

August 18, 1997

MEMORANDUM TO: David B. Matthews, Chief
Generic Issues and Environmental Projects Branch
Division of Reactor Program Management, NRR

FROM: James H. Wilson, Senior Project Manager Original Signed By:
Standardization Project Directorate
Division of Reactor Program Management, NRR

SUBJECT: SUMMARY OF PUBLIC MEETING HELD ON JULY 31, 1997, WITH THE
ELECTRIC POWER RESEARCH INSTITUTE (EPRI) TO DISCUSS EPRI'S
COATINGS PROGRAM

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Project No. 669

Attachments: As stated

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Document Name: G:\JHW1\MEETSUM.731

OFC	PGEB <i>JHW</i>	(A) SC: PGEB	C: EMCB	C: PGEB <i>JHW</i>
NAME	JHWilson:sw	MJCase <i>JHW</i>	JStrosnider <i>ES</i>	DBMatthews <i>JHW</i>
DATE	08/15/97	08/15/97 <i>for</i>	08/15/97	08/18/97

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NUCLEAR REGULATORY COMMISSION
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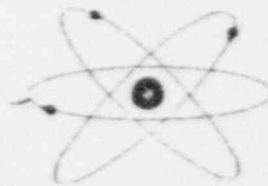
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J. Strosnider	NRC
T. Sullivan	NRC
J. Davis	NRC
R. Elliott	NRC
P. Lobel	NRC
A. Serkiz	NRC
E. Woolridge	NRC
J. Medoff	NRC
L. Campbell	NRC
M. Marshall	NRC
K. Battige	NRC
J. P. Wilson	NRC
F. Rosch	EPRI
D. Hill	ASTM/WPPSS
J. Butler	NEI
G. Dolderer	FPL/NUCC
R. Howard	TVA/NUCC
L. Waggoner	Duke/NUCC
D. Zabala	SNOC/NUCC
M. Carr	BGE-CCNP
J. Caturano	ComED/NUCC
K. Fry	Southern Nuclear
J. Adrian	Southern Company
S. Crawford	Consultant
T. Sutter	Bechtel
W. Houston	Sequoia Consulting Group
G. Spires	Advanced Corrosion Engineering
K. Kunert	NAC International



TIMELINE OF NUCLEAR COATING STANDARDS

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Don Hill - July 31, 1997

PROPOSED STANDARD:
D 33.10 (97.1) T

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FOR LEVEL 1 AREAS.**

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 - Qualification of the Person Doing Survey.
 - Qualification of the Evaluator of Survey
 - Must Be Done Every Two (2) Years.
2. Identify Present Materials in Use.
3. Find Qualification Data of Materials - Both Existing and That to Be Used for Maintenance.
4. If Unqualified Coatings Are in Service Level 1 Areas - Go Evaluate Them.
5. Diving Team Suggested for Inspection and Underwater Repair.
6. Determine Surface Preparation.
7. Determine Application Methods and Equipment.
8. Determine Compatibility - Suggests ASTM D 5064.
9. Be Aware of Effects Upon Stainless.
10. Suggests ASTM D-3843 for QA If Owner'S QA Is Not Used.
11. Allows for Commercial Grade Dedication in Keeping With 10 CFR, Part 21.

PRE R.G. 1.54 PLANTS:

- 1) Liner Plate: Vinyl**
- 2) Dresden Tests**
- 3) All "UNQUALIFIED" - Vinyl;
Alkyds; Vinyl Alkyds; Epoxy
Esters.**
- 4) Thin Film Epoxy Systems**

**POST R.G. 1.54 PLANTS:
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Epoxy**
- 2) Inorganic Zinc + Epoxy**
- 3) Inorganic Zinc No Top Coat**
- 4) Epoxy + Epoxy (Thin Film)**
- 5) Epoxy Hi Build Mastics**

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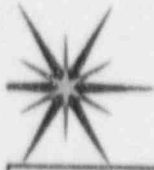
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3) Train and Re-train

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3.2 Workman using SSPC; ASTM; your procedures and new technology.



