Riverside Energy Park

Combined Heat and Power Supplementary Report

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CORY
RIVERSIDE ENERGY

Contents

Tables

1 Introduction

1.1.1 Cory Environmental Holdings Limited (trading as Cory Riverside Energy) ('the Applicant' or 'Cory') is applying to the Secretary of State under the Planning Act 2008 for powers to construct, operate and maintain an integrated Energy Park, to be known as Riverside Energy Park (REP).

1.1.2 REP comprises an integrated range of technologies: energy recovery from residual waste; anaerobic digestion for food and green waste; solar panels; and battery storage. In addition to the electrical connection, REP incorporates the on-site infrastructure required to provide the potential for heat to be supplied to local housing and businesses.

1.2 Purpose of this Report

1.2.1 The application for the Riverside Energy Park (REP) Development Consent Order (DCO) was submitted to the Secretary of State on 16 November 2018. A **Combined Heat and Power (CHP) Assessment** (**5.4, APP-035**) was submitted in support of the DCO application. This Report provides an update to the CHP Assessment and should be read alongside the CHP Assessment.

1.2.2 The purpose of this report is as follows:

- to provide an update on the status of progress on heat export strategy and technical development;
- to clarify heat demand analysis carried out in the **CHP Assessment** (**5.4, APP-035**);
- to highlight the benefits associated with the development approach adopted by the Applicant in relation to heat export; and
- to provide an update on carbon intensity floor (CIF) calculations for the Proposed Development.

1.2.3 This report concludes that:

- REP responds directly to the outcomes sought through the National Policy Statements EN-1 and EN-3 by being designed at the outset as CHP Enabled and will therefore be fully capable of exporting heat from the commencement of operations, with all required on-site infrastructure in place.
- There is sufficient heat demand within the locality to accommodate the heat produced from REP and the existing Riverside Resource Recovery Facility (RRRF).

- REP achieves the required value for the CIF when operating in electricity-only mode, confirming that REP complies with relevant London Plan policy.

- The Applicant has implemented, and will continue to implement, demonstrable steps to secure heat export, as required by London Plan policy.

1.3 Overview of Proposed Project

1.3.1 Major energy generating stations, such as REP, utilising proven treatment technology, are well established as a key component of sustainable communities. Beyond diverting waste from landfill and meeting climate change challenges, such facilities deliver essential energy infrastructure and societal, as well as economic and environmental benefits.

1.3.2 REP is proposed on land immediately adjacent to Cory's existing RRRF located at Belvedere within the London Borough of Bexley. It would complement the operation of the existing facility as well as making greater use of existing river-based infrastructure in London.

1.3.3 Battery storage and district heating opportunities provide additional benefits, supplementing the diversity, resilience, and security of London's energy supply sources.

1.4 Policy Context

1.4.1 The National Policy Statements ('NPS') EN-1[1] and EN-3[2] are clear in their objectives to achieve climate change priorities through positive carbon outcomes, renewable/low carbon energy, sustainable waste management and optimised design. NPSs EN-1 and EN-3 establish an urgent and substantial need for new energy generation infrastructure, making clear the expectation that the industry will provide this capacity through private-led investment such as REP. Despite nearly ten years passing since their publication, the need for new, supply of renewable/low carbon energy remains substantial and urgent.

1.4.2 The National Waste Strategy – Our Waste, Our Resources (2018) supports "*driving greater efficiency of energy from waste (EfW) plants by encouraging the use of heat that plants produce"* (pg 77) and as such the Government *"welcome further investment in residual waste treatment infrastructure,…and particularly encourage development that increase plant efficiency,…and progress technologies that produce outputs beyond electricity generation where these are demonstrated to be environmentally sound and economically viable"* (pg 79).

1.4.3 Locally, policy of the London Plan is consistent with the NPS in seeking to reduce London's carbon emissions, gain decentralised energy supply and

[1] Overarching National Policy Statement for Energy EN-1, Department of Energy and Climate Change, July 2011

[2] National Policy Statement for Renewable Energy Infrastructure EN-3, Department of Energy and Climate Change, July 2011

divert waste away from landfill, through new treatment capacity that will enable London to be self-sufficient by 2026. Policies in both the adopted London Plan[3] and the draft London Plan[4] encourage delivery of combined heat and power and combined cooling heat and power.

