

1. Summary Position

The Greater London Authority (GLA) welcomes the opportunity to respond to Ofgem's RIIO-3 Draft Determinations. We are pleased to see the government's broader plans for its 10 Year Infrastructure Strategy and in particular the ambition to reduce uncertainty whilst securing infrastructure that is better planned for, as well as designed to meet strategic needs.

Energy networks play a critical role in unlocking national and local Net Zero ambitions, economic growth and housing delivery. Ensuring that London's infrastructure networks are fit for the future is critical to the delivery of these priorities in the capital. However, some of London's distribution and transmission networks need to be modernised and changed at an extraordinary pace to support the Mayor of London's ambitions for London's growth.

Given that a complex and fragmented landscape of stakeholders is responsible for the regulation, delivery and maintenance of London's infrastructure, the GLA values the opportunity to provide input on the Draft Determinations for RIIO3 for Electricity & Gas Transmission, and Gas Distribution Business Plans.

We acknowledge the significant challenges facing this cycle, including the need to deliver a clean power system, increase electrical capacity and strengthen climate resilience. That is why the GLA encourages continued partnership working on these crosscutting issues.

The GLA continues to engage closely with Ofgem, National Energy System Operator (NESO), National Grid Electricity Transmission (NGET), Cadent Gas and Southern Gas Networks (SGN) to support regulatory reform, planning and investment. This includes ongoing electricity connection reform, the development of the transitional and enduring Regional Energy Strategic Plan (including through the production of Local Area Energy Plans), and in monitoring and assessing the collaborative streetworks incentive.

2. RIIO-3 Draft Determinations - Overview

2.1.OVQ6. Do you agree with our proposed approaches to improving the NARM framework?

We would support approaches to improve the NARM framework where this leads to better outcomes in relation to resilience and risk management across the electricity and gas sectors. From an electricity transmission perspective, we are mindful of the findings and recommendations of NESO's final report into the North Hyde substation fire. While NESO did not outline specific recommendations in regard to the NARM Framework itself, we strongly believe the incident demonstrates a need to clarify expectations within NARM as to the calculation of risk where it comes to system and network consequences. For instance, the impact of asset failure on connected Critical National Infrastructure and cross-sector resilience, of which the North Hyde incident's impact on Heathrow Airport is a prime example.

2.2.OVQ7. Do you agree with our proposal for the physical security PCD?

We support the proposal for a physical security PCD and its ability to help manage the risk associated with network sites that are designated as Critical National Infrastructure (CNI). However, we would note that the electricity networks do not always have full view of other CNI assets that may be connected to their assets. We therefore believe that flexibility should be allowed within the PCD to support better cross-sector resilience. For instance, allowing for upgrades to the physical security of sites where these may not be designated CNI themselves but provide vital energy supply to connected CNI customers.

2.3.OVQ17. Do you agree with our design proposal for the resilience re-opener?

We support the inclusion of a resilience re-opener which recognises the need for flexibility with the on-going work by NESO and Government (including the recently published UK Government Resilience Action Plan and the forthcoming Cyber Security and Resilience Bill). We would like to see further rationale as to the timing of the proposed reopener windows (April 2028 and April 2030). These windows should reflect the pace of work by Government on the establishment of new resilience standards, and to account for any expected outcomes from Ofgem's ongoing audit into NGET assets following NESO's report into the North Hyde substation fire.

2.4.OVQ32. Do you agree with our proposal to establish a direct pathway for transformative projects to seek Ofgem's support for funding?

We would support a direct pathway for transformative projects to seek Ofgem's support for funding under the Strategic Innovation Fund (SIF). This is important given regulatory shifts towards greater investment ahead of demand, and the increasing role that Local Authorities and regional bodies can play in energy network planning and investment. This includes work the GLA continues to progress on Local Area Energy Planning, and in seeking to better align infrastructure and spatial planning to provide greater certainty on network needs.

2.5.OVQ33. Do you agree on the need to clarify roles and responsibilities within the innovation ecosystem, and the factors that we should consider?

We agree on the need to clarify roles and responsibilities within the innovation ecosystem. This includes aligning on challenges, priorities and themes to ensure proposals can be developed with greater confidence. Consideration should also be given as to actively widening the scope of actors that are encouraged to participate in the SIF as innovation partners, including community energy groups.

3. RIIO-3 Draft Determinations – Gas Distribution Annex

Context

The GLA welcomes all efforts to deploy the Dig-Once Approach and reduce disruption. Over the last 7 years, the GLA has been supporting works promoters – utility companies and contractors – and highway authorities – TfL and borough highway teams – to reduce disruption by promoting collaborative working. A fundamental driver for collaboration, which has been evidenced to play a key role in the London area in cultivating the Dig-Once Approach, is the introduction of the Collaborative Streetworks ODI-F.