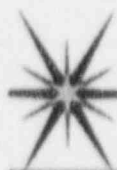
Guideline on the Elements of a Nuclear Safety-Related Coatings Program

Sponsored by EPRI
Plant Support Engineering Program
Project Manager: Fran Rosch



Coatings Guideline

- Background: NRC Proposed GL
 - Requests summary of Class 1 Coatings Control Program
 - Compliance with your plant's licensing basis related to the amount and tracking of unqualified coatings



EPRI Coatings Guideline

- PSE held a coatings meeting with the NUCC on May 22, 1997
 - Evaluate proposed GL
 - Provide comments to assist NEI with response
 - Attendees included coatings experts and individuals involved in strainer blockage work



EPRI Coatings Guideline

- Utilities proposed EPRI develop a guideline to:
 - Assist utilities in assuring their current programs provide adequate guidance for the procurement, applications, and maintenance of SR coatings



EPRI Coatings Guideline

● For more information contact:

- Bob Howard, TVA
Utility Task Group Chairman
Ph: (423) 751-8208
rhoward@tva.gov
- Fran Rosch, EPRI
Project Manager
Ph: (704) 547-6073
frosch@lawson.epri.com



Coatings Guideline

- Guideline is to implement and be consistent with existing requirements
- Guideline development is being coordinated with Owners Groups involved in strainer/sump blockage issue resolution
- Guideline to reference existing industry guidance (e.g., ASTM standards) where applicable



Project Status

- First meeting held on July 29-30, 1997
 - Developed a draft outline for the guideline
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**Guidelines on the Elements of a
Nuclear Safety Related Coatings Control Program
Draft Outline - July 29, 1997**

- Application of outside containment coatings
- Application of touch-up and repair
- Precautions for surface preparation and coatings application
- Environmental controls
- Waste Management

7.0 Inspection of Surface Preparation and Application

- Types of Inspection
- Surveillance Inspections
- Hold Point Inspections - Containment
- Hold Point Inspections - Outside Containment
- Final Inspections - Containment
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8.0 Condition Assessment

- Scope of coatings to be assessed
- Prioritization of coatings to be assessed
- Condition assessment techniques (visual plus others)
- Frequency of condition assessment
- Assessment criteria
- Evaluation of data
- Documentation (paper, photos, video)
- Dispositions of observations (evaluate, repair, replace, follow-up)
- Guidance for the early identification of failures
- Coordination of condition assessment with other plant Inspections
 - ◊ Take credit for other inspections (ASME Section XI)
- Trending of assessment data and coating performance

9.0 Personnel Training and Qualification

- Table of functions and recommended qualification and training

10. Management of Unqualified Coatings

- Definition of "unqualified" coatings
- General guidance on evaluating amount of unqualified coatings in containment
- Guidance on managing unqualified coatings (may be a coatings log)

**Guidelines on the Elements of a
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- 1.0 Introduction/Background
- 2.0 Listing of Coatings Related Information
 - Applicable Regulatory Documents
 - Industry Standards
 - Definitions
 - Acronyms
- 3.0 Safety-Related Coatings Program
 - Scope of coatings programs
 - Program Responsibilities
 - Investigate design basis and program commitments
 - ◊ Inside containment general coatings
 - ◊ Inside containment immersion coatings
 - ◊ Outside containment general coatings
 - ◊ Outside containment immersion coatings
 - Discuss sump/strainer blockage and other plant issues related to safety-related coatings
- 4.0 Qualification/Selection of Coatings Systems
 - Qualification testing of inside containment coatings - general
 - Qualification testing of inside containment coatings - immersion
 - Qualification testing of outside containment coatings - immersion
 - Evaluation and acceptance of qualification test data
- 5.0 Material Procurement and Materials Management
 - Development of procurement specification
 - Procurement from 10 CFR 50, Appendix B approved suppliers
 - Commercial grade dedication
 - Packaging, shipping, handling, storage, shelf life
 - Receipt Inspection
 - Documentation
- 6.0 Surface Preparation and Coatings Application
 - Surface preparation for containment coatings - general
 - Surface preparation for containment coatings - immersion
 - Surface preparation for outside containment coatings - immersion
 - Surface preparation for touch-up and repair (3 categories)
 - Application of containment coatings

Project No. 669
Electric Power Research Institute

Mr. Raymond C. Torok
Project Manager, Nuclear Power Group
Electric Power Research Institute
Post Office Box 10412
Palo Alto, CA 94303

Mr. Gary L. Vine
Senior Washington Representative
Electric Power Research Institute
2000 L Street, N.W., Suite 805
Washington, DC 20036

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NAME	JHWilson:sw	MJCase <i>JHW</i>	JStrosnider <i>EAS</i>	DBMatthews
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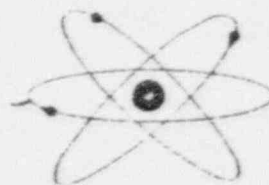
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Guideline on the Elements of a Nuclear Safety-Related Coatings Program

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Plant Support Engineering Program
Project Manager: Fran Rosch



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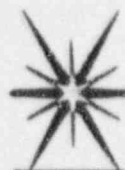
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