NRC MEETING

ASME BPV III & BPV XI

August 6, 2010

ASME BPV III ORGANIZATION

BPV III Standards Committee

- Executive Committee on Strategy & Management
- Executive Committee on Administration
  - Stakeholders Groups
  - Honorary Members
- Subcommittee on Design
- Subcommittee on Materials, Fabrication & Examination
- Subcommittee on General Requirements
- Subgroup on Pressure Relief
- Joint ACI-ASME Committee

ASME BPV III ORGANIZATION

Division of Work and Responsibility

Division Committees

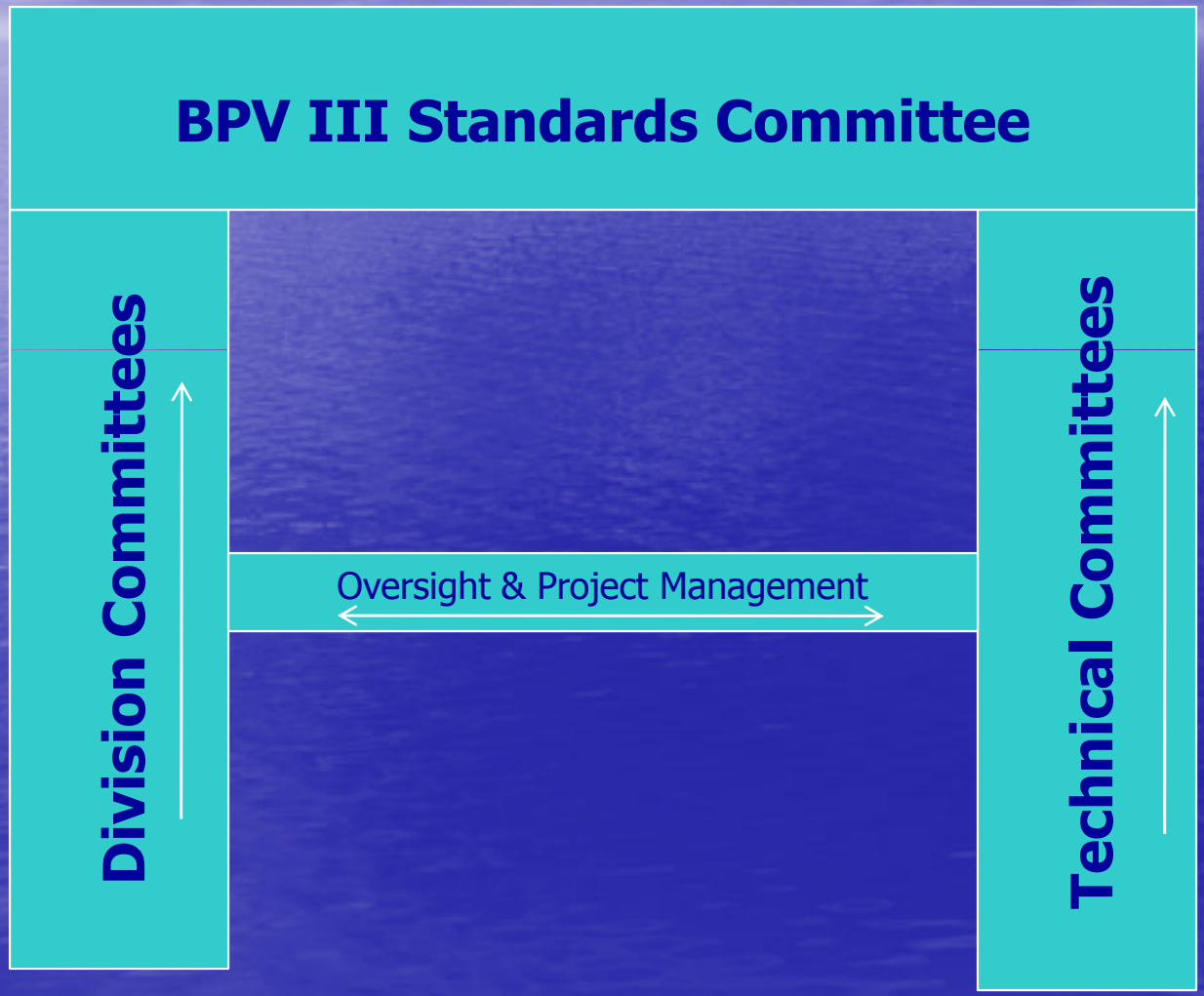
- Division 1
- Division 2
- Division 3
- Division 4
- Division 5

