ETN EUROPEAN TURBINE NETWORK

Exhaust Systems PG Update
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Exhaust Systems PG

ISO/API Standard for Exhaust Systems

❑ Establish a technical document validated by all members of the workgroup.

❑ Internal standards from Statoil and Shell to be used as a base.

UPDATE

❑ Collect the feedback from all parties

❑ 2 workshops organized

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Exhaust Systems PG

Workshop in Paris

❑ Review of operational feedback from operators

❑ Cross reference with available standards within ETN

❑ Review of a draft Datasheet to complete the standard

→ *Ongoing review of the two merged standards and the datasheet by different members of the group*

❑ Review of the necessary boundary conditions to optimize the exhaust system design

→ *First conference call review of all the merged boundary conditions to complete the standard*

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Workshop in Brighton

- ❑ Limits and advantages of CFD to validate a proper design of an exhaust system
- ❑ The instrumentation that can be used on exhaust systems

  - → ***The requirement to define with in the standard the added value to CFD modelling of the complete exhaust system based on the inlet conditions***
  - → ***The need of a benchmark case to validate the CFD code correct use***

- ❑ Separate standard for WHRU and complete the API 534 on HRSG
- ❑ Co-chairman of the PG: OLE TORP (MJORUD)

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What's next?

- ➢ 2012:
  - ❑ Q1 2012
    - ▪ Finalize the draft of each section of the exhaust system for heat recovery systems and the corresponding datasheet
  - ❑ Q2 2012 – First 2012 Workshop
    - ▪ First common review of the standard on WHRU
    - ▪ Review of the HRSG API 534 outcome with the WHRU standard
    - ▪ Presentation of the required budget to establish a measured test on a test bench or on a string test unit
    - ▪ Presentation on the redaction of an ETN to become ISO/API standard
  - ❑ Q3 2012 – Measured test for bench mark case
  - ❑ Q4 2012 – Second 2012 workshop
    - ▪ Last review of the standard on WHRU
    - ▪ Last review of HRSG update API
    - ▪ Presentation of the benchmark case
- ➢ 2013
  - ❑ Format of the standard to fit requirements to ISO/API standard

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