

**Report of** Director of Resources and Housing

**Report to** Executive Board

**Date:** 20<sup>th</sup> July 2020

**Subject:** District Heating Phase 3E Extension to the Southbank

Are specific electoral wards affected?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
If yes, name(s) of ward(s): Burmantofts & Richmond Hill; Hunslet & Riverside; Beeston & Holbeck	
Has consultation been carried out?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
Are there implications for equality and diversity and cohesion and integration?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
Will the decision be open for call-in?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
Does the report contain confidential or exempt information?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
If relevant, access to information procedure rule number: 10.4.3	
Appendix number: 1	

**Summary**

**1. Main issues**

- Phase 1 of the Leeds PIPEs District Heating Network (DHN) is complete having been approved by Exec Board in July 2017. Having connected to the Recycling and Energy Recovery Facility (RERF) in September 2019 it has been successfully supplying low cost, low carbon heat to residents and commercial customers. Over 900 multi storey flats (MSFs) and the Leeds Playhouse have been connected to the network, with the remaining flats due to connect prior to this winter, with major affordable warmth benefits.
- The Phase 2 extension has been under construction since September 2019 and has made excellent progress having been approved by Executive Board in April 2019. The 2.5km extension will connect 5 council owned buildings to the network, helping deliver a 60% carbon reduction for these buildings through removing their gas boilers. Discussions with other key customers in the city centre are progressing well and the network, once complete, will open up significant benefits to others within the city centre.
- Phase 2 has been delivered through securing £2.439m of Heat Networks Investment Project (HNIP) grant. The grant conditions required the council to establish a separate company, the Leeds District Heating PipeCo Ltd (SPV), and the Council has agreed to loan this wholly owned company £2.9m to complete the construction of Phase 2.

- An excellent opportunity to further extend the network has arisen with a Phase 3E extension proposed to supply heat to customers in the Southbank area of the city. Vastint, who are redeveloping the old Tetley site, will act as the anchor load to support the business case for the extension, with a key requirement to start works on their site this autumn. Affordability will be further supported through an application for grant funding from HNIP.

## 2. Best Council Plan Implications (see the [latest version of the Best Council Plan](#))

- Supporting the aspirations set out in the Best Council Plan 2019/20 – 2020/21, the Phase 3E DHN extension will provide significant economic, social and environmental benefits to the city of Leeds, including:
  - Reducing CO<sub>2</sub> emissions associated with the RERF and contributing to our ambitious CO<sub>2</sub> reduction targets in support of the recently declared “Climate Emergency”;
  - Improving air quality by making ageing gas boilers redundant;
  - Supporting fuel poverty by reducing fuel bills by circa 10% for residential customers;
  - Creating construction, operation and maintenance jobs and retaining wealth in the local economy; and
  - Supporting the expansion of superfast broadband across the city by installing empty telecommunication ducts throughout the route of the DHN.

## 3. Resource Implications

- The phase 3E extension has a total capital cost of £6.215m (including construction, connection of the Discovery Centre, external contract management and internal staff costs) which will be met via a combination of £2.438m HNIP grant and £3.777m of prudential borrowing.
- Of this, the full grant of £2,438m will be passported to the SPV and £3.692 will be loaned to the SPV at a state aid compliant rate.
- The remaining £85k will be used to replace the near end of life boilers in the Discovery Centre with a connection to the phase 3E extension.

## Recommendations

Executive Board are requested to note the contents of this report including its appendices and:

- a) Subject to HNIP funding being secured and commercial agreement with Vastint approve the additional injection of £6.215m to deliver Phase 3E of the DHN.
- b) Approve authority to spend for construction of the Phase 3E DHN extension of £6.215m funded through £2.438m HNIP grant and supported by £3.777m of prudential borrowing. As this is subject to the approval of the HNIP grant from the Department for Business, Energy and Industrial Strategy (BEIS), delegate authority to the Director of Resources and Housing to negotiate an alternative package.