1.4.4 The Proposed Development is located within a Heat Network Priority Area of the draft London Plan. A substantial demand is identified within the Thamesmead development led by Peabody, a social housing organisation. The energy demands are actively growing and are unlikely to be relocated in the foreseeable future. The facility would be CHP-Enabled and include on-site infrastructure necessary to connect to a heat distribution network.

1.4.5 The Bexley Energy Master Plan[5] identifies RRRF to be a potential source of heat for a district heating network. Further, the London Environment Strategy[6] recognises both that "*demand on the electricity grid will likely increase due to the growing population and electrification of heat and transport*".

1.5 Benefits of the Proposed Development

1.5.1 REP responds directly to the outcomes sought through NPSs EN-1 and EN-3 and the London Plan (both the adopted Plan and draft Plan). It is a market led, industry funded project, requiring no form of government subsidy, which will make a significant contribution to delivering the urgent and substantial need for new energy, and waste disposal, infrastructure both in London and the UK.

1.5.2 REP delivers on policy objectives in a number of ways, including the following:

- it is an energy recovery facility that achieves a positive carbon outcome, not least through the recovery of renewable/low carbon electricity from otherwise useless residual waste and has good potential to also contribute to heat demand;
- it is at the right level of the waste hierarchy and constitutes sustainable waste management capacity, taking waste away from landfill, moving it up the waste hierarchy and providing for the reuse of metals and ash as construction aggregates; and
- it delivers good design, not least through incorporating a range of energy recovery and storage technologies, it is CHP-Enabled and it incorporates river freight as part of the multi-modal transport network thereby significantly reducing the number of trucks on London's streets.

1.5.3 In summary, REP is an efficient major energy project, taking non-recyclable waste as its feedstock to recover renewable/low carbon energy and secondary

[3] The London Plan, The spatial development strategy for London consolidated with alterations since 2011, Mayor of London, March 2016

[4] Draft New London Plan showing Minor Suggested Changes, Mayor of London, August 2018

[5] Energy Masterplan, London Borough of Bexley, October 2015 (revised April 2016)

[6] London Environment Strategy, Mayor of London, May 2018

materials. The London Waste Strategy Assessment[7], the Applicant's policy based assessment of REP against the adopted and draft London Plans and independent market-based research prepared by Tolvik Consulting Ltd[8] demonstrate the extent of need for new residual waste treatment facilities such as REP.

1.5.4 Deploying both REP and RRRF would effectively double the amount of heat available to supply local networks. In addition, having the two facilities provides the necessary redundancy cover during events when one facility is not available (e.g. under maintenance) thereby ensuring continuity of supply to those users (including households) benefitting from heat supply and reducing or eliminating the need for fossil fuelled back-up boilers and associated carbon emissions.

1.5.5 Clearly, it is not a question of whether RRRF *or* REP should operate with CHP, but rather recognition of the need for *both* energy generating facilities operating with CHP and the benefits which this approach would yield.

[7] Annex A of the Project and its Benefits Report, Cory Riverside Energy, November 2018
[8] 'Residual Waste in London and the South East: Where is it going to go?', Tolvik Consulting Ltd, October 2018

2 Heat Export Strategy

2.1 Demonstrable Steps

2.1.1 The Applicant is committed to maximising the benefits associated with delivering REP with the highest levels of energy efficiency, principally through configuration of the Energy Recovery Facility (ERF) as a CHP facility to facilitate the export of heat. The Applicant has put in place a number of demonstrable steps to realise heat export from REP.

2.1.2 To actively pursue its heat export ambition, the Applicant has applied for development consent on the basis that REP will be fully CHP-Enabled from the outset by virtue of installing the necessary on-site heat export infrastructure as part of the proposed construction programme. This approach means that REP would be capable of exporting heat from the commencement of operations to a heat distribution network and demonstrates clear commitment from the Applicant by exceeding Environment Agency best available technique (BAT) requirement of being 'CHP-Ready'.

