MAYOR OF LONDON

TRANSPORT FOR LONDON
EVERY JOURNEY MATTERS

Agenda

Meeting: Finance Committee

Date: Tuesday 19 November 2024

Time: 12:00 noon

Place: Elizabeth Line Room, 11th floor (11Y8), Palestra, 197 Blackfriars Road, London, SE1 8NJ

Members

Anne McMeel (Chair)
Deborah Harris-Ugbomah (Vice-Chair)
Zoë Billingham CBE
Seb Dance
Prof Greg Clark CBE
Anurag Gupta

Copies of the papers and any attachments are available on tfl.gov.uk How We Are Governed.

This meeting will be open to the public and webcast live on TfL YouTube channel, except for where exempt information is being discussed as noted on the agenda.

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Further Information

If you have questions, would like further information about the meeting or require special facilities please contact: Jackie Gavigan, Secretariat Manager; Email: v_JackieGavigan@tfl.gov.uk.

For media enquiries please contact the TfL Press Office; telephone: 0343 222 4141; email: PressOffice@tfl.gov.uk

Andrea Clarke, General Counsel
Monday 11 November 2024

Agenda
Finance Committee
Tuesday 19 November 2024

1 Apologies for Absence and Chair's Announcements

2 Declarations of Interests

General Counsel

Members are reminded that any interests in a matter under discussion must be declared at the start of the meeting, or at the commencement of the item of business.

Members must not take part in any discussion or decision on such a matter and, depending on the nature of the interest, may be asked to leave the room during the discussion.

3 Elizabeth Line Concession 2 Procurement (Pages 1 - 14)

Chief Operating Officer

The Committee is asked to note the paper and the exempt supplementary information on Part 2 of the agenda and approve Procurement Authority to enable entry into the New Concession Agreement for the operation of the Elizabeth line and ancillary agreements.

4 Power Purchase Agreement Comet: Contract Award (Pages 15 - 22)

Chief Safety, Health and Environment Officer

The Committee is asked to note the paper and the exempt supplemental information on Part 2 of the agenda and approve Procurement Authority of £225m for electricity purchased under a Power Purchase Agreement for 15 years and the costs under the associated onsale / sleeving arrangements for the same duration.

5 Any Other Business the Chair Considers Urgent

The Chair will state the reason for urgency of any item taken.

6 Date of Next Meeting

Wednesday 18 December 2024, at 10.00am

7 Exclusion of the Press and Public

The Committee is recommended to agree to exclude the press and public from the meeting, in accordance with paragraphs 3 and 5 of Schedule 12A to the Local Government Act 1972 (as amended), in order to consider the following items of business.

Agenda Part 2

8 Elizabeth Line Concession 2 Procurement (Pages 23 - 32)

Exempt supplementary information relating to the item on Part 1 of the agenda.

9 Power Purchase Agreement Comet: Contract Award (Pages 33 - 46)

Exempt supplementary information relating to the item on Part 1 of the agenda.

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Finance Committee

Date: **19 November 2024**

Item: **Elizabeth Line Concession 2 Procurement**

This paper will be considered in public

1 Summary

1.1 The purpose of this paper is to update the Committee on the procurement process undertaken by Rail for London (RfL) for the proposed new concession agreement to operate Elizabeth line passenger train services from May 2025 (New Concession Agreement) and to seek approvals for that New Concession Agreement.

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 exempt information must take place after the press and public have been excluded from the meeting.

2 Recommendations

2.1 **The Committee is asked to note the paper and the exempt supplementary information on Part 2 of the agenda and:**

(a) approve Procurement Authority in the amount set out in the paper on Part 2 of the agenda to enable entry into the New Concession Agreement for the operation of the Elizabeth line and ancillary agreements; and

(b) note that matters for which Procurement Authority is sought above extend beyond the current TfL Business Plan and Budget and provision will, therefore, need to be made in future Business Plans and Budgets.

3 Background

3.1 In May 2023 the Elizabeth line achieved through running of up to 24 trains per hour (tph) in the Central Operating Section, delivering one of the core objectives of the Crossrail project. Operationally, the Elizabeth line is now a steady-state railway.

3.2 The existing operating contract, entered into in July 2014 and due to expire in May 2025, has supported this by requiring the operator to recruit and train over 480 drivers, increase daily services from around 300 to over 1,000 as of May 2023 and manage change as phases of the Crossrail project were delivered. This has been achieved while consistently delivering high levels of customer satisfaction, with the latest results of TfL Customer Surveys scoring the highest of all TfL modes at 81. The Elizabeth line now carries over 700,000 passengers per day.

3.3 In June 2023, an update was given to the Committee on the Elizabeth line operations which proposed the commencement of a procurement process to appoint a new operator for the Elizabeth line. This update included a proposal to coordinate closely with the Docklands Light Railway (DLR) procurement process to ensure a consistent message was presented to the market, maximise interest and share lessons.

