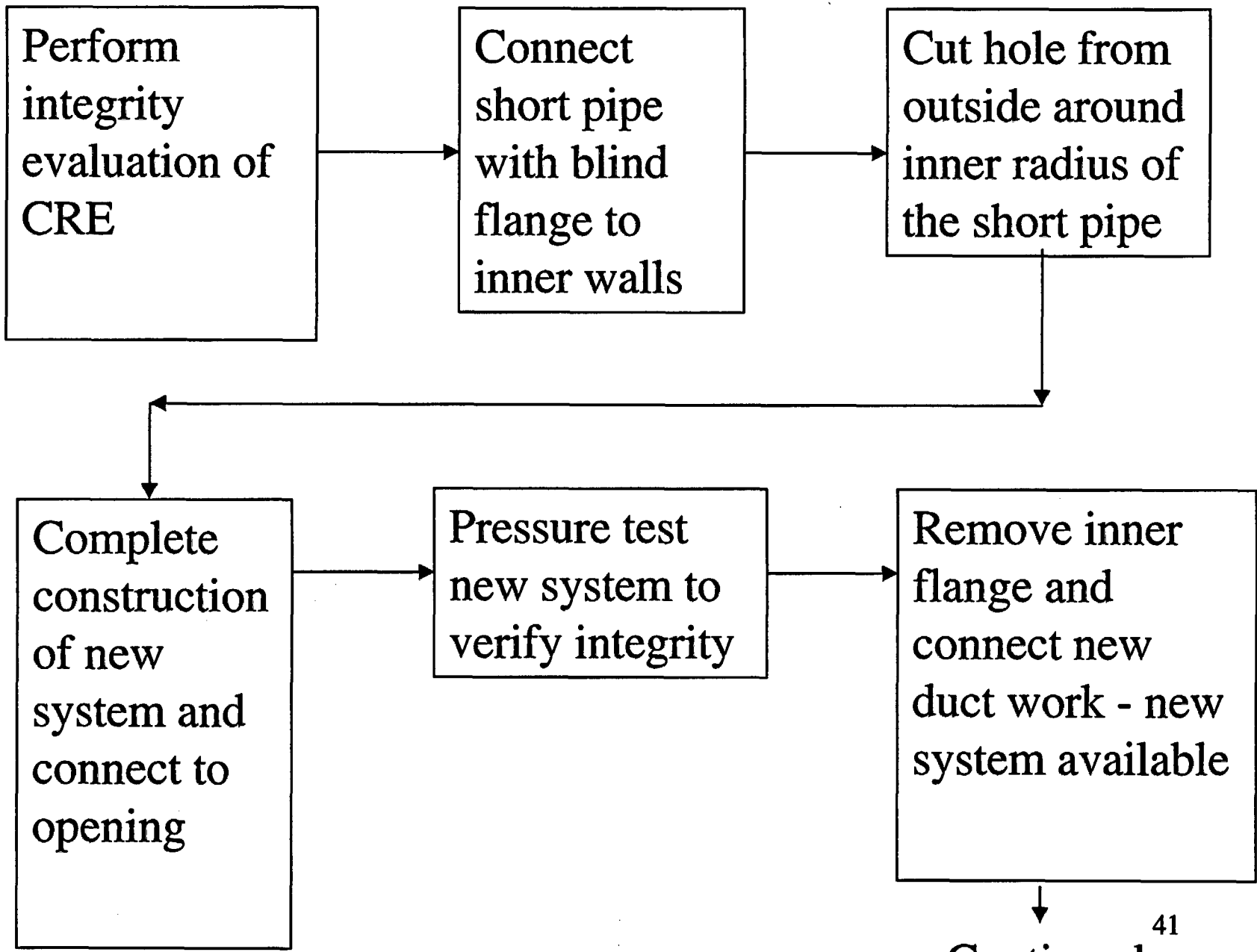
On-Line Construction Plans

CREATS Design

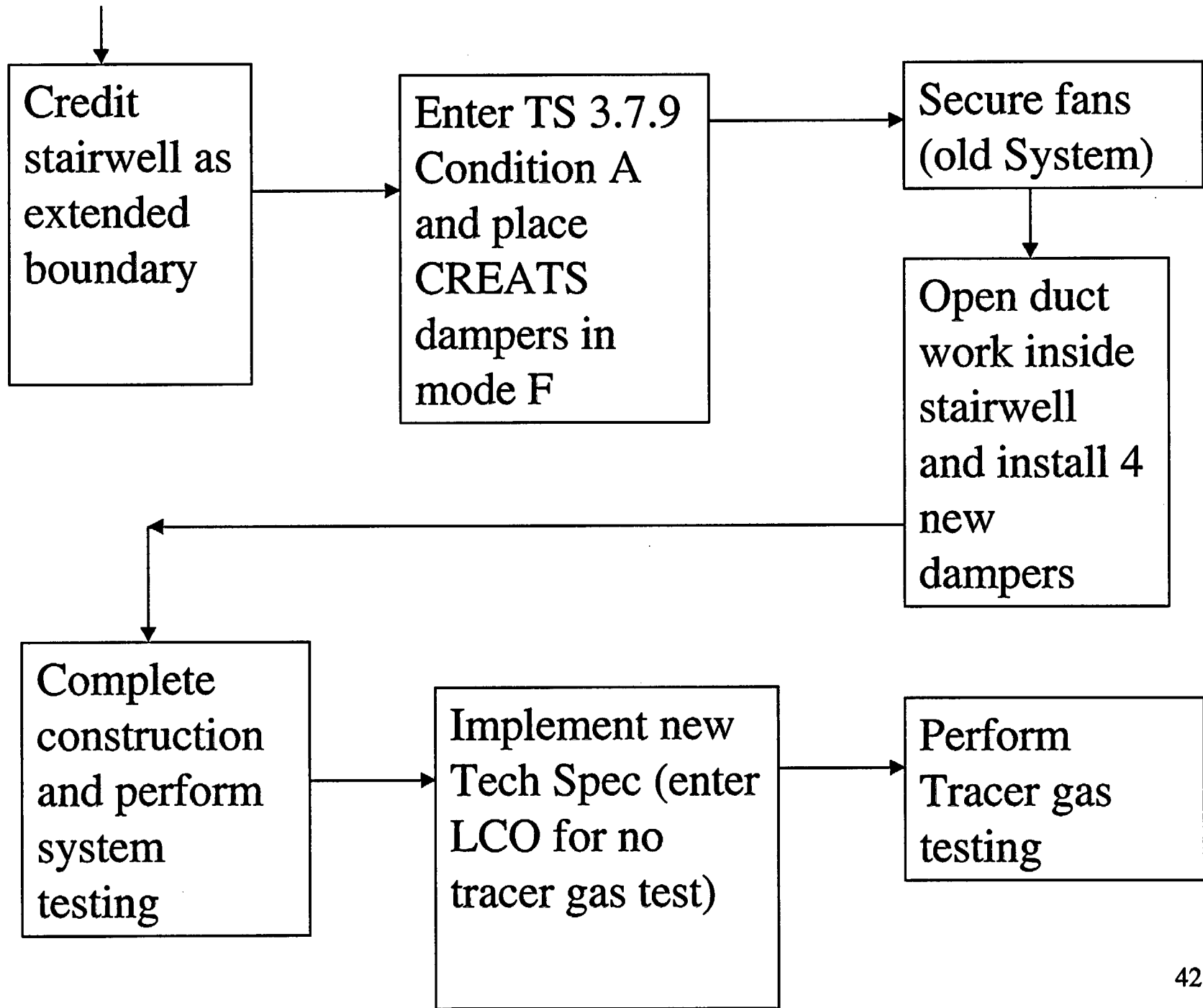


Control Room
Penetration
Flange





↓
Continued



Question - Explain the basis or derivation of 300 CFM unfiltered air inleakage rate used in your control room radiological consequence analysis.

- Reasonable number based on industry feedback and relatively small volume of the Ginna Control Room Emergency Zone

Staff Feedback and Questions

Open Discussion

Attachment 3

RG&E Response to Staff Questions

The following are questions asked by NRC staff during the public meeting on August 19, 2003 and RG&E's response.

1. What is the maximum letdown rate?

Response: 60 GPM (see UFSAR Table 9.3-6).

2. Is the ECCS leakage value of 4 GPH double the operability value?

Response: Yes.

3. Does Ginna have a design criteria for installation of charcoal filters within containment (e.g., pre-GDC)?

Response: Ginna Station was designed to Atomic Energy Forum (AIF) General Design Criteria (GDC) issued by the AEC for public comment on July 10, 1967. A search of the Ginna UFSAR indicated no design requirements for installation of charcoal filters within these GDC.

4. Please review the basis for the proposed 14" dP limit for the new filters. This seems too high. Need to look at N510, Section 8.3.1 for more guidance.

Response: Based on the referenced standard, RG&E will provide a revised number after initial startup testing of the new system.

5. NRC would prefer that RG&E use 2% versus 1% iodine partitioning for beyond 18 hours of ECCS leakage.

Response: Agree. RG&E will revise the appropriate dose calculations.

6. Is re-circulation assumed to occur at 1 hour?

Response: Yes.

7. What is the technical basis for lowering the NAOH tank levels?

Response: RG&E agreed to provide the basis/analysis in a future submittal.

8. Table 5.2 of Attachment 1 of the LAR submittal (page 38) shows that RG&E assumed certain efficiencies of the CNMT post accident charcoal filters, when RG&E is planning to remove these filters.

Response: This is incorrect and will be revised.

9. NRC believes that going beyond the Standard Review Plan (SRP) limit for locked rotor would not set a good precedent, even if the locked rotor accident is not within our current licensing basis. The NRC suggested that we evaluate ways of reducing excessive conservatism from this analysis.

Response: Agreed. RG&E will review the dose analysis and revise if appropriate.

10. The NRC needs the calculation for spray removal coefficient for particulate as described on page 46/47 of Attachment 1 to the LAR.

Response: RG&E will provide the calculation.