2.1.3 Prior to obtaining development consent and an Environmental Permit (EP), developers of energy generation assets do not typically engage in detailed commercial discussions regarding heat purchase agreements with the intent of bringing forward heat export opportunities. Understandably, this approach is justified on the basis that both heat generators and heat consumers require some level of certainty around the prospects of a network being implemented. It is therefore common, particularly for heat networks supplied by medium / large scale ERFs, for substantive cross-party discussions around heat export to commence only once the relevant consents have been secured.

2.1.4 Notwithstanding the industry standard, the Applicant is making significant steps, at its own cost, in establishing and maintaining momentum in the heat network development process via the Bexley District Heating Partnership Board. The Partnership Board is attended by representatives from the London Borough of Bexley (LBB), the London Borough of Greenwich (LBG), the Greater London Authority (GLA), housing developers Peabody and Orbit Homes, and the Applicant, and was established in 2018 with the ambition of establishing a collective approach to the development of a heat network in the locality. The Applicant has expressed its intention to supply renewable/low carbon heat for residents and commercial developments through the provision of a low temperature heat network.

2.1.5 Through the Partnership Board the Applicant has engaged with Peabody, LBB's development partner for the Thamesmead and Abbey Wood area of the Borough. Peabody has recognised and welcomes the Applicant's approach in respect of these efforts, as detailed in a letter of support (dated 17th April 2019), provided in Appendix A to this report, which states: "*We [Peabody] write in support of the effort and commitment shown by Cory Riverside Energy in seeking to progress the development of a Combined Heat and Power (CHP)*

district heating network to serve Belvedere, Thamesmead and other neighbouring areas…Cory have attended all Partnership Board meetings and has played an integral role in progressing the development of a CHP heat network scheme…Peabody support Cory's ongoing support and commitment to the collective goal of developing a heat network in Thamesmead and Belvedere to serve the local area which will utilise hear from RRRF and REP."

2.1.6 The Applicant is also fully engaged in supporting Ramboll, who has been engaged to evaluate the techno-economic feasibility of establishing a borough wide district heating network on behalf of the LBB. This package of work, and the Applicant's commitment, is detailed in the following section.

2.2 Ramboll Heat Network Feasibility Study

2.2.1 Ramboll was commissioned by the LBB to undertake a techno-economic feasibility study for a district energy network, focusing on energy supply from the existing Riverside Resource Recovery Facility (RRRF) and aiming to deliver heat, and potentially power, to the Thamesmead and Belvedere areas of Bexley. Phase 1 of the study was published in December 2018. It should be noted that Ramboll's work is only in relation to RRRF at this stage, given that facility is consented and operational. However, the Applicant includes this update as it demonstrates the Applicant's commitment to delivering heat to a district heating network.

2.2.2 A CHP strategy meeting was held on 20th February 2019 to discuss the results of Phase 1 of the feasibility study. The purpose of the meeting was to verify technical and commercial assumptions adopted within the study and to discuss next steps in delivery of a heat network in the region. The meeting was attended by the Applicant, the Applicant's technical and commercial advisers and Ramboll (on behalf of the LBB).

2.2.3 The results of Ramboll's Phase 1 feasibility study indicate that opportunities exist to connect 15,200 new homes over the next 20 years, assuming a "realistic" scenario, although it has become evident that this level of growth is overly conservative. Attention was drawn to a recent announcement[9] that Landlease has been selected as preferred bidder for the 11,500 home Thamesmead Waterfront development, which is being progressed by LBB's development partner for the Thamesmead and Abbey Wood area of the Borough, Peabody. This scheme is not fully accounted for in the feasibility study. Industrial heat demand in the Burt's Wharf area also appears to be under represented, and Ramboll intends to obtain energy consumption data for the largest industrial sites as part of its Phase 2 study.