This regulatory incentive has helped to dramatically increase the number of collaborative streetwork projects undertaken within the GLA boundary. This innovative regulatory mechanism is helping to bridge the gap between regulators, highway authorities and customers / residents, fostering systematic, proactive planning of collaborative works.

The Collaborative Streetworks ODI-F has been a strong success, offering other regulators and utilities a blueprint for how regulation can be designed to encourage industry to undertake collaborative streetworks. The power and water sectors have followed suit, introducing similar incentives across the ED2 (UK Power Networks) and AMP8 (Thames Water) regulatory cycles.

The Collaborative Streetworks ODI-F is based on the ‘Dig-Once’ approach, which has been pioneered by the GLA. Although the Dig-Once approach builds upon the regular statutory coordination undertaken by London’s highways authorities under the New Roads and Streetworks Act, it is important to note that the schemes that are incentivised via the Collaborative Streetworks ODI-F are collaboratively planned at an early stage, far in advance of the coordination stage. The GLA routinely partners with GDNs and other utilities’ asset management and capital delivery teams to identify opportunities for collaboration across mains rehabilitation programmes before they reach the permitting stage, typically 1-2 years in advance of actual delivery on-site.

Whilst traditional statutory coordination usually involves the alignment of already planned works, the GLA’s efforts and the Dig-Once Approach are reliant upon high-quality data: the forward look provided by the GLA’s Infrastructure Mapping Application (IMA) allows the GLA to engage collaborating parties at an early stage, successfully influencing both when and how projects are delivered.

3.1.GDQ18. Do you have any views on the proposed expansion of the Collaborative Streetworks ODI-F across GB?

The Mayor’s Infrastructure Coordination Service (ICS) plays an active role in the application – and governance – of the Collaborative Streetworks ODI-F within the GLA boundary.

Successful application of the Collaborative Streetworks ODI-F is dependent on the presence of a neutral central convenor. In London, the Mayor’s Infrastructure

Coordination Service has taken on this role, providing regular tailored support to London's utilities, and acting as a neutral convenor in developing the tools and processes that support the meaningful and sustainable deployment of the Dig-Once Approach. The work of the Mayor's Infrastructure Coordination Service – including its digital tools and frameworks – are available for application and scaling elsewhere.

Ultimately, the GLA supports the expansion and scaling of the Collaborative Streetworks ODI-F across the UK, provided that the collaborative works that are incentivised reach beyond existing statutory coordination efforts, seeking to embed long-term collaborative planning and delivery within utilities.

Given the delivery and financial pressures that result from working within London, we welcome regulatory mechanisms that safeguard investment in essential mains rehabilitation programmes. We recognise that the introduction of new lane rental schemes may increase these pressures on capital programmes and that GDNs may struggle to forecast these before the start of GD3. Therefore, the GLA in its role as a neutral convenor would welcome involvement in relevant forthcoming discussions, ensuring collaborative efforts are ringfenced.

The GLA's position is that that a neutral convenor is recommended to oversee the administration of an ODI-F and set out best practice regarding collaborative streetworks.

3.2.GDQ19. Do you have any views on the proposed minimum threshold, the methodology used to set it, and the incentive reward rate for the Collaborative Streetworks ODI-F?

The GLA welcomes introducing a minimum annual threshold for collaborative streetworks project, which will help to embed collaboration as business-as-usual. The GLA is however cognizant that when it comes to the London area, the minimum threshold should be tailored to the maturity levels and experience of utilities' collaborative efforts. In the case of London, a low threshold would likely be ineffective as there is an existing baseline. The GLA however recognises that other areas of the UK may feel that a lower threshold would be more appropriate for their regions and be more reflective of the nascent nature of collaborative efforts.

In addition:

- The GLA does not hold any views on the appropriate reward level. This is a matter that is best determined between regulators and utilities.
- The GLA would welcome the inclusion of the following prerequisites for the application of the incentive, with critical overarching governance provided by a neutral central coordinator:
 - GDNs will need to reference the **GLA's Dig-Once Strategy** and adopt its processes when submitting incentivised projects.
 - GDNs will need to utilise the **GLA's Monitoring & Evaluation Tool** to evidence the results and benefits of each incentivised project – outputs from the Tool historically indicate higher generated benefit through GLA-led schemes relative to those identified and 'self' delivered by GDNs.

- GDNs will hire dedicated resource – ‘**Collaboration Specialists**’ – to progress collaborative opportunities.
- GDNs will need to share data on completed projects to the GLA’s **Collaboration Incentive portal**, which will act as a central repository for all delivered schemes.
- The GLA would support the **removal of yearly targets**, moving to an end-of-period target.
- The GLA would also like to propose including a margin of flexibility to allow Cadent Gas and Cadent East to share any quotas on the number of incentivised projects to support greater delivery in the GLA area.

