

# HUB PROGRAMME DELIVERY OFFICE

## GUIDANCE NOTE 06/14

Guidance Note on Energy Solutions on hub DBFM Projects

July 2014

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## Introduction

Under the standard form hub DBFM Agreement, energy usage and price risks are retained by the Authority. The energy solution proposed by hubCo on a project will therefore be a factor in the Authority's assessment of the ongoing affordability and budgeting implications of the project. As well as the direct cost of utilities procurement, the energy solution proposed may also have implications for the Authority in terms of entitlement to certain revenues (e.g. renewables incentives).

Where hubCo's design provides for different energy sources for a particular utility (e.g. CHP with back-up electricity generation), the extent to which reliance is placed on each source will have a direct impact on the Authority's utilities costs and revenues. If the CHP plant is not adequately maintained, for example, the requirement to rely on back-up generators could leave the Authority facing higher utilities bills and lost incentives.

The standard form hub DBFM Agreement and Service Level Specification do not address this potential issue directly, focussing as they do on outputs (e.g. room temperature and power requirements) rather than inputs (e.g. input from each energy source where alternatives are available).

SFT recognises that, depending on the energy solution proposed on a particular project, it may be appropriate for the contract to incentivise Sub-hubCo to adhere to an agreed strategy on the usage of different energy sources and to reimburse the Authority for costs and/or losses that it incurs if it deviates from that. This is a matter for the Authority to consider in conjunction with its technical advisers and to the extent that it is considered relevant and appropriate, the Annex to this guidance note contains suggested drafting amendments for the standard form hub DBFM Agreement and Service Level Specification.

The suggested drafting is not a substitute for project-specific advice and Authorities must take appropriate legal, financial and technical advice when using it. An Authority must review the drafting in conjunction with its advisers to ensure that it is tailored to the requirements of the specific project and that its terms (and its impact) are clearly understood. Use of the suggested drafting is not mandatory but Authorities must discuss with SFT any amendments that they propose to make if using it.

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## Annex

### 1. DBFM Agreement

Insert new Clauses as follows:

#### Energy for deviation from the Energy Strategy

- 23.26 Subject to Clause 23.27, the Authority is entitled to be reimbursed by Sub-hubco for costs and losses incurred by the Authority in relation to Utilities supplied to the Facilities during the Operational Term that are consumed as a result of the occurrence of Performance Failure(s) in respect of Performance Standard [FM61A], such additional costs to be calculated in accordance with Clause 23.29 below (the “**Utility Cost Difference**”).
- 23.27 For the purpose of applying Clause 23.26 the Authority shall not be entitled to reimbursement if the Utility Cost Difference is less than zero (0).
- 23.28 Where the Authority claims reimbursement of Utilities costs and/or losses pursuant to Clause 23.26 it must calculate the Utility Cost Difference pursuant to Clause 23.29 and send Sub-hubCo a statement showing its calculation of the amount claimed along with its supporting evidence. Unless Sub-hubCo disputes the statement within ten (10) Business Days of receipt, the Authority will be entitled, pursuant to Clause 34.6, to set-off the amount claimed.
- 23.29 The Authority shall calculate the Utility Cost Difference using the following formula:<sup>1</sup>

$$\text{Utility Cost Difference} = \text{Actual Utility Cost} - \text{Energy Strategy Utility Cost}$$

For the purposes of this Clause 23.29:

- 23.29.1 The Actual Utility Cost is the aggregate of the cost of Utilities for each heat and power source incurred for each day on which the relevant Performance Failure occurs and shall be calculated as

$$\text{Actual Utility Cost} = \sum \text{Heat Cost} + \sum \text{Power Cost}$$

- 23.29.2 The Energy Strategy Utility Cost is the aggregate cost of Utilities for each heat and power source that would have been incurred for each day had the relevant Performance Failure not occurred and shall be calculated as

$$\text{Energy Strategy Utility Cost} = \sum \text{Heat Cost} + \sum \text{Power Cost}$$

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<sup>1</sup> The calculation for the Utility Cost Difference at Clause 23.29 should set out an appropriate basis for reimbursement of costs (i.e. increased utilities costs) and losses (i.e. foregone incentives) that might arise from a deviation from the Energy Strategy. This will need to be looked at in detail on a project-by-project basis e.g. to ensure that it captures all relevant incentives that could be lost by the Authority.