2.2.4 Ramboll intends to issue a final version of Phase 2 of the feasibility study, comprising detailed techno-economic modelling, in the short term although a specific date is not known. To assist in the Phase 2 study, the Applicant provided Ramboll with a technical note outlining feasibility studies

[9] http://www.constructionenquirer.com/2019/02/15/lendlease-wins-8bn-thamesmead-development/

commissioned by the Applicant since 2014 to explore heat export from RRRF. The note substantiates technical assumptions in respect of heat export, covering heat export system configurations for hot water and steam options, presents equipment layouts, identifies space available for heat recovery and distribution equipment and sets out an indicative pipe route. The Applicant's commercial advisor also raised some suggestions in respect of commercial assumptions within the feasibility study, which could be adjusted to offer a more realistic view of the scheme under consideration.

3 Heat Demand Analysis

3.1 Policy Context

3.1.1 The **CHP Assessment** (**5.4, APP-035**) submitted in support of the DCO application demonstrates that the Proposed Development meets the policy objectives of the Overarching National Policy Statement for Energy (NPS EN-1) and the relevant technology-specific National Policy Statement for the Application (National Planning Statement – Renewable Energy Infrastructure (NPS EN-3).

3.1.2 At a regional level, the adopted and Draft London Plans both contain a number of policies relating to the sustainable use of energy and the provision of CHP. The main policies which specifically refer to the provision of CHP include; Policy 5.6 in the adopted London Plan and draft Policy S13 in the Draft London Plan. The Proposed Development responds directly to the identified challenges in both London Plans, provides a local source of renewable/low carbon energy recovered from London's residual waste and provides a means to reduce carbon dioxide emissions.

3.1.3 The local policy and guidance which relates to energy and the provision of CHP in relation to the REP DCO includes policies set by LBB, Dartford Borough Council (DBC) and Kent County Council (KCC). The CHP Assessment also considers policies set by the Royal Borough of Greenwich (RBG) as some of the heat export opportunities discussed in this report are from proposed sites in the RBG jurisdiction. The local planning policies identify a need for climate change initiatives including the provision of decentralised energy sources. These needs will be met by the Proposed Development.

3.2 Heat Demand Volumes

3.2.1 REP would be designed to export up to 30 MWt of heat to offsite consumers. Based on an operational availability of 8,000 hours per annum, this would equate to a theoretical maximum heat export capacity of 240,000 MWh/annum. Due to the variable demand profile of heat networks (as a result of seasonal and diurnal variation in heat consumption), it is not possible to export the maximum heat export capacity consistently. The same concept applies to heat supplied by RRRF (discussed subsequently). On this basis, it is important to recognise variation in instantaneous heat demands and particularly peak heat demands, which are universally inherent in district heating networks, and careful consideration must be given to ensure that infrastructure is sized to ensure that heat from low carbon sources is prioritised.

3.2.2 A heat demand assessment has been undertaken in accordance with the methodology outlined in the Environment Agency CHP-Ready Guidance. Based on the results of the National Heat Map (commissioned by DECC and subsequently adopted by BEIS), a total demand of approximately

8,300 GWh/annum exists across a registered 534,734 addresses within 10 km of the Proposed Development. Owing to the high heat density around the REP Site, heat networks are deemed by the Mayor of London to provide a competitive solution for supplying heat to buildings and consumers. REP therefore falls within an identified Heat Network Priority Area.

3.2.3 Following screening of consumers which cannot be viably be connected due to local infrastructure, topology and technical incompatibility, two key heat network options have been identified.

a. Based on a comparatively conservative assumption of proposed residential dwellings substantially located to the west of the REP site (those for which proposals were in the public domain at the time of drafting the CHP Assessment), Option 1 would comprise supply of heat to these developments via a low temperature heat network. Based on indicative build out profiles, the total demand was estimated at 114 GWh/annum. Accounting for the anticipated heat demand profile and allowing for some level of thermal storage, peak loads align with the level of heat available from REP. Development ambitions for the region are significantly greater than the conservative numbers proposed in the original assessment. Up to 20,000 dwellings and commercial properties are proposed as part of a Thamesmead regeneration programme. When accounting for the entirety of the proposed development volume, there is a surplus of heat demand which could not be satisfied by REP exclusively.

b. Option 2 would comprise connection of businesses located to the south and east of the REP site along Burt's Wharf. An estimated total heat demand of 291 GWh/annum has been identified following screening of buildings which would be unviable to connect. The heat demand requirements of individual businesses, and whether the REP ERF could supply the heat grade required, would need to be explored further. However, there appears to be an abundance of heat demand in relatively close proximity to the REP Site, which could be supplied by hot water or steam from REP and offset carbon emissions.

