

# Policy on Seasonal Commissioning

## **1.0 Policy Reference**

This policy document refers to the following aims outlined in The Highland Council's Energy Management Performance Plan:

- Reduce the council's energy use by 15%
- Save £3.8M in energy costs
- Reduce CO<sub>2</sub> emissions by a minimum of 15%
- Increase the installed capacity of renewable energy by a minimum of 4,000kW

## **2.0 Introduction**

As its title implies, seasonal commissioning involves re-commissioning heating systems in winter and mechanical cooling systems in summer. But seasonal commissioning may also be applied to other systems, such as motorised windows and active solar-shading devices - any building system affected by seasonal changes. Ideally, the original project team (or independent commissioning engineer, if appointed) should remain engaged to perform the seasonal commissioning.

Seasonal Commissioning refers to testing under full-load conditions during peak heating and peak cooling seasons, as well as part-load conditions in the spring and autumn –

- Initial commissioning will be done as soon as the contract work is completed, regardless of season.
- Subsequent commissioning will be undertaken thereafter to ascertain adequate performance during the different seasons.

The BREEAM environmental assessment scheme awards credits for the adoption of seasonal commissioning.

The Design Consultant will co-ordinate the seasonal commissioning during the 12 month 'defects period' following the completion of the project.

## **3.0 Purpose**

The Seasonal Commissioning process acts as a checking procedure to ensure that –

- The installed equipment is as designed
- The building and its services operate correctly, safely and efficiently
- Equipment is tested and adjusted repetitively, balanced and fine tuned to achieve the specified performance whilst optimising flow rates, temperature etc
- Automatic controls have been set-up and tested
- Any design faults or over-specification are highlighted
- Systems are clean
- The system settings and performance test results have been recorded and accepted as satisfactory

## **4.0 Procedure**

All equipment and systems will be tested and commissioned in a peak season to observe full-load performance –

- Heating equipment will be tested during winter design extremes.
- Cooling equipment will be tested during summer design extremes, with a fully occupied building.
- Each contractor and supplier will be responsible to participate in the initial and the alternative peak season test of the systems required to demonstrate performance.

Subsequent commissioning will also be required under conditions of minimum and/or maximum occupancy or use –

- All systems and equipment effected by occupancy variations will be tested and commissioned at the minimum and peak loads to observe system performance.
- The contractor will be responsible to participate in the occupancy sensitive testing of systems to provide verification of adequate performance.

## **5.0 Monitoring**

Prior to the seasonal commissioning being carried out the Energy & Sustainability Team will meet with the Design Consultant and agree key commissioning dates throughout the 12 month 'defects period'.

The Highland Council may chose to have a council representative attend each commissioning session and the council should therefore be advised of any change to the commissioning dates.

All commissioning certificates completed during seasonal commissioning will be inserted within the 'Seasonal Commissioning' section of the O&M Manuals for each property.

A checklist within the seasonal commissioning section of the O&M Manuals will be dated and signed after each commission.

## **6.0 Reporting**

The Energy & Sustainability Team will receive copies of all commissioning certificates completed for seasonal commissioning.

Any issues arising during commissioning which cannot be resolved at that time will be referred to the Energy & Sustainability Team.