

Date: 14 October 2014

Item 17: TfL Energy Purchasing 2017 to 2020

This paper will be considered in public

1 Summary

1.1 This paper:

- (a) reviews the current purchasing strategy for the supply of electricity and gas to all applicable TfL supply points through the Crown Commercial Service (CCS) agreed frameworks;
- (b) asks the Committee to recommend that the Board approves the continuation of the procurement of this requirement through future CCS frameworks from 2017 to 2020; and
- (c) updates the Committee that the value of the existing Bulk Supply Electricity contract with CCS is expected to outturn at a value of £336m over three years (2014 to 2017). The Board granted procurement authority on 2 February 2012 “to place this contract with CCS for a maximum of four TWhs, which at that day’s forward wholesale market price would have cost £300m, but which could be more over three years” (see paragraph 10).

1.2 A paper is included on Part 2 of the agenda, which contains exempt supplementary information. The information is exempt by virtue of paragraph 3 of Schedule 12A of the Local Government Act 1972 in that it contains information relating to the business affairs of TfL. Any discussion of that information must take place after the press and public have been excluded from this meeting.

2 Recommendation

2.1 The Committee is asked to:

- (a) **note the paper and the supplemental paper on part 2 of the agenda; and**
- (b) **recommend that the Board:**
 - (i) **approves the contract with CCS for the purchase of electricity and natural gas from 2017 to 2020 pan-TfL, with a value of up to £600m (the Agreement);**
 - (ii) **notes the outturn value of £336m in respect of the existing Bulk Supply Electricity contract with CCS. This is £36m more than was originally estimated when the contract was approved by the Board in February 2012 due to the unexpected increases at the time around increased regulatory charges and wholesale market movements;**
 - (iii) **authorises the TfL Officers and the Subsidiaries (described in paragraph 2.2 below) to finalise the final terms of the contract with**

CCS and its execution;

- (iv) authorises the agreement and execution (whether by deed or otherwise on behalf of TfL or any Subsidiary (as appropriate)) any documentation to be entered into in connection with the completion and implementation of the Agreement and any of the matters referred to in it (including, without limitation, all agreements, deeds, guarantees, indemnities, announcements, notices, contracts, certificates, letters or other documents); and**
- (v) authorises TfL Officers and Subsidiaries to do all such things as they consider necessary or desirable to facilitate the execution and implementation of the Agreement and the matters referred to in it.**

2.2 The following Officers and Subsidiaries shall have delegated authority:

- (a) TfL Officers: the Commissioner, Managing Director Finance, Managing Director Rail and Underground, General Counsel; Commercial Director Rail and Underground; and**
- (b) Subsidiaries: Subsidiaries of TfL including Transport Trading Limited and any other subsidiary (whether existing presently or to be formed) of Transport Trading Limited and any of the directors of the relevant company shall be authorised to act for and on behalf of that company.**

3 Background

- 3.1 TfL has an annual aggregated requirement for the supply of over 1500 Gigawatt-hours (GWhs) of electricity and 88 GWhs of natural gas. While TfL is a modest consumer of natural gas, TfL is London's single largest consumer of electricity and among the top users in the UK.**
- 3.2 TfL has been utilising the procurement services and frameworks of the Crown Commercial Service (previously the Government Procurement Service) since 2009, which has enabled TfL to have additional commercial leverage by subscribing to the largest buyer of energy in the UK and aggregating its volume with other like-minded public sector organisations.**
- 3.3 In line with the TfL energy risk management approach, the contract covering the delivery period from April 2017 to March 2020 will require TfL's commitment by mid November 2014 to ensure continuity with TfL's rolling 30 month purchasing horizon.**
- 3.4 CCS continues to provide an exemplary fully managed service, both from a price and service delivery perspective.**
- 3.5 CCS energy supply frameworks are three years in duration. EDF Energy is currently the main electricity framework provider (up to 1 April 2016) and Corona Energy the gas framework provider for the same period. These frameworks are currently being tendered for the three-year period from April 2016 and in common with other large CCS customers, TfL is involved in their evaluation and award. TfL in turn has a contract with CCS that enables TfL to access the frameworks and**

sign pre-agreed supply contracts with the chosen framework supplier (see diagram in Appendix 1).

- 3.6 The estimated outturn value is £533.5m. Due to the volatile nature of wholesale energy markets and the potential for unexpected changes in regulatory costs the estimated outturn value may be exceeded. This paper therefore requests procurement authority for £600m, which includes headroom of approximately 12 per cent to cover estimated additional costs arising from increases in the wholesale market and regulated pass-through charges. This represents a similar level to the increase incurred in relation to those costs under the existing Bulk Supply electricity contract.

