

# **Scrutiny review: RMBC's District Heating Scheme**

Review of the Self-Regulation Select Commission

*November 2012*

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## **Executive Summary**

The Commission received a report to its January meeting outlining proposals for Housing Rent Increase 2012/13, which includes charges for heating in those areas covered by district heating. The report outlined that the scheme did not secure full recovery of its costs and despite action to address this, it had not proved possible due to significant increases in fuel charges and other factors.

### **The aim of the review:**

In light of this, the Self-Regulation Select Commission agreed to undertake a review to explore how cost effective and fuel efficient provision of District Heating (DH) can be achieved.

The review group was made up of the following members:

- Cllr Alan Atkin,
- Cllr Dominic Beck (Chair),
- Cllr Simon Currie
- Cllr Jane Hamilton
- Cllr Simon Tweed

In gathering its evidence the DH Review Group Members reviewed previous Cabinet reports; received a series of briefings from key officers; examined practice in other local authorities and available technologies; and spoke to the Cabinet Member for Safe and Attractive Neighbourhoods.

The help and co-operation of all who participated in this review is gratefully acknowledged.

### **Summary of findings and recommendations**

With pressure on all household budgets, it is important that residents receive reliable, competitive and value for money heating. However, the current basis for charges does not reflect actual costs. The review sets out some practical steps to remedy this, ensuring that charges are fair and affordable to tenants. The review also explores how we communicate changes, service improvements or disruptions with our tenants.

In order for DH to be efficient and effective, the members concluded that management continuity and oversight needed to be improved and sets out how this can be achieved in relation to financial management, DH stock condition and future investment plans into existing schemes or in new technologies. Building on the recent scrutiny review of Fuel Poverty, the review group explored how new and more efficient technologies can minimise reliance on fossil fuels and if other sources of funding could support such developments.

There are sixteen recommendations, detailed in Section 4 of the report. These address the following areas:

- Consolidation of management arrangements and procedures;
- A review of charges and creation of a mechanism for annual review to ensure that the DH fuel cost can be fully recovered from residents;
- That a full Stock Condition Survey of all schemes is carried out, taking into account the boiler house, plant, infrastructure (distribution system) and presence of controls;
- On the basis of the Stock Condition Survey, that revenue spend profiles and capital investment plans are created, supported by the Housing Revenue Account 30 Year Business Plan to:
  - Improve existing viable schemes
  - Remove non-viable schemes and replace with the most effective alternative.
- That all future investment in DH should incorporate where possible funding opportunities presented through ECO-obligations and Greendeal.
- Ensuring that communication with service users is improved and that awareness is raised about energy efficiency and usage.

## **1. Why members wanted to undertake this review?**

The Commission received a report to its January meeting outlining proposals for Housing Rent Increase 2012/13, which includes charges for heating in those areas covered by a district heating scheme. The report outlined that the scheme did not secure full recovery of district heating costs. Despite a three year strategy to address this (agreed by the Cabinet Member for Neighbourhoods in 2007), due to ongoing and significant increases in the prices of gas and utility charges in general, this has yet to be fully realised. Under its remit, the Self-Regulation Select Commission agreed to undertake a review to ascertain whether value for money is being secured.

It is important that residents receive reliable, competitive and value for money heating. The review group was mindful of the links between this review and the wider Affordable Warmth and Anti-Poverty Agendas; not least because of a parallel review conducted by the Overview and Scrutiny Management Board to examine how ECO/Greendeal could be used to minimise fuel poverty. In addition, to these agendas, there is also evidence to demonstrate that efficient communal heating systems can contribute to the limitation of emissions of harmful gases. This may have positive implications for the Council's environmental policies.

These priorities are articulated in the Council's corporate plan as the following:

- Making sure no community is left behind:
  - less people struggle to pay for heating and lighting costs
- Helping to create safe and healthy communities:
  - people are able to live in decent affordable homes of their choice
- Improving the environment:
  - reduced CO2 emissions and lower levels of air pollution

## **2. Terms of reference**

At the meeting of the Self-Regulation Select Commission on 19<sup>th</sup> April (Minute No.76) and 31<sup>st</sup> May 2012 (Item 7), Members agreed to undertake a scrutiny review "to explore how cost effective and fuel efficient provision of District Heating (DH) can be achieved". The review group comprised of Councillors Atkin, Beck (Chair), Currie, J. Hamilton and Tweed

The Review Group refined the key questions to focus on:

- Is the current management of the scheme effective?
- Is the billing system transparent and fair and how can full recovery costs be secured?
- What are the cost and frequency of repairs?
- Can alternative technology be used to provide more efficient and effective provision, (including consideration of what other local authority and providers are doing)?
- How communications with district heating users can be improved?

