

Joint WLB/ WLA/ OPDC Response to Willesden Grid Supply Point (GSP) Strategic Development Plan (SDP) Consultation

Closing Date: [4 September 2025 \(Extended to 17 September\)](#)

This is a joint response representing the views of West London Business (WLB), West London Alliance (WLA) and the Old Oak and Park Royal Development Corporation (OPDC). West London Business is a non-profit business leadership forum representing businesses and enterprises with a presence in West London, some of whose comments are included as part of our response. West London Alliance is a public sector partnership between seven West London local authorities, including Ealing Council the local authority area primarily served by Willesden GSP. The Old Oak and Park Royal Development Corporation was established by the Mayor of London in 2015 focusing on regenerating the land surrounding the new Old Oak Common station for both residential and commercial use.

Together (WLA, WLB and OPDC) we have been collaborating on the grid capacity constraints and working to unlock capacity for this part of our subregion.

We welcome the greatly enhanced transparency, dialogue and openness from SSEN to engage with West London stakeholders in the past year and a half.

Our feedback spans methodology, readability of the current draft, questions of clarification and SSEN's current SDP recommendations.

Q1. Have we missed any significant sites or development that use or generate electricity specific to the local area covered by Willesden GSP?
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Section 1 – The Executive Summary's in this and other SDPs are too generic. They should include a table summarising:

- Current MV supply capacity
- Headroom
- Future needs and whether there is alignment between LAEP and DFES, or a gap that needs to be understood
- Additional MV that new investments set out in SDP/ current DNOA will enable
- Shortfall that needs to be addressed in ED3 and future periods

While it is assumed (and understood) that future reinforcement works will be carried out under ED3, it would be useful to make a clear link to the West London LAEP and DFES demand forecasts, and set out the timing that different PSS areas can be developed as more capacity is unlocked.

The Executive Summary should also address by when SSEN will have the network infrastructure upgraded for the 9.1MW of solar PV that has planning consent in the Park Royal area to be connected on G99 (unlimited) connections. The SDP could also indicate whether SSEN is likely to prefer a private network (PN) to be built out in Park Royal, noting that the PN might still be reliant on SSEN upgrades or will have constraints on export capacity.

Section 2 – It is worth noting that ARUP advise the WL LAEP is most closely aligned to the 'Leading the way' scenario, whilst SSEN power system analysis uses 'Consumer transformation'.

Section 3.1.4 - The volume and assumptions around DC demand appear at risk of falling between the gate and the gate post. Given that the DFES scenarios are macro-level, it would be beneficial to include the specific demands and locations assumed for DC load growth over the planning period and whether meeting this demand is being led on by NGET, with an assumption that connections will be at transmission level.

It is concerning that NGET's West London strategy for the 275kv network is still in its "early stages", implying that any significant improvements might be so far in the future that it could be years before we see the benefits. Since 2022 West London stakeholders have pressed the need for new capacity to be unlocked as soon as possible. We are raising this directly with NGET.

- **The frequency and level of engagement between SSEN and NGET needs formalising and transparent reporting to West London stakeholders around issues being discussed and solutions arising.**
- **Additionally, when are we likely to see a shareable joint TO/DNO strategy for West London?**

Section 3.1.5 - Commercial flexibility "demand asset" case studies need to be added to your Flexibility website. You could use these case studies from MEU Council:

https://library.meucnetwork.co.uk/pdfs/NG_MEUC-book-2021.pdf#page=58 to help educate businesses new to the concept.

Canal Bank PSS seems to have flexibility procured (figure 4) but can you please provide some narrative to give a sense of scale. Are these commercial customers? One or more?

It would be good to include more data and narrative on when peak demand is in each PSS area and what this suggests with regards to opportunities for procuring flexibility. We understand this could be drawn from the Near Real-time Data Access (NeRDA) portal although not all Park Royal PSSs are currently visible.¹

Section 5 - The Willesden SDP does not incorporate the DFES 2024, although it is referenced in the Appendices, and instead relies on the DFES 2023 analysis. DFES 2023 would not have accounted for the latest evidence from the Phase 1 subregional Local Area Energy Plan (LAEP) for West London that was completed in 2023. However, the SDP does explicitly state that *"Outputs from the LAEP have informed the DFES projections to inform long-term strategic planning of the distribution network in the area."* Whilst we welcome this change from previous Strategic Development Plans, given that the 2024 DFES has now been published and better incorporates the West London LAEP, we believe that fully focusing on the 2024 DFES data is critical to accurately understanding developing energy demand in Willesden.

It is also important to note that the demand projections increased substantially from the Phase 1 LAEP to the OPDC Phase 2 LAEP covering Park Royal. The SDP and DFES needs to draw on the OPDC Phase 2 data. This is not included in the Appendices to this response and we intend to include in a revised version of this response for clarity.

