



United States Nuclear Regulatory Commission

Reactor Systems LOCA Methodologies

Presented to

LATF

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by

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Office of Nuclear Reactor Regulation

TSTF-363

- Permits use of the most recent NRC-approved version of a topical report (TR) without having to submit an amendment to the facility operating license every time the TR is revised.
- These methods are used to establish operating limits in the COLR (GL 88-16).
- The COLR contains specific information identifying the particular revision number and date used.
- NRC expects licensees will ensure the new revision (non-LOCA) is applicable to their facility.
- **Does not apply to 50.46 (LOCA) methods; cycle-specific limits.**
 - NRC suggests that the TS list include the revision number and date of LOCA methods.

10 CFR 50.46

- The regulation requires that each plant have a (plant specific) licensing basis ECCS analysis, performed with an evaluation model which appropriately simulates thermal-hydraulic phenomena attendant to a LOCA at that specific plant.
- 50.46 requires NRC approval of the methodology and the input model for the plant (assumptions in the analysis).
 - Annual reporting requirements
 - Absolute value of the changes are summed.
 - When the changes equal or exceed 50 F, a reanalysis must be scheduled.
 - NRC is contacted within 30 days.
 - If the algebraic sum of the errors exceeds 2200 F, NRC is contacted immediately.
- A new version of a TR is required when the absolute value of the changes equal or exceeds 50 F for the demonstration plant in the TR.
- Local oxidation acceptance criterion of 17% includes LOCA and pre-LOCA oxidation.

10 CFR 50.59

- 50.59 does not override requirements established in other regulations.
- 50.59 cannot be used to modify LOCA methodologies.

ACCELERATED iSTS CONVERSION (PILOT)

- Purpose of This Presentation: Awareness of Initiative

Staff Lead: Pete Hearn, NRR/DIPM/IROB/TSS, 4/21/2004

SUMMARY

- **Accelerate the traditional iSTS conversion review from 16 months to 8 months**
- ***DC Cook is pilot conversion: start date 4/12/2004***
- **Expectations: Pilot Program, not a change in review process at this time**
- **Significant Potential for future iSTS Conversions and “mini Conversions” (conversion from early STS to iSTS Rev. 3)**

Background/History

- Standard Technical Specifications - 1979
NUREG-0123 (BWR5)
NUREG-0212 (CE)
NUREG-0452 (W)
- improved Standard Technical Specifications (iSTS)
 - Rev. 0 - September 1992
 - Rev. 1 - April 7, 1995
 - Rev. 2 - April 30, 2001
- Revisions incorporate generic changes to iSTS; over 400 TSTFs since iSTS Rev. 0
- iSTS, Rev. 3 - June 2004

iSTS Conversion Status

- Plants implementing iSTS - 69
- Plants currently converting to iSTS - 5
 - DC Cook, 1&2 (4/12/04)
 - Beaver Valley, 1&2 (10/04)
 - Monticello (4/05)
- Plants considering converting to iSTS - 30
- Plants not considering converting to iSTS - 0
(Note: There were 5 plants in this category until NRC initiated the pilot program for the accelerated review process)

GOALS

- Reduce conversion review time

Current Process

16 months

Accelerated Review

8 months (goal, NOT a metric!)

- Improved Predictability

- Licensees plan funds 1-2 years in advance of submittal
- Savings realized only upon implementation - Technical work begun 1 year prior to submittal; NRC reviews can take 12-20 months; implementation can take 6-12 months

CONCEPTS

- Team approach vs. individual reviews over extended period
- Decisions by licensee and NRC as issues arise vs. formal RAIs and licensee response
- Web based issue tracking
- Contentious issues resolved at public meetings
- Improved Public Access
 - Access to Web Tracking System
 - Issues documented in meeting notices and minutes
 - Public meetings

HOW SAVINGS REALIZED

- Eliminate relearning time between submittals
- Reduce iterative re-thinking of issues by NRC and licensee
- Reduce volume of formal correspondence (Both NRC RAIs and licensee submittals)
- Synergy of licensee and NRC staff teams
- Web based interactions & tracking
- Categorizing of TS changes as part of initial application