3.4 Since the meeting of the Committee in June 2023 Government policy has changed and the current policy is one of bringing national rail operations back into public ownership as current franchises expire. Although the Elizabeth line concession is not within the scope of this policy, before proposing the current TfL strategy to the Committee in 2023, we considered alternative delivery models and this has been reconsidered as part of completing our analysis. While it was concluded that the current approach continues to offer the best way of delivering a high performing and cost effective Elizabeth line operation, we continue to be open to alternative models and will monitor national developments closely.

3.5 In November 2023, after an early market engagement exercise, RfL issued a notice to the market to commence a procurement process to appoint a supplier to operate passenger train services on the Elizabeth line for a period of seven years (with an option exercisable by RfL to extend for up to a further two years and seven periods).

3.6 The procurement process was conducted in accordance with EC Regulation 1370/2007 on public passenger transport services by rail and by road.

4 The Scope of the Concession Agreement

4.1 The New Concession Agreement has been designed to ensure the Elizabeth line continues to be a showcase for investment in TfL, rail, and public transport by building on the legacy of the Crossrail project and Elizabeth line through optimisation and improvement on current high levels of safety, performance and customer satisfaction while remaining adaptable to an evolving industry and changing customer needs.

4.2 RfL reviewed the current Concession Agreement in light of lessons learnt throughout its term, updated strategic priorities across TfL, insight from market engagement and wider industry changes and best practice from similar arrangements in TfL (such as the London Overground Concession and the Docklands Light Railway Franchise).

4.3 This has informed the scope and structure of the New Concession Agreement, a summary of which is set out below, and which is designed to support the vision for the Elizabeth line and the achievement of the following strategic outcomes:

(a) achieve excellence in safety and sustainability across all aspects of the Elizabeth line;

(b) optimise the performance and cost of the Elizabeth line through continuous improvements, without sacrificing quality;

(c) maintain high and annually improve customer satisfaction, accounting for increasing customer expectations and emerging technology trends;

(d) positively influence customer and stakeholder perception of TfL and the Elizabeth line by maintaining, developing and enhancing the Elizabeth line brand across London in partnership with TfL;

(e) manage and accommodate passenger and network growth at consistently high service levels, collaborating with RfL to deliver investment projects;

(f) maintain a flexible and dynamic approach to changes in the rail industry that directly and indirectly influence the Elizabeth line; and

(g) ensuring the Elizabeth line is a great place to work and its workforce is representative of the communities it serves.

Operations

4.5 The New Concession Agreement will continue to cover all aspects of train and station operations over the Elizabeth line; this includes operation of 28 of the 41 stations on the Elizabeth line and operating over 1,000 timetabled services per weekday to deliver a peak timetable of 24 trains per hour.

4.6 While RfL retains responsibility for specifying service levels, the operator will be required to develop timetables that offer convenience to customers, including coordination of connecting services with other operators.

Train Services

4.7 The New Concession Agreement includes the operation of the 24tph peak timetable currently in operation on the Elizabeth line and operating services to Old Oak Common from 2030, as well as other pre-priced service modifications which RfL retains the right to exercise.

Interfaces

4.8 The New Concession Agreement will continue to require the operator to play a significant role in interface management between key stakeholders (such as Rail for London (Infrastructure) (RfL(I))[1], the Department for Transport (DfT), other train operating companies, Network Rail, other TfL modes and the rolling stock provider).

Infrastructure

4.9 Elizabeth line services operate over sections of the network managed by multiple infrastructure managers:

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[1] Rail for London Infrastructure (RfL(I)) is a wholly owned subsidiary of TfL and is the Infrastructure Manager responsible for the Crossrail Central Operating Section (CCOS).

(a) RfL(I) is the Infrastructure Manager (IM) responsible for the Crossrail Central Operating Section (CCOS) between Westbourne Park, Stepney Green Junction and Abbey Wood station;

(b) Network Rail Infrastructure Limited (NR) is the IM responsible for the existing parts of the National Rail Network between Paddington High Level, Heathrow Airport Junction and Reading Station in the west and Liverpool Street High Level and Shenfield Station in the east; and

(c) Heathrow Airport Limited (HAL) is the IM responsible for the Heathrow Spur and associated stations.

4.10 The operator will be required to enter into a regulated Track Access Agreement (TAA) for each section of the railway owned by NR, HAL and RfL(I). The operator will be required to negotiate and enter these TAAs and pay access charges for these sections of the railway, set by the Office of Rail and Road (ORR). TfL will retain a right in the New Concession Agreement to direct the operator in these negotiations if required.

4.11 The TAAs will not only govern the level of access and associated charges payable but also, inter alia, set benchmarks and financial incentives in relation to the Infrastructure Managers' performance. The ORR ensures reasonable provision is made for compensation for the expected revenue loss to passenger operators from the Infrastructure Managers' poor performance.

4.12 In relation to Network Rail and HAL's performance, this includes being satisfied they are adequately and continuously incentivised to improve performance, while not discriminating between train operating companies. In addition, the ORR will also ensure reasonable provision is made for compensation for the expected revenue loss to passenger operators as a result of poor performance by IMs.

4.13 Access charges paid by the operator will be treated as a straight pass through to RfL to avoid unnecessary risk pricing. Any payments received by the operator under the TAA relating to poor performance of Network Rail and/or HAL and/or other operators will also be a straight pass through to RfL. The New Concession Agreement requires the operator to ensure that payments received compensate to the fullest extent. All other payments in relation to the operator's own performance will remain the responsibility of the operator.