3.2.4 Option 1 was presented in the CHP Assessment as the preferred solution for delivering a heat network in the region with the associated benefits of minimising heat losses, supporting economic growth and regeneration and providing social benefits. Further details of the Thamesmead regeneration programme, including work undertaken by Ramboll, are presented in section 2.2.

3.2.5 The surplus heat demand captured under option 2 should not be overlooked. Should heat export to consumers identified within option 1 not materialise, the Applicant intends to engage further with key businesses identified within the **CHP Assessment** (**5.4, APP-035**). Of interest would be Archer Daniels Midland, a rapeseed oil refinery, which is suitably located on the south bank of the River Thames, approximately 1.8 km from the Proposed Development.

This site alone has an estimated heat demand of 213 GWh/annum, as specified by BEIS UK CHP Development Map tool[10].

3.2.6 As a result of the highly efficient REP design, exporting heat from REP to either of these options would present a network which is defined as 'Good Quality' CHP under the Combined Heat and Power Quality Assurance (CHPQA) scheme. Additionally, the scheme would qualify as high-efficiency cogeneration as defined in the Energy Efficiency Directive (EED).

3.3 Synergy Opportunities

3.3.1 As outlined in the CHP Assessment (5.4, APP-035), the Applicant operates RRRF, a three-stream ERF with a maximum consented waste throughput of 785,000 tonnes per annum of residual municipal solid waste (MSW), including a proportion of waste from commercial and industrial (C&I) sources. RRRF is capable of generating up to 72 MWe through a conventional combustion process and has been operated successfully since Take-Over was achieved in October 2011. RRRF is located on land directly to the east of the REP site off Norman Road, Belvedere.

3.3.2 RRRF presents an opportunity to increase the capacity of a heat network developed in the region and is therefore identified as a viable additional heat source in the **CHP Assessment** (**5.4, APP-035**). The availability and thermal export capacity of RRRF is broadly equivalent to that of the proposed REP ERF. As discussed in the preceding sections, there is a significant volume of existing and proposed local heat demand which would require heat supply from both REP and RRRF to be satisfied more comprehensively and for the benefits of renewable/low carbon heat provision to be maximised.

3.3.3 REP will be designed to achieve an availability at least 8,000 operational hours per annum. During periods of routine maintenance or unplanned outages the facility will not be operating, however the heat consumers will still require heat. There is therefore a need, somewhere within the heat distribution system, to provide a back-up source of heat to meet the needs of the heat consumers. To avoid carbon emissions associated with conventional fossil fuelled back-up boiler plant, RRRF could be utilised to export heat to the local area and offer a robust back-up heat source when REP is not operational. Since both facilities would be owned by the Applicant, staggering maintenance outages to ensure that heat supplies are maintained year-round would be possible, as both REP and RRRF would be exporting heat to the local area.

[10] https://chptools.decc.gov.uk/developmentmap

4 Carbon Intensity Floor

4.1 Policy Context

4.1.1 Energy strategy proposals should aim to reduce carbon dioxide emissions through the use of zero or low-emission decentralised energy where feasible, prioritising connection to heating and cooling networks and utilising local secondary heat sources. Policy 5.17 'Waste capacity' of the London Plan stipulates that technologies generating energy from London's non-recyclable waste must achieve a minimum greenhouse gas performance level, known as the Carbon Intensity Floor (CIF). The CIF is set at 400 grams of carbon dioxide equivalent generated per kilowatt hour (kWh) of electricity generated.

