

**GENERAL**

The following changes in the Tender Documents are effective IMMEDIATELY. This addendum will form part of the Contract Documents

**APPROVED ALTERNATIVE MATERIALS**

| <b>APPROVED AS EQUAL</b>   | <b>SPECIFIED</b> |
|----------------------------|------------------|
| Pump(s) / Suction Guide(s) | <b>Armstrong</b> |

**DRAWINGS**

1. Reference: Drawing M13 - Mechanical Schedules and Details  
See below for accepted equals:
  - a. Product: Pumps  
Specified approved manufacturers: Bell & Gossett, Taco, Grundfos.  
Equal: Armstrong.

**CLARIFICATIONS**

1. The requests for alternative Boiler was not approved since the proposed equipment (RBI FlexCore FireTube boiler) is not a dual temperature return boiler.

**QUESTIONS**

1. *Can you confirm the complete anticipated duty conditions for validation of the product?*  
*Missing information to provide should include:*
  - a. *Loop circulation flow rate*

- i. **Answer:** Flow rates are indicated below:

| TAG  | DESCRIPTION                              | FLOW RATE | HEAD  |
|------|--|-----------|-------|
|      |  | (L/s)     | (kPa) |
| P-1  | Hot Water Circulation Pumps (Lead/Lag)   | 31.55     | 149   |
| P-2  |  | 31.55     | 149   |
| P-23 | Radiation Recirculation Pumps (Lead/Lag) | 7.89      | 149   |
| P-24 |  | 7.89      | 149   |

Please refer to drawing M13 for more details.

- b. Heating medium confirmation (plain water or glycol mixture, specify %)
  - i. **Answer:** Plain Water
- c. Maximum deltaT (assuming 11 degC rise as per above) for loop flow rate
  - i. **Answer:** Maximum deltaT of 11 degrees C

2. *Can you also advise whether a boiler design with rating of 5 bars would be acceptable? After all, the loop is running at low pressure since you ask for relief valve setting of 1100 kPa. We don't see the point of limiting your options and excluding technologies that would already have a near 5x safety factor over your maximum relief valve setting.*

**Answer:** Proposed equipment must have the same pressure rating as the reference unit.

**END OF ADDENDUM 3**