4. RIIO-3 Draft Determinations – Electricity Transmission Annex

4.1. Summary Position

We share the concerns of Ofgem regarding the lack of maturity of projects put forward for consideration by the Transmission Operators (TOs). Our primary concern is to ensure transmission network investments serving Greater London come forward at pace within the T3 period to address existing capacity constraints as well as future needs.

In summer 2022, the GLA was alerted to severe electricity capacity constraints in the west London boroughs of Ealing, Hillingdon, and Hounslow, where developers were receiving connection quotes extending to 2037. This was due in part to a surge in demand connections from major energy users including data centres, overwhelming both distribution and transmission networks. Although NGET has committed to upgrading the transmission network, these works are not expected to be completed until 2037, prompting the GLA to stress the urgency of speeding up grid reinforcement to support housing delivery, economic growth, and decarbonisation in west London.

We support in principle the new proposed mechanisms within the draft determinations to support innovation, as well as enabling TOs to respond more flexible and efficiently to uncertain demand. We would like to see further clarity as to how these proposed interventions would help accelerate connection timeframes and address capacity constraints, including for demand customers. This is particularly a concern in areas facing uncertain levels of major energy user growth. London is a European leader in data centre development, providing world-leading infrastructure that hosts our growing digital sectors. However, as noted with the example of the west London capacity constraints, we are aware of the risks that the sudden and unexpected growth in major energy users such as data centres can have on available capacity to support broader growth priorities including housing delivery. It is therefore critical that the mechanisms proposed provides the flexibility to respond at pace to prevent any further future capacity constraints in London.

4.2.ETQ7. Do you have any further considerations on our chosen direction for a RIIO-ET3 Connections Capacity ODI-F, including detail on how the targets could be built up?

We support the inclusion of a Connections Capacity ODI-F where this can lead to better connection timeframes for demand customers as well as for generation connections. We believe the design of this incentive should include a strategic consideration of demand customers at distribution level, especially in areas of local capacity constraint where they face significant timelines and costs to connecting due to delays in upwards transmission reinforcement. The on-going electricity capacity constraints in west London demonstrates the importance of better accounting for the cost to demand connections that capacity constraints at the transmission level can have, as well as the current lack of regulatory incentive to accelerate the resolution of this issue.

In summer 2022, the GLA was alerted to severe electricity capacity constraints in the west London boroughs of Ealing, Hillingdon, and Hounslow, where developers were receiving connection quotes extending to 2037. This was due in part to a surge in demand connections from major energy users including data centres. Despite shorter term solutions developed with NGET and NESO, and ongoing reforms to the connection process, the GLA maintains that accelerated investment in constrained transmission assets in the area is essential to fully resolving the issues. Although NGET has committed to upgrading the transmission network, these works are not expected to be completed until 2037, prompting the GLA to stress the urgency of speeding up grid reinforcement to support housing delivery, economic growth, and decarbonisation in west London.

We therefore believe that the proposed Connections Capacity incentive could more directly support better outcomes for demand customers, such as those affected in west London. However, this relies on integrating a clearer assessment of the costs of demand connection delays when incentivising the delivery of additional capacity to the transmission network. While constraint costs are considered from a generation perspective, a similar measure is needed to consider the cost of transmission constraints to demand customers looking to connect. We believe this is important to ensure this regulatory incentive aligns not just with the Clean Power 2030 target, but with Ofgem's broader duty to have regard to the desirability of promoting economic growth, alongside the delivery of protections set out in relevant legislation.

4.3.ETQ19. Do you agree with the need to introduce an Innovative Delivery Incentive to drive the five behaviours that we've identified and do you consider that there are any behaviours that are missing?

We support the introduction of an Innovative Delivery Incentive to drive improvements in the delivery of network investments, particularly where this can accelerate transmission reinforcements in areas experiencing constraints. While we agree with the five behaviours identified, we would propose an expansion of behaviour number 4 (collaboration with the NESO on strategic planning and outages) to consider

collaboration with local, combined, and strategic authorities. Given the significant development associated with the TOs investment plans over the period, there will be numerous interactions with authorities as part of spatial planning, land assembly and development management processes. There is therefore considerable opportunity for collaborative innovation between TOs and authorities considering specific or portfolios of projects. Encouraging TOs, via this incentive, to participate in earlier collaboration with authorities would be welcomed and help drive better outcomes, by encouraging better and easier alignment of investment and spatial planning.

4.4.ETQ29. Do you agree with our proposed scope, re-opener windows and materiality threshold for the Load Re-opener?