11. Can the NRC obtain copies of the HABIT code files (input/output)?

Response: These were provided on CD-ROM at the meeting.

12. The NRC would like detailed design descriptions of the new system (electrical/mechanical, P&IDs).

Response: RG&E agreed to provide design details.

13. What are the timing assumptions used for isolation of the control room?

Response: Sixty (60) seconds was used in all cases except Steam Generator Tube Rupture (SGTR), which assumes 6 minutes. This is bounding, especially since a SI signal has been added to the CREATS actuation circuitry.

14. For Fuel Handling Accidents (FHAs), is this a uniform release over 2 hours?

Response: Yes. RG&E assumed 99.9% of the activity was released over 2 hours using a constant flow rate.

15. Ginna assumed a 30-day Control Room dose for LOCAs. For other accidents, radioactivity will be retained within the control room. These should also reflect 30 days even though the calculated dose will not be changed.

Response: RG&E initially agreed at the meeting that the analysis should be revised. However, further evaluation indicates that this is unnecessary. GDC-19 and 10CFR50.67 require the cumulative dose to remain less than the stated limit for the "duration of the accident," which from a release perspective is defined by RG 1.183. The flow rates for the new system, assuming only one train operation, will turn over the volume of the Control Room approximately once every six minutes, quickly reducing the Control Room Iodine concentrations to minimal values after release termination. Subsequent to the release, the Control Room could also be purged to reduce the exposure, if necessary. For the Ginna analysis, the intervals were extended beyond the required release duration to provide the maximum integrated dose. Therefore, RG&E believes that there is no benefit to revising the dose calculations to include a 30 day evaluation. RG&E requests that the Staff notify us as soon as possible if they do not agree with this position so that the issue can be resolved in a timely manner.

16. For Main Steam Line Break (MSLB), is the 1 GPM leakage consistent with Technical Specification (TS) leakage?

Response: No, the actual limit is 0.1 GPM, making the assumption conservative. The 1GPM value is consistent with expected future Steam Generator (SG) leakage TS.

17. For MSLB and locked rotor accidents, what is the steam release assumed for the intact SG at 2 hours (Tables 7.1 and 9.1 of LAR Attachment 1)?

Response: RG&E agreed to provide the requested information.

18. Is the 150 GPD SG leakage consistent with TS?

Response: Yes, since the current TS limits per LCO 3.4.13 is 0.1 GPM per SG as averaged over 24 hours.

19. Please clarify LAR Attachment 1, Table 8.2 and what the mass flows actually mean, including the partitioning factors for Steam Generator Tube Ruptures (SGTR)

Response: RG&E will clarify the information in a future submittal.

20. Does LAR Attachment 1, Section 9.0 (locked rotor), first bullet, assume that the only leak path is via the SG?

Response: Yes.

21. In LAR Attachment 1, Table 10.1, what is the basis for the natural deposition coefficient value?

Response: RG&E agreed to provide this information in a future submittal.

22. On LAR Attachment 1 page 77, the second paragraph under 12.2, what is meant by "Section 7.1.6".

Response: This is apparently a typographical error which RG&E agreed to correct, and provide the necessary information in a future submittal.

23. Why did RG&E assume a 2-hour dispersion for Gas Decay Tank (GDT) rupture, especially since the previous analysis done for Ginna, related to TS Amendment 78, assumed a puff release?

Response: RG&E agreed to revise the analysis and do a puff release with no CR isolation, consistent with the analysis performed for Amendment 78.

24. LAR Attachment 1 page 80, bottom of page has typo (renumbers).

Response: RG&E agreed and will correct the typo.

25. Is the entire new ventilation system covered under 10CFR 50, Appendix B?

Response: Yes.

26. Are there any TS setpoint changes? If so, need to send all associated calculations.

Response: There are no TS setpoint changes.

27. When will Ginna resubmit the TS to reflect the final approved TSTF-448?

Response: The Staff and RG&E agreed to wait until later this year to review the status of the TSTF, and then decide on a submittal date.

Attachment 4

List of Regulatory Commitments

The following table identifies those actions committed to by RG&E in this document. Any other statements in this submittal are provided for information purposes and are not considered to be regulatory commitments.

REGULATORY COMMITMENT	DUE DATE
Revise the original CREATS LAR Attachment 1 to reflect Attachment 3, items 8, 10, 17, 19, 21, 22 and 24.	December 1, 2003
Revise dose calculations and LAR Attachment 1 to reflect Attachment 3, items 5 and 23.	December 1, 2003
Evaluate ways of reducing excessive conservatism from the Locked Rotor analysis and revise as necessary.	January 31, 2004
Revise the proposed 14"dP limit for the new CREATS filters after startup testing, as necessary.	After Startup testing of new system (anticipated May 2004)
Provide the NRC with the technical basis for lowering the required NaOH tank levels.	December 1, 2003
Provide NRC with detailed design descriptions of the new CREATS system (electrical/mechanical and P&IDs)	January 31, 2004
Resubmit appropriate Tech Spec sections based on resolution of TSTF-448	Upon approval of TSTF-448. If not issued by December 15, 2003, RG&E will hold further discussions with the NRC Staff.