¹ [Near Real-time Data Access \(NeRDA\) portal - SSEN](https://www.ssen.co.uk/our-services/tools-and-maps/near-real-time-data-access-nerda-portal/) - <https://www.ssen.co.uk/our-services/tools-and-maps/near-real-time-data-access-nerda-portal/>

As well as this, we are curious as to whether any gap analysis has been carried out comparing the 2023 and 2024 DFES and picking up the implications, if any, for Willesden GSP? This seems vital if the detailed optioneering in the DNOA process that follows the SDP is to be robust.

Please clarify how and when will the DNOA be published and how it aligns projects against the TNOA.

Section 5.1.1 – We assume “seizing the opportunity for domestic rooftop solar across the area” should read “seizing the opportunity for *commercial* rooftop solar across the area”. This could reference publicly available data on the 9.1MW of solar consented but not installed in Park Royal and what investment is needed to support G99 connections. (Appendix 4)

“There are no large scale batteriesprojected to connect at Willesden GSP” (pg 12) – There is no indication as to the value batteries might provide in grid flexibility in the Park Royal or Greenford/Perivale areas. This would be helpful as input to the Park Royal Net Zero Accelerator (Mayoral funded, being delivered by Mott MacDonald).

Section 5.3 - This section of the SDP should note that the OPDC has commissioned Hemiko to lead on delivery of a heat network in the Old Oak & Park Royal area. The project is supported by a £36m grant from central government.² The first phase of OPDC’s heat network is expected to deliver up to 95GWh of heat a year. By 2040 £600m is expected to be invested in the network.

Section 5.5 - We would like to understand if SSEN have considered OPDC’s intended loadings across Park Royal in their DFES – this has been asked in the previous Ealing SDP consultation, and it remains valid in this case as SSEN are discussing their plans for development for the Willesden GSP area for the future up to 2050. Whilst Section 5.5 refers to commercial and industrial electrification in the area being predominantly driven by the OPDC ‘opportunity area’, a sign that you have considered the region’s intended loadings in your SDP, it would be good to see explicit confirmation on this point.

In Appendix 3 Table 2.1 (OPDC LAEP phase 2) you will see that Manufacturing businesses in Park Royal need more electricity network capacity if they are to migrate from gas to green electricity to decarbonise. Investment needs to be ahead of demand or this will have a chilling effect and manufacturing businesses may start to leave Park Royal.

Section 6 - Do these ‘Works in progress’ provide the PSS capacity needed in Park Royal for 10MW+ of solar projects consented to be connected on G99 connections (as opposed to G100)? If not can the proposed programme include the upgrades required for incorporation into the updated DNOA?

Section 7.1 - The Northolt/ Greenford area appears to be facing significant capacity headroom shortfall according to the EHV/HV spatial plans (figure 13). How far do plans currently proposed in the SDP or by NGET go to addressing this forecasted shortfall?

² <https://www.london.gov.uk/opdc-announces-hemiko-development-and-funding-partner-innovative-new-heat-network>

Section 7.2 - Secondary transformers seem to be heavily loaded in many parts of the GSP geography (fig 14). Narrative is needed on how and when this will be addressed

Section 8.2 – Pg 22. SDP would be easier to read if CB written in full as Circuit Breaker.

Sections 8.2, 8.3 and 8.4 discuss future EHV system needs to 2033, 2040 and 2050; it is assumed that these works are indicative of what will be carried out under the subsequent Ofgem funding scenarios (ED3, ED4, ED5 etc.).

Section 8.5.1 – “This would achieve SSEN’s strategy for removal of the 6.6kV network at Willesden GSP, increase resilience, and release capacity on the HV network.” Clearly this upgrade is welcome and necessary.

Missing “new” : “increased penetration of low carbon technologies (LCTs) connecting to the distribution network will result in **new** system needs...”

We are already facing 10-20% secondary transformer overload. Is it the red secondary transformers that need flexibility (fig 14)? If so, this could be clearly stated in narrative. This could guide comms and engagement around where flexibility is needed.

Section 8.5.2 – “Flexibility at a local level... products linked to battery export and embedded generation such as solar is likely to be requiredleveraging recent innovation work through Project LEO and My Electric Avenue...” It would be good to reference The Mayor’s Net Zero Accelerator project that OPDC/ Mott are just initiating to support stakeholders in translating these insights around Smart Grid design and operation into Park Royal.

We note the thermal overload points seem to be approaching fast. Given you acknowledge “...*timeline to grow our workforce ...jointing training typically taking 4 years to be fully competent...*” has this workforce scale-up started? What is SSEN's approach to reaching out to DWP, Further Education and Higher Education in West London to support recruitment? Can we support this?

