CIBSE Heat Network Consultant

Pre-requisites & Pre-course Reading

This is a two day course aimed at providing an understanding of the CoP and how to apply it. Following the course there is the opportunity to take an exam which allows entry to the Heat Networks Consultant register.

This document sets out reading and preparation that is required of candidates in advance of joining the two day training course.

You are strongly advised that this preparation should be taken seriously. The required reading will be referred to and expanded upon during the training and you should have a thorough knowledge of the documents in advance in order to gain further knowledge in their application. The examination will feature some questions on the content of these documents.

There is a set of questions at the end of this document entitled 'Routemap' These should guide you to some of the relevant sections of the essential reading list below and provide you with some quick self- assessment questions to test whether you have read and absorbed what is required.

The essential reading can either be downloaded from on the links provided or from the free downloads areas of the CIBSE website (www.cibse.org/membersservices/downloads), or if you are a member the CIBSE Knowledge Portal (www.cibseknowledgeportal.co.uk). You will need to log in or register to get access to these areas.

Essential Reading

- Code of Practice: http://www.cibse.org/Knowledge/CIBSE-other-publications/CP1-Heat-Networks-Code-of-Practice-for-the-UK

- BRE A Technical Guide to District Heating: http://www.brebookshop.com/details.jsp?id=327457

- London Heat Network Manual: http://www.londonheatmap.org.uk/Content/TheManual.aspx

- CIBSE AM12: http://www.cibse.org/knowledge/cibse-am/am12-combined-heat-and-power-for-buildings-%28chp%29

- CIBSE Certification Code of Conduct: www.cibseenergycentre.co.uk/assessor-area/code-of-conduct.html
- Heat Trust: http://www.heatcustomerprotection.co.uk/

- Metering instruments directive
  http://ec.europa.eu/growth/single-market/european-standards/harmonised-standards/measuring-instruments/index_en.htm

- DECC Heat networks legislation for metering and billing
  https://www.gov.uk/heat-networks

Route Map

The following provides a route through some of the key information by a series of actions and questions. You can self-assess yourself against the answers provided overleaf. To convert to a readable form simply highlight the answer and convert back to normal sized font.

Sample Questions

1. Which of the following statements regarding the installation and testing of pre-insulated buried pipework is **true**?
   a. Only joint closure systems using shrink sleeves require air testing.
   b. Only joint closure systems using fusion welded joint casings require air testing.
   c. All joint closure systems require air testing.
   d. Joint closure systems do not require air testing.
2. What are the recommended maximum design operating temperatures within the Code of Practice for fan coil units in new building services systems?
   a. 80/60°C
   b. 80/50°C
   c. 70/40°C
   d. 60/40°C
3. When determining insulation thickness within buildings which of the following statements is true?
   a. Hours of operation should be taken into account
   b. Standard insulation tables in BS5422 are adequate
   c. Fittings do not need to be insulated as heat losses from them are small
   d. Heat losses should be limited to 20%
4. For systems with variable flow and two port control, where bypasses are required to maintain flow temperatures above a minimum level at times of low demand, which of the following are preferred?
   a. Temperature controlled bypass valves
   b. Pressure controlled bypass valves
   c. Flow controlled bypass valves
   d. None of the above
5. Which of these is **not** a benefit of incorporating thermal storage into heat networks?
   a. Smoothing of the daily variation in heat demand.
   b. Reducing the number of starts of low carbon plant.
   c. Enabling plant to operate at full output for longer hours.
   d. Allowing the peak heat network capacity to be reduced.

Answers:

1. C
2. D
3. A
4. A
5. D