4.14 Where the operator is charged for traction electricity by Network Rail, in line with the existing Concession Agreement, the cost risk of that resides with RfL, with the operator on risk for levels of consumption.

4.15 The New Concession Agreement will strongly encourage and financially incentivise the operator to form a close relationship with the Infrastructure Managers with aligned incentives to ensure both parties' optimum contribution to the overall performance of the services. This includes developing improvement and recovery plans, regularly reviewing performance and proactively informing TfL of the outcomes.

4.16 The operator will not be responsible for maintenance and asset management strategy on any of the infrastructure in the Central Operating Section, as is the case under the existing Concession Agreement.

Stations

4.17 The operator will be responsible for the management and staffing of 28 stations on the Elizabeth line and the New Concession Agreement requires them to enter into various agreements to support this:

(a) entering into a station lease with RfL for 12 stations. This includes the 11 stations between Maryland and Brentwood, as well as Abbey Wood;

(b) entering into a station lease with Network Rail for 12 stations. This includes stations between Acton Main Line and Taplow (excluding Heathrow and Slough) and part of Stratford station; and

(c) entering into a Station Operator Agreement and Station Access Agreements with RfL(I) for Paddington Low Level, Canary Wharf, Custom House and Woolwich.

4.18 Where the operator is not responsible for the management and staffing of a station, or where other Train Operators wish to call at stations managed by the operator, they must enter in various agreements with other Train Operators and/or Infrastructure Managers including:

(a) entering into Station Access Agreements with other Train Operators and facility owners at Abbey Wood, Ealing Broadway, Shenfield, Slough, Twyford, Maidenhead, Heathrow, Liverpool Street High Level and Paddington High Level stations; and

(b) entering into a Station Usage Agreement with London Underground Limited at stations between Bond Street and Whitechapel and for access to the relevant parts of Ealing Broadway and Stratford stations.

4.19 The operator will be required to provide staff for Elizabeth line platforms at Bond Street, Tottenham Court Road, Farringdon, Liverpool Street and Whitechapel stations, working under London Underground operational protocols.

4.20 At operator managed stations, the operator will continue to be required to carry out low level repairs and ongoing cleaning, fault identification and reporting.

Rolling stock

4.21 The operator will be required to sub-lease the fleet of Class 345 units, which are owned by a consortium (made up of Natwest, Equitix Investment Management Limited and SMBC leasing) and leased by RfL. This fleet is maintained under the Rolling Stock Services Provision Agreement with Alstom (previously Bombardier), the Rolling Stock Provider (RSP).

4.22 The operator will manage the performance of Alstom’s maintenance obligations on a day-to-day basis as RfL’s agent under a tripartite agreement between the operator, RfL and the RSP.

4.23 The New Concession Agreement also requires the operator to support the delivery and commissioning of, and enter into a sub-lease for the additional Class 345 units due for delivery in 2026-2027.

Safety and security

4.24 The operator will continue to be required to comply with safety management requirements which include, inter alia, the Health and Safety at Work etc. Act 1974 and the Railways and Other Guided Transport Systems (Safety) Regulations 2006.

4.25 The operator will be required to hold appropriate safety certification and safety authorisation from the ORR for the operation of vehicles and management of infrastructure (stations). The ORR requires that these, as well as a Safety Management System are in place before the commencement of the next concession. In addition, RfL will require the operator to comply with specific requirements such as participation in wider safety governance arrangements with key stakeholders and monitor and manage certain safety related metrics across the railway.

4.26 The operator will be required to enter into a Police Service Agreement with the British Transport Police (BTP). Costs arising under this agreement will be a straight pass through to RfL. This change from the current arrangements has been made in alignment with wider TfL objectives and in recognition that the operator has limited or no ability to influence these costs. Notwithstanding this, day to day management of the BTP in relation to Elizabeth line services will continue be the role of the operator.

Revenue Risk

4.27 Revenue generated from fares and rail products together with patronage risk will be retained by TfL. Experience across TfL demonstrates this approach to be good value when the responsibility for matters that influence revenue outcomes, such as fare policy decisions, investment decisions, service specification, as well as advertising and marketing are retained by TfL.

4.28 Responsibility for the management and development of the station retail portfolio (excluding the CCOS stations between Paddington and Woolwich) will be transferred from Places for London to the operator under the New Concession Agreement. All existing and future revenue generated from retail (excluding car park revenue which will be retained by TfL) at these stations will be retained by the operator. This provides an incentive for the operator to improve and exploit additional revenue opportunities across the Elizabeth line. This benefits RfL by reducing the overall concession payment as a result of increased revenue to the operator and longer-term commercial benefit to TfL from an improved retail portfolio.

4.29 The operator will be responsible for the operation of ticket offices and ticket vending machines, and for undertaking revenue protection activities.

Payment Mechanism

4.30 The operator will be remunerated through a fixed concession payment that is adjusted according to performance against a suite of metrics. The concession payment will be indexed by the Consumer Price Index (with the exception of HAL Regulatory Charges which remain linked to the Retail Price Index).