The review was also asked to consider the review timescales to ensure that savings and efficiencies can be maximised.

The review has been provided with technical support by Tracie Seals, Programme Delivery Manager, Neighbourhood and Adult Services. Her help and expertise is gratefully acknowledged.

A number of other key officers provided information; namely Dan Colley (Contract and Development Services), Megan Booth (Housing Income) Kath Oakes (Finance) and David Rhodes (Energy).

DH Review Group Members also received a series of briefings, including an overview of practice in other local authorities, spoke to the Cabinet Member for Safe and Attractive Neighbourhoods and attended a training session from a DH specialist contractor in order to inform their understanding of DH system and available technologies.

### **3. Background**

The council currently operates 3 distinct schemes, each with a separate charging format:

- A pooled metered scheme; charging at 6.55p per kWh. Pre-payment charges range from £12.80 - £19.78 depending on the size of the property
- An unmetered scheme at Beeversleigh; with charges from £14.90 for a one-bedroom flat and £17.10 for a two-bedroom flat; and
- Switch 2 card meter scheme at Swinton; charging at 4.5p per kWh

In order to have a comprehensive overview of the current state of Rotherham's DH scheme, technical and financial information was consolidated into a 'matrix' (see Appendix A).

The matrix was considered and a broad red, amber and green status was applied to the following elements:

- Income per scheme compared to expenditure (cost per household)
- Scheme surplus or deficit per household
- Level of works required (considering potential to fail)
- Condition of the infrastructure (pipework, power supplies, boiler house)
- Remaining potential life of the boiler
- Presence of gas network (considering alternatives to DH) or if the scheme could be adapted to more carbon efficient alternatives

On the basis of this information, the review group could make informed recommendations of the viability of some of the schemes, the potential impact on the residents and if value for money could be secured.

## 4. District Heating – Review Focus

### 4.1 Is the current management of the scheme effective?

Management of DH has passed through a number of services, notably from the Council to Rotherham 2010 Ltd and then back again; coupled with restructures and staff losses over recent years it appears that continuity has been disrupted and no single officer has the oversight of DH in the round.

In Housing & Neighbourhood Services (HNS), repair and maintenance is managed by Contract & Development Services (C&DS); whilst billing and metering is managed by Housing Income Team; and asbestos management is undertaken by Programme Delivery Service. Boiler house management was historically undertaken by EDS.

During the review, boiler house management budget provision has been moved to C&DS bringing all budgets with Housing & Neighbourhood Services (HNS). This should lead to a more coherent approach and the review group was supportive of this early management action.

Officers reported that capital investment is largely reactive as a consequence of system failure rather than investment being part of a wider planned programme of improvement. With a better understanding of stock, expenditure and DH systems, coupled with more robust monitoring of budgets, it is anticipated that a shift can be made from the reactive to more strategic investment decisions.

Members established that financial monitoring of budgets is a challenge and it is recommended that monthly monitoring of revenue and capital budgets is undertaken between the key budget holders from the relevant sections, along with the NAS Finance Manager. It is important to ensure that this monitoring includes billing and metering matters (when necessary) as it appears difficult to reconcile.

A recent Internal Audit report “District Heating Schemes Audit 2012/2013” highlighted that there were no fundamental concerns but made recommendations to enhance the control environment and provide an increased level of assurance to management. These recommendations focused on the effective administration of the scheme and the need to update procedures. The findings of the Internal Audit reinforced the conclusions drawn by the review group, that greater oversight of the scheme should be addressed.

#### **Recommendation 1.**

Lead revenue and capital expenditure officers are identified from within Contract and Development Services (C&DS) and Strategic Housing Investment Team (SHIS) and monthly monitoring is undertaken with a representative from Neighbourhood and Adult Service’s (NAS) Finance support to ensure prudent budget control.

### 4.2 Is the billing system transparent and how can full recovery costs be secured?

There are three rates charged to DH scheme users which are dependent on a

number of factors. The basis for increasing charges is historic and in order to ensure that heating is affordable for Rotherham tenants, charges were increased by an agreed percentage point plus the rate of inflation (RPI) rather than reflecting actual costs. The charges are reviewed annually as part of the rent and service charges setting process as these are used to feed into annual budget setting.

It is important to charge fairly, but accurately, on the basis of predicted total operating costs of the heating system. This should take into account many factors, including the types of technologies deployed to generate heat.

The review group were mindful that there is a risk in drawing comparisons with 'competitor' heat and water providers. This is unhelpful because whilst unit cost for DH fuel may seem disproportionately high, domestic unit costs do not include standing charges, boiler servicing or other maintenance costs. Furthermore, within a DH context, fuel cost may not bear any resemblance to the actual cost of producing and delivering the heat to the point of use, as it does not take into consideration critical factors such as operational inefficiencies such as heat loss through pipes or boiler plant.

