



**U.S.NRC**

UNITED STATES NUCLEAR REGULATORY COMMISSION

*Protecting People and the Environment*

## **Regulatory Issue Resolution Protocol**

### **Inaccessible or Underground Cable System Performance Issues at Nuclear Power Plants**

**January 21, 2010**



## **NRC Team Review**

**The NRC team reviewed the following documents submitted by the Industry team on January 7, 2010:**

- **Low Voltage AC and DC Power Cable Program Elements, Rev 1**
- **MV Power Cable Program Elements, Rev 4**
- **Power Cable Aging Management Program Elements, Rev b**
- **RIRP Pilot Industry Presentation, Rev b**

## Comments

- ❑ **Staff understands that the industry problem statement includes performance and design**
  
- ❑ **Closure Plan Statement must provide detailed assessment strategy including condition monitoring and implementation at all nuclear power plants. It is unclear how the industry will consent to implement the proposed resolution at every plant**
  
- ❑ **Program should include condition monitoring of all cables within the scope of Maintenance Rule.**

### ❖ Cable Aging Management Program Guides should address the following:

- ❖ All cables subjected to any level of wetting or submergence
- ❖ All energized or de-energized cables
- ❖ All cables exposed to elevated stress levels
- ❖ Sampling Criteria for Condition Monitoring should include other groups beyond the three mentioned in Slide No. 8
- ❖ Testing methods selected for monitoring the cables installed in adverse conditions ( IR tests or megger tests alone are not adequate)



## Comments- Cont.

- The proposed Aging Management Guides (LV and Medium Voltage) should consider the guidance provided in the applicable NRC RGs and NUREG/CR-7000 on cables.
  
- The Aging Management Program should include Condition Monitoring and Trending.

**Slide 5**

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**R1**

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RVJ, 1/15/2010

## Conclusion

- Licensees must be in full compliance with all NRC regulatory requirements for cable systems.
- Industry failure to maintain cables important to safety in an environment for which they were designed is a deficiency.