Section 9 – There is no mention of when the Ramping Strategy that is in place will no longer be required given proposed reinforcements.

While there is a Ramping Solution in place, there is little specific detail on how more flexibility ahead of 2030/33 could improve short-term capacity and support the enduring operation of the network. It would be helpful if this could be expanded further, as flexibility is discussed at the local level but do not really touch on SSEN providing or driving the market to offer more material flexibility alongside large demand requests, such as Long Duration Storage, and how that may help stabilise the network.

It needs to be communicated that Ramping is not just for residential development projects, but can also apply to commercial connections, although we understand not Solar PV generation.

The recommendations do not provide much additional insight. They seem to endorse the projects that are already in progress, with a few additional engagement comments. There are also statements that seem slightly contradictory as on one hand. Reducing or removing the need for the 22kV system at

Acton and reinforcing to provide a 66kV system is suggested as the objective, however some options still mention overlaying in 22kV and perpetuating the dependency on Acton. Which is it to be?

Appendix D – “Capacity released: 10.4MVA at Park Royal primary substation and 38.1MVA at Perivale primary substation” should be lifted out and included in the SDP Executive Summary with narrative on when/ whether this meets the WL LAEP and DFES forecasts.

Q2. Have we correctly identified and represented the net zero ambitions of your local area?
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It is good to see that the West London LAEP is explicitly referenced in relation to heat networks, reflecting on improving engagement with stakeholders in the area including OPDC.

Section 3.1.3 - WLA/ WLB recently commissioned ARUP to break down the current WL LAEP (Phase 1) demand forecast data by GSP region to better support our engagement with the GSP SDP review process. Completed in early September 2025 this has now been supplied to NESO, SSEN, UKPN and National Grid. We have also lifted out the relevant extracts into the Appendices to this response.

- There should be some extended narrative in this part of the SDP that demonstrates understanding of key insights from WL LAEP and OPDC phase 2 LAEP, both of which are pertinent to this SDP, and alignment (or not) with DFES 2023 and 2024.
- We would welcome assurances that the recent ARUP work will be reviewed over the next month and any queries arising discussed as soon as possible. N.B. Requirements will need to be reviewed again against more granular work in the Phase 2 Ealing LAEP and a WSP Park Royal Energy study reaching its conclusion for WLB, OPDC and partners. This will feed into the Park Royal 'Net Zero Accelerator'.
- We think there may be an inconsistency in the headroom data (drawn by ARUP from SSEN's open data portal) and insights in your Appendix 1 advice on fault level/ capacity by PSS provided to help us understand the potential for G99 connections for Solar PV generation in Park Royal. We would welcome your early review of the headroom data ARUP have drawn from your portal.

Section 3.1.5 - With regards to the connection of renewables, the SDP makes reference to 'Flexibility Services' being procured in section 3.1.5, and go on to demonstrate areas where they have procured flexibility, and areas where they have not. It would be good to understand if they intend on procuring more 'flexibility' (i.e. PV generation connections) across West London, as this could be a potential opportunity area for OPDC and West London growth to be included in such plans.

As discussed above, it is likely that the 'Flexibility Services' have been considered in these figures, but it would also be useful to understand if the solar PV considered in the West London LAEP has been factored in as part of this consultation.

Q3. Do you have any feedback for us on how we are presenting this information to you? For example, do you have any suggestions on how we could make it more accessible.
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1. As we have mentioned in previous GSP SDP draft consultation responses this year (for Iver and North Hyde), a non-technical summary with the key information about the SDP and what it means in terms of capacity uplift and local opportunities from the proposed investments would be helpful for the audiences we represent. As suggested in response to Q1 this should form part of the Executive Summary.

2. Could data tables for all the SSE [GSP PowerBI graphs](#) be made downloadable? This would make it easier for us to cross reference against LAEP.
3. New development forecasts are split into three separate measuring units for each graph (data centres in Mw, domestic in number and non-domestic in m2). Can these all be expressed in MW so we can fully understand their contribution to overall projected MW demand and alignment with the WL LAEP and OPDC Phase 2 LAEP forecasts.
4. If all PowerBI data layers were in MW then tick boxes (rather than radio buttons) would allow us to build up a cumulative view of demand forecast by GSP

Q4. Is there any further information you would like to see in this Strategic Development Plan or future Strategic Development Plans?