- c) Delegate authority to the Director of Resources and Housing to take the final decision to invest in the network once a suitable commercial agreement with Vastint has been reached.
- d) Agree to award contracts to Vital Energi Utilities Limited and Ove Arup and Partners Ltd as set out in sections 4.4.10-4.4.12.
- e) Agree to passport the full grant award to the Leeds District Heating PipeCo Limited SPV once received, with no mark up or deductions, loan the SPV £3.692m at the minimum state aid compliant rate and require the SPV to meet the terms of the HNIP grant agreement.
- f) Support the connection of the Discovery Centre to the district heating network at a cost of £85k.

## **1. Purpose of this report**

1.1 The purpose of this report is to:

- Inform Members of the progress of the district heating project since the Executive Board paper in April 2019;
- Seek approval to construct Phase 3E of the network subject to securing funding from HNIP and other conditions being met.

## **2. Background information**

2.1 Approval to start the citywide DHN was granted by Executive Board in July 2017, which enabled the first phase of the flagship green infrastructure project to commence construction. Despite numerous challenges associated with delivering a major infrastructure project, such as complex land deals and intricate grant agreements, excellent progress has been made:

- c16km of underground pipework installed, and 2 energy centres have been constructed, containing four 11MW boilers to provide backup heat to the RERF as well as supplemental heat in periods of peak demand.
- Connection to the RERF was completed in September 2019 enabling low cost, low carbon heat to be supplied to customers.
- The Grenfell disaster occurred early in project delivery so the council amended Vital's specification to also include delivery of sprinkler systems to all flats in multi-storey blocks with newly installed DH: fire safety improvements have happened quicker than would otherwise have been possible and disruption to tenants has been minimised.
- Additional Energy Company Obligation (ECO) funding of up to £2m has been secured, ring-fenced to support energy efficiency works in the Lincoln Green area. This income is programmed to fund external wall insulation on Roxby Place flats, allowing HRA funding to be spent elsewhere. Should more than £1.4m be received, the balance will be used to offset the additional costs incurred by the General Fund (see section 4.4) to ensure that resilient heat was available to facilitate flat changeovers from April 2019.
- The project team submitted a successful European Regional Development Fund (ERDF) Project Change Request to include external wall insulation on the Shakespeares triplets as part of planned concrete repairs, securing £734k, allowing this insulation to go ahead.
- Communication ducts have been installed along the length of the DHN and are now in use by both Urban Traffic Control and Leeds Watch, with plans in place to bring superfast broadband to the council flats, saving those projects capital costs and reducing disruption to the city, with the potential to bring future income.
- The spine project has secured future expansion opportunities during construction, to avoid potentially expensive and disruptive works in future.

2.2 COVID-19 has impacted on the number of flats connected however. When work was suspended in March 2020, 946 council flats were connected to the network. Tenants connected have welcomed the new system, with many reporting that their flats are now warmer and more comfortable, improving health. The remaining flats

will be connected over a c3 month period from late July, to ensure as many as possible are connected before the winter, to help address cold homes and fuel poverty.

- 2.3 Leeds Playhouse connected to the network in June 2019 and have been heating the building using low carbon heat generated at the RERF. Ongoing discussions with potential customers on Phase 1 have been very positive with new commercial connections planned to take place during 2020/21, again delayed due to COVID-19, as highlighted in confidential appendix 1.
- 2.4 The Phase 2 extension into the city centre commenced in September 2019. The 2.5km extension will connect to the council buildings around the civic quarter in autumn 2020. The underground pipework along Eastgate and the Headrow was installed in conjunction with the Connecting Leeds project. The coordination of these 2 complex projects has been very positive and has reduced the impact on the public highway, minimising the negative effect of construction of both schemes on shops and commuters. In addition, work accelerated during COVID-19, due to the cancellation of major city centre events and the lighter traffic on the network allowing Vital to double the gangs working in the area, with works now expected to finish roughly 1 month ahead of programme
- 2.5 Phase 2 was funded through a successful HNIP grant application, which attracted investment into Leeds via a £2.439m grant. This was supported with a £2.9m loan from the council to the SPV.
- 2.6 Conditions of the HNIP grant have required a special purpose vehicle (SPV) to be established by the council. As such Leeds District Heating PipeCo Ltd has been incorporated to own the Phase 2 infrastructure. PipeCo will hold the assets and levy a use of system charge on the council to enable the transfer and sale of heat to customers connected to the network.
- 2.7 There has been significant interest from potential customers on phase 2, with a number of conversations having progressed to a commercial stage with connections anticipated during 2020/21 and beyond, as outlined in confidential appendix 1.
- 2.8 The volume of heat available from the RERF and the interest of customers in the Southbank provides an excellent opportunity to extend the network further through the construction of Phase 3E.
- 2.9 This would build further on the benefits of Phase 1 and Phase 2, with the key benefits being:
  - Reducing customer fuel bills by c10%;
  - Supporting new developments to reduce costs and achieve challenging CO<sub>2</sub> standards;
  - Maximising CO<sub>2</sub> emission reduction opportunities associated with the RERF to contribute to climate emergency declaration of being zero carbon;
  - Improving air quality in the city by removing old, inefficient gas boilers and replacing them with low carbon, renewable heat generated at the RERF;
  - Creating construction, operation and maintenance jobs;
  - Retaining greater wealth within the local economy.