Technical Committees

- SC Design
- SC M, F, & E
- SC GR
- SG Pressure Relief
- Joint Committee ACI-ASME

ASME BPV III ORGANIZATION

BPV III Standards Committee



BPV III EXECUTIVE COMMITTEE ADMINISTRATION

Membership

- Chair BPV III
- Vice Chair BPV III
- Secretary BPV III
- Chair Strategy and Management
- Chair Subcommittee Design
- Chair Joint ACI-ASME Committee
- Chair Subcommittee Materials, Fabrication & Examination
- Chair Subcommittee General Requirements

BPV III EXECUTIVE COMMITTEE

STAKEHOLDERS GROUPS

SUBGROUP
HDPE Materials

SUBGROUP
Magnetic Confinement Fusion Energy Devices

SUBGROUP
High Temperature Gas Cooled Reactors

SUBGROUP
High Temperature Liquid Metal Reactors

EXECUTIVE COMMITTEE STRATEGY & MANAGEMENT

Membership (27)

- Code User Executive Representatives (12 invited)
- Generic Subcommittee Chairs (4)
- Chairs Book Committees (5)
  - SC Division 2 (Joint Committee)
  - SG Division 1
  - SG Division 3
  - SG Division 4
  - SG Division 5
- Chairs Technical Projects (6)
  - SG Editing & Review
  - SG Resource Management
  - SG on Industry Experience for New Plants
  - SG HDPE Pipe
  - SG Probabilistic & Risk Informed Methods
  - SWG Advanced LWR Issues

ASME BPV III
Strategy & Management

Subgroup
High Temperature Reactors (Div 5)

Working Group
Liquid Metal Reactors

Working Group
HTGR

ASME BPV III
Strategy & Management

Subgroup
High Density Polyethylene Pipe

Working Group

HDPE Pipe – Research & Development

ASME BPV III ORGANIZATION

SUBCOMMITTEE DESIGN III

- Subgroup Component Design
- Subgroup Elevated Temperature Technology
- Working Group Design Analysis
- Working Group Creep/Fatigue
- Special Working Group R&D

SUBCOMMITTEE DESIGN III ORGANIZATION

SUBGROUP COMPONENT DESIGN

- Working Group Vessel Design
- Working Group Piping Design
- Working Group Pump Design
- Working Group Valve Design
- Working Group Supports
- Working Group Div 3 Design
- Working Group Div 4 Design
- Working Group Core Supports
- Working Group Probabilistic Design
- Special Working Group Environmental Effects

ASME BPV III ORGANIZATION

SUBCOMMITTEE DESIGN III (cont'd)

- Subgroup Graphite & Composite Design
- Subgroup New Design Applications III
- Subgroup Generic Design Analyses (I,III,VIII)
- Subgroup Fatigue Strength (I,III,VIII)
- Subgroup Elevated Temp Construction (I,III,VIII)

ASME BPV III ORGANIZATION

JOINT ACI-ASME COMMITTEE

- Working Group Design
- Working Group Materials, Fabrication & Examination
- Special Working Group Modernization

ASME BPV III ORGANIZATION

SUBCOMMITTEE MATERIALS, FABRICATION & EXAMINATION

- Subgroup Materials
  - Working Group Elevated Temperature Materials (creep/fatigue)
  - Working Group HDPE Materials
- Subgroup Graphite & Composite Materials
- Subgroup Fabrication & Examination