4.1.2 Proposal 7.3.2.b of the London Environment Strategy aligns with the London Plan and requires that "*Waste authorities must demonstrate how solutions generating energy from waste (EFW) meet the carbon intensity floor (CIF), or put in place demonstrable steps to meet it in the short-term.*"

4.2 CIF Calculation

4.2.1 The Applicant has assessed the carbon impact of the Proposed Development in accordance with GLA approved methodology, originally using the Mayor of London's greenhouse gas calculator model (ready reckoner) for municipal waste (version 2.1 dated October 2011). The results of the assessment indicated that the waste management technologies within REP would achieve a carbon intensity of between 283 g and 393 g of carbon dioxide equivalent generated per kWh of energy generated, subject to the level of heat export assumed.

4.2.2 Within the original assessment, set out in section 4.3 of the CHP Assessment (5.4, APP-035), the results were presented on both a gross calorific value (GCV) and a net calorific value (NCV) basis. The GLA's environmental advisory consultant has confirmed that the ready reckoner calculates the energy content of the waste using NCV and as such results are presented on a NCV basis henceforth.

4.2.3 Since the original assessment was undertaken, a number of updated ready reckoners have been released by the GLA. Versions released in October 2011 and November 2018 have been formally published but the April 2019 extracts (two of which were issued to the Applicant) have not. The Applicant has been agreeable in complying with the GLA's requests to recalculate carbon performance using updated versions of its ready reckoner, beyond those formally published and adopted within relevant policy.

4.2.4 The results for the assessment have been extracted from the various ready reckoners and are presented in Table 4-1. The November 2018 and April 2019 versions do not easily allow for the inclusion of the anaerobic digestion facility

and so the results using these versions only include the energy generation benefit associated with the ERF.

Table 4-1: Comparison of Carbon Intensity Floor results (gCO2e/kWh)

Load case	Ready reckoner version		
	October 2011 (formally published)	November 2018 (formally published)	April 2019[1] (not formally published)
33 MW heat export (to district heating and Anaerobic Digestion facility)	283	368	323
30 MW heat export (to district heating)	290	368	329
3 MW heat export to Anaerobic Digestion facility	380	375	394
No heat export	393	375	400
[1]A version of the forthcoming Emissions Performance Standard ready reckoner "*London GHG EPS Ready Reckoner v2 Issued to Cory*".			

4.2.5 The results demonstrate that REP will comply with the requirements of the CIF in all load cases and using any of the ready reckoner versions issued. Irrespective of the positive results under even the power only (non-CHP) scenario, the Applicant has put in place a number of demonstrable steps in order to realise heat export from REP, as discussed in section 2.1.

5 Conclusions

5.1.1 REP responds directly to the outcomes sought through the National Policy Statements EN-1 and EN-3 by being designed at the outset as CHP-Enabled and will therefore be fully capable of exporting heat from the commencement of operations, with all required on-site infrastructure in place. Relative to comparable projects at the pre-consent stage, the Applicant has taken considerable steps to actively pursue opportunities for heat export, principally through involvement in the Bexley District Heating Partnership Board and direct engagement with the LBB, GLA and their advisors. The Applicant has carried out and will continue to implement demonstrable steps in realising heat export opportunities.

5.1.2 Through the Partnership Board the Applicant has engaged with Peabody, LBB's development partner for the Thamesmead and Abbey Wood area of the Borough. Peabody has recognised and welcomes the Applicant's approach in respect of these efforts, as detailed in a letter of support (dated 17th April 2019), provided as Appendix A to this report, which states: "*We [Peabody] write in support of the effort and commitment shown by Cory Riverside Energy in seeking to progress the development of a Combined Heat and Power (CHP) district heating network to serve Belvedere, Thamesmead and other neighbouring areas…Cory have attended all Partnership Board meetings and has played an integral role in progressing the development of a CHP heat network scheme…Peabody support Cory's ongoing support and commitment to the collective goal of developing a heat network in Thamesmead and Belvedere to serve the local area which will utilise hear from RRRF and REP.*"

5.1.3 Ramboll, on behalf of the LBB, issued Phase 1 of a techno-economic feasibility study in December 2018. The study concludes that opportunities exist to connect 15,200 new homes over the next 20 years, although a recent media announcement and communication from the housing developer indicate that growth assumptions are overly conservative. Furthermore, industrial heat demand in the Burt's Wharf area also appears to be under represented and does not align with Government projections. The Applicant has been active in providing supporting information to Ramboll, and a final version of Ramboll's Phase 2 feasibility study is expected imminently.