Performance Regime

4.31 The performance regime in the New Concession Agreement will continue to see the operator subject to assessment against predetermined performance measures. The operator will be paid incentive payments and/or charged deductions to concession payments should actual performance be better and/or worse than target.

4.32 The monetary values ascribed across the various performance targets have been carefully calibrated to provide sufficient financial incentives and to reflect the cost to the operator (plus a reasonable margin) of achieving increased levels of performance or mitigating underperformance through correct behaviours (for example, staffing and training), whilst remaining value for money (for example, not rewarding overstaffing). In particular, the financial incentives will be designed to encourage the operator to correct any failures as rapidly as possible and to avoid repeated failures through the use of rectification periods, escalating deductions and ultimately, contractual default.

Operating Performance

4.33 The operating performance regime measures the delivery of train services against the plan of the day which covers all services operating on the Elizabeth line.

4.34 The primary performance measures in the New Concession Agreement will relate to the following operational metrics:

(a) availability (availability of units);

(b) delay (services arriving late against their scheduled timetable on the eastern section, western section or Heathrow Spur);

(c) headway (services not adhering to the timetables headway in the CCOS); and

(d) cancellations (number of missed station stops).

4.35 These operational performance measures are aligned to the Class 345 RSP performance regime, utilising the same measures and financial incentives where possible. The regime is designed so that in the CCOS, the Elizabeth line provides a high frequency, high capacity metro service and on the wider network will support commuter and leisure travel.

4.36 The operational performance measures are subject to a deduction only regime; that is, the target in the New Concession Agreement is set at 100 per cent achievement and the operator will be charged deductions for non-achievement from the concession payments RfL makes to the operator. The operator will be heavily incentivised to perform at a lower level of deductions than forecast in its bid.

4.37 Under this regime the operator will be liable for:

(a) the full value of the calculated deduction (100 per cent) for all primary delay where the cause of the incident is attributed to the operator;

(b) 10 per cent of the calculated deduction for all primary delay where the cause of the incident is attributed to the RSP, HAL, RfL(I) or NR; and

(c) 30 per cent of the calculated deduction for all reactionary delay (regardless of who caused the initial incident).

4.38 These arrangements have been adapted from those in the current Concession Agreement to ensure there is a focus on service recovery and take into account lessons learnt. As such the operator will take more responsibility for primary delay in self-caused incidents, however the operator will take equal responsibility for the reactionary delay, regardless of who the incident is attributed to – that is, the operator will be held accountable for recovering the service regardless of the cause.

4.39 To limit operator downside and risk pricing, an annual liability cap is included which has been calibrated to a level set above bid projections. A remedial plan and default level will be in place prior to hitting caps to ensure appropriate remedial action can be taken and an individual incident cap of £0.5m has been introduced. This builds on learnings from the existing Concession Agreement and ensures the operator is incentivised to recover from large one-off incidents as quickly as possible, but avoids excessive risk pricing or the operator reaching the period cap resulting in the operator “capping out” as a result of one major incident in a period.

4.40 The New Concession Agreement also measures Trips Operated (the percentage of services operated against the timetable), the On Time Metric (the number of services that arrived at a station within one minute of their scheduled arrival) and the Journey Time Metric (the TfL index used to measure performance across TfL Operations).

Service Quality

4.41 In addition, the New Concession Agreement will continue to include certain customer service targets measured against results of customer surveys (relating to information provision and security, for example) and also targets related to service quality (relating to the maintenance of high standards for frontline staff).

4.42 The New Concession Agreement will also continue to include a “Customer Facing Regime”, whereby the operator is financially incentivised to ensure customer facing resources (for example, staff, matters such as station cleanliness and ticket vending machine availability) are maintained at appropriate levels.

4.43 The operator will be incentivised to effectively protect TfL’s revenue by preventing fraudulent travel. The operator is currently charged a deduction and/or achieve an incentive payment based on a percentage share of additional and/or foregone revenue compared against a set ticketless travel target (that is, the percentage of passengers travelling without a valid ticket for their journey). The New Concession Agreement introduces Contactless Payment Media (CPM) into this regime as well as surveys in the CCOS to reflect the shift in CPM usage amongst customers and the high levels of customers using the CCOS only or transferring from other modes.

Enforcement

4.44 The enforcement regime escalates through remedial plan notices, corrective action notices, step-in rights and ultimately contractual default; designed to provide RfL with appropriate recourse to remedy poor performance quickly, without resulting in hair triggers to contractual default.

4.45 The New Concession Agreement contains a wide range of matters that constitute an event of default without being subject to earlier stages of the enforcement process. These include, inter alia, the operator reaching certain operating performance financial deduction caps in any thirteen periods, the operator reaching default benchmarks in the Operating performance and customer service regimes, insolvency related events, change of control without RfL's consent, safety related matters, breach of law and failure by the operator to provide the Guarantee and bank bond referred to in paragraph 4.46.