ASME BPV III ORGANIZATION

SUBCOMMITTEE
GENERAL REQUIREMENTS

Subgroup Duties & Responsibilities

Working Group
Graphite & Composite Materials

Working Group
Duties & Responsibilities
Div 4, 5

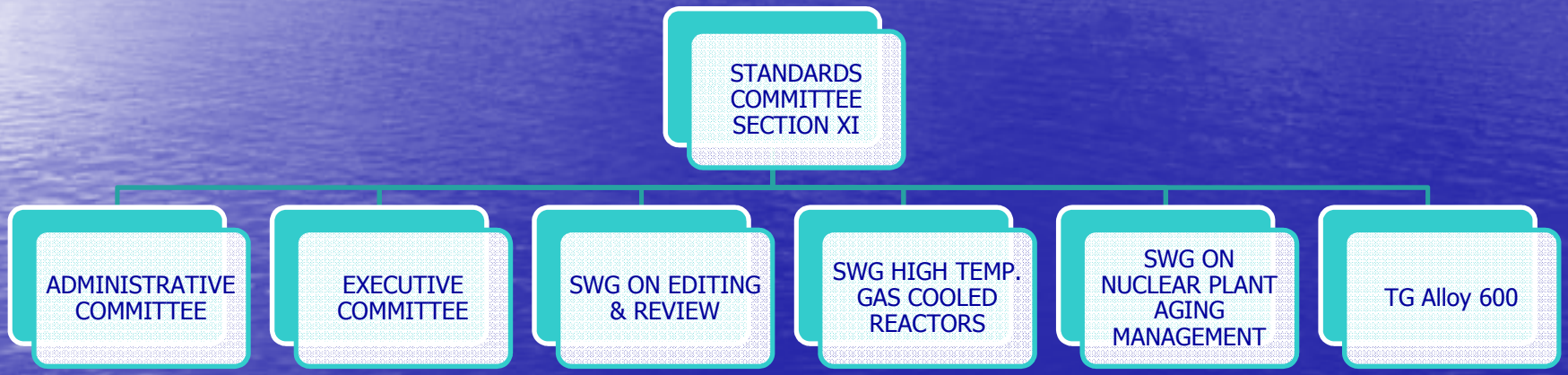
Working Group
General Requirements
Div 3

Working Group
Quality Assurance, Certification & Stamping

Special Working Group
HDPE Materials

Working Group
Duties & Responsibilities

ASME SECTION XI ORGANIZATION



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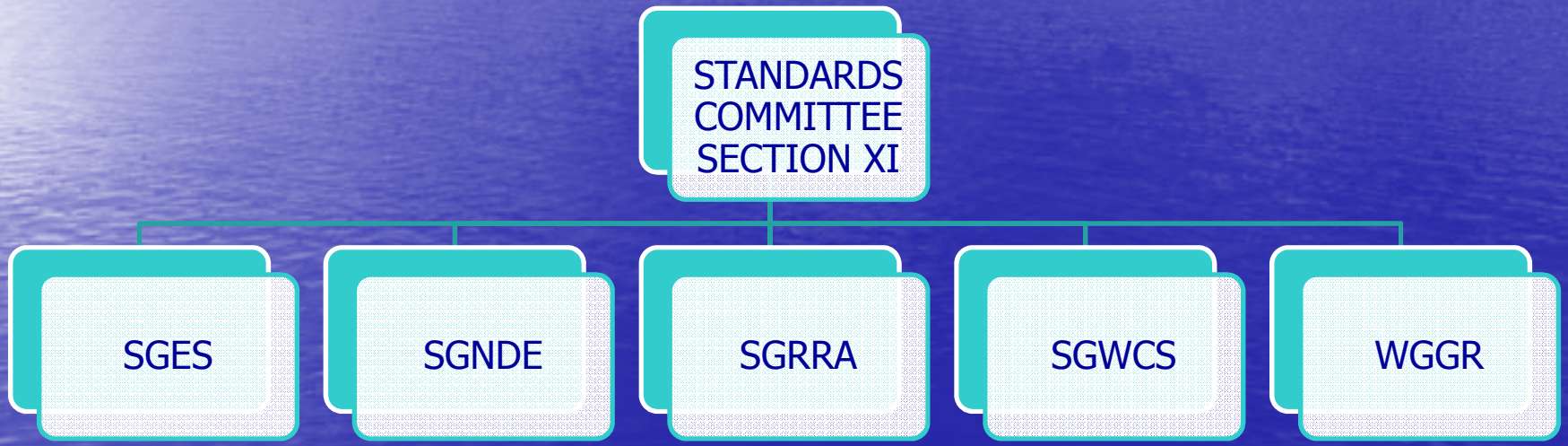

