Replacement CHP at Burntwood Leisure Centre Councillor Eadie Deputy Leader and Cabinet Member For Investment, Economic Growth and **Tourism** Date: 8 October 2019 www.lichfielddc.gov.uk Agenda Item: Contact Officer: Sarah Sleigh John Smith Tel Number: 01543 308772 - 01543 308016 CABINET Email: sarah.sleigh@lichfielddc.gov.uk john.smith@lichfielddc.gov.uk **Key Decision? Local Ward** Burntwood Leisure Centre is situated in the Ward of **Members** Chasetown and Ward members include: Cllr Ennis and Cllr Tapper.

1. Executive Summary

- 1.1 The 17 year old Combined Heat and Power Unit (CHP) at Burntwood Leisure Centre is at the end of its economic life and has been deemed obsolete by energy specialists.
- 1.2 As Landlord of the facility it is the Council's responsibility to replace the CHP.
- 1.3 There is a £235,000 sinking fund for BLC and there is an assumption in the Capital Programme that LDC will fund projects in 2019/20 using this sum.
- 1.4 The Council has appointed Townsend and Renaudon (T&R) as Project Manager and Contract Administrator. T&R have completed a procurement exercise and are helping to identify a preferred contractor.

2. Recommendations

- 2.1 To approve the release of funding from the BLC sinking fund up to the approved budget available of £235,000, to replace the Combined Heat and Power Unit (CHP) at Burntwood Leisure Centre.
- To award the contract for installation of the CHP unit at Burntwood Leisure Centre, following the due diligence referred to in paragraphs 3.12 and 3.13.

3. Background

What is a Combined Heat and Power Unit?

- 3.1 A Combined Heat and Power Unit CHP is an energy efficiency piece of plant that burns gas to both generate electricity and to heat air and water.
- 3.2 Advantages of having a CHP:
 - CHP maximises the benefit of the energy created from burning gas
 - Operators typically save around 20% on energy bills
 - Operators can save up to 30% on carbon emissions
 - Transmission and distribution losses are reduced
 - Increases fuel supply security

https://www.gov.uk/guidance/combined-heat-and-power for further information.

- 3.3 The CHP unit installed at Burntwood Leisure Centre is over 17 years old and has 99621 running hours. The unit has already had at least one rebuild. Most parts of this unit are now obsolete and the unit is at the end of its economic life. The CHP at BLC was installed when the building was constructed in 2002. It operates for 17hrs per day generating approx. 90kwh of electricity and has a heat recirculation system to supply heat to the boilers. The CHP saves approximately £42k per year in electricity when operational
- 3.4 The existing CHP is a Cogenco, 90kwh unit and a recent high-level investigation has highlighted that the unit may be greater than required and that a slightly smaller unit may result in a better economic output.
- 3.5 The CHP unit has been non-operational since November 2018 following a series of significant breakdowns during 2018, which included generator synchronisation issues, the unit seizing and/or failing to start.
- 3.6 Veolia CHP UK Ltd who are responsible under a contract novated to FL from LDC for servicing and maintaining the CHP have advised us that there are major component failures and the replacement parts for this model are now obsolete and that the CHP unit requires replacing.
- 3.7 Currently Freedom Leisure are absorbing approximately £3,500 extra per month on energy costs.

 These costs are likely to increase over the course of the next year because of inflation. Freedom

 Leisure expect LDC to replace the CHP because it is clearly stated in the contract that as Landlord it is

 LDC's responsibility to provide the CHP.
- 3.8 Alternative options have been considered and are detailed in the options section below. Replacement is the preferred option because the financial element is predictable and more controlled; the revenue liabilities and costs for energy usage are quickly returned to FL; there is no long term agreement that ties LDC into a fluctuating cost, high risk situation; there's no requirement for variation of the contract with FL and long term, it's the cheapest solution. However it will draw down the majority of what remains in the BLC sinking fund.
- 3.9 Other renewable energy solutions were considered but due to the additional costs being incurred by Freedom Leisure the preferred preference was to replace the CHP unit. Since becoming the building operators, Freedom Leisure have already completed works to introduce new energy efficiencies.
- 3.10 T&R, a contract specialist, were appointed, via an NHS Framework Agreement, to prepare the specification and procurement documents, to run the tender process, to evaluate tenders and to project manage the contractor installing the CHP Unit on behalf of LDC, at a cost of £15,000. (This was funded through the BLC sinking fund).

Cost of replacement

3.11 In August T&R issued a Tender brief to the market. The deadline for Tender returns was Monday 23 September.

Result of tender process

- 3.12 The selection process took place on Tuesday 24 September with the involvement of T&R and shortlisting was based upon price.
- 3.13 The results from the tender exercise are as follows:

 Four companies were invited to submit a tender and two companies did submit. Due to anomalies in both submissions, officers asked T&R to further interrogate the tenders and to seek post tender clarifications from both submissions, to ensure that best value is achieved with the most effective solution.
- 3.14 This post tender clarification is underway and will be completed in time for the Cabinet meeting.
- 3.15 Once this process is complete, we anticipate that both tenders price will still be within the remaining sink fund budget of £220,000 and the final tender prices will be reported to the meeting.