1. Whilst the SDP is somewhat useful to us, due to the information gaps outlined in the first draft it is very difficult for us to evaluate whether the proposed infrastructure improvements/upgrades are sufficient or rapid enough to meet the needs of boroughs, as well as existing and prospective businesses across the West London subregion.
2. Given the recent NESO report and recommendations outlined in the North Hyde report last month, we also emphasise the need for key sites of Critical National Infrastructure (CNI) to be identified within the subregions served by Willesden GSP, such as the Central Middlesex Hospital in Park Royal. The findings of the NESO report suggest that energy network operators are neither aware of whether customers connected to their networks are classified as CNI, nor is there a cross-sector requirement for these operators to ensure that Critical National Infrastructure can be appropriately maintained in the wake of a catastrophic power failure. It would be good to see SSEN proactively engage with NESO and DESNZ to develop the implementation approach for improvements to CNI energy resilience and embed this within the SDP process. This collaboration will also assist government in refining its overall energy resilience strategy and improving understanding of CNI needs in West London.

Q5. Do you have any feedback on how we have consulted with you?

1. We welcomed Harry Britten's update on the Willesden GSP SDP consultation, and open Q&A, at the Park Royal Business Group Breakfast Forum that took place on Thursday 4 September AM.
2. As this forum was one day before the official response deadline, you kindly agreed an extension of this response until the 17 September. We appreciate SSEN's flexibility in this regard.
3. In the recommendations section 9 (point 3), you highlight the need for continued engagement with large/ major energy users. Despite our collective efforts to promote the SDP consultation many large commercial operators in the area may still not be aware of this process. Also developers/ asset owners/ investors like SEGRO and CBRE may not show up as large energy users and hence may get bypassed in this process with their prospective tenants being engaged instead. Engagement needs to happen at all levels.

Q6. Is there anything else you'd like to add?

