

Minutes: Task Group on **RP 580 Risk Based Inspection** (update)
API Refining Spring Conference
 New Orleans April 15, 2008

Attendee List:

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- 1) Task Group reviewed the significant changes to the RP 580 document and prepared a summary so that balloters will be able to identify these and focus review during balloting. Summary attached.

2) **Action Items:**

Action	Who/By
John Reynolds to complete definitions and minor word editing, then send electronic file to Lynne Kaley for E2G to help with Microsoft Word formatting	John Reynolds complete and send by end of April
John Reynolds to complete word search and conversion of ‘deterioration’, ‘degradation’ to <u>damage mechanisms</u> , and ‘damage modes’ to ‘damage mechanisms’ to be consistent with RP 571. Also, in ‘damage mechanism’ definition include mention of associated deterioration, degradation by mechanism or mode with association of extent as well as time basis for progressive ‘damage’	John Reynolds complete as final step in preparing RP 580 rewrite for ballot, and then send ballot document, with changes indicated in document for balloters to compare, to Jim Riley. Jim will then forward to John O’Brien for conveyance to API staff to ballot. Goal is to ballot early June with minimum of 6 week ballot period.

Overview of changes to RP 580 Risk Based Inspection

Section	Changes other than editorial improvements worth noting
Introduction	New introduction
1.2	Overview of Risk Analysis
3	Large number of changes and deletions to definitions sections based on progressive changes to API inspection codes and ASME Inspection Planning Using Risk Based Methods as well as other industry norms. Damage mechanism used as standard wording rather than deterioration, degradation to be consistent with RP 571; includes use of ‘mechanism’ rather than ‘mode’
5.2	Added text about types of RBI assessment
5.2.1	Improved general high-level wording around qualitative and quantitative approaches
5.2.2	Added new text segments on QRA (quantitative risk assessment)
5.3	Added introductory sentence on precision versus accuracy
5.4	Added text for considering operating conditions
5.5.3	New text on Evaluation of Fitness-for-service
5.6.3	Added text to equipment reliability
5.7	Added text to Relationship with Jurisdictional Requirements
6.0	Added text to Getting Started in the development of RBI program
6.4.2	Added examples of fatigue damage mechanisms
7	Added general section under header to introduce section
7.2	Added ultimate sentences under Data Quality
8	Replaced completely Section 8 Damage Mechanisms and Failure Modes based more thorough treatment from ASME Inspection Planning Using Risk Based Methods development
9.2	Added examples of commonly used probability of failure levels (frequency)
9.4.1	Added text in Determine the Deterioration Susceptibility and Rate
10.3.2	Added text to Cost section about consequences expressed in monetary values to maximum extent practical as well as other added paragraph. Added Table 10.3.2 of Consequence Levels
10.3.4	Added Table 10.3.4.a and Table 10.3.4.b Levels of Safety, Health and Environmental Consequence
10.3.5	Added short section with text on other considerations
10.6	Added new section on Determination of Consequence of Failure; new Figure 10.6
10.6.1	Added new section on Factors for Estimating Consequences
10.6.2	Added new section on Factors for more Rigorous Methods
11.2.1	Revised Figure 5 Example of Calculating the Probability of a Specific Consequence (based on ASME Inspection Planning Using Risk Based Methods development)
11.6.3	Added new paragraph to Using a Risk Plot or Matrix
15.2	Added paragraph about Team Members, Roles and Responsibilities
15.2.1	Added text about Team Leader responsibilities
17	Added new Section 17 on Summary of RBI Pitfalls
Appendix A	Replaced Damage mechanism Descriptions table
Appendix B	Added new Screening Table for Damage Mechanisms (based on ASME Inspection Planning Using Risk Based Methods development)
Appendix C	Added new Appendix C – Screening Table of Examination Methods (based on ASME Inspection Planning Using Risk Based Methods development)