4 Crown Commercial Service

- 4.1 CCS purchases for all central government, the Metropolitan Police, London Fire and Emergency Planning Authority, more than 130 local authorities, approximately 85 per cent of the NHS in England and many other organisations across the public sector including the not-for-profit sector, housing associations, education and emergency services.
- 4.2 CCS leverages its position and aggregates customer volumes to deliver sustainable savings and innovative solutions and to provide an enhanced managed service delivering value directly to its customers. It explores virtual integration of the supply chain through direct generation opportunities and hedging strategies of over 20 year time horizons.
- 4.3 In total CCS is responsible for the procurement and delivery of over £2bn per annum of energy across the public sector, and has secured savings for the public sector of over £102m in financial year 2012/13 and £94.9m in financial year 2013/14. All savings generated through the use of CCS are supported by agreed benefits methodologies, which are formally approved and audited by the Cabinet Office.
- 4.4 By aggregating all public sector volumes CCS is able to exert greater buying power in the marketplace and reduce charges incurred within the supplier margin. Through using CCS, TfL is already reducing supplier margin costs by in excess of £90,000 per annum. This increases to over £540,000 per annum from financial year 2014/15, as London Underground's and Rail for London's Bulk Supply Points (BSP) joined the CCS framework from 1 April 2014.
- 4.5 The aggregation of volume with other public sector volumes has improved TfL's load shape by reducing the relative proportion of more expensive peak volume versus cheaper baseload volume. This has enabled London Underground to reduce the BSP budget across the plan by £780,000 per annum starting financial year 2014/15.
- 4.6 Further TfL specific savings relating to CCS trading performance for 2013/14 are as follows:
- (a) Half-Hourly electricity, 4.3 per cent saving year on year of £392,800;
 - (b) non Half-Hourly electricity, 0.62 per cent saving year on year of £28,600; and
 - (c) Natural gas, 5.07 per cent saving year on year of £99,100.

5 CCS Risk Management

- 5.1 As the largest buyer of gas and electricity in the UK, CCS has skilled in-house market analysts and risk management specialists and has robust independent governance procedures in place.
- 5.2 The CCS frameworks offer a number of risk management products for its customers. The current proposal is that TfL continues to use the product it has used to date, which aligns with TfL's current risk strategy and comprises a 30 month purchasing window ahead of delivery. On that basis, from October 2014 CCS will be looking to procure electricity and gas in respect of the year commencing in April 2017.
- 5.3 The product incorporates a minimum volume profile that CCS must purchase in order to provide minimum coverage levels closer to delivery; this is designed to mitigate the impact of wholesale market price spikes.
- 5.4 This strategy is complemented by a stop loss, a mechanism which limits customers' exposure to wholesale electricity and gas price volatility where market prices reach a certain threshold.
- 5.5 CCS also has the ability to un-lock/sell back previously hedged volumes, if it believes the market fundamentals indicate potential upside. It should be noted that this mechanism is seldom used and is limited to small transactions.
- 5.6 CCS continues to develop and optimise strategy with periodic strategy workshops attended by CCS energy trading and strategy team and key customers such as the MoD, NHS, Metropolitan Police, Department for Work and Pensions, the Highway Agency, and TfL. It also holds a quarterly External Risk and Governance Board attended by the same key customers.

6 Contractual Arrangements

- 6.1 The CCS framework agreements are competitively tendered and open to all public sector organisations outlined in section 4.1, as well as TfL.
- 6.2 The CCS contract with TfL allows for termination in limited circumstances (such as in respect of material breach and in the circumstances set out in section 6.3). Any termination outside of this would be subject to the agreement of CCS and likely to involve a financial penalty. In such a scenario TfL would have to award an alternative supply contract, which would take approximately six months to procure.
- 6.3 The CCS contract allows TfL to give notice each October of its intention to terminate the agreement if it does not wish to roll forward to the next 30 month horizon; if such a notice is not given the arrangement rolls forward automatically. To accommodate the timing of the TfL Board decision on this paper, CCS has specifically agreed that TfL will need to serve such a notice by mid November 2014 if it does not wish to participate in the April 2017 procurement round. The CCS contract does, however, allow TfL to reduce or increase its overall volume requirement prior to delivery without attracting a financial penalty.
- 6.4 CCS has confirmed that, should the GLA be successful in its application for a junior electricity supply licence (Licence Lite), and (subject to commercial agreement with

TfL) be in a position to supply electricity to TfL, CCS will allow supply points to be removed from the portfolio at logical dates i.e. 1 April (start of summer season) and/or 1 October (start of winter season).

- 6.5 London Underground is currently investigating opportunities to source low carbon generation directly into its 22kV private distribution network. Given the lead time of physical delivery of any such connection, CCS has confirmed removal of significant volume would not be an issue. Currently, CCS frameworks offer no volume tolerance constraints; consequently, there is no penalty for under or over consumption.

