

# Changes made to the Version 2 of the BFBT Specifications

## Chapter 2 - Test Facility

- Dimensions of Thermocouples' axial positions (A, B, C, D) were added – see Figures 2.5.2 through 2.5.5

## Chapter 3 – Fuel Assembly Data

- In Table 3.2.5 Radial Power Shape of Test Assembly Type 4 - B (for Assembly C2B) in position (7,3) the value was corrected from 0.45 to 0.75
- Thermo-mechanical Properties were changed due to some errors - see pages 35, and 36.
- Grid spacers' figures were changed after some remarks made by participants –see Figures 3.5.3 through 3.5.11

## Chapter 4 – Benchmark Database

### 4.2 Void Distribution Measurements- Phase I

#### Exercise 1 Steady State

- Some additional tables with experimental and processed boundary conditions were added in order to provide more detailed and clear information on the key and format of the database. See Tables 4.2.4 through 4.2.17 for steady state void distribution measurement data.

#### Exercise 3 – Transient

- Transient void distribution - Figures of different boundary conditions as a function of time were added for the two transients – Turbine Trip and Pump Trip (Figures 4.2.1 through 4.2.8).

### 4.3 Critical Power Measurements – Phase II

#### Pressure drop measurements

- Single Phase - Table 4.3.3 (example of single phase pressure drop measured data) was added
- Two Phase - Table 4.3.6 (example of two phase pressure drop measured data) was added

#### Critical Power Measurement

- Exercise 1 Steady State – no major changes
- Exercise 2 Transient – Figures of different boundary conditions as a function of time were added for the specified transients (Turbine trip and Pump Trip) for both types of assemblies where measurements were performed (Assembly C2A and C3). See Figures 4.3.1 through 4.3.12

## **Chapter 5 Benchmark Phases and Exercises**

### **5.2 Phase 1 – Void Distribution Benchmark**

- The table with the data format for steady state sub-channel grade void distribution benchmark was changed (Table 5.2.4)
- Table 5.2.5 (example of the data format for the average void distribution for test 0011-55) was added
- Table 5.2.6 was changed in order to be more consistent with the data bank.
- Tables 5.2.10 and 5.2.12 (data format of turbine trip transient macroscopic grade void distribution benchmark) were changed – see pages 107 and 108.
- Tables 5.2.11 and 5.2.13 (examples of the data format) were added – see pages 107 and 108.

### **5.3 Phase II – Critical Power Benchmark**

- Table 5.3.3 (data format of steady state critical power benchmark) was changed
- Tables 5.3.10 and 5.3.12 (data format of transient critical power benchmark) were changed
- Tables 5.3.11 and 5.3.13 (examples of data format) were added

## **Chapter 6 Output requested**

Some additional clarification is made for the output requested and some additional output results are required.

**6.1 Introduction** - some additional information is added – see page 116

**6.3 Critical Power Benchmark** - some additional information is added – see page 119

Tables 6.3.1 and 6.3.2 were changed (page 120)

**Chapter 7 Conclusions is added** (page 121)

**References** – some additional references are added

**P.S The numbering of tables and pages are according to the new version (Version 3) of the specifications**