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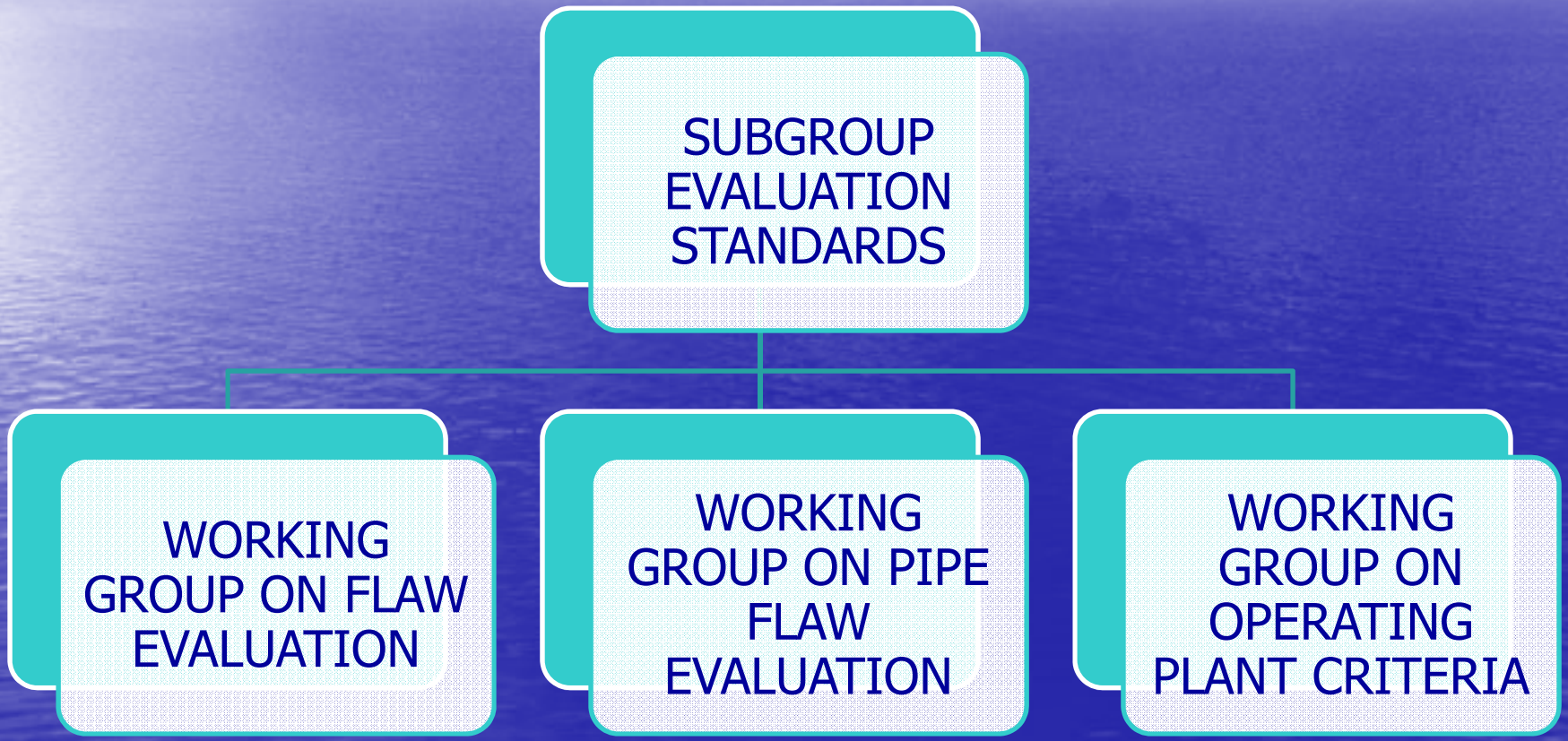