### 3. Main issues

- 3.1 The DHN was designed and construction to enable expansion to allow customers across the city to connect. The RERF is capable of delivering over 100GWh of low carbon heat each year and the energy centres have been sized to supply a network of this size with resilience heat. The long term success of the network requires the number of customers connected to increase and extending into new areas increases the potential for more rapid growth, maximising the return from the initial investment.
- 3.2 Phase 2 provided the first opportunity to extend the DHN, with a route directly into the city centre. Modelling has demonstrated that two further areas of expansion (Southbank West and Southbank East), provide additional opportunities. The Southbank was initially highlighted within the Executive Board paper in July 2017 as a future area of expansion.
- 3.3 The regeneration of the Southbank and the aim of developing up to 8,000 new homes makes the Southbank one of the largest regeneration schemes in Europe. There is huge potential for the area to be transformed, with new housing, businesses and educational facilities being brought forward. Demand for energy and heat within this area will increase significantly, and installing the DHN in readiness to supply low carbon heat will play a key role in the low carbon future of the Southbank.
- 3.4 Discussions with a key stakeholder (Vastint) in the Hunslet area of the Southbank have shown an eagerness for a connection to the DHN, which along with other potential customers, has made this area a priority for expansion. Key factors are:
- The area has a demand of approximately 24.8 GWh making it a very attractive opportunity, comparable with the Phase 2 expansion which has an approximate demand of 22 GWh.
  - Time-sensitive construction programme as Vastint requires underground pipework across their site to be installed in November 2020 to align with their own construction programme, which has shifted slightly due to COVID-19 impacts. This key customer will provide a significant anchor load for the extension so it is critical that cooperation with their programme is achieved, or the opportunity will be lost.
  - Pipework has already been installed within the new pedestrian footbridge that spans the River Aire. The development programme for the next phases of the Citu Low Fold sites requires additional DHN pipework to be installed to ensure any future disruption of their site is mitigated. Critical cooperation with the developer is continued to ensure access to this key section of the network is secured.
  - The DHN can help unlock future housing investment in the Southbank by providing a low carbon secure heat source, with significant interest from several potential customers.
- 3.5 Grant funding for up to forty per cent of the construction is anticipated to come from the Heat Networks Investment Project (HNIP), a government funding programme intended to facilitate growth of heat networks in England and Wales. A total of £320 million of capital funding has been provided to fund projects. Phase 2 was funded through the award of a £2.439m grant following a successful funding application in 2019.