5.1.4 The work undertaken in the **CHP Assessment** (**5.4, APP-035**) submitted in support of the DCO application is underpinned by and supports the requirements of the national, regional and local policy position in relation to the provision and/or opportunity for CHP.

5.1.5 A total demand of approximately 8,300 GWh/annum exists within 10 km of the Proposed Development site, which is located within a Heat Network Priority Area. After screening, two principal heat network options exist, of which the Thamesmead regeneration programme offers the most favourable solution. To fully satisfy the proposed 20,000 dwellings and associated commercial premises, heat supply from both REP and RRRF is required. Businesses

located on Burt's Wharf represent a significant volume of surplus heat demand.

5.1.6 A back-up heat source would normally be required to cover maintenance outages. It would be possible to plan maintenance outages at RRRF and REP so that the two facilities could act as a robust back-up heat source for each other, offsetting or eliminating the need for conventional fossil fuelled back-up boilers and associated carbon emissions.

5.1.7 By virtue of offering a waste management solution utilising high efficiency technologies to generate heat and power, REP is able to comply with the CIF target outlined in the Adopted and Draft London Plans and the London Environment Strategy. The Applicant has agreed to reassess the carbon performance of REP in line with updated versions of the GLA's ready reckoner, and in every operational scenario REP achieves or exceeds the CIF threshold.

Appendix A Peabody Letter of Support

Peabody

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Riverside Energy Park Examining Authority
National Infrastructure Planning
Temple Quay House
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For the attention of: Mr Jonathan Green

17th April 2019

Dear Sir,

Development Consent Application by Cory Riverside Energy for the Riverside Energy Park

We write in support of the effort and commitment shown by Cory Riverside Energy in seeking to progress the development of a Combined Heat and Power (CHP) district heat network to serve Belvedere, Thamesmead and other neighbouring areas.

In conjunction with our partners at London Borough of Bexley, Royal Borough of Greenwich, Greater London Authority and Transport for London, Peabody are driving forward the regeneration of Thamesmead. As one of London's oldest Housing Associations, we are putting our 150 years of experience into making a lasting contribution to the cultural, physical, environmental and economic wellbeing of Thamesmead.

Thamesmead is a key strategic growth area for Peabody with unrivalled space and scale. Over the next 30 years we aim to create 20,000 new homes together with commercial, cultural, and leisure facilities. Work is already underway and the first new homes in the current programme will be completed during 2019.

Within the vicinity Thamesmead and Belvedere, we understand that Cory own and operate an Energy Recovery Facility (ERF) known as Riverside Resource Recovery Facility (RRRF), which was constructed to enable heat offtake (CHP-Ready).

In addition to the existing RRRF, Cory have lodged an application for the proposed Riverside Energy Park including an ERF. If Development Consent is granted for the REP, we understand that the new facility would be constructed to be CHP-enabled, meaning REP will include all necessary heat export infrastructure within the site boundary of the new facility. This would enable the construction of a heat network in a straightforward manner.

To realise the opportunity for CHP offtake the London Borough of Bexley established the Bexley District Heating Partnership Board during 2018, which includes representation from the London Borough of Bexley, the London Borough of Greenwich, the Greater London Authority, Peabody, Orbit Homes and Cory Riverside Energy. The Partnership Board has made progress in assessing heat offtake opportunity within Bexley and the appropriate action required to enable delivery. Cory have attended all Partnership Board meetings and has played an integral role in progressing the development of a CHP heat network scheme. Clearly having heat sources within the vicinity of planned Peabody development would provide opportunities for the provision of a low-carbon heat network.

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As a fellow member of the Partnership Board, Peabody support Cory's ongoing support and commitment to the collective goal of developing a heat network in Thamesmead and Belvedere to serve the local area which will utilise heat from RRRF and REP.

Yours faithfully,

[redacted]

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