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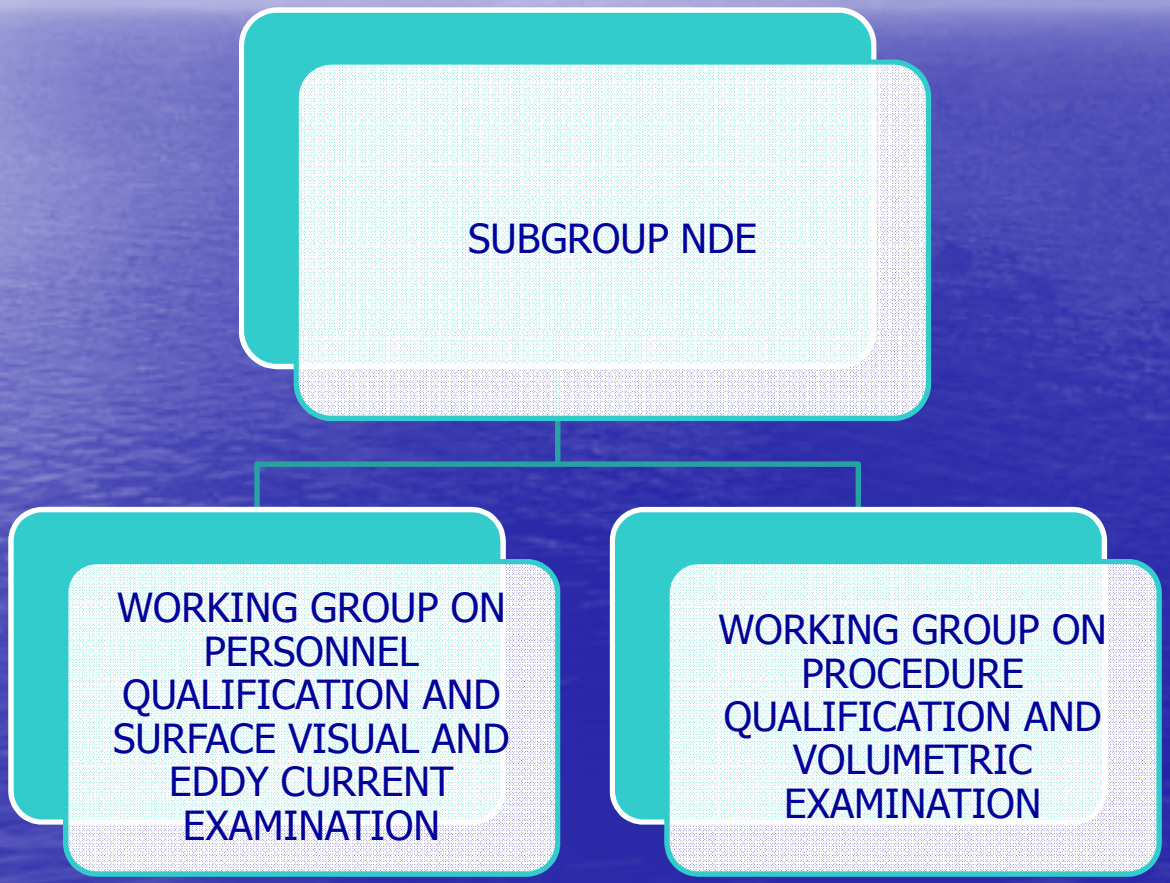