No

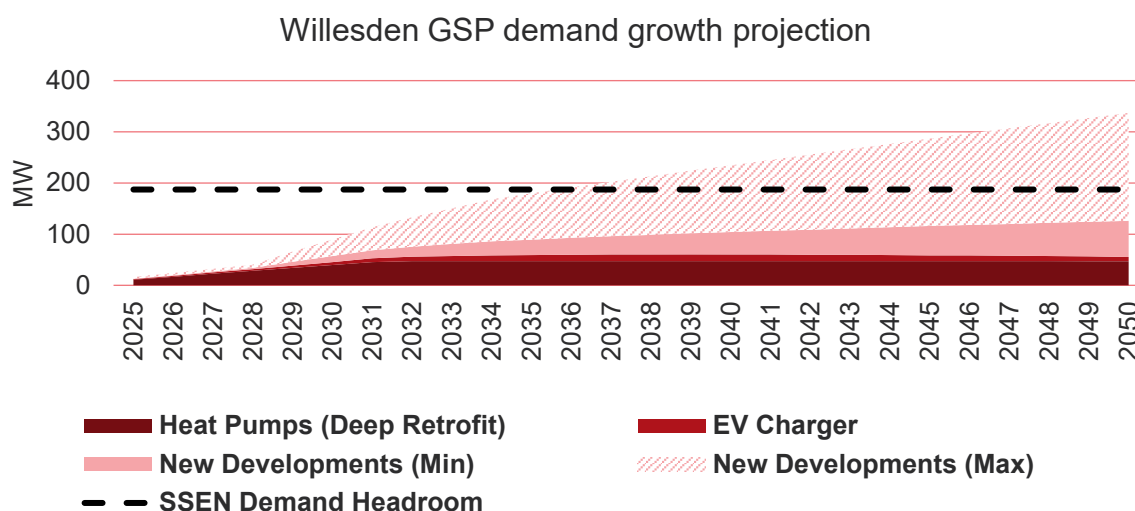
Appendices

Appendix 1 - Fault Level Data information Request to SSE

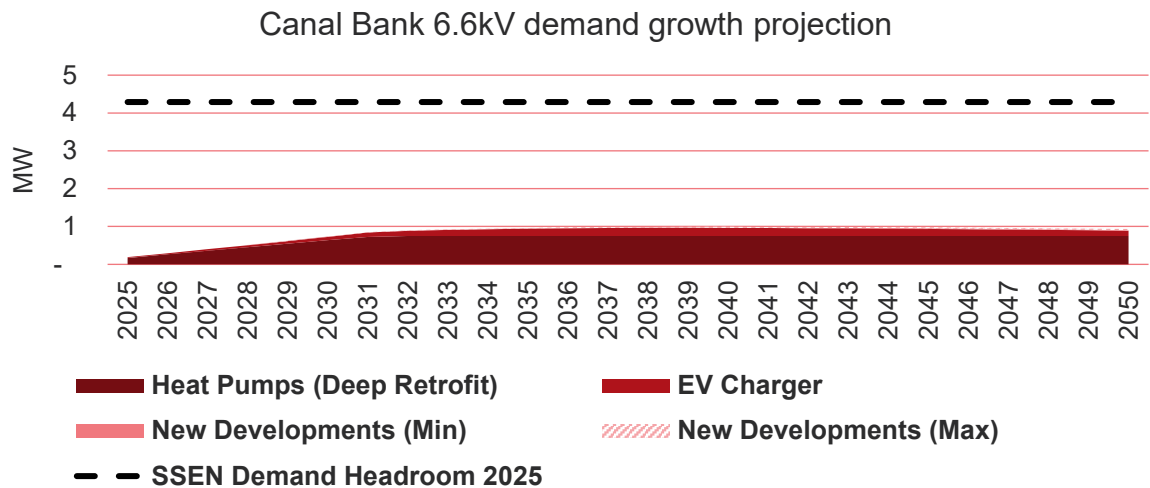
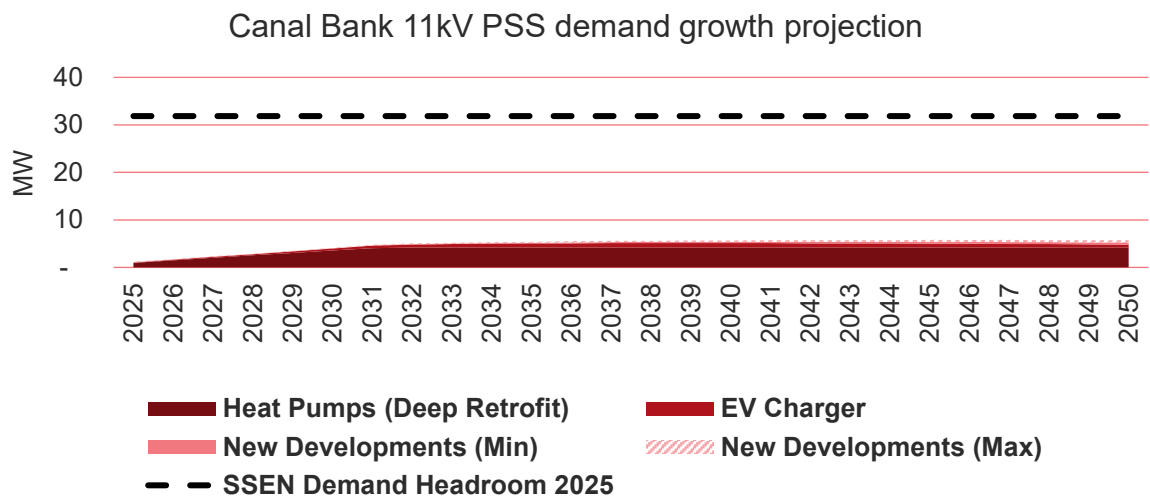
Park Royal				
Grid Supply Point (GSP)	Primary Substation (PSS)	PSS Headroom 2025 – able to take G99 connections*, or G100 limited connections only? (Upstream Headroom / Fault Level Headroom / Yes or No)	PSS Headroom 2030 – able to take G99 connections*, or G100 limited connections only? (Upstream Headroom / Fault Level Headroom / Yes or No)	PSS Headroom 2050 – able to take G99 connections*, or G100 limited connections only? (Upstream Headroom / Fault Level Headroom / Yes or No)
Willesden	Canal Bank 11*	6 MVA / 8.6 kA headroom / Y	4 MVA / 6.9 kA / Y	0 MVA / 5.9 kA / Y
	Leamington Park	0 MVA / 0kA headroom / N	#3 MVA / 0kA headroom / N	#0 MVA / 0kA headroom / N
	Park Royal	0 MVA / 0kA headroom / N	25 MVA at PARR, 4 MVA at PERI66 ccts / 10.7 kA / Y	12 MVA ~ / 10.15 kA / Y
Comments	* CANB6.6 set to be decommissioned 2025, data is given for CANB11 PSS only. # Fault level issues at Acton Lane 22 kV BSP, NGET owned. Upgrade dependent on ED3 works, not yet proposed. ~ 0 MVA upstream, ED3 works will trigger upgrade of upstream circuits, predicted these will leave the Park Royal TxS as the limiting factor (40 MVA firm supply).			