7 Environmental and Other Sourcing Initiatives

- 7.1 Currently 20 per cent (up to 25 per cent is available to TfL) of the electricity received through the CCS framework is renewable and exempt from Climate Change Levy (CCL) although subject to a premium which is equal to the prevailing rate of the CCL. 80 per cent of TfL's electricity is used for direct transportation (i.e. traction power) which is exempt from CCL; therefore purchasing more than 20 per cent renewable energy would attract the full equivalent cost of the CCL (currently 0.541 p/kWh or £410,000 for the additional 5 per cent). CCS has confirmed its plan to continue to source at least 25 per cent of renewable energy on new frameworks covering the period 2017-20.
- 7.2 CCS aims to deliver a commercial strategy aligned and supportive of the wider UK energy policy themes of security of supply and decarbonisation.

8 Financial

- 8.1 The annual value of the CCS contract is approximately £177.8m, based on the forward wholesale market price and Department of Energy Climate Change (DECC) price projections, totalling £533.4m for the proposed three years of the agreement. This value is based on the forward wholesale market and DECC price projection for this period. Non-commodity costs are increased in line with Business Plan guidelines. (See breakdown in Appendix 2).
- 8.2 As outlined in paragraphs 4.4 and 4.5 the London Underground BSP budget plan has already been reduced by £1.3m per annum to reflect established savings from moving to CCS.
- 8.3 CCS offers a transparent not for profit service. The cost of using CCS is approximately £82,000 per annum, based on 1300 supply points; this fee includes tendering, evaluation and award of supply contracts, strategy development and optimisation, energy purchasing through the CCS trading desk and portfolio management and assistance through the CCS site administration team.
- 8.4 Failure to award a supply contract and risk management services covering the three-year period beyond April 2017 may leave TfL exposed to unmanaged wholesale market volatility and/or out of contract rates within the delivery period.

9 Alternative

- 9.1 The main alternative to remaining with CCS is to tender this requirement direct to the supply market with the likely respondents being the so called 'Big Six' energy suppliers. This would enable TfL to evaluate and award to a supplier of its choice and to select an alternative risk management strategy should it wish to do so.
- 9.2 While this option would give TfL a greater level of control, the disaggregation of TfL's volume from CCS volumes and the adjustment in relative proportion of peak time usage would result in TfL paying more than necessary for its energy. TfL would also be unable to achieve the same level of flexibility on volume tolerance, which could hinder any future directly connected low carbon sourcing opportunity. In addition, TfL would see an increase in risk management cost and associated services.
- 9.3 A further alternative would be to source multiple direct connections with local generators, but this would not be practicable or cost effective for 100 per cent of TfL volume. TfL is currently sourcing medium scale low carbon direct connections to complement the CCS strategy and TfL's carbon reduction objectives where it is cost effective to do so, as outlined 6.4 and 6.5 above.

10 Update on the existing Rail and Underground Bulk Supply Electricity

- 10.1 The increase to the April 2014 to March 2017 estimated cost of £300m to £336m for the Rail and Underground Bulk Supply was not unexpected, as the £300m figure was based on market price and pass-through costs known at the time. Since the TfL Board approval in February 2012, increases in the wholesale market and regulated pass-through charges have increased the expected three-year cost by almost 12 per cent. It should be noted that in February 2012, it was not possible to purchase wholesale electricity beyond April 2015 and the majority of regulated charges have increased beyond expected levels, notably Renewable Obligation (a mechanism designed to support large scale renewable electricity generation and there is an obligation on suppliers to financially support this) by 218 per cent, which now costs TfL in excess of £16m per annum.

List of appendices to this report:

Appendix 1: CCS Contractual Relationship Diagram

Appendix 2: CCS Forecast Spend Financial Years 2017-2020

Exempt supplemental information is included in a paper on Part 2 of the agenda.