23.29.3 The Heat Cost in respect of heat source (n) shall be calculated as:

$$Heat\ Cost_n = \left( \frac{H_{DHn}}{E_{Hn}} \right) \times H_{nUc} - RHI_n$$

Where

$H_{DHn}$  = heat demand met by heat source n

$E_{Hn}$  = efficiency ratio for heat source n as provided for in the Energy Strategy

$H_{nUc}$  = average unit cost of fuel for heat source n

$RHI_n$  = renewable heat incentive savings available for heat source n

23.29.4 The Power Cost in respect of power source (n) shall be calculated as:

$$Power\ Cost_n = (P_{DPn} \times P_{nUc}) - FIT_n$$

Where

$P_{DPn}$  = power demand for power source n

$P_{nUc}$  = average unit cost of fuel for power source n

$FIT_n$  = feed in tariff savings available for power source n

## 2. Service Level Specification

### 2.1. Insert new definition to Section A as follows:

“Energy Strategy” means the operating hierarchy and strategy for the supply of Utilities to, and the operation of associated Plant in, the Facilities as set out in [ ]<sup>2</sup>.

### 2.2. Amend paragraph 3.7 of Section C as follows:

[Procuring and] maintaining the supply of Utilities throughout the Facilities, [ in accordance with the Energy Strategy,] of adequate capacity to supply the requirements of the Authority under all anticipated operating conditions.

### 2.3. Insert new Performance Standard to Section E as follows:

FM61A	Sub-hubCo shall receive written agreement from the Authority’s Representative(s) prior to amending and/or performing its operations other than in accordance with the Energy Strategy.	Major	N/A	N/A	No reported non-compliance.	Per occurrence	1 Business Day. To commence on identification of failure. Remedy: Revert to agreed Energy Strategy.
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<sup>2</sup> Refer to drafting note at paragraph 3 below.

**2.4. Insert new item to Appendix A (A.1 Monthly Service Report) as follows:**

18. Monthly monitoring and reporting information to be supplied in accordance with the Energy Strategy

**3. Drafting Note for Energy Strategy**

<sup>3</sup>The Energy Strategy shall contain as a minimum the following information in respect of the supply of Utilities to the Facilities and the operation of associated Plant:

1. Details of the hierarchy of the main energy delivery strategy setting out sources for provision of heat and power
2. Process and criteria for switching to secondary/back-up sources for provision of heat and power
3. Testing processes for each source
4. The designed run-times for each source between programmed maintenance intervals;
5. Details of planned operating capacity / efficiency of each source and process for determining actual operating capacity / efficiency of each source
6. Details of planned maintenance variations to main strategy including timescales<sup>4</sup>
7. Procedure for monitoring and reporting to the Authority on performance against the Energy Strategy, including actual run times and actual operating capacity / efficiency of each source
8. List of sub-meters and heat meters that will be utilised for calculation of the Utility Cost Difference in accordance with to Clause 23.29
9. Procedure for annual validation of the efficiency of each plant item.
10. Procedure for reviewing/updating Energy Strategy (material variations to be progressed through the Change Protocol).
11. [Details of sample calorific value testing of biomass wood chip fuel / biofuels]

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<sup>3</sup> The Energy Strategy will need to be developed in detail on a project-by-project basis by Authorities and their advisers. It is envisaged that this will capture how the energy plant is intended to operate (including capacity, efficiency and timing) to create a baseline against which any Utility Cost Difference is measured and that it will also contain detailed information, monitoring and reporting requirements that will support the calculation of the Utility Cost Difference.

<sup>4</sup> Authorities may also wish to make specific reference to particular items of energy plant/equipment in the context of Sub-hubCo's maintenance obligations under the Service Level Specification (e.g. ensuring that the annual Schedule of Programmed Maintenance, submitted to the Authority for comment, covers planned maintenance of this plant/equipment). Any proposed amendments to standard form drafting should be discussed with SFT.