Programme

3.6 The table below sets out the key project milestones associated with the construction of Phase 3E.

<b>Project Milestone</b>	<b>Date</b>
HNIP funding award	August 2020
Commercial agreement with Vastint	September 2020
Phase 3E mobilization	September 2020
HNIP grant agreement signed	October 2020
Phase 3E construction commences	November 2020
Phase 3 commissioning	July 2021
Phase 3 completion	August 2021

### DHN Design Proposals

3.7 Phase 3E will comprise of a range of above and below ground infrastructure and equipment that will be installed from a phase 1 connection point on Easy Road and extend to the Hunslet area of the Southbank. The key assets associated with Phase 3E will be:

- Approximately 2.4km of super-insulated underground pipework to extend the network into the Southbank. The route of the network extension is shown on the plan in Appendix 2.
- A new pumping station proposed to be located on a road island on the A61 to serve the new extension and to act as a mixing station to allow the extension to be an efficient low temperature network.
- Isolation valves within chambers in roadways to allow connections to customers, via additional underground pipework through to individual plant rooms that contain plate heat exchangers.
- Empty telecommunications ducting installed along the route of the network to enable the installation of superfast broadband across the city and to enable council services to enhance existing services or install new services that require telecoms cables.

3.8 The design will be based around a low temperature network, which is normally only feasible for networks designed to serve modern buildings. Phase 1 and 2 are designed around providing heat to customers at a temperature of 90C, with this being returned at 60-70C. Reducing the flow temperature to 75C with a return of 45C will make the transfer of heat more efficient, allow costs to be optimised, provide additional carbon savings, and ensure that the full 100GWh of heat is available to the network.

3.9 The route of the network will cross the Citu Climate Innovation District that spans both sides of the river Aire. Following discussions with Citu DHN pipework has already been installed within the new footbridge and a detailed route planned across the remainder of the site. An easement is in draft and will be signed prior to installation.

3.10 The majority of the route does not require planning permission as it is located in land covered by the Local Development Order 3 (LDO3) and conditions will be discharged in the same way as during phases 1 & 2. However, there will be a requirement to secure planning permissions for the pumping station and those elements of the network outside the scope of the LDO, again in the same way as for stretches of phase 1, or via discharge of planning conditions for developers' sites. Outline discussion have been held with planners and Asset Management have

confirmed that the proposed pump house location is on unallocated land in the council's ownership.

- 3.11 Highways permits will also be required for the phase 3 extension. Network Management have been heavily involved with developing the programme and have helped to create a plan that will minimise the disruption to the network. It is inevitable that there will be some disruption on Crown Point Road but the works will be designed in consultation with Network Management and timed to minimise disruption.
- 3.12 The Phase 3E extension will initially connect to a number of commercial buildings, which act as a base load to enable the expansion. These are set out within the table below.

Connection	Type	Annual Energy Demand	Connection Status
<b>Council Connections</b>			
Discovery Centre	Commercial	c170MWh	Confirmed, subject to EB approval. Plant in this council owned building is c15 years old and struggles to deliver the heat requirements of the site.
<b>Additional Connections</b>			
Vastint phase 1A		c6,840 MWh	Advanced commercial discussions

- 3.13 In addition, the project team has identified additional heat loads of c17,900 MWh, as set out in the confidential appendix 1, which have strong potential to connect.

#### Business Case

- 3.14 For Leeds PIPES to be financially viable it is critical that additional heat customers are connected. However, the number of customers required to break even is significantly below the potential heat capacity of the network.
- 3.15 Phase 3E further supports Phase 1 and Phase 2 in reaching the breakeven point, with key customers in the Southbank helping to make the overall project more financially stable. Additional customers within the Southbank will further improve the projects viability when connected.
- 3.16 Further detail is provided within section 4.4 below.

#### Governance

- 3.17 To ensure that the project has robust governance and that the necessary growth is realised, annual updates regarding the performance of the DHN will be reported via the annual budget report and also via the annual Cutting Carbon report.
- 3.18 The funding agreement with HNIP will also need to be entered into following approval by the Director of Resources and Housing.

## **4. Corporate considerations**

### **4.1 Consultation and engagement**

- 4.1.1 The Executive Member for Resources and Sustainability has been kept updated on progress with Phase 1 and Phase 2 construction and briefed on plans for Phase 3E.