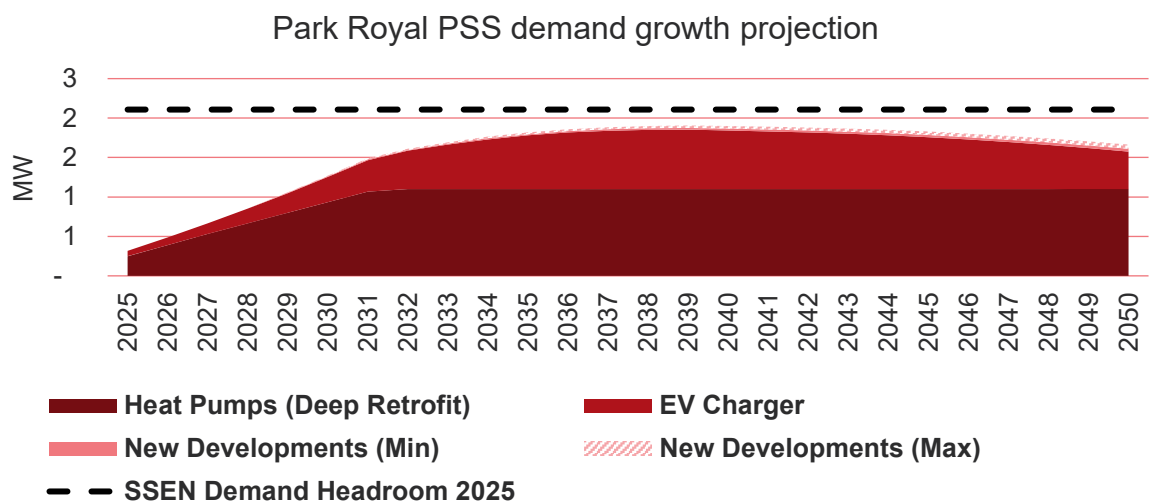
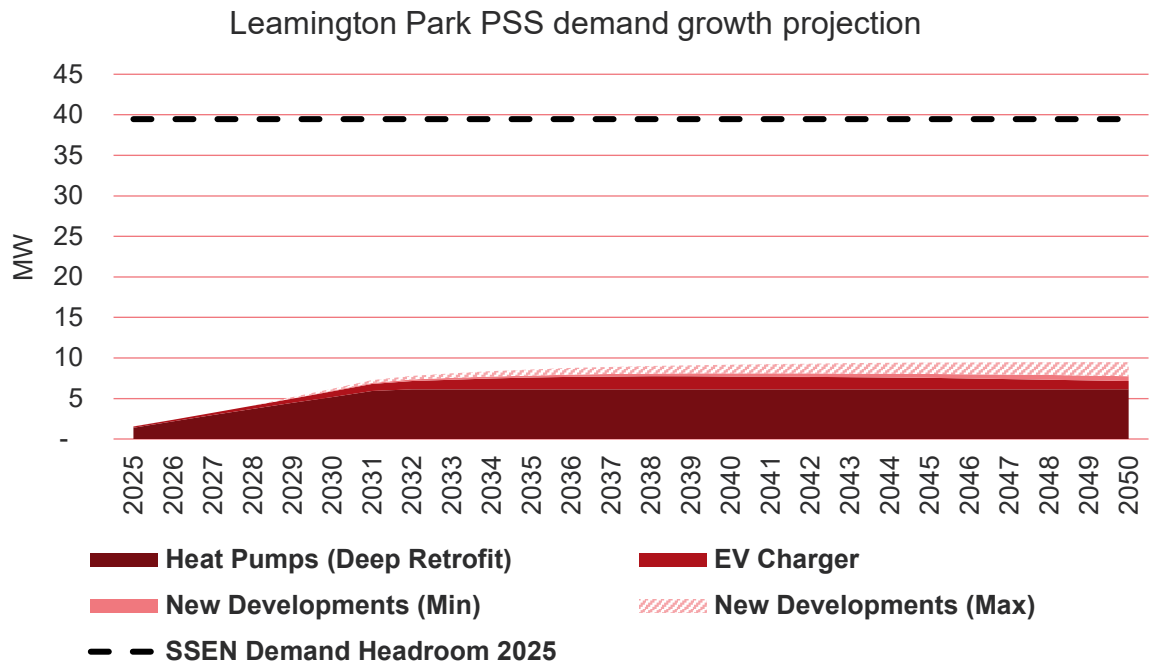
Appendix 2 – Extracts from ARUP breakdown of WL LAEP by GSP

These figures exclude DCs and we are querying the headroom figures ARUP have drawn from SSEN's open data portal.