We support the introduction of a load re-opener mechanism where this can accelerate the ability of the TOs to respond at pace to uncertain network load requirements, especially in areas of system constraints or future capacity shortfalls. We would welcome further clarity as to the expected impact of this incentive on the ability of the TOs to respond to significant new investments triggered by new large connection requests at the transmission level, such as by data centres. We note the significant future demand on London's transmission network expected from data centres and other major energy users over the next price control period. London is a European leader in data centre development, providing world-leading infrastructure that hosts our growing digital sectors. However, as noted with the example of the west London capacity constraints, we are aware of the risks that the sudden and unexpected growth in major energy users such as data centres can have on available capacity to support broader growth priorities including housing delivery. It is therefore critical that flexible and efficient re-opener process is in place to address where new large connection requests trigger reinforcement requirements. Without a speedy that risk further future capacity constraints in London. This is especially needed given the current lack of a clear solution for strategic demand within on-going connection reform.

4.5.ETQ32. Do you agree with our proposed design of the generation and demand connections volume driver mechanisms?

We would support the generation and demand connections volume driver where this both improves connection timeframes for demand customers and accelerates investment to address existing constraints or future capacity shortfall. We recognise the interplay between the volume driver and load re-opener to introduce a more flexible and efficient approach to allowing TOs to respond at pace to uncertain demand connections. We would like to see how these mechanisms together will provide an effective approach to the uncertainty associated with major energy user demand growth, such as with data centres. However, we recognise that both mechanisms have been developed in the context of emerging connection reform for strategic demand and would need to consider emerging approaches from NESO to this theme over the coming year.

It should be noted that the proposed unit rates for NGET have been redacted within the associated annex despite the consultation asking for responses as to whether we agree with these rates.

4.6.ETQ69. Do you agree with our drive to reduce the use of F-Gases as far as possible and do you agree with our intent to fast track selected AIS solutions to minimise the use of F-Gases now and in the future?

We recognise the importance of reducing the use of F-Gases to meet net zero obligations. We also recognise the benefits of Air Insulated Substations in terms of ease of replacement and lower whole life costs. However, we strongly believe that an understanding as to spatial footprint is an important determinant in the selection of either AIS or gas insulated substations (GIS) particularly for investments in urban areas such as London. NGET have proposed significant investments at existing Grid Supply Points across London and many of these sites are either in constrained urban location or next to sites allocated for strategic growth. Any assessment by Ofgem of GSP expansion in London should pay careful consideration to requiring AIS over GIS where this would require significant land assembly. There is a risk that the pursuit of AIS in urban locations may jeopardise or further complicate existing proposed strategic developments.

5. NGET Annex

5.1.NGETQ1. Do you agree with our proposal to introduce these six PCDs for NGET?

We support the inclusion of the important London investments within the OHL & Reconductoring PCDM. This includes works to the Amersham - East Claydon - Iver, and Barking - West Ham circuits. We note the importance of upgrades towards Iver as one in a series of necessary upgrades in and around west London to increase much needed network capacity in the area.

5.2.NGETQ10. What are your views on our engineering assessment of NGET's Business Plan?

Iver-Laleham Cable tail uprating & Iver-West Weybridge Cable tail uprating

Iver and Laleham represent two of the five constrained GSPs serving the area of west London currently affected by capacity constraints. It is noted that Ofgem does not consider the maximum capacity of this proposed circuit to be sufficient for long-term needs. We maintain concerns about current and longer-term capacity need to resolve existing constraints in the area and support future need, and would encourage opportunities to better futureproof these investments.

Barking

The GLA has had close and early consultation with NGET as their proposed approach to the Barking GSP, given its adjacency to the London Riverside Opportunity Area (OA). The OA is currently expected to deliver 44,000 new homes and 29,000 new jobs by 2041. Early conversations with NGET had focused on solutions to enable upgrades at Barking given the constrained location as land to the east and south of the GSP are earmarked for strategic development of a new town centre (Barking Riverside, whose broader strategic site alone anticipates delivery of 20,000 new homes). While we support in principle a longer-term and holistic view of investment at the site, we would not wish to see options where uprating or focus on AIS solutions would require substantial land assembly that subsequently threatens the delivery of the Opportunity Area. We believe such a decision would not reflect Ofgem's broader duty to growth.

West London Cables Strategy (Ealing - Laleham, Iver - North Hyde, Ealing Willesden)

The strategy encompasses many of the key constrained GSPs in the west London area, and we would support investment where it addresses existing constraints, provides future capacity for needs, and improves connection timeframes for demand customers in the area. Given the urgent constraints in the area it is disappointing that NGET has not progressed to a preferred option for assessment at this stage, especially as some of the options that are presented appear short-sighted (such as like-for-like replacement).