- 4.1.2 An extensive consultation process was undertaken prior to and during the Phase 1 and Phase 2 construction. This successful process will be mirrored for Phase 3E. Vital Energi will undertake consultation activities to ensure local Ward Members, the general public and other relevant stakeholders are involved and informed of the process. Information will be provided to local communities on the proposals.
- 4.1.3 Engagement with the Highways department will continue throughout detailed design and construction of the extension to the DHN to minimise the impact on the highway network.
- 4.1.4 Consultation with key customers within the Southbank has been ongoing over the last 12 months to determine the connection requirements and the potential heat loads. Citu have been engaged over the last few years to support the installation of pipework across their site.
- 4.1.5 Regional Energy Accelerator and National Heat Network Development Unit (HNNU) funding has been utilised to help build the business case and prepare the HNIP grant application at zero cost to the council.

## **4.2 Equality and diversity / cohesion and integration**

- 4.2.1 An equality impact assessment was completed as part of Phase 1 and Phase 2, and this has been updated for this proposed extension. The revised version is therefore attached as appendix 3.
- 4.2.2 The DHN will have a positive impact on equality as it will support the compassionate city equality objective by reducing fuel poverty, helping to increase life expectancy, improving mental health and wellbeing and reducing health inequalities.

## **4.3 Council policies and the Best Council Plan**

- 4.3.1 The extension of the DHN supports the aspirations set out in the Best Council Plan and the overall vision of becoming the best city and best council in the UK. In particular, the project helps deliver the Best Council Plan 2019/20 to 2020/21 priority on Sustainable Infrastructure with a focus on:
- Improving air quality, reducing pollution and noise; and
  - Promoting a more competitive, less wasteful, more resource efficient, low carbon economy.
- 4.3.2 In addition, the council is committed to reducing citywide carbon emissions. Significant progress has already been made, with a reduction of 43% from a 2005 baseline to 2019.
- 4.3.3 KPIs of the Best Council Plan 2019/20 – 202/21 will measure progress and achievements using – amongst others - carbon emissions across the city and level of CO<sub>2</sub> emissions from council buildings and operations. The extension of the DHN will help achieve positive results for these KPIs.
- 4.3.4 The council is working towards meeting air quality targets to ensure that it complies with national requirements. The DHN will provide a contribution towards reducing air pollution generated by heating systems in the city.

- 4.3.5 This scheme will also allow the council to demonstrate its ability to be enterprising and to act as an enabler for growth.

#### Climate Emergency

- 4.3.6 The DHN will help maximise CO<sub>2</sub> emissions reductions associated with the RERF and contribute to the citywide CO<sub>2</sub> reduction targets. Using the heat generated at the RERF will provide carbon savings through reducing the consumption of gas or electricity. Depending on the ratio of RERF to gas boiler use, a range of 0.079kg CO<sub>2</sub>/kWh to 0.109kg CO<sub>2</sub>/kWh is expected, compared to 0.216kg CO<sub>2</sub>/kWh for gas.
- 4.3.7 This translates to c1,033 tCO<sub>2</sub> saved each year under a phase 3E base scenario, rising to c3,306 tCO<sub>2</sub> saved each year once phase 3E is fully built out.