An accurate review of charging based on the actual cost of fuel and other direct costs of heat production and service provision should be undertaken. However, the charges should take account of efficiency of the boiler plant and heating operating system and cost of distributing the energy to dwellings. As strategic decisions are made about investment and repair; infrastructure inefficiencies will be minimised in the future.

Due to the way in which gas use is forecast, some DH users choose either to overpay or to under-use gas which can result in an overpayment at year end. This over payment must then be administered i.e. paid back (after checking whether the rent account is in balance). Conversely, if the forecast is underestimated, then accounts can be in arrears and debt recovery has to be arranged. The final issue in relation to billing is that for the Swinton schemes, the tariff for gas through the Switch 2 payment scheme has been under-estimated and so the cost of gas consumed is not fully recovered.

From visits to some complexes and feedback from officers, it is clear that energy consumption in communal areas and community centres must be monitored and controlled to ensure that residents do not elect to bypass their own consumption of fuel by opening doors to communal areas. By doing this, residents will only pay for the heating and energy they use.

The Internal Audit Report of DH schemes 2012/13 made a number of recommendations in relation to financial management arrangements and these are re-confirmed by this review.

**Recommendation 2.**

Metering and tamper-proof temperature control of common areas and community centres will ensure fairer arrangements are made for individual energy use.

**Recommendation 3.**

A review of charges and creation of a mechanism for annual review will ensure that the fuel cost in providing DH can be fully recovered from residents and those

responsible for communal areas

**Recommendation 4.**

That the review of charges accurately reflects the actual cost of fuel and other direct costs of heat production and service provision

**Recommendation 5.**

Complete the initial and subsequent annual review of DH separately from the annual rent review. Convergence of DH costs for the 1,400 DH users should not be associated with rent review for 21,000 users but overall consideration of financial impact should still be made to ensure that charges are affordable and accommodate provision for bad debt.

**Recommendation 6.**

That the recommendations in the Internal Audit Report of DH Schemes 2012/13 be implemented.

### 4.3 What are the cost and frequency of repairs?

Assimilating information about the number of schemes, location, service users and presence of leaseholders, extent of repairs, condition of boiler houses, plant, infrastructure and cost of provision proved challenging. It emerged during member's investigation that similar to the financial management concerns, no single officer or even service has a clear understanding of current condition and future investment plans into existing schemes or in new technologies.

Broadly speaking, revenue and capital investment is reactive, in response to system failure or just in time management where infrastructure is deteriorating. An absence of a planned approach to capital investment in overall maintenance means that it is difficult to consider the efficacy of any scheme as most major components were installed or replaced at different points in time with some major elements now nearing the end of useful life and some elements in good condition but for which obtaining parts is a challenge.

In communal areas and 17 community centres, lack of control over heating and hot water provision means that energy is often wasted. Some service users maximise the use of heat from communal areas which leads to repair call-outs due to air-locks.

**Recommendation 7.**

That a full Stock Condition Survey of all schemes is carried out forthwith, taking into account the boiler house, plant, infrastructure (distribution system), presence of controls both in communal areas and dwellings and the configuration of meters.

**Recommendation 8.**

That a database is created that captures the Stock Condition Survey outcomes as well as asbestos, health and safety data and servicing schedules.

**Recommendation 9.**

That revenue spend profile and capital investment plan is created for each scheme and resourcing of that plan is supported by the Housing Revenue Account 30 Year Business Plan.



#### **4.4 Can alternative technology be used to provide more efficient and effective provision?**

Extensive consideration has been given to new technologies, including receiving advice on best practice from other local authorities and DH Service providers; attendance at a training session from a commercial DH manufacturer as well as instructing a tailored in-house focus group led by officers. The Review Group Chair and Lead Officers have also attended the recent Scrutiny Spotlight Meeting on Fuel Poverty and ECO/Greendeal opportunities.

The review group attended a presentation that outlined that the benefits of district heating are increased dramatically by using a combined heat & power plant (CHP), which produces not only heat, but also electricity. CHP plants can be powered by fossil fuels but are increasingly being fuelled by biomass or anaerobic digestion systems. There are a number of advantages to CHP plants. These include:

- reduce carbon usage
- more efficient to produce energy locally can use renewable energy sources – (eg biomass, ground source) rather than reliant on fossil fuels
- community based heat source
- future proof - minimise maintenance costs if fewer plants are used
- some scope to develop schemes across Local Authority boundaries
- sell excess power to grid

The review group are very keen to pursue new and more efficient technologies, which minimise reliance on fossil fuels. However, nationally, energy funding opportunities are in transition and it will be early in 2013 before there is certainty about how local authorities will access funding to reduce carbon.