Other Commercial Matters

4.46 The New Concession Agreement specifies that the operator will secure its obligations with an on-demand bank bond of £30m and a parent company guarantee (which reflects the operator's limits on liability of £80m, excluding certain general indemnities where liability remains uncapped and performance regime deduction caps set at £13.5m p.a. above their projected bid performance). This reflects a review of any credit risk in the New Concession Agreement and takes into consideration the structure of the potential bidding entities.

4.47 The New Concession Agreement includes a mechanism whereby profits made by the operator will be shared with RfL. This mechanism pays RfL a 50 per cent share of the operator's profit over a predetermined threshold of 30 per cent above the level of profit bid by the operator, calculated on a cumulative basis throughout the concession. This is designed to allow sufficient flexibility for the operator to earn additional return should they perform well given the risk they are bearing but also provides a means by which RfL can limit excess returns.

5 Concession Pre-Qualification and Invitation to Tender

5.1 In February 2024, the following four bidders pre-qualified to receive an Invitation to Tender (ITT)

(a) Arriva Rail EL Limited;

(b) First Keolis Cross London (a joint venture between First Group PLC and Keolis SA);

(c) GTS Rail Operations Limited (a joint venture between Go Ahead Holdings Limited, Sumitomo Corporation and Tokyo Metro Co. Limited); and

(d) MTR (Metro Trains London) Limited.

5.2 The ITT was issued on 15 April 2024 and all four Bidders submitted their bids, including the content required by the ITT and other mandatory requirements, by the specified deadline of 8 July 2024.

5.3 The key principle of the evaluation methodology was to ensure that the New Concession Agreement would be awarded to the most economically advantageous bid allowing for a balance between technical, commercial and financial factors. The bids were evaluated for technical, commercial and price components according to the following weightings:

Component	Weighting
Technical	40%
Price	50%
Commercial	10%

5.4 The evaluation methodology takes account of the commercial structure of the New Concession Agreement with Bidders required to submit bids against the performance regime and a draft New Concession Agreement specified by RfL.

5.5 RfL has followed a detailed procurement process, set out in appropriate procurement documentation. The primary areas of evaluation are set out in further detail below.

5.6 Where appropriate, RfL has sought assurance from expert advisors, including legal, technical, financial and procurement advisers.

Technical

5.7 Bidders provided written responses to the following 16 “Delivery Plans” split across five key components:

Delivery Plan	Sub-Weighting
Delivery Plan 1 (Business Management)	-
Delivery Plan 1A (Setting Up for Success))	10.0%
Delivery Plan 1B (Health and Safety)	5.0%
Delivery Plan 1C (Working with RfL and delivery of Projects)	7.5%
Delivery Plan 2 (Operating Performance and Service Delivery)	-
Delivery Plan 2A (Operating Performance Projections)	-
Delivery Plan 2B (Traincrew Management)	10.0%
Delivery Plan 2C (Management of Third Parties)	15.0%
Delivery Plan 2D (Command and Control and Disruption Management)	15.0%
Delivery Plan 3 (Customer Service and Staffing)	-
Delivery Plan 3A (Service Quality and Revenue Protection Projections)	-
Delivery Plan 3B (Customer Experience Delivery)	12.5%
Delivery Plan 3C (Customer Information During Disruption)	10.0%
Delivery Plan 4 (Responsible Procurement)	
Delivery Plan 4A (Community Engagement)	5.0%
Delivery Plan 4B (Environment)	5.0%
Delivery Plan 4C (Equity, Diversity and Inclusion)	5.0%
Delivery Plan 4D (Strategic Labour Needs and Training)	P/F
Delivery Plan 4E (Modern Slavery)	P/F
Delivery Plan 5 (Cyber Security)	P/F
Total	100%

5.8 Each Delivery Plan was evaluated for the Bidder's understanding of the requirements and RfL's confidence that these plans would deliver the relevant sections of the New Concession Agreement.

5.9 Bidders were scored using either a "pass" or "fail" basis (P/F) or an 11 point scale ranging from 0 to 100 on a linear basis. The scored sections required Bidders to score a minimum of 30 (Minor Concerns) in each Delivery Plan, otherwise the Bidder would be excluded from further participation in the competition.

Price

5.10 Bidders were required to provide a financial model, record of assumptions and other supporting documentation to support the financial submission. The evaluation of the Price component was comprised of scoring the net present value of total payment amounts identified in the ITT.

5.11 The bidder with the lowest weighted Price was awarded full marks for the financial component and other bidders were assigned a score in inverse proportion.

Commercial

5.12 Bidders were required to provide a "mark-up" of the draft New Concession Agreement and certain associated documents. This was evaluated for the extent to which the proposed mark-up transferred risk, obligations or had any other adverse impact on RfL.

5.13 Bidders were restricted from amending various key components of the New Concession Agreement; in particular the service level commitments and staffing requirements, performance regime, the requirement to lease the class 345 rolling stock (including the additional units), the principles of the respective liability and indemnity positions of the operator and RfL (specifically including the requirement and form of the Guarantee and value of the overall liability caps in the New Concession Agreement and the Guarantee), RfL's right to set off and the structure of the payment mechanism.