### **4.4 Resources, procurement and value for money**

- 4.4.1 The council has already made a significant investment in the overall DHN project within Leeds (phases 1, 2 and MSFs), with approximately £43.5m spent or committed to date. This has included £12.2m of grant funding support with the HRA contributing £10.3m and £21m of prudential borrowing.
- 4.4.2 As a result of the challenges identified above, the DHN project is currently forecasting a net overspend of c£4.4%. However, the project has both attracted additional income (i.e. additional ECO and ERDF funds) and delivered an enhanced project (i.e. £340k spend to allow the network to grow, additional comms ducts and inclusion of sprinkler systems). Just accounting for the additional income, an enhanced project has actually been delivered at 2.5% below forecast capital spend.
- 4.4.3 The business case for the Phase 3E extension is based upon a capital investment of £6.215m, which is required to construct the c2.4km extension into the Southbank to connect to a number of key customers. The investment is based upon a business model that generates revenue associated with the sale of heat to customers and includes c£2.44m of HNIP grant funding. Please note, although HNIP can grant fund up to 50%, certain costs are ineligible (i.e. telecom ducts, some works in buildings) and is a competitive process, hence our application for c40% of the total costs. The team and its advisors determined that this is a competitive level, meets HNIP criteria and creates a benefit to the overall Leeds PIPES business case.
- 4.4.4 Heat generated at the RERF and supplied to customers is classed as renewable power and is therefore eligible to receive RHIs (Renewable Heat Incentive) revenue for each megawatt hour of heat. RHI accreditation from Ofgem has been received by Veolia for customers connected to the DHN (e.g. Leeds Playhouse). For each customer that connects and is accredited by Ofgem, RHI payments will help subsidise the cost of heat purchased by the council until 2040 when the RHI eligibility period ends. Heat sold to customers on Phase 3E will be registered for RHI payments, supporting the affordability of the extension.
- 4.4.5 The total construction cost of Phase 3 is estimated at £6.215m. Of this, £6.13m will be spent by the PipeCo; it is estimated that this will be spent and funded as outlined below. This profile will maximise use of the HNIP grant in Year 1 and delay the majority of the loan from the Council to the PipeCo until 2021-22 when construction is scheduled for completion. The remaining £85k will be required to be provided as part of the Council's capital programme to fund the connection to the Discovery

Centre in 2021-22. The borrowing costs will be recovered as part of the heat sales agreement.

4.4.6 A cashflow table is provided below setting out the forecast spend for the project.

<b>PipeCo Costs and Funding</b>			
	2020-2021	2021-22	Total
	£000	£000	£000
Spend	2,867	3,263	6,130
Grant	-2,438		-2,438
Loan to PipeCo	-429	-3,263	-3,692
	0	0	0
<b>Capital Programme</b>			
	2020-2021	2021-22	Total
	£000	£000	£000
Spend	0	85	85
Borrowing	0	-85	-85
	0	0	0

4.4.7 Heat sales revenue from customers and the associated RHIs form a key element of the business case. For Phase 3E discussions have taken place with three external customers, with the base business case predicated on connecting just the first phase of Vastint's development and the Discovery Centre. The council has been provided with a letter of intent from Vastint, and has commenced negotiations of detailed Heads of Terms and provided initial drafts of a Framework Agreement covering the entire development. This has de-risked the investment to an extent, but there will always remain an element of risk until buildings are constructed and connected. Executive Board is therefore requested to delegate authority to the Director of Resources and Housing to take the final decision to invest in the network once a suitable commercial agreement with Vastint has been reached.

4.4.8 The project team anticipates making additional connections to the network, as outlined in the confidential appendix, which will provide further revenue through the sale of heat and the associated RHI revenue as the demand on the network increases. This confidential appendix also provides scenarios of the forecast long term benefit to the General Fund.

4.4.9 It is anticipated that some new Phase 3E connections will require additional capital finance, which will be repaid over c20 years via the customers' standing charge. When these are known, a separate report will be required to provide injection into the capital programme and give authority to spend.

4.4.10 The HNIP grant is subject to State Aid considerations and the Council has sought external legal advice to ensure that we comply. This is detailed in section 4.5 below.

- 4.4.11 The Phase 3E extension will be delivered by Vital Energi Utilities Limited under obligations set out within the existing OJEU compliant NEC3 option A Spine Design and Build contract and O&M contract, which require the contractor to support the council's ambition of expanding the network. The council will enter into a phase 3E contract with Vital, based on a minor variation of the existing D&B contract for phase 1, with a value of c£6m, and will immediately novate the phase 3E contract with Vital Energi to the Leeds District Heating PipeCo Limited SPV and provide a Parent Company Guarantee (PCG) to the benefit of Vital Energi guaranteeing the SPV's performance under the novated contract.
- 4.4.12 A construction programme for Phase 3E of around 12 months will be followed by a c10 year operational contract, followed by 2 extension periods of 5 years each. The design and build costs are based on fixed price lump sums, subject to industry standard compensation events.
- 4.4.13 In addition, the council will award a contract to Ove Arup and Partners Ltd to provide NEC3 PM and supervisor services during the construction of phase 3E, based on a minor variation of the *District Heating Project – Project Manager and Supervisor Services* contract, with a value of c£120k. Again, this contract will be immediately novated to the Leeds District Heating PipeCo Limited SPV.

