

Assumption Change Control Sheet

Test	All low temperature tests
Assumption	8. DH flow temperatures (low temperature regime)

Change Originator	Josu Aurrekoetxea
Change Request No.	026
Date of Request	13/12/2019
Proposed Change to Assumption?	Y

Proposed Approach

Due to the future DHN decarbonisation requirements, it is proposed to reduce the DH temperature of all LT tests from 60 °C to 55 °C. Secondary set points on DHW side (50 °C) and heating side (45 °C) would not need to change.

In order to check the DHW power capacity of the HIU at these conditions it is recommended to add a maximum power test where the HIUs DHW maximum flow is tested at the minimum DP. This test will also help managing customers' expectations when purchasing a HIU.

Rationale (underlying basis for assumption)

See technical Note 005.

DH low temperatures affect mainly on the performance of the PHE because small temperature approach demands higher flows to achieve the same results on the secondary side. This extra flow might limit the HIU capacity to supply enough power with a limited DP available. 2 of the main HIU PHE manufacturers software has been used to check the capacity to supply the demanded temperatures and both passed successfully the test.

Impact of Change (e.g. implications for test rig)

DHW test rig will need an extra solenoid valve with a DRV to modulate the maximum flow. The test should take no more than 15-30 minutes, but this should be confirmed by the test houses.

CHANGE EVALUATION

Date Evaluated	17/12/19
Additional Information Required?	N
Modification to Proposed Approach?	N
Details Consider a secondary test at a higher domestic hot water flow rate – MC & TN reviewing as another Technical Note.	
Signed-off	Y