

Jonathan Green
Riverside Energy Park Examining Authority
National Infrastructure Planning
Temple Quay House
2 The Square
Bristol
BS1 6PN

Date: 03 September 2019
Our ref: 20022257
Your ref: EN010093

Dear Mr Green,

Re: Riverside Energy Park DCO Application – Deadline 5 – Response to Cory Riverside Energy

Further to the Written Representation I submitted at Deadline 2, I am writing with comments on the response to that representation which was submitted at Deadline 3 by Cory Riverside Energy (the Applicant).

Overview

The Applicant has not adequately addressed some of the points that I raised in ELWA's Written Representation about the logic of locating a second large facility of this type at a site where a relatively young facility already exists.

The justification for placing a second facility at this location seems to reiterate some of the outline basis of the application, namely accessibility by river, and also puts forward supporting rationale that would appear to be largely made up of commercial benefits for the Applicant itself (such as use of the existing jetty, and pre-existing ownership of the land) rather than representing a positive contribution to the improvement of London's overall infrastructure provision.

I would suggest that these points might be more relevant if this facility was being proposed as a replacement for an older, less-efficient facility at the same sort of location, and indeed there is a precedent for this elsewhere in London¹. However, I do not believe these issues entirely justify placing such a large concentration of waste treatment capacity at a single location.

I would like to re-state my point that this location does not appear to be logical for placing another energy-from-waste facility. The site has a natural boundary to the north and east (the River Thames) which limits the potential for heat and power offtake within an economically viable distance.

The transportation options for waste to be treated at the facility are also limited because of the likely required need to use the river to satisfy planning conditions. This may be potentially beneficial to the environment in some circumstances, but does not necessarily make sense financially or environmentally in others.

I have set out my responses to and observations of the Applicant's comments under the sub-headings below, which are intended to clarify my thinking as previously expressed.

¹ See <http://northlondonheatandpower.london/>

Existing Riparian Infrastructure

In document 8.02.60 the Applicant has provided more information on the headroom within the permitted tonnage limits at its existing riparian wharf infrastructure, and ELWA acknowledges that this would appear to allow for the use of these sites as a means of transferring additional tonnage on to barges for onward transportation to the Riverside Energy Park.

However, it has not been demonstrated that the permitted tonnages are the only limitations, and it appears that the following could also be factors (and other matters later in this letter) that would perhaps reduce the practically available surplus capacity (headroom) at these locations:

- physical limitations on space and/or equipment at the wharf facilities, which may differ from the permitted capacities;
- curtailed hours of operation specified in the permits or planning permissions, or arising because of tidal patterns in the Thames;
- HGV movement limits specified in the permits or planning permissions; and
- any limitations within the permits or planning permissions that relate to the area from which waste is allowed to be collected to then be handled at the riparian transfer station.

The Examining Authority may consider it prudent to request further information from an independent source and/or the Applicant, as well as the relevant permitting and waste disposal authorities for the five riparian wharves (which are the Environment Agency, Western Riverside Waste Authority, Corporation of London, London Borough of Tower Hamlets, and Thurrock Borough Council) and the Port of London Authority, to be satisfied that the stated surplus capacity is actually available at the wharves and at the various mooring/holding points along the river.

The impacts of seasonal variations on the demand for transfer capacity at the wharf facilities should also be assessed. While it may be the case that there is sufficient capacity to serve the REP through the existing riparian facilities based on an annual average, those facilities may not be able to cope with peak demands on a daily or weekly basis. There are typically increased volumes of household waste generated around Christmas and in early summer, and for a facility that is potentially going to be accepting a large amount of commercial waste there may be additional or more extreme peaks that could result in demand exceeding capacity at the riparian transfer stations at various points during the year.

The proposed use of the existing wharf facilities to serve the REP may significantly increase HGV movements around the wharves. This could create impacts such as traffic congestion and increased vehicle emissions in these areas, which may not have been modelled or appropriately communicated to relevant stakeholders at these locations. There are some significant housing developments now in place or under construction around these wharves, particularly the two higher-capacity facilities located in the London Borough of Wandsworth (Cringle Dock and Smugglers Way).

On top of the five riverside wharves where waste can be loaded for towing to the RRRF/REP, the Examining Authority may wish to gain clarification from the Applicant (if not already done) that there is sufficient capacity within the design of the jetty at Belvedere to accommodate an increased amount of activity. This includes more barges

needing to be unloaded using the cranes, as well as the vehicle operations to move the containers to and from the facilities on the riverbank. Similarly, it may be necessary to check that the design of the road layout if the new facility is built, as well as the interim plans to manage traffic during the construction works in that area, do not result in delays, congestion and therefore a likely increase in emissions.

Impacts of River Operations

The impact of the additional quantities of waste moving along the river may also need to be considered by the Examining Authority, particularly if this activity requires more to be transported when the currents/tides are not favourable (which could become necessary because of capacity limitations on both the river and at the various pieces of infrastructure that support this operation). Towing fully loaded barges against the current would result in higher emissions from the tugs, as they would have to work harder to move the barges forward. Even if the barges are battery-powered, the increased 'effort' is likely to result in greater impacts wherever the electricity is generated.

