Update on NACE TG 404 'Nuclear Buried Piping'

Gabriel Ogundele, Chair (Kinectrics Inc., Canada)

Pierre Roberge, Vice-Chair (Royal Military College, Canada)

Hank Kleinfelder, Secretary (Mears Group Inc., U.S.A)

Presentation at the NRC Public Meeting April 4, 2012



History

- > TG 404 Initiated during Corrosion 2009
- ➤ Workshop -Corrosion 2010
- ➤ Meeting -Corrosion Technology Week 2010
- ➤ Symposium -Corrosion 2011
- ➤ Meeting -Corrosion 2011
- ➤ Meeting -Corrosion Technology Week 2011
- ➤ Forum-Corrosion 2012
- ➤ Meeting -Corrosion 2012



Scope of TG 404

To produce a report on

"State--of--the--Art Report of External Corrosion, Assessment, and Control of Buried Metallic and Reinforced Metallic Piping Systems in Nuclear Power Plants"

Forum Corrosion 2012 (March 11-16, 2012)

Title of Forum:

<u>Nuclear Buried Piping - Procedures and Oversight to Provide Reasonable Assurance</u>

- ➤ "Overview of EPRI buried piping program guidelines and research into inspection and mitigation technologies", *Tim Eckert, EPRI*
- ➤ "Coating issues in relation to buried pipes in nuclear power plants", Jon Cavallo, Enercon
- Cathodic protection issues in relation to buried pipes in nuclear power plants", *Kevin C. Garrity, Mears Group (President, NACE International)*
- ➤ "Maintaining buried piping operations in nuclear power", Cassie Bitler, INPO
- ➤ "Regulatory perspective on cathodic protection", David Alley, NRC



Contributors

Utilities

EPRI

Coating Experts

Cathodic Protection Experts

Inspection Service Providers

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Status of Report

- ➤ Discussed extensively at the meeting held March 13 during Corrosion 2012.
- ➤ Disposition of TG members' comments completed
- Report undergoing "internal" review (i.e., within selected members of TG 404)
- Final" comments to be reviewed before forwarding to NACE HQs
- NACE HQs will format report and send out for ballot
- > Dates TBD

Subsequent Work

- ➤ Release of report "completes" the scope of TG 404
- New Task Groups (TGs) and Technology Exchange Group (TEG) will carry-forward the gaps itemized in the report
- > Chairs have signed up to actualize the requirements

NEW TEG

- Name: TEG 465X "Nuclear Buried and Underground Piping"
- Task: To liaise between the sponsoring committees and the specific task groups which will develop standards, training, inspection, and assessment of buried/underground piping in nuclear power plants while focusing on discussions for the application of cathodic protection and coating systems.
- **Chair**: Gabriel Ogundele (Kinectrics Inc.)
- ➤ <u>Vice-Chair</u>: Hank Kleinfelder (Mears Group)
- ➤ Administering STG: STG 41
- > Sponsoring STGs: STG 03, STG 05, and STG 35



Path Forward

- ➤ Develop Standard for Cathodic Protection for Buried Piping in Nuclear Power Plants
- Develop Standard for Coatings for Buried Piping in Nuclear Power
- ➤ Develop Standard for Materials Selection for Buried Piping in Nuclear Power Plants
- > Develop Standard for NDE of Buried Piping in Nuclear Power Plants
- ➤ Review Training for Nuclear Buried Piping

All new TGs will report at the Corrosion Technology Week 2012 with first draft



Future Meeting (TEG 465X)

- ➤ Corrosion Technology Week 2012, September 16-20, 2012, New Orleans, (Discuss Draft of TG Deliverables)
- ➤ Symposium Corrosion 2013
- ➤ Meeting Corrosion 2013

QUESTIONS