The CHP replacement cost is:

Details	Cost
Project management including an allowance for associated sub- contractor costs from start to completion and execution of contract	£15,000
CHP Unit (No more than)	£220,000
Total net cost Maximum	£235,000

Cost not to replace

3.16 Any alternative systems are unlikely to yield better results and would take time to explore and delay the project. This would mean Freedom would continue to incur the additional £3,500 extra utility costs per month and would expect the council to compensate this within the management fee.

Alternative Options

The Contract with Freedom Leisure Clearly states that the responsibility for replacing the CHP lies with LDC. There are 2 alternative options that were considered as part of this process:

incurred by not replacing the CHP unit				
Advantages	Disadvantages			
The Sink Fund for BLC will remain available for other projects.	 Financial risks are not predictable and less controlled. Based on current utility prices and these are expected to increase by 20-40%. This is a long term agreement that ties LDC into fluctuating costs, and carries higher risk. A variation of the contract is required. 			

1) To compensate FL through the contract based on the additional Utility costs

If the decision was taken not to replace the CHP, a variation to the Freedom contract management fee would need to incorporate the additional utility costs associated with not having a CHP. The £3,500 per month is based on current unit price. Freedom have informed the council that their utility contract is due to expire in September and they are working with a broker to secure the best deal and strategy moving forward; but they have been advised that they should expect an increase of between 20-40%. Freedom would expect regular utility benchmarking and adjustments for the remainder of the contract. For the contract period the cost to LDC is £318,500 which is considerably in excess of the £235,000.

2) To ask FL to replace the CHP unit based on a fixed additional monthly sum to be paid by LDC for the contract period.

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Advantages	Disadvantages
 The Sink Fund for BLC will remain available for other projects. Financial risks are predictable and more controlled. 	 It's more expensive over the longer term than recommended option. This option doesn't currently take account of inflation.
 Revenue liabilities and costs are quickly returned to FL. 	A variation to the contract is required
 There is no long term agreement that ties LDC into a fluctuating cost, high risk situation. 	

Another option would be for Freedom to undertake the works and be responsible for the cost in return for a variation to the contract that increases the payment by £3,500 per month or £42,000 per year (excluding any increase for inflation) we have undertaken a Net Present Value calculation (calculating the future value of money today). The assumptions we have used are:

- Commences from 1 July 2019 so year 1 is 2019/20 for 9 months.
- Ends 31 January 2027 year 8.
- No inflation.
- Discount rates of 4% (our desired net yield from Property Investment) 6% (median) and 8% the rate used by Cushman in a previous scheme.

4	Α	В	С	D	Е	F	G	
1								
2					4%	6%	8%	
3	£ per M	Months	Year					
4	3500	9	1	£31,500	£30,288	£29,717	£29,167	
5	3500	12	2	£42,000	£38,831	£37,380	£36,008	
6	3500	12	3	£42,000	£37,338	£35,264	£33,341	
7	3500	12	4	£42,000	£35,902	£33,268	£30,871	
8	3500	12	5	£42,000	£34,521	£31,385	£28,584	
9	3500	12	6	£42,000	£33,193	£29,608	£26,467	
10	3500	12	7	£42,000	£31,917	£27,932	£24,507	
11	3500	10	8	£35,000	£25,574	£21,959	£18,909	
12				£318,500	£267,564	£246,514	£227,855	
13								

In all of these scenarios even excluding any inflationary impact on the fee, the Net Present Value is in excess of £235,000 apart from inflationary impact at 8% where it could be £7k over.

Consultation

- 1. Freedom leisure have been consulted and are supportive of the proposal to replace the CHP unit.
- 2. During the CHP replacement works, there will be very little if any disturbance to customers using the facility. LDC and FL will jointly prepare a communications plan to inform customers of the works taking place.

Financial Implications

- 1. There is a £235,000 sinking fund for BLC and there is an assumption in the Capital Programme that LDC will fund projects in 2019/20 using this sum.
- 2. If the decision is not to replace the CHP the council will incur a continued annual unbudgeted pressure.

Contribution to the Delivery of the Strategic Plan

- 1. The Council's Strategic Plan describes a council that is fit for the future and that we will continue to be financially responsible.
- 2. The replacement of the CHP will result in a more energy efficient solution.

Equality, Diversity and Human Rights Implications

1. Not applicable.

Crime & Safety Issues

1. The Leisure centre presents opportunities for activities diverting people from anti-social behaviour.

GDPR/Privacy Impact Assessment

1. There are no GDPR implications arising from the proposals.

	Risk Description	How We Manage It	Severity of Risk (RYG)
Α	Project exceeds budget	By ensuring the project is closely monitored and contingencies are planned for with the appointment of T&R as Contract Administrator.	Green
В	Project Delay, which will have further financial pressures on the freedom contract.	By ensuing the project is properly managed.	Green
С	Legal challenge to tender process	T&R appointed as Contract Administrator. LDC manage the decision process.	Green
D E			

Background documents

Evaluation Documents.

Relevant web links