

## ABERDEEN CITY COUNCIL

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COMMITTEE	Finance & Resources
DATE	2 December 2010
DIRECTOR	Gordon McIntosh
TITLE OF REPORT	Extension of the Combined Heat and Power district heating network
REPORT NUMBER:	EP&I/10/294

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### 1. PURPOSE OF REPORT

The purpose of this report is:

- to inform the committee of a verbal offer of grant of £1million from the Scottish Government specifically for the extension of the CHP district heating network in the City

### 2. RECOMMENDATION(S)

It is recommended that Committee:

- Authorise acceptance of the grant from the Scottish Government, as long as the conditions of the formal grant offer create no financial risk for the Council
- Instruct officials to identify the most economically beneficial routes for the district heating extension, including extensions in Seaton and from the Beach Ballroom towards the City Centre,
- Agree in principle to enter into an Installation Agreement with AH&P covering the capital costs of them installing the district heating extension, and
- Agree in principle to provide a licence and wayleaves to AH&P for the use of Council owned land through which the mains distribution pipes will run.

### 3. FINANCIAL IMPLICATIONS

There are no direct costs to the Council or AH&P from this report as the Scottish Government grant will cover 100% of the cost of extending the district heating network.

Acceptance of this offer of grant will, however, have an impact on the Housing Capital Expenditure Programme in 2010/2011 and 2011/12. On 24 August a report was submitted to the Housing and Environment committee on the installation of CHP to eight multi storey blocks in the Seaton area stated that the sums required from the Housing Capital Expenditure Programme would be £2.14 million in 2010/11 and £2.22 million in 2011/12. Accepting the offer of grant will result in this spend being reduced by £1 million in 2010/11 and increased in 2011/12 by £1 million. The increase in expenditure in 2011/12 has not been factored in to budget preparations to date. The Director of Housing and Environment will therefore be required to consider how the

slippage of expenditure of £1 million will be managed. The outcome of this exercise will be reported to the Housing and Environment committee in the near future.

The proposed expansion of the CHP infrastructure will offer the opportunity for other Council buildings, both housing and public buildings, to be served by the scheme in the future. Each connection of Council owned properties into the extended district heating network would be the subject of a full Feasibility Study and report to the relevant Committee for approval before works are undertaken.

#### 4. SERVICE & COMMUNITY IMPACT

The report supports the “Vibrant, Dynamic & Forward Looking” Policy Statement for Aberdeen, the Corporate Strategy, the Corporate Plan and the Community Plan. The development of CHP schemes, and the support that the Council gives to AH&P, demonstrates the ongoing commitment to sustainable development, improving homes, raising environmental standards, improving access to affordable energy, and tackling fuel poverty.

#### 5. OTHER IMPLICATIONS

Installing CHP district heating schemes reduces the City’s carbon emissions, and tackles fuel poverty in multi-storey flats which is a hard to heat property type.

CHP reduces fuel costs in public buildings which frees up resources that can be redirected into other areas by the Council.

#### 6. REPORT

### **Combined Heat and Power in Aberdeen – Background**

To date 14 multi storey blocks and 8 public buildings are being provided with space and water heating from the three combined heat and power (CHP) district heating schemes at Stockethill, Hazlehead and Seaton. At present work is on-going to link a further 8 multis storey blocks into the Seaton CHP scheme with completion due mid 2012. These projects have achieved the objectives of:

- Fuel poverty proofing “hard to heat” flats, ensuring the occupants can afford to heat them adequately, and that these flats reach the Scottish Housing Quality Standard in terms of energy efficiency
- Reducing energy related costs in 7 Council owned public buildings (Hazlehead Academy, Hazlehead Swimming Pool, Hazlehead Sports Pavilion, Beach Ballroom, Beach Leisure Centre, Linx Ice Rink and Aulton Sports Pavilion) plus Aberdeen Sports Village
- Reducing CO2 emissions by around 45% across all the properties linked to the CHP district heating systems

AH&P was set up by the Council in 2002 to develop and manage CHP schemes, in particular schemes linked to clusters of multi-storey blocks. AH&P is a not-for-profit company limited by guarantee. It has a board of unpaid Directors and an external CHP consultant who carries out design, procurement and project management. A Framework Agreement is in place between the Council and AH&P and, before each development begins, project

specific agreements are drawn up detailing what is to be developed, capital costs, heat charges and maintenance arrangements. The underlying principles of all the CHP schemes developed by AH&P to provide heating to Council owned properties are that:

- AH&P's procurement is in line with the public procurement policy
- Ownership of all parts of the heating system within Council owned flats or common areas of multi storey blocks reverts to the ownership of the Council upon installation
- The CHP plant is located on land owned by the Council and all mains distribution pipes run through Council owned land, and that the Council will grant AH&P a license for the long-term use of such land
- Surplus operating profits made by AH&P will be used to offset the capital costs of linking more Council owned multi-storey blocks into CHP schemes in the future.

Aberdeen is a leader in the field of CHP district heating in Scotland. We have a sound reputation for delivering projects and hence have been able to secured external capital funding for each CHP scheme developed to date. Without such external funding CHP schemes would not have been affordable to the Council in terms of capital costs.

### **The Scottish Government's commitment to CHP district heating**

In the recently published Energy Efficiency Action Plan for Scotland: Conserve and Save, the Scottish Government has included CHP district heating as one of the approaches necessary to reduce energy use and carbon emissions if we are to achieve Scotland's targets in these areas. Appendix One contains extracts from the Energy Efficiency Action Plan for Scotland that relate to district heating.

It is recognized that CHP district heating carries a higher capital cost than installing less efficient systems such as individual gas boilers, but considerably lower running costs. When considered from a full life-cycle costing perspective CHP district heating is the cheaper option.

For some time now we have been making a case to the Scottish Government that if district heating is to become a truly viable option there needs to be financial support available to install district heating networks in areas of high heat demand. It is the cost of installing the distribution pipes in the ground that increases the initial capital costs. If the costs of the distribution pipes could be covered by another means, it would be no more expensive for public bodies and private organisations to install heating systems linked to an existing heat network, than it would be for them to install individual gas boilers and link into the existing gas network.

Two costed examples were recently submitted to the Scottish Government showing extension that could be made to the Seaton CHP scheme if capital costs of the district heating pipes could be covered. These are shown in Appendices Two (location plans) and Three (costings and carbon savings).

## **Offer of grant from the Scottish Government**

The Council has been verbally offered a grant of £1million to extend the CHP district heating network in Aberdeen. We expect to receive a formal offer of grant by the end of November.

The expected conditions of the grant, as discussed with the Scottish Government, are as follows:

- The funding would be transferred in full in the current financial year.
- It cannot be used to displace any of the funding already committed for the extension to the 8 multi storey blocks at Seaton, that is we have to demonstrate additionality.
- We have to achieve expenditure, on the already committed extension to the 8 multi storey blocks in Seaton, of at least £1million by 31 March 2011 (that is not a problem - around £2million of spend is scheduled by that date).
- The £1million slippage on the Council's Housing expenditure in 2010/11 is to be spent on the extension of the district heating network as soon as practically possible in 2011/12. This recognizes the time required to determine the most cost effective route(s), carry out design, secure Planning Permissions, wayleaves, formal agreement with AH&P, etc., and this expenditure will be in addition to what the Council has already committed in 2011/12.

Scottish Government announcements have lead on other aspects of support and would therefore appreciate if neither the Council nor Aberdeen Heat and Power makes this grant the subject of a high level of publicity.

### 7. REPORT AUTHOR DETAILS

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