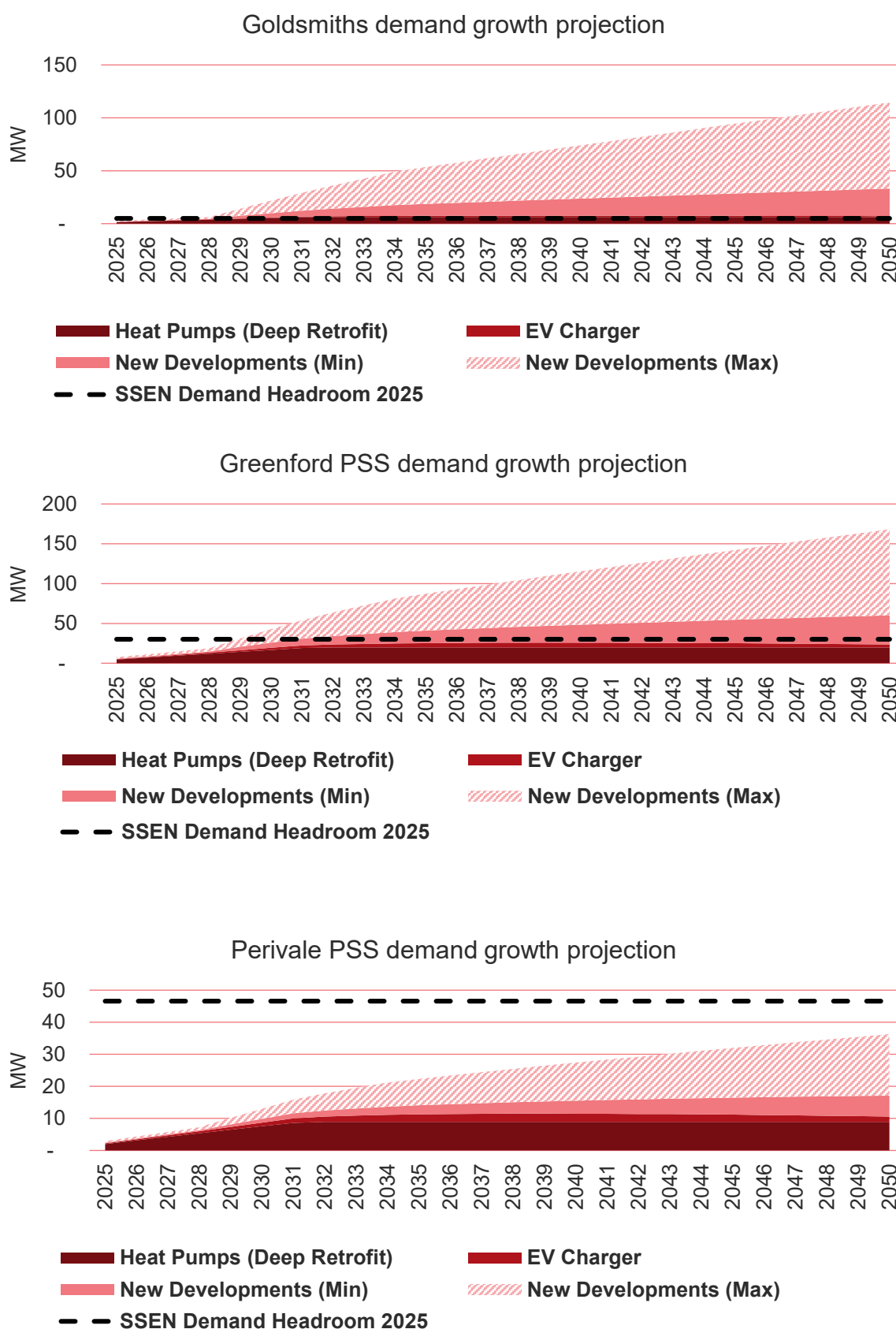


Primary substations in Park Royal area



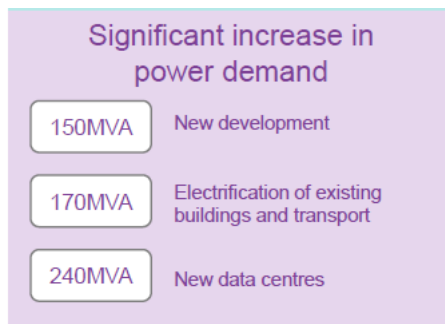


Other Primary substations in WL LAEP breakdown by ARUP

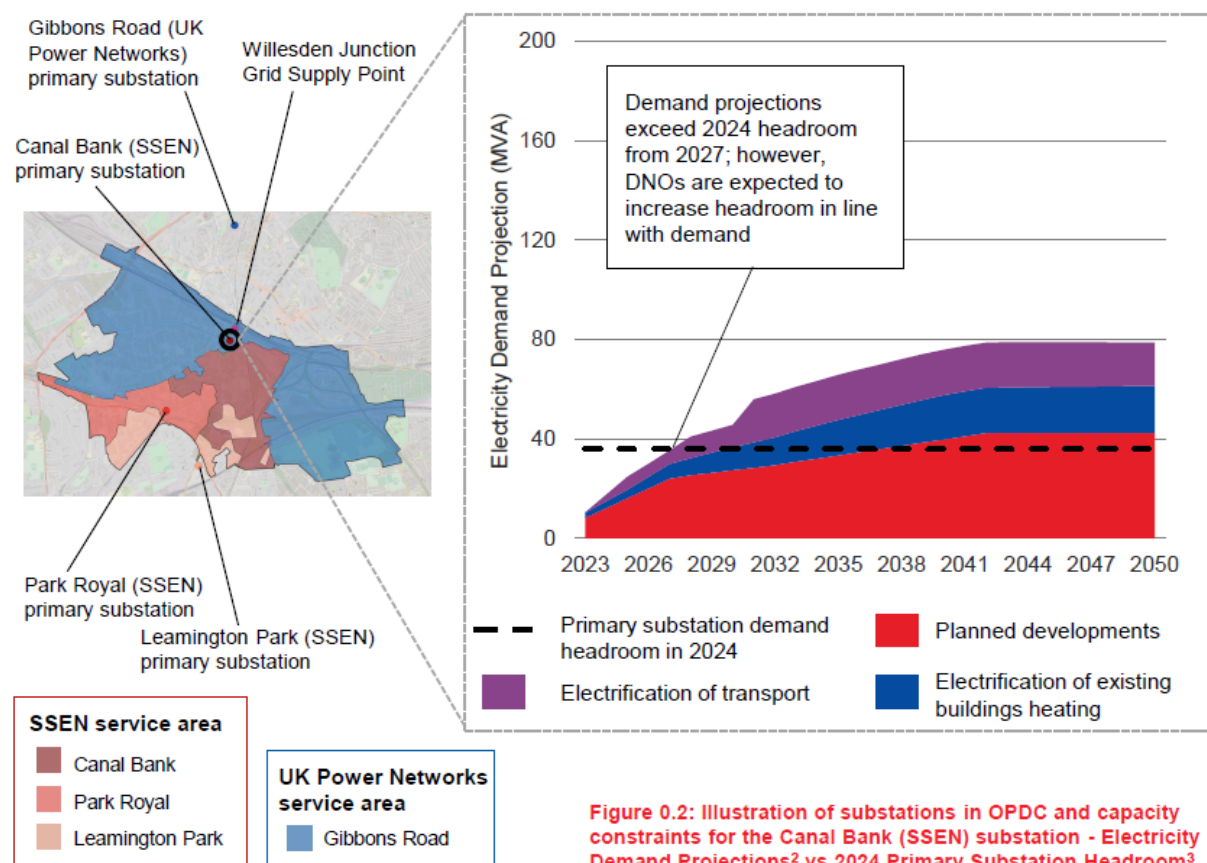


Volt Avenue and Wesley Avenue missing from study as did not appear on SSEN open data portal; raised with ARUP/ SSEN.

Appendix 3 – Extracts from OPDC LAEP Phase 2 (ARUP for OPDC, 2024)



Important to note that some of this additional demand out to 2050 will fall on UKPN's network and Gibbons Road and likely a new Primary Sub-Station.



Business typology	% of total by number of businesses	Indicative energy consumption (1=Low, 3=High)			Ranked decarbonisation priority =a*(b+c+d)
		Electricity	Gas	Transport	
	a	b	c	d	
Manufacturing - Food	8%	3	3	2	1
Wholesale	10%	2	1	3	2
Manufacturing - General	6%	3	3	2	3
Construction	6%	2	2	3	4
Business Support Services	9%	2	1	2	5
Vehicle Sale and Repair	8%	2	1	2	6
Hospitality, Leisure and Recreation	8%	2	2	1	7
ICT, Media and Creative Industries	9%	2	1	1	8
Retail	8%	1	1	1	9
Utilities and Waste	2%	3	3	3	10
Transport	2%	2	2	3	11
Financial and Professional Services	5%	1	1	1	12