OTHER CONSIDERATIONS

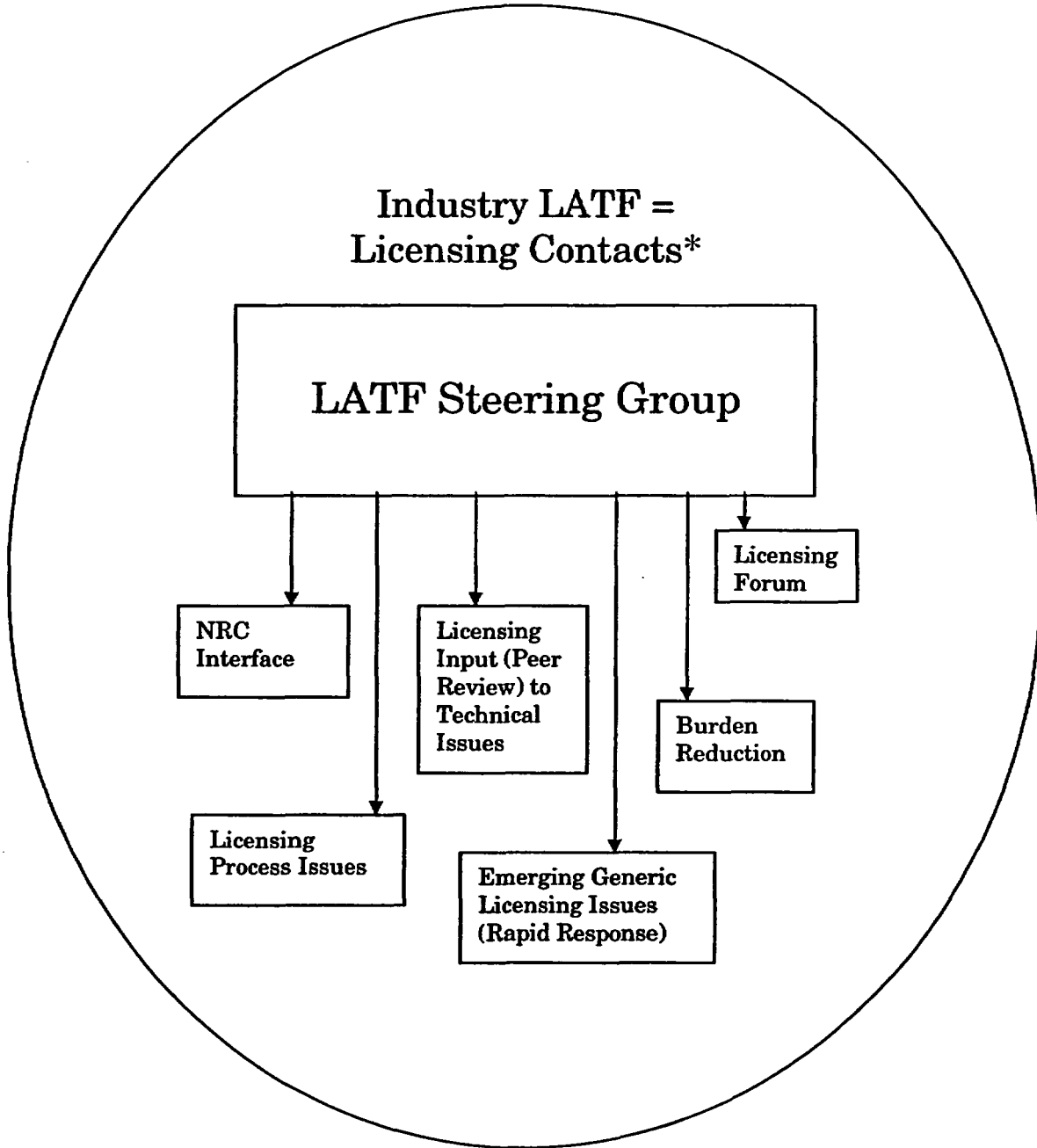
- Traditional Causes of Delays May Recur
 - Quality of Submittals
 - Delays in Licensee Responses to issues/RAIs
 - Beyond Scope Items/Deviations

Licensing Action Task Force

April 21, 2004

NEI HANDOUT

NEI Licensing Action Task Force Functional Organization



* Commercial reactor licensees; NSSS Owners Groups; NSSS vendors; EPRI; INPO; Regional Utility Groups; Special Issue Groups; nuclear-practice law firms (case-by-case); licensing services companies (case-by-case)

**LATF Steering Group
NRC INTERFACE COMMITTEE**

Chairman: Jim Fisicaro
Vice-Chairman: Mike Schoppman

Members: Pedro Salas
Keith Jury
Mike Krupa

Deliverables:

- Strategic plan for interfacing with NRC on licensing-process issues
- Methodology for prioritizing LATF action items
- Problem statements, white papers, and other work products for use in meetings or correspondence with NRC

Interface Process:

- Primary oversight committee within the LATF Steering Group
- Policy-level planning for LATF action items
- Establish standard practices for the NRC/NEI LATF interface
- Develop agendas and work products for NRC meetings
- Coordinate LATF presentations at public meetings
- Coordinate follow-up discussions with NRC between public meetings
- Identify licensing-process issues that may need NRC/NEI LATF attention
- Coordinate with Industry Licensing Managers to obtain information in support of LATF meetings and correspondence
- Review and approve final LATF products for use in meetings, forums, and correspondence

Administration:

- Hold meetings between the LATF SG and NRC approximately quarterly
- SG Teams meet or teleconference as needed to prepare and plan their efforts
- The LATF SG will endorse work products presented at NRC meetings

**LATF Steering Group
LICENSING PROCESS COMMITTEE**

Chairman: Donald R. Woodlan
Vice-Chairman: Scott Bauer

Members: Patricia Campbell
Dale Wuokko
Charles Brinkman

Deliverables

- White papers on selected topics
- Problem statements for new issues

Issue Process

- Issues can originate from multiple locations
- Add issue to list and determine priority (priority may be revised during process as appropriate)
- If warranted, based on discussions within committee, within LATF, and within industry, develop a problem statement
- Present issue problem statement to full LATF and to NRC LATF
- If appropriate, develop a white paper
- Work with NRC to resolve issue
- Obtain NRC endorsement of white paper