#### **4.5 Legal implications, access to information, and call-in**

- 4.5.1 The information contained within confidential Appendix 1 to this report is designated as exempt from publication in accordance with paragraph 10.4(3) of the Access to Information Rules and Schedule 12A(3) of the Local Government Act 1972 on the grounds that it contains information relating to the financial or business affairs of any particular person (including the authority holding that information). The appendix contains detailed pricing information underpinning the Council's heat sales business case which if disclosed could damage the commercial interests of the Council. Disclosure of this information would seriously harm the Council's negotiating position when discussing heat sales with potential customers. Therefore it is considered that the public interest in maintaining the content of confidential appendix 1 as exempt outweighs the public interest in disclosing the information.
- 4.5.2 In any project involving the expenditure of public monies and parties acting in part for a commercial purpose there is the possibility of state aid arising. External legal advice regarding state aid has been received. This indicates that the Phase 3E extension can rely on the block exemption under Article 46 of the General Block Exemption Regulations (GBER), which applies to the capital cost of the pipes for the district heating network. Other state aid risks that have been considered (including possible aid to businesses that purchase heat) cannot be ruled out but should not arise.
- 4.5.3 Article 46(6) of GBER requires that the total amount of aid for the distribution networks must not exceed the difference between the eligible costs (i.e. the investment costs) and any operating profit which is generated. The council must calculate the operating profit on the basis of discounted revenues and operating costs over the life of the asset. If an operating profit is made the Council must then repay an equivalent amount of the grant it received to the grant provider.
- 4.5.4 Note that the council will enter into easements with Vastint and Citu to provide access to lay the DHN and maintain it in perpetuity.

4.5.5 The decisions within this report are Key Decisions and are therefore subject to call in.

### **Leeds District Heating PipeCo**

4.5.6 As set out above, the council was required to establish a SPV (Leeds District Heating Pipeco Ltd) in order to receive the HNIP grant for phase 2. This was successfully achieved by creating a company with a very simple structure and limited financial exposure:

4.5.6.1 The PipeCo receives heat from the council at the point of interconnection to the phase 1 network at Easy Road and then transports this heat to points of connection in the vicinity of customers where it is returned to the council. The council then sells heat to customers.

4.5.6.2 The PipeCo makes a use of system charge to the council for this service. This is a fixed charge (i.e. it does not vary according to the amount of heat transported) and is the PipeCo's single revenue stream. This will be formalised via a Use of System Agreement between the PipeCo and the council prior to the service starting. It is anticipated that the use of system charge will be £251k pa, indexed as appropriate. However, the SPV Directors, with the agreement of the council, may change this to reflect any unforeseen change to business rates, interest rates or cost overruns.

4.5.6.3 The major costs of the PipeCo are:

1. Repayment of a capital loan to LCC;
2. Payment of business rates;
3. An O&M and management charge to LCC;
4. External audit fees.

4.5.7 All four outgoings are predictable, although it should be noted the business rates figure modelled is a best case estimate, and the business case is based on the SPV achieving a net neutral position over the anticipated life of the asset.

4.5.8 The SPV has no directly employed staff and instead will pay the council to provide services to the SPV. This will be a formal service level agreement and will be signed prior to the service starting. The services are:

1. O&M of the assets, under contract to Vital Energi;
2. Financial services, including accounting and preparing tax returns;
3. Management and monitoring of the company and reporting to funders.

4.5.9 The council intends to use the same SPV established for phase 2 to deliver phase 3E, with the same overall approach, namely, the council applying for the grant, contracting with Vital Energi and Arup, then novating these contracts to the SPV and signing a loan agreement alongside the transfer of grant funding and grant conditions to the SPV.

4.5.10 Repayment of the capital loan will be done via a loan agreement which has been entered into by the council and the SPV on the 30<sup>th</sup> April 2020. The agreement contains step in rights in favour of the council and staged loan repayments to minimise council risk exposure.