If the additional waste is not to be moved in unfavourable currents, then there will presumably need to be a large number of additional containers and barges acquired to support the river transfer operation, and these would need to be temporarily moored or stored at locations along the river. The impact of such moorings, on factors like visual impact, potential for pollution and impact on other river traffic, should be considered as part of a wider impact assessment of the proposed river transfer operation. It may be that the Port of London Authority is best placed to advise on this.

New Riparian Infrastructure

The distribution of riverside infrastructure should be taken into account by the Examining Authority as part of considering this application. The majority of the capacity that the Applicant has cited as being available (Table 2.1 of document 8.02.60) is at the Smugglers Way site in Wandsworth, suggesting that most of the additional waste to be delivered to the REP would need to be within a reasonable driving distance of that site for the Applicant to be able to use the river as the primary delivery route to the new facilities. However, much of the waste from the immediate catchment areas of all four wharves is already passing through the existing facilities, meaning that the extra tonnage to feed into the REP would probably have to come from further afield and would require longer initial distances to be traversed using road haulage.

In the event that additional riverside wharves are needed to be able to guarantee that the additional waste moving to Belvedere can be transported by barge, it may be the case that without long-term municipal contracts in place the Applicant would find it difficult to progress the delivery of such infrastructure. Commercial waste contracts tend to be considerably shorter in length than those for municipal waste, and without the guarantees of long-term supply of waste from within a reasonable catchment area of any proposed new wharf, it may be problematic for the Applicant to source funding and planning permission for the significant investment that would be needed to construct additional wharves suitable for handling waste containers, which could then undermine the viability of the application.

The REP is also proposed to have up to 240,000 tonnes of waste per year brought in by road, with a limit of 90 vehicles in and out per day (which I presume is applicable 365 days a year and includes non-waste vehicles, given they will have the same local impacts). However, with the River Thames as an obstacle to the north and east of the site, and a significant proportion of the waste from the host borough of Bexley already coming to the

RRRF by road, the driving distances for that permitted quantity of material coming by road could be significant.

The absence of a fixed road crossing between the Blackwall Tunnel and the Dartford Crossing would exacerbate this for any waste material originating on the north side of the river, including from some of the areas that are closest to the REP. The length of the road journeys from areas just across the river, via either of the aforementioned crossings, would be around 25-30 km each way. This is approximately the same distance as the road journey from the RRRF/REP to Smugglers Way, the most distant of the riparian wharves in use at the existing site.

The alternative river journey from this location opposite the Belvedere facilities could be as short as 500m if a new wharf was built in that sort of area. However, this method of transfer for the final distance to the treatment facilities would involve several different stages and operations, which would increase the costs compared to that same waste being able to be driven into and directly tipped into the facilities by the same vehicle that collected it in the first place.

Heat Demand and Supply

I remain concerned that the heat demand for the REP is being overstated, and I continue to have concerns with the assessment of the need for the REP to support the existing RRRF in both heat-generation capacity and resilience.

The Applicant notes that an EfW requires a common-systems outage every two years. From my experience of this technology, such outages are not needed on anything like this sort of frequency, and can be planned in to be carried out when the heat demand is at its lowest (such as during the middle of weekdays in summertime). In these circumstances, the thermal storage and local back-up boilers that any resilient heat network should include would be more than sufficient to cope with the demand until the EfW was ready to come back online. This may represent some use of fossil fuel-based technology if the back-up boilers were gas-powered, but on a small scale and for only a short period (if they were needed at all, given the thermal storage solutions should be able to cope if planned correctly). The overall emissions and environmental impact of such solutions may be lower than proceeding with the development of the REP, given the much higher embodied carbon associated with developing an EfW facility of such a scale.

I would also question whether a facility as large as the RRRF would actually require the support of the REP to serve the heat demand of the proposed 20,000 households at Burt's Wharf that the Applicant has highlighted in their response, given modern standards for insulation and energy efficiency in new-build homes. The Examining Authority may wish to consider requesting an independent study of the likely demand for heat in the area, and what that would equate to in terms of a need for heat sources, back-up generators and thermal storage. Alternatively, the Examining Authority may wish to look at a recently approved DCO for a similar facility and the relationship between tonnage throughput and heat availability there, to inform consideration of the need for the REP in this regard².

² Examining Authority report to Secretary of State 24 Nov 2016 in relation to the North London Heat and Power Project (<https://infrastructure.planninginspectorate.gov.uk/wp-content/uploads/projects/EN010071/EN010071-001810-6%20-%20Final%20Report%20with%20appendices.pdf>) – Para 2.3.3 notes the Meridian Water project's forecast 5,000 new homes and 3,000 new jobs to be supplied with heat; para 2.4.10 notes the ExA's acceptance of a peak heat demand of 35MWth from a waste facility capable of supplying up to 160MWth (from the processing of 700,000 tonnes per year)

If you wish to clarify any of the points we have made, please do not hesitate to contact me.

Yours faithfully,

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