Committee Process

- Chairman maintain a list of potential and active issues with status
- Rotate tasks (developing problem statement or white papers) among committee members or others
- Hold conference calls at least quarterly (between LATF meetings)

Interfaces

- Meet with LATF during scheduled LATF meetings
- Represent committee during meetings between NEI LATF and NRC
- Communicate directly with NRC staff if cleared first with NRC LATF representative

LATF Steering Group Emerging Generic Issues Committee

Chairman: Keith Jury, Exelon
Vice Chairman: Donald Hoffman, Excel Services

Members: Doug McKinney, Southern Nuclear
Rick Garner, Progress Energy
Pete Kokolakis, Entergy Northeast
Ken Ainger, Exelon

Purpose

- Provide for strategically addressing of emerging generic issues with the Industry and the NRC

Deliverables

- White Papers on candidate generic emerging issues
- Implementation guidance for resolution generic issues

Generic Issue Resolution Process

- Emerging issues may originate from Industry or NRC sources
- Establish a threshold to determine which emerging issues are candidates for the Emerging Generic Issues Committee to address
- Develop a Generic Issues Statement defining the issue, establish a priority and outline the process and schedule for resolution
- Present Generic Issue Statement to Industry LATF and NRC LATF
- Develop mutually agreeable process and schedule for generic issue resolution with the NRC
- Develop White Papers if appropriate
- Work closely with NRC and Industry to resolve the generic issue
- Obtain NRC endorsement of resolution/White Paper
- Promulgate issue resolution to Industry with guidance as necessary

Committee Process

- Maintain status of identified emerging generic issues
- Ensure accurate and timely resolution of candidate generic issues
- Communicate at least once per quarter between LATF meetings

Interfaces

- Maintain interface with the Industry Owners Groups Committees and NEI Task Forces
- Represent Committee at NEI LATF and NRC meetings
- Communicate with all affected parties as the process dictates

**LATF Steering Group
LICENSING FORUM COMMITTEE**

Chairman: Mike Schoppman

Members: Jim Fisicaro
Don Woodlan
Pedro Salas
Keith Jury
Mike Krupa

Deliverables:

- Forum logistics (hotel, travel options, meals)
- Registration Form
- Forum Agenda
- Binder/Handouts
- Attendance List
- Forum Summary

Forum Process:

- Choose the theme for Forum 2004
- Committee members suggest topics and speakers
- Determine proper balance between plenary sessions and breakout sessions
- Chairman invites prospective speakers
- Chairman coordinates NRC participation
- Chairman conducts the Forum with assistance from committee members

Administration:

- Chairman/Members hold periodic telecons to compile deliverables
- NEI Conference Department handles logistics

(Note: Charters pending for Licensing Input to Technical Issues COMMITTEE and Burden Reduction COMMITTEE)

LATF Action Items - Composite List

#	Source	Requirement	Subject	Recommendation	Committee	NEI Contact(s)	NRC Contact(s)	Schedule	Status
2003-01	RUBI 01	10 CFR 19.13(b)	Worker dose report - annual report from licensee to each radiation worker.	Delete - redundant to 19.13(a) reports	Burden Reduction	Schoppman, Andersen	Reckley		69 FR 8350, 2/24/04
2003-02	RUBI 02	10 CFR 20.1003	Definition of Total Effective Dose Equivalent (TEDE).	Revise definition per RIS 2003-04	Burden Reduction	Schoppman, Andersen	Reckley		69 FR 8350, 2/24/04
2003-03	RUBI 03	10 CFR 20.1904	Establish a threshold for labeling containers.	Exclude containers inside the radiation protection area unless the dose rate or contamination level is greater than RPA ambient	Burden Reduction	Schoppman, Andersen	Reckley		69 FR 8350, 2/24/04
2003-04	RUBI 04	10 CFR 20.2104	Determination of prior occupational dose.	Eliminate the requirement for cumulative dose records, because all dose limits are annual.	Burden Reduction	Schoppman, Andersen	Reckley		69 FR 8350, 2/24/04
2003-05	RUBI 05	10 CFR 50.4 & 50.4(b)(6)	Requirements regarding addressees, distribution lists, forms of communication, etc.	Rulemaking to update 50.4, or reduce the number of names on the Service list, or add an "electronic information exchange" (EIE) option to the regulations.	Burden Reduction				Final EIE Rule 10/10/03, effective 1/1/04. CLOSED
2003-06	RUBI 06	10 CFR 50.33(f)	Financial Qualification - contents of applications.	Eliminate the requirement	Burden Reduction	Schoppman	Reckley		
2003-07	RUBI 07	10 CFR 50.34(f)	Additional TMI-related requirements for post-1982 applications.	Eliminate unnecessary TMI-related requirements	Burden Reduction				NEI Part 52 task force is pursuing this item. DROP