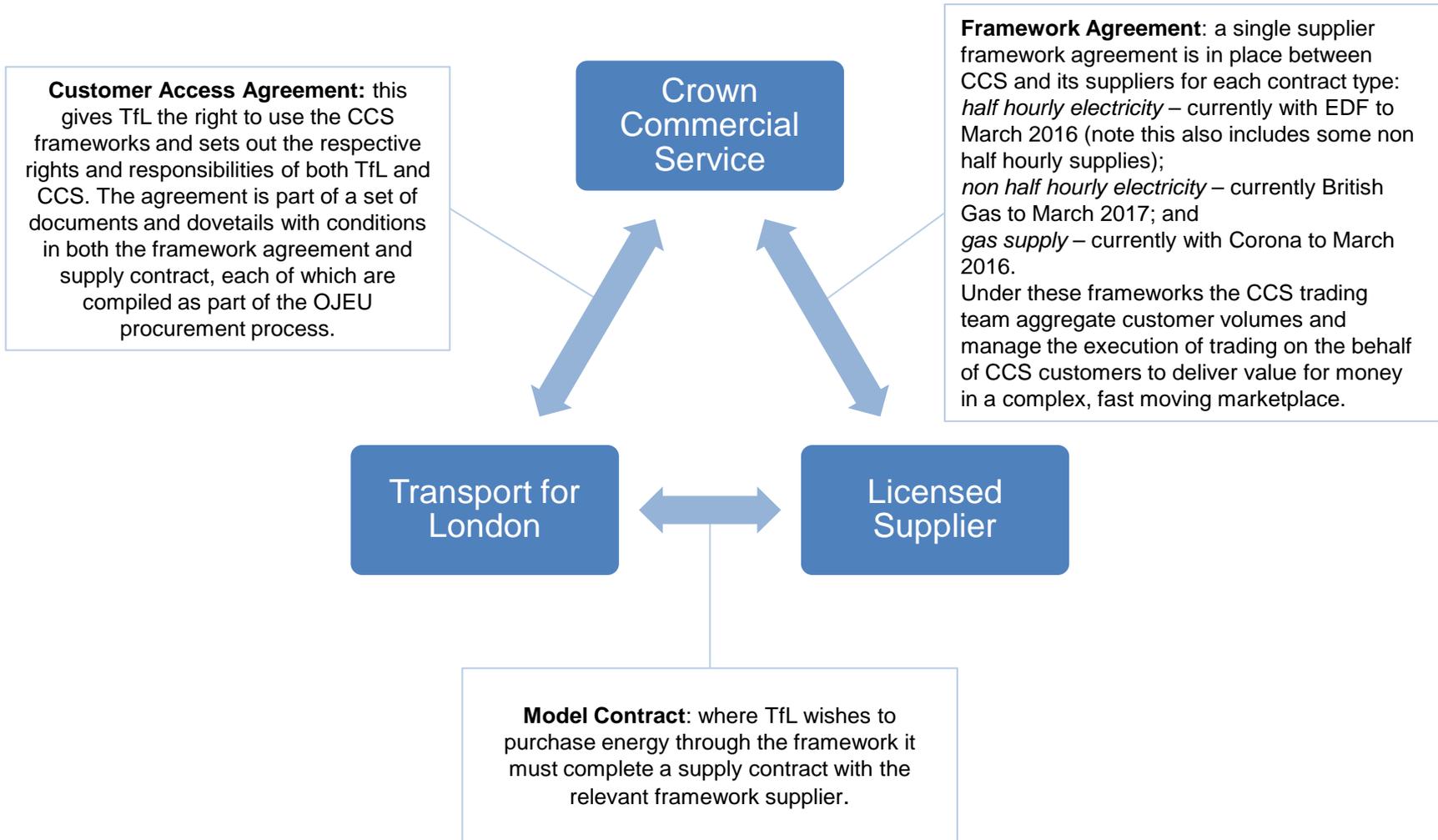
List of Background Papers:

None

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Transport for London - Crown Commercial Services Forecast Spend Financial Years 2017- 2020

Supply/Contract Type	Annual MWh	2014/2015 £	2017/2018 £	2018/2019 £	2019/2020 £
Gas Supply Points	88,454	2,437,913	2,540,879	2,571,772	2,603,745
Non Half-Hourly (NHH) & NHH Unmetered Supply Points	84,971	9,053,627	9,781,877	10,008,801	10,158,836
Half-Hourly (HH) & HH Unmetered Supply Points	175,343	18,109,710	19,899,600	20,357,865	20,657,116
LU Bulk Supply Points (BSP)	1,228,401	97,338,719	129,602,943	134,746,210	138,957,122
London Overground and Docklands Light Railway	95,294	8,863,580	10,326,661	10,558,627	10,703,576
Total	1,672,463	135,803,549	172,151,960	178,243,275	183,080,395
Estimated Contract Value £					533,475,630

The 2017-2020 LU BSP Outturn cost is based on Quarter 1 traction forecast which uses the Strategy and Service Development - Transport Planning Working Timetable Business Plan and therefore reflects the incremental changes due to SUP, regenerative braking and other upgrades in this period. The commodity costs (wholesale gas and electricity) are based on the forward wholesale market and the Department of Energy and Climate Change (DECC) price projection for this period. All non-commodity costs are increased in line with Business Plan guidelines.

All other (non BSP) 2017-2020 cost projections are based on 2014/2015 volumes and the pricing is based on the DECC forward wholesale market price projections for this period with non-commodity costs increased in line with Business Plan guidelines.