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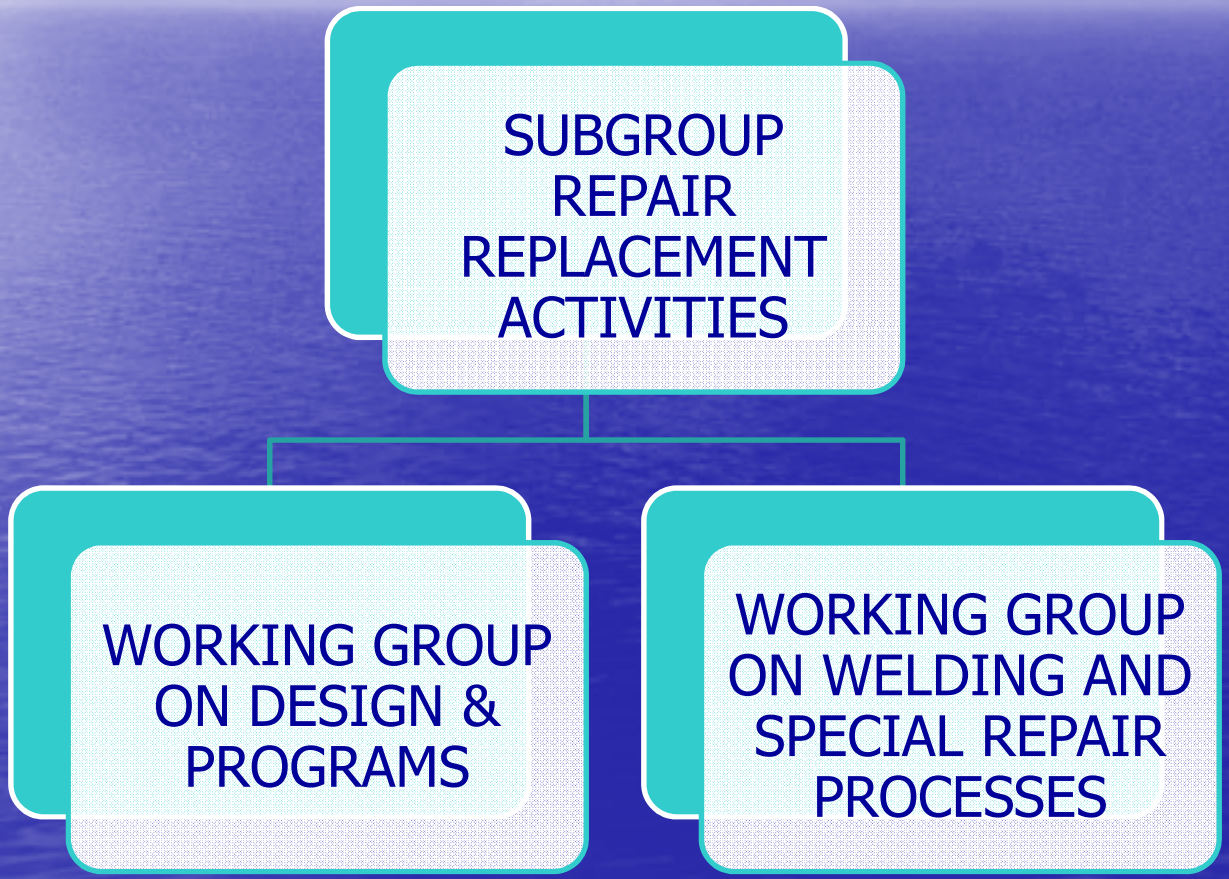

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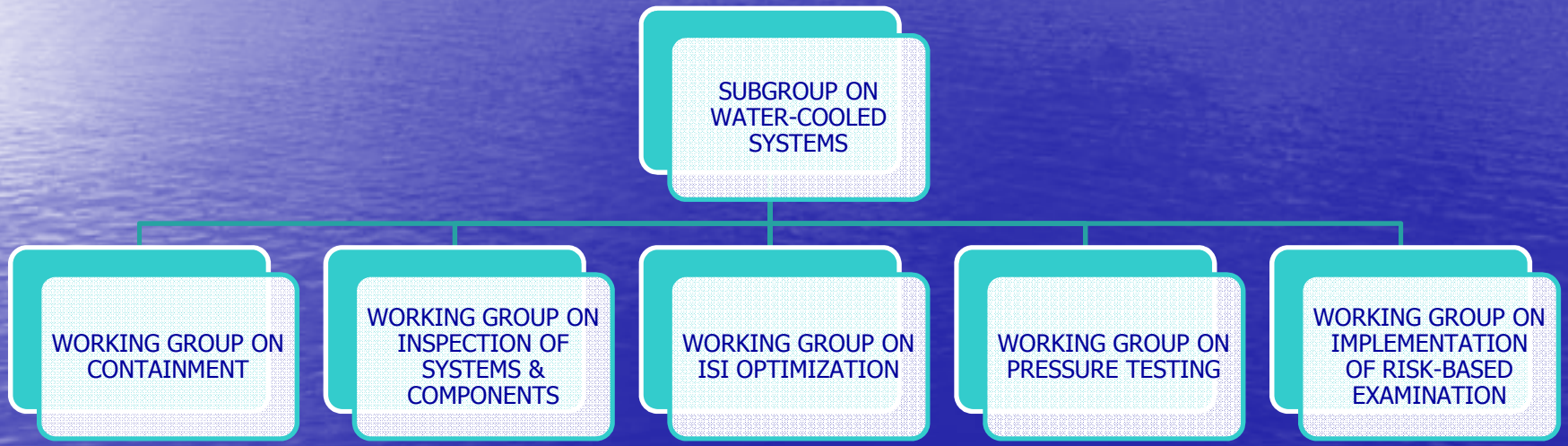

