



# **ACC Technical Guidance Documents**

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# Need for ACC Guidelines Documents

## ■ Currently available information:

- ◆ OEM operating instructions
- ◆ CTI Test Code for Aircooled Condensers
- ◆ Steam Cycle Chemistry: IAPWS and EPRI documents
- ◆ presentations from ACCUG, ASME, CTI and miscellaneous other meetings
- ◆ not aware of anything else

# Proposed ACC Guidelines Documents

- **1: Guidelines for the Off-Line Inspection of Air Cooled Condenser Steamside Surfaces**
  - ◆ largely complete, needs reviews and possible reformatting

# Proposed ACC Guidelines Documents

## ■ 2: Guidelines for External Cleaning of Air Cooled Condenser Fined Tubes

### ■ Introduction

- ◆ impact(s) of external tube fouling
- ◆ common foulants
- ◆ recognition of need to clean
- ◆ frequency of cleaning

# Proposed ACC Guidelines Documents

- **2: Guidelines for External Cleaning of Air Cooled Condenser Fined Tubes**
- **Objective(s)**

# Proposed ACC Guidelines Documents

- **2: Guidelines for External Cleaning of Air Cooled Condenser Fined Tubes**
- **Cleaning methods**
  - ◆ **rain**
  - ◆ **fire hose**
  - ◆ **pressure-nozzles**
  - ◆ **pressurized air**
  - ◆ **dry ice (solid CO<sub>2</sub>)**

# Proposed ACC Guidelines Documents

- **2: Guidelines for External Cleaning of Air Cooled Condenser Fined Tubes**
- **Conclusion**

# Proposed ACC Guidelines Documents

- **3: Guidelines for Air Inleakage Detection in Air Cooled Condensers**
- **Introduction**
  - ◆ **impact(s) of air inleakage problem**
  - ◆ **recognition of air inleakage problem**
    - **high oxygen**
    - **high backpressure**
    - **high air ejector flow**
    - **uneven temperature distribution in ACC tubes**
  - ◆ **indoor vs. outdoor testing**

# Proposed ACC Guidelines Documents

- **3: Guidelines for Air Inleakage Detection in Air Cooled Condensers**
- **Objective(s)**

# Proposed ACC Guidelines Documents

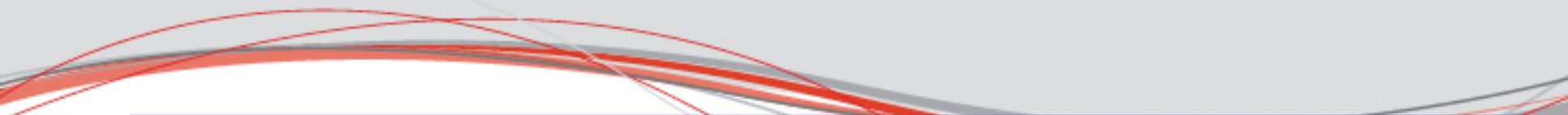
- **3: Guidelines for Air Inleakage Detection in Air Cooled Condensers**
- **Methods**
  - ◆ **visual inspection**
  - ◆ **tracer gas**
  - ◆ **thermal imaging**
  - ◆ **acoustic**
  - ◆ **water spray ingress**

# Proposed ACC Guidelines Documents

- **3: Guidelines for Air Inleakage Detection in Air Cooled Condensers**
- **Process / approach to leak detection**
- **Repairs**
- **Conclusion**

# Proposed ACC Guidelines Documents

- **4: Guidelines for Specification of Aluminum Coating Process for Purchase of Carbon Steel Air Cooled Condenser Tubes**



# **Additional ACC Guidelines Documents Needed?**



**Process for creating guidelines documents and making available to the general public**