4.5.11 The interest rate for loan repayments is currently fixed at 4.94% for the length of the loan agreement (38 years), this is a state aid compliant rate. In line with HNIP

requirements, it is necessary to account for the costs and income (excluding heat sales) through the SPV in the same way as Phase 2.

4.5.12 There will also be potential corporation tax liabilities in the future as and when the PipeCo begins to operate in profit.

## **4.6 Risk management**

4.6.1 Cost certainty relating to the construction of Phase 3E will be provided through having a contracted fixed cost with Vital Energi through an NEC construction contract. A Heat Sales Agreement with Veolia for the purchase of heat from the RERF has been agreed.

4.6.2 Sufficient customers are required to provide an anchor load with an energy demand that supports the viability of the extension. To be financially viable the network must secure sufficient heat sales and this is therefore a key risk to the project. However, planning powers (policy EN4) can be used to encourage connection to the network, which will be enforced when new developments arise and there has also been a recent national announcement that gas boilers will be banned in all new homes from 2025.

4.6.3 The council has sought grant only from HNIP, but it is possible that a mixture of grant and loan may be offered. Full details of the grant and loan funding agreements have yet to be released, so at this stage it is unclear what the individuals conditions will be. Therefore it is essential to maintain flexibility to review and accept the offer, with the authority for this delegated to the Director of Resources & Housing. This will be subject to due diligence in co-operation with the Section 151 officer and City Solicitor.

4.6.4 Interruptions in heat supply from the RERF represent a risk to the continuous supply of heat across the network. Saxton Gardens energy centre includes back-up heat generation equipment and, along with the ability to connect temporary boiler plant at locations across the network, heat supply to customers can be maintained at all times.

4.6.5 The RERF has received accreditation for RHI payments for eligible heat use. Customers connecting to the Phase 3E extension will all attract RHI revenue for the heat sold by the council, which will support the business case for the extension.

4.6.6 Ground conditions, access and routing risks that are associated with construction projects along highways and over third party land, have been transferred to the contractors.

4.6.7 Key Performance Indicators within the Spine D&B and O&M contracts will provide performance remedies to mitigate underperformance in key areas of the service where Vital Energi do not achieve the necessary service levels.

4.6.8 Coordination of programme with the councils P4G group to mitigate the impacts on the highway and other projects.

## **5. Conclusions**

5.1 Construction of phase 1 of the Leeds PIPES DHN is now complete and phase 2 is ahead of schedule. The council now has a unique opportunity to construct a significant extension of the DHN to unlock a major heat supply opportunity within

the Southbank, but must act quickly to meet the timescales of Vastint, the anchor load for the extension.

## **6. Recommendations**

- 6.1 Executive Board are requested to note the contents of this report including its appendices and:
  - 6.1.1 Subject to HNIP funding being secured and commercial agreement with Vastint approve the additional injection of £6.215m to deliver Phase 3E of the DHN.
  - 6.1.2 Approve authority to spend for construction of the Phase 3E DHN extension of £6.215m funded through £2.438m HNIP grant and supported by £3.777m of prudential borrowing. As this is subject to the approval of the HNIP grant from the Department for Business, Energy and Industrial Strategy (BEIS), delegate authority to the Director of Resources and Housing to negotiate an alternative package.
  - 6.1.3 Delegate authority to the Director of Resources and Housing to take the final decision to invest in the network once a suitable commercial agreement with Vastint has been reached.
  - 6.1.4 Agree to award contracts to Vital Energi Utilities Limited and Ove Arup and Partners Ltd as set out in sections 4.4.10-4.4.12.
  - 6.1.5 Agree to passport the full grant award to the Leeds District Heating PipeCo Limited SPV once received, with no mark up or deductions, loan the SPV £3.692m at the minimum state aid compliant rate and require the SPV to meet the terms of the HNIP grant agreement.
  - 6.1.6 Support the connection of the Discovery Centre to the district heating network at a cost of £85k.

## **7. Background documents<sup>1</sup>**

- 7.1 None

---

<sup>1</sup> The background documents listed in this section are available to download from the council's website, unless they contain confidential or exempt information. The list of background documents does not include published works.