This transition, coupled with lack of comprehensive stock condition information in relation to DH means that rather than direct recommendations as to which schemes should be invested in, there are some broad suggestions for consideration.

For example:

- Beeverleigh (48 dwellings) whilst in reasonable working order is not metered and residents pay a set fee. Satisfaction with the scheme is low as there is no control over how much is paid and the building is uncomfortably warm, in all weather. The building can not be converted to traditional gas boilers. In order to harness innovation and the opportunities ECO funding may bring, heating system providers could be invited to enter a competition to provide creative and sustainable solutions, to the challenges our current infrastructure faces. Consideration should be given to the competition outcomes and whether the work can be accommodated by the HRA 30 Year Business Plan.
- Fitzwilliam at Swinton is comprised of 20 mini-DH schemes, each servicing 12 dwellings. The boilers are nearing the end of their useful life (estimated two/three years remaining) and it is recommended that an appraisal is carried

out to convert one scheme to individual boilers. This exercise is enable comparison between schemes in terms of costs and user satisfaction

In all other instances that once the stock condition surveys are complete that a hierarchical approach is given to investment such that, if a scheme is not viable then the Council should seek a more energy efficient solution and where schemes are viable then consideration be given to enhancing the technology to improve energy efficiency and use.

**Recommendation 10.**

All future investment in DH should incorporate where possible funding opportunities presented through ECO-obligations and Greendeal.

**Recommendation 11.**

On the outcome of the Stock Condition Survey implement a hierarchical approach to investment in DH schemes to:

- Improve existing viable schemes
- Remove non-viable schemes and replace with the most effective alternative

**Recommendation 12.**

Enable a mini-competition for heating and hot water providers to explore solutions for Beeverleigh and which maximizes potential to draw in ECO funding.

**Recommendation 13.**

Support a pilot to replace one scheme at Fitzwilliam, Swinton with individual boilers (subject to gas network) to enable cost in use comparison between schemes and take into account service user satisfaction

#### **4.5 How communications with district heating users can be improved?**

DH remains popular with most scheme users however dissatisfaction can occur when the system fails due to breakdown or interruption in power or fuel supply. DH schemes are complex and it is important that scheme residents, which include leaseholders, are kept informed of changes to charges or service provision.

The review identifies that on larger schemes that it is unreasonable to expect that the contractor door-knock each property; instead DH scheme users will be written to, to obtain current communication preferences of telephone, e.mail or text alert and that these methods be used to inform of problems or service changes.

Where a resident identifies themselves as 'vulnerable', it is suggested that the details could be added to the council's database so that provision can be made for face to face communication or contact via the Warden Control system (Rothercare). In addition, a suitable common information point be identified at each scheme, in order to position 'alert' notices.

It is clear from the evidence gathered that a minority of tenants are not using the heat in communal areas efficiently. Alongside, information sharing about the changes to metering or temperature control in communal areas, there needs to be awareness raising about energy efficiency and usage. This should complement projects such as "Keeping Warm in Later Life" which seeks to find out what helps

and prevents older people in Rotherham from keeping warm in winter and other initiatives about minimising the impact of fuel poverty.

**Recommendation 14.**

That service users are contacted to seek their contact details and preference for failure notifications and that this information is securely communicated to contractors associated with DH repair and maintenance.

**Recommendation 15.**

Enable a series of information sharing sessions for DH Scheme users to raise awareness about energy usage and efficiency.

#### 4.6 Future monitoring

It is apparent that the DH scheme has not delivered the efficiencies to make full cost recovery outlined in the 2007 three year strategy and subsequent action plans have not been fully implemented. Should the recommendations outlined in the report be approved, it is suggested that members of Self-Regulation Select Commission (or any successor body) assumes a monitoring role to ensure that the progress is maintained.

**Recommendation 16.**

That Members of Self-Regulation Select Commission (or any successor body) assumes a monitoring role to ensure that the progress on the implementation of agreed recommendations is maintained.

#### 5. Background Papers

- Housing Rent Increase 2012/13 – Report to Cabinet, 18 January 2012
- Self-Regulation Select Commission – Minute 43 - 12.01.12 and Minute 76 - 19.04.12
- Appendix A – overview of the current state of Rotherham’s DH scheme, technical and financial information

#### 6. Thanks

- Cllr Rose McNeely – Cabinet Member for Safe and Attractive Neighbourhoods
- Dave Richmond – Director for Housing and Neighbourhoods
- Tracie Seals - Programme Delivery Manager
- Kath Oakes - Principal Finance Officer (Neighbourhoods)
- David Rhodes – Corporate Environmental Officer
- Paul Maplethorpe - Affordable Warmth and Sustainable Energy Co-ordinator
- Dan Colley (Contract and Development Services)
- Megan Booth (Housing Income)

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