**Expectations of EM on "Assistance on review of safety analysis model for safe operation of BNPP-1"**

**(Task 3.10.1 of IRA2013)**

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| **No.** | **Title** |
| 1 | Review progress in development of evaluation model for BNPP-1:  - Review of database, engineering handbook and input deck  - Assessment/review of analysis results |
| 2 | Presentation on “Guides to establish a comprehensive program to apply DSA methods for technical support purposes of BNPP-1”. |
| 3 | Presentation on “Assessment the adequacy of the evaluation model for accident and transient analyses to achieve the desired results” |
| 4 | Technical discussion in the area of quantitative methods to assess transient analysis results of integral codes (e.g. FFTBM) as well as advantages and drawbacks of each methods |
| 5 | Technical discussion for performing integral codes sensitivity analysis (including code input variables or modeling parameters) |
| 6 | Technical discussion for performing uncertainty analysis (including uncertainties in individual modeling, the overall code or plant data) in integral system codes (e.g. RELAP5, MELCOR) |
| 7 | Presentation on ”Guides to apply DSA methods for technical support purposes, design modifications” (presentation of detailed examples if possible) |
| 8 | Presentation on “Guides to apply DSA methods for technical support purposes, operational event investigation” (presentation of detailed examples if possible) |
| 9 | Presentation on “Applying DSA methods for technical support purposes, periodic safety review” |
| 10 | Introduction on “QA (quality assurance) plan for Thermal-hydraulic Analysis” |
| 11 | Standard procedures and recommended steps for the validation and verification of an input model for DB and BDB accident analysis. |
| 12 | Introduction of technical challenges in development of thermal-hydraulic model and presentation of technical approach to address them, for example controlling the level of water in the steam generator and pressurizer , How to apply appropriate boundary conditions, sources and sinks during model development, etc. |