Public Admin, Health and Education	5%	1	1	1	13
Warehousing and Logistics	2%	2	1	3	14
Manufacturing - Creative and Media	1%	3	3	2	15
Manufacturing - Advanced / Higher Tech	1%	3	3	2	16
Property Development and Management	2%	1	1	1	17
Other	8%				
Grand Total number of businesses		1,319			

Table 2.1: Breakdown of business typologies in OPDC

Appendix 4 – Solar consented but not installed in Park Royal

Site address	Application status	Operator	Capacity once installed (MW)	Planning submitted	Planning application reference
Prop House, Abbey Road - Solar Panels	Awaiting construction	SEGRO	0.577	Nov-22	22/3947
Bestway Cash and Carry, Abbey Road - Solar Panels	Refused	GL Electrical (WM) Limited	0.396	Nov-24	24/3194
Premier Park Road, Unit E - Solar Panels	Awaiting construction	SEGRO	0.418	Mar-23	23/0912
Premier Park Road, Unit C - Solar Panels	Awaiting construction	SEGRO	0.509	Mar-23	23/0911
Premier Park Road, Unit B - Solar Panels	Awaiting construction	SEGRO	0.581	Mar-23	23/0910
Premier Park Road, Unit 4 - Solar Panels	Awaiting construction	SEGRO	0.243	Mar-23	23/0917
Premier Park Road, Unit A - Solar Panels	Awaiting