ASME SECTION XI ACTIVITIES

- 10CFR50.55a
  - Presentations by NRC staff to inform ASME on proposed rule
    - This allows ASME to be aware of the conditions that may be included in the final rule
    - Helps in the development of a response during the public comment period
    - Opens up the lines of communication between the NRC Staff and ASME
    - Hopefully the NRC Staff finds this helpful

ASME SECTION XI ACTIVITIES

- 10CFR50.55a (cont.)
  - 1989 Edition 57 FR 34666
    August 6, 1992
  - 1996 Addenda 64 FR 51370
    September 22, 1999
  - 2000 Addenda 67 FR 60520
    September 26, 2002
  - 2003 Addenda 69 FR 58804
    October 1, 2004
  - 2004 Edition 73 FR 52730
    October 10, 2008

ASME SECTION XI ACTIVITIES

- 10CFR50.55a (cont.)
  - NRC is doing much better in reviewing and adopting the code edition/addenda into 10CFR
  - Public comment period just ended for the proposed rule for the 2008 Addenda
    - This brings the 10CFR only two publications behind (2009 Addenda and 2010 Edition)
    - Need to continue this pace

ASME SECTION XI ACTIVITIES

- 10CFR50.55a (cont.)
  - ASME eliminating addenda service with 2010 Edition (last addenda will be 2011)
  - Following editions will be every two years (starting with 2013 Edition)
  - NRC needs to continue to make progress in this area to stay up with the changes made by ASME in publication cycles
    - Many NRC conditions are incorporated into later editions

ASME SECTION XI ACTIVITIES

- 10CFR50.55a (cont.)
  - Code Cases are lagging behind
    - Next RG 1.147 will only include up to Supplement 0 of the 2007 Edition
  - Results in an increase of relief requests from the industry
    - Puts an additional burden on the NRC , ASME, and Utilities
  - NRC conditions are addressed by revision to code cases
    - If there is no generic approval for use then a relief request is needed.
  - Is there anything we can do to help in this area

ASME SECTION XI ACTIVITIES

- 10CFR50.55a (cont.)
  - NRC Process for adoption of code cases
    - There tends to be a "fast-track" process for incorporating code cases that add new requirements
    - Can that "fast-track" process be used for adding other code cases that are a benefit for both the industry and NRC (e.g., N-702, N-716)

ASME SECTION XI ACTIVITIES

- 10CFR50.55a (cont.)
  - ASME tracks the NRC conditions and prioritizes them
  - Most of the conditions have been incorporated into the later editions (revisions to code cases)
  - If rulemaking can keep up less relief requests would be needed

ASME SECTION XI ACTIVITIES

- 10CFR50.55a (cont.)
  - Comments on rulemaking process
    - Scope
      - ASME would like to have each edition incorporated after it is published
    - Frequency
      - ASME will be publishing on 2-year cycle would like to have rulemaking process on 2-year cycle as well
    - Communication
      - ASME believes that it would be beneficial to be more predictable

ASME SECTION XI ACTIVITIES

- 10CFR50.55a (cont.)
  - Over the years, several NRC staff have discussed the potential for an industry workshop as preliminary step towards making the regulation:
    - Less open to interpretation
    - Easier to follow (format-wise)
  - ASME supports the simplification of 10CFR
    - E.g., reformatting for better understanding by licensees and others
  - ASME is willing to help in this process if requested

10CFR Part 52 - SECTION III & XI

- 10CFR Part 52
  - NRC Staff made a presentation to remind ASME that ASME Section III was required until finding on 52.103(g)
  - ASME formed a Special Task Team
    - Task Team assigned to develop code changes to address this issue
    - Draft Section III Code Case (10-858) has been developed and is going through the consensus process
    - Status of Code Case in BPV III

