

Cabinet Meeting on Wednesday 21 February 2024

Contract for the Supply of Electricity for Street Lighting and Intelligent Transport Systems (ITS)



Councillor David Williams, Cabinet Member for Highways and Transport said,

“Through continued effective management of our street lighting we are reducing energy consumption which contributes to our carbon reduction commitments and drives down costs to get best value for money for our residents. Our current contract will have enabled us to convert 47,000 lights to LED by June 2024, saving £2.8million and 1,392 tonnes of CO₂, in addition to lower ongoing maintenance costs. By continuing our present procurement arrangements, we will implement the next phase of our invest to save programme, which will see a further 13,900 lights converted to

LED.”

Report Summary

The objective of the report is to establish support for the procurement direction and award of the supply of electricity for street lighting and Intelligent Transport Systems (ITS) assets, by utilising Crown Commercial Services (CCS) energy framework and their flexible purchasing model to gain the best value possible and volume for the purchase of electricity, from the supplier EDF Energy. The contract will be for the supply of 100% renewable electricity product for the period 1 April 2024 until 31 March 2028.

Recommendation

I recommend that Cabinet:

- a. Approve the approach for procuring, awarding and entering into an Electricity and Associated Services contract through the Crown Commercial Services (CCS) framework for the period of 1 April 2024 until 31 March 2028, with EDF Energy for street lighting and Intelligent Transport Systems (ITS) assets.

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Recommendation of the Cabinet Member for Highways and Transport

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Local Member Interest:

N/A

Report of the Director for Economy, Infrastructure and Skills

Reasons for Recommendations

1. The objective of the report is to establish approval for procurement direction and award of utilising the CCS energy framework and their flexible purchasing model to gain the best value for the purchase of electricity, from the supplier EDF Energy for energy supply for the street lighting and ITS assets for the period 1 April 2024 until 31 March 2028.
2. Within the public-sector arena, energy procurement has been a focus for central purchasing bodies (referred to as consortiums or public sector buying organisations) throughout the UK. These bodies offer aggregated volume based flexible pricing procurement routes and are Public Contract Regulations (PCR) 2015 compliant. There has also been a strong drive from the UK Government Energy Project board to utilise such Central Purchasing Bodies (CPBs), all of which were reviewed as part of market research. Energy market conditions have presented several challenges regards the supply and delivery of these type of contracts.
3. The annual value of the electricity usage for the Council's street lighting (91% of the total usage) and ITS (9% of the total usage) assets is currently an estimated £7.3M million per annum. This is a high-profile category for the Council due to the financial impact.

4. Regarding renewable electricity provision, CCS will ask members for their green requirements once new contracts are signed and will return to the market to ascertain the volume price increase. Currently (at the time of writing, 20/11/2023), prices are £9.25 per megawatt hour (mwh) that would equate to an additional 1p per kilowatt hour (kwh) for green electricity provision. Renewable Energy Guarantees of Origin (REGO) certification will be provided upon contract start.
5. The amount of electricity purchased is based on data showing previous demand, but there is no contractual obligation to a set volume purchase. CCS have a dedicated account management team who review and monitor the market and liaise with the supplier (EDF Energy) to identify the optimal purchasing window. Volume is then purchased in varying amounts across the basket period creating a consistent pricing approach for all customers. This allows CCS to take advantage of minor movement in current markets and pass these benefits on to customers, but also protects customers from spikes in electricity volume trading. It is noted however that current trading conditions are still extremely volatile, and purchases are primarily made to secure volume where possible whilst this volatility continues.
6. To provide an example (at the time of writing: 20/11/2023)* the typical CCS Framework Electricity Rate has recently changed to 28.0p per kwh. If the Council were to move onto a standard non-contracted deemed tariff, then this would rise to 45.92p per kwh, with suppliers able to change this at any given moment. This would represent a significant cost increase (64%) and a budgetary risk.

*Rates are currently fluctuating daily, and market volatility continues to impact on unit rates significantly.
7. Following a framework comparison, it is the recommendation of the Council's Commercial team and Entrust's Energy Management team that the Council continue with the current provider CCS Energy Flexible purchasing framework for the period 1 April 2024 until 31 March 2028 for street lighting and ITS assets. Reasons set out below:
8. Crown Commercial Services (CCS) is a UK-wide procurement organization providing a broad range of solutions, including energy services, to public sector entities. Alternative framework offers for electricity exist, such as from Yorkshire Purchasing Organization, Eastern Shires Purchasing organisation and West Mercia Energy, all of which offer a framework provision for electricity.
9. CCS sets itself apart by offering tailored procurement frameworks for energy services, designed to streamline the process for public sector

entities, ensuring efficiency and flexibility. CCS also have a significant public sector customer base, team of dedicated risk analysts, and have recently published information which included data showing that during the energy crisis they required no government assistance as the rates procured had been below the energy cap. This gives assurance and confidence in CCS moving forward.

Legal Implications

10. The tendering process completed by CCS complies with the PCR 2015 and was advertised and awarded in accordance with the regulations.

Resource and Value for Money Implications

11. Current energy market trading conditions are extremely volatile, and purchases are made to secure volume where possible whilst this volatility continues. Prices increased by around 300 – 400% from winter 2022 to spring 2023. However, the trend has now started to decrease significantly, and markets have continued to stabilise.

12. There are projections which are provided by EDF Energy for their records and for CCS, along with market trend information from the Office of Gas and Electricity Markets (OFGEM). Our current purchasing strategy has shifted from securing unit rate and volume discounts to a necessity to secure volume to ensure supply. In addition, CCS have developed (following recent world events) an extremely robust risk profiling model for the purchasing of energy to ensure any trades meet a series of purchasing markers prior to the volume being committed.

Climate Change Implications

13. The climate change implications with this procurement revolve around the conservation of renewable fuel and power. This contract will use 100% green electricity, and upon the awarding of the contract and securing of a volume of energy, a REGO certificate will be provided to the Sustainability and Climate Change team from EDF Energy for their records and carbon calculations.

Energy Consumption Reduction

14. The Lighting for Staffordshire Private Finance Initiative (LFS PFI) has delivered energy savings throughout the life of the contract. This has included de-illuminating bollards, de-illuminating road signage, and switching to energy efficient lanterns.

15. Through the contract, a significant volume of street lighting lanterns will be converted to LED. With the Invest to Save Phase 1 programme, approximately 47,000 high powered lanterns will be converted to LED by June 2024. This offers significant cost and energy savings - £2.8m (at the current energy rate) and 1,392 tonnes of CO2 have already been saved to date. In addition, there will be lower ongoing maintenance costs.
16. A second phase has recently been approved for funding – Invest to Save Phase 2 – which will commence upon completion of Phase 1. Phase 2 will change approximately 13,900 lanterns to LED and will focus more on lower powered existing lanterns. It will cost c. £4.6m to implement, with an anticipated breakeven point of four years, and will save an estimated 660 tonnes of CO2 emissions annually once implemented. A third phase of the Invest to Save programme is currently being investigated, and it is expected that further cost and energy savings will be identified. The reductions will be more modest for Phase 3 as the vast bulk of the high-volume, high-energy lanterns will have been converted.
17. In terms of ITS assets, existing halogen signal heads are currently being converted to LED. All signal heads are planned to be converted to LED by April 2025. Due to the smaller volume and energy consumption of these asset types, the conversion doesn't offer the same scale of cost and energy savings as the street lighting LED conversion, but there are still considerable benefits, particularly regarding ongoing maintenance.

List of Background Documents/Appendices:

N/A

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