5.14 Bidders were scored using a six-point scoring scale ranging from 0 (Major Concerns) to 100 (Excellent).

5.15 In addition, bidders' financial documentation and financial validity of the underlying pricing assumptions were evaluated for their completeness, clarity, ease of use and the robustness (and ultimately the risk of financial default), on a pass or fail basis.

5.16 Further details regarding the evaluation process and authority sought are set out in Part 2 of the paper.

6 Next Steps

6.1 Following contract signature, a mobilisation phase will commence to ensure that the supplier under the New Concession Agreement is ready to take over the operation of Elizabeth line services prior to Concession Commencement in May 2025.

6.2 The remaining stages in the procurement process are summarised below.

Activity	Date
Notify Bidders of Award Decision	19 November 2024
Sign Concession Agreement	December 2024
Concession Commencement	25 May 2025

List of appendices to this report:

A paper containing exempt supplementary information is included on Part 2 of the agenda.

List of Background Papers:

Elizabeth line Concession Procurement Finance Committee June 2023 Part 1
Elizabeth line Concession Procurement Finance Committee June 2023 Part 2

Contact Officer: Howard Smith, Director, Elizabeth line
Email: HowardSmith@tfl.gov.uk

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Finance Committee

Date: **19 November 2024**

Item: **Power Purchase Agreement Comet: Contract Award**

This paper will be considered in public

1 Summary

1.1 TfL is London's largest single consumer of electricity, using around 1.6TWh per annum at a cost of around £350m. This represents around 43 per cent of our operational carbon emissions and accounts for 337,000 tonnes of emitted carbon per annum.

1.2 The Mayor of London has set a target for London to be net-zero carbon by 2030. As London's strategic transport authority, TfL is responsible for implementing the Mayor's Transport Strategy (MTS), which provides that TfL will aim for rail services under its control to be zero carbon by 2030.

1.3 To meet this target, we have set out a plan to transition the way we purchase electricity to ensure it is sourced from renewable generation. Our Energy Purchasing Strategy shared with the Committee in July 2024, outlines the plan to procure up to 70 per cent of our total electricity needs from a generator through renewable energy corporate power purchase agreements (PPAs). The first step in this initiative, known as PPA Comet, involves procuring up to 12.5 per cent of TfL's electricity demand (or up to 200GWh) from a new renewable project. The proposed project has already secured planning permission, and is due to commence construction in 2026. Power delivery from the asset is anticipated to begin in 2028.

1.4 The procurement process is close to completion, and this paper set outs the contract award recommendation.

1.5 This paper seeks Procurement Authority to enable the award of a contract for the first generator PPA and associated agreements to advance our Energy Purchasing Strategy. Delivery of the electricity under the generator PPA will be effected through a concurrent onsale PPA and with an Energy Supply Agreement Addendum to our existing energy supply contract under the CCS Framework (known as "sleeving") to be signed concurrently or shortly thereafter.

1.6 A paper is included on Part 2 of the agenda, which contains exempt supplementary information. The information is exempt by virtue of paragraphs 3 and 5 of Schedule 12A of the Local Government Act 1972 in that it contains information relating to the business affairs of TfL or an issue where a claim to legal professional privilege could be made. Any discussion of that exempt information must take place after the press and public have been excluded from the meeting.

2 Recommendations

2.1 The Committee is asked to note the paper and the exempt supplementary information on Part 2 of the agenda and:

(a) approve Procurement Authority of £225m for electricity purchased under a Power Purchase Agreement for 15 years and the costs under the associated onsale/sleeving arrangements for the same duration; and

(b) note that matters for which Procurement Authority is sought above extend beyond the current TfL Business Plan and Budget and provision will, therefore, need to be made in future Business Plans and Budgets.

3 TfL ambition and context

3.1 The Mayor’s Transport Strategy, the London Environment Strategy, and TfL’s Corporate Environment Plan outline a vision for a zero-carbon London, with a specific ambition for all rail services under TfL’s control to be net-zero carbon by 2030. Achieving this goal requires eliminating fossil fuels use, enhancing energy efficiency, and increasing the use of on-site renewable energy. As self-generating sufficient renewable electricity within London to power the entire transport network is currently not feasible, TfL will continue to predominantly depend on grid-supplied electricity for its operations.

3.2 This paper addresses electricity that TfL directly procures from the Great Britain (GB) electricity grid, which currently accounts for 43 per cent of our operational carbon emissions (approximately 337,000 tonnes CO_2e per year). While TfL does not directly procure electricity for all TfL-branded services, their emissions are included in these figures for completeness.

3.3 To align with our 2030 target, TfL plans to transition to renewable electricity sources, while ensuring financial viability and alignment with broader energy procurement needs.

4 Renewables purchasing - strategic choices

Business as Usual (BAU) energy purchasing and its limitations

4.1 TfL has been utilising the procurement services and frameworks of the Crown Commercial Service (CCS) for energy purchasing since 2013. This has enabled us to take advantage of additional commercial leverage as we aggregate our volume with other public sector organisations.

4.2 Although the CCS has provided competitive prices in the past, they do not currently have an option available which is consistent with TfL's net zero ambitions. Continued reliance on grid-supplied electricity under TfL's business as usual (BAU) contracting structure is not a viable option if we are to meet our 2030 target.