NEW REACTOR ACTIVITIES

- New Reactors
  - BPV III and XI created a Joint Subgroup Industry Experience for New Plants
    - Access for Inservice Inspection
    - Weld Coverage due to Surface Conditions
    - Reducing Weld Repairs during Construction
      - Evaluating Construction Flaws using Fitness for Service
    - Administrative issues related to III/XI repairs, modification issues
  - New SWG on Advanced LWR Issues established at recent meeting

ASME SECTION XI ACTIVITIES

- Buried Piping
  - BPV III actions
    - Draft Code Case for Design of Metallic Buried Piping (Section III)
    - Revise Code Case N-755 for use of PE Pipe to include more detailed requirements for material suppliers and a repair option (Section III)
  - BPV XI actions
    - Draft Code Case for Evaluation of Degraded Metallic Buried Piping (Section XI)

ASME SECTION XI ACTIVITIES

- Buried Piping
  - Future Actions include
    - Develop more refined version of Code Case for Evaluation of Degraded Metallic Buried Piping (Section XI)
    - Develop flaw evaluation procedures for PE Pipe (Section XI)

RISK INFORMED ACTIVITIES

- BPV III Initiatives – (under development)
  - Code Case on application Section III Classification requirements
  - LRFD approach

ASME SECTION XI ACTIVITIES

- Operational Leakage
  - Letter from John Grobe (Office of NRR) to Ken Balkey (ASME Vice President) dated July 26, 2006

ASME SECTION XI ACTIVITIES

- Operational Leakage (cont.)
  - Full Scope will be Complex both in Administrative and Technical Nature
  - Action will proceed with a phased approach
  - Phase I – Update Current Rules to incorporate existing Code Cases for moderate energy Class 2 and 3 piping, vessels and tanks
  - Phase II – Address Expanded Scope
  - Phase III – Review and Recommend New Rules
    - Actions for new or revised Code requirements will proceed in consolidated proposals with the appropriate technical basis

ASME SECTION XI ACTIVITIES

- Operational Leakage (cont.)
- Phase I – At Stds Committee for approval
- Phase II – Address Expanded Scope
  - Define words to address leakage acceptance when found during an activity that is not Section XI driven (IWA-1000 and new IWC/D-3700 for Plant Operating Events)

ASME SECTION XI ACTIVITIES

- Operational Leakage (cont.)
- Phase III – Review and Recommend New Rules
  - Consider new items, techniques, and approaches
  - Potential issues for consideration:
    - Class 2 and 3 High Energy Piping
    - Class 1 Piping and Components
    - Non-Piping Components
    - Analysis to define the Duration until repair/replacement
    - Timing of next Outage in Relationship to Duration until repair/replacement
    - New, alternate, or enhanced Evaluation Techniques
    - Regulatory involvement (Submittal vs. Acceptance)

ASME SECTION XI ACTIVITIES

- NRC Letter from Michele Evans (NRR) to Kevin Ennis (ASME) dated 01/12/10
  - Letter documented concerns
    - Personnel Qualifications requirements
    - How is POD factored into ASME Code

ASME SECTION XI ACTIVITIES

- NRC Letter (cont.)
  - ASME responded on 02/08/10
    - Indicated that a response would be sent within six weeks
    - Draft letter was discussed at the Code Meetings in May (San Antonio)
    - Letter was revised significantly based on comments
    - Further comments received and are being resolved

ASME SECTION XI ACTIVITIES

- ASME is working on having a Certification process (ANDE)
  - Develop new criteria standard as an alternative to ANSI/ASNT CP-189
  - Develop written exam question banks
  - Develop practical examinations
  - Establish host certification body
  - Still working through the details

ASME SECTION XI ACTIVITIES

- NRC Involvement
  - NRC active participation is vital to the success of the committee process
  - The consensus process involves all of the stakeholders as actions proceed through the different committees
  - Good example was the development of Code Case N-770
    - However during the review for adoption several comments were identified

ASME SECTION XI ACTIVITIES

- NRC Involvement (cont.)
  - Inclusion of the regulator perspective as part of the action helps provide public confidence when the code is endorsed in 10CFR50.55a
  - It is understood that resource limitations affect participation