4.3 Despite the Government's target to decarbonise the grid by 2030, challenges remain including in relation to planning delays and long wait times for grid connection dates, which put that target at risk. The development of schemes such as PPA Comet, however, will help accelerate the Government's goals for achieving grid transition.

Energy Procurement Options

4.4 TfL has explored various approaches for procuring renewable energy, as detailed in the Energy Purchasing Strategy paper to the Committee on 11 July 2024, this is summarised in figure 1 below.

Figure 1: Options for procuring renewable energy, Strategic Objectives Analysis

Option	Is this route currently available / deliverable?	Does this route meet our 'green credentials'?
1) **The Business as Usual (BAU)** Grid Procured through CCS (with grid mix)	✓ Current route	✗ Grid not decarbonising until beyond 2035
2) **The Do Minimum** Green Tariff (Grid Mix + REGO)	✓ Available through CCS	✗ Available Green Tariffs used REGOS, are not net additional
3) Public Buying Organisation PPA Solution	✗ Solutions are in early developed but are not available	✓ Solutions being considered could allow for net additionality
4) Power Purchase Agreements	✓ PPA market growing	✓ Can specify an 'additional' PPA
5) Direct Investment in Assets	✗ High risk to TfL, and needs PPA	✓ Would satisfy additionality

4.5 Option 1 is our BAU approach and has been discussed above. Option 2 (Green Tariff) is offered through BAU purchasing routes and relies on Renewable Energy Guarantees of Origin (REGO) certificates. These mechanisms do not provide clear additionality, as the certificates reflect the existing supply of renewables on the grid and are traded independently of this supply.

4.6 REGOs are certificates that are issued by Ofgem for each megawatt hour of electricity that has been generated from a renewable source. REGOs can be sold separately to the power with which they are associated to 'green up' organisations' fossil fuel-based supplies. This means the certificates do not necessarily support or incentivise the development of new renewable energy projects. If an organisation purchases REGOs, there is no direct impact on the GB Grid and no net additional abatement of carbon emissions. While REGOs are not without any merit (at the margin an increase in demand for REGOs increases its price, which can provide investment incentives for future renewable developers), green tariffs are often criticised as 'greenwashing' as the lack of transparency and how they are used can be misleading.

4.7 Option 3 (Public Buying Organisation) does not currently exist, but would see an organisation such as the CCS providing a simpler route to market for renewable energy that provides additionality. Option 5 (Direct Investment in Assets) would involve capital expenditure, seeing TfL take on additional risk, alongside a PPA, but would provide additionality.

4.8 Option 4 is a PPA, which is a mechanism to directly contract renewable assets with an energy generator. PPAs remain the best strategic fit, however they come with limitations; these benefits and limitations are explored below.

Additionality in renewable energy contracts

4.9 The environmental value of a renewable electricity contract is determined by its ability to directly support new renewable projects. This concept, known as ‘additionality’, means that the contract drives the development of new renewable generation that would not have been built otherwise. TfL aims to support additionality, using its purchasing power to stimulate the domestic renewables market which accelerates decarbonisation of the grid and fosters job creation. An additionality requirement can be stipulated when procuring PPAs.

4.10 While cost competitiveness is essential, requiring additionality in a contract also brings broader benefits, such as accelerating GB grid decarbonisation, supporting green job creation, and enhancing national energy security. This aligns to TfL’s duty as a local authority to bring best value in delivery.

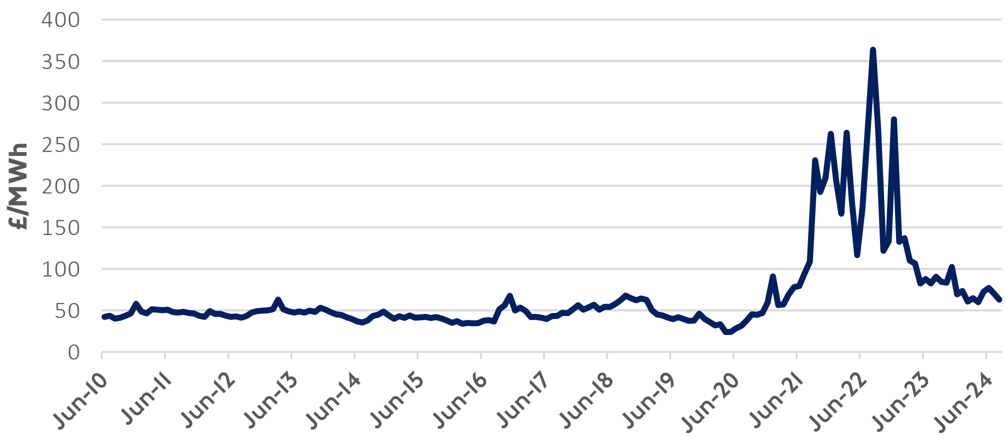
Long-term price stability

4.11 Currently, the annual cost of TfL’s electricity purchasing (at around £350m per year) is a significant element of our operational spend. In moving to new energy purchasing mechanisms we need to maintain the same financial advantages of our current approach.

4.12 PPAs are able to provide a long-term hedge (typically 10-15 years, with prices indexed to inflation as is market standard), offering price predictability and stability over an extended period. This approach can shield buyers from short-term market volatility, allowing for more consistent budgeting and financial planning. In the GB wholesale electricity market, opportunities to hedge prices are typically limited to a maximum of five years due to limited market liquidity, exposing buyers to fluctuations and potential price spikes.

4.13 The wholesale electricity market has experienced significant volatility in recent times. Although prices have begun to stabilise, they remain higher than pre-crisis levels, reflecting ongoing volatility. Gas-fired generation often sets the marginal wholesale price, which is the cost of producing one extra unit of electricity. It is set by the most expensive power plant needed to meet demand at a given time. This price determines what all suppliers (generators) get paid in the wholesale market. As such, the GB energy market remains sensitive to fluctuations in global gas prices. Long-term PPAs can mitigate this risk by locking in prices over a fixed period. This is illustrated in figure 2 below.

Figure 2: Electricity Prices: Day ahead baseload contracts monthly average (GB), Ofgem



On the other hand, a 15-year contract comes with the risk that we may be locking in prices now which are lower in the future.

Price Structure

4.15 Switching from wholesale exposure with our BAU contract, to a Consumer Price Index (CPI) linked structure, as provided by PPAs, aligns more closely with TfL's income patterns and supports effective budgeting. A mixed portfolio of energy purchasing further diversifies and manages risk.

Diversification

4.16 The PPA Comet tender aims to procure renewable electricity, with future PPA tranches planned to be procured to meet up to a total of 70 per cent of our needs. Our recently launched solar private wire project looks to contract for power from new build local solar assets. The remaining volumes will be procured through a renewable-backed flexible tariff. These diverse contracting mechanisms bring a mixed portfolio for net zero.

4.17 Under the BAU contract all of our electricity demand is met under the same mechanism. To date this has worked in our favour as the CCS Framework has delivered cost savings against wholesale prices.

5 Contracting structure of proposed PPAs

5.1 In setting the Energy Purchasing Strategy we have explored various types of PPAs. The below sets out the contracting structure of PPA Comet, and the type of Corporate PPAs TfL will contract up to the 70 per cent threshold.

PPA between the Generator and TfL

5.2 Under the proposed PPA, TfL will purchase renewable source electricity from a specified facility on a half-hourly, "pay-as-produced" basis. This means electricity is bought as it is generated. The PPA includes obligations for TfL that must be fulfilled by a regulated trading party, as detailed below, under the on-sale arrangement (Onsale PPA).

Onsale PPA between TfL and a regulated trading party

5.3 The Onsale PPA terms align closely with the Generator PPA. This agreement ensures that a regulated trading party registers the meters, takes delivery of the power, and handles market obligations for TfL.

5.4 For PPA Comet, TfL intends to use EDF Energy Limited as the regulated trading party to the Onsale PPA until at least 2029.

5.5 Additional fees will be payable to the regulated trading party for managing the PPA, including balancing and shaping services, known as the Management Fee.

5.6 As the Management Fee includes cost elements that fluctuate throughout the day, the final price will depend on the actual costs when the facility becomes operational. Alternatively, a 12-month fixed Management Fee is generally available. TfL plans to secure this fixed fee closer to the commercial operations date, when pricing becomes feasible.

Addendum to Energy Supply Agreement (ESA) between TfL and Licensed Supplier

5.7 The ESA Addendum amends TfL's existing Energy Supply Agreement under the CCS Framework with EDF Energy Customers Limited to facilitate the delivery of renewable energy purchased under the PPA. This process known as "sleeving", incurs a PPA Administration Fee, which will be charged via the CCS Framework terms.

5.8 The duration of the Onsale PPA as well as the ESA Addendum, is limited by TfL's current Energy Supply Agreement through the CCS Energy Framework to March 2029. However, both the Onsale PPA and ESA Addendum will be extended to align with TfL's future supply agreements as they are established, likely in 2026, to maintain TfL's flexible hedging strategy that allows for a purchasing horizon of at least 30 months ahead of delivery.

6 PPA Comet

6.1 The PPA Comet procurement looked to procure a 15-year PPA for 80-200 GWh per year of renewable electricity from a new build solar or wind asset, which would commence generating between April 2025 and December 2028. Due to strong market precedent the price structure is CPI linked with a cap and floor. The tender was published on 8 February 2023.

6.2 The supplementary information in Part 2 details the outcome of the procurement.

7 Next Steps

7.1 Subject to Procurement Authority being granted by the Committee, TfL will appoint the preferred bidder and finalise contract terms. Following execution of the PPA, onsale agreement, and ESA Addendum, we will announce the outcome.

7.2 Procurement authority for any proposed future PPA tranches will be sought from the Committee prior to award.

List of appendices to this report:

A paper containing exempt supplementary information is included on Part 2 of the agenda.

List of background papers:

Finance Committee, TfL Energy Purchasing Strategy update, 11 July 2024

Finance Committee, TfL Energy Purchasing: Crown Commercial Service and Power Purchase Agreements, 25 November 2020

Finance Committee, TfL Power Purchase Agreements, 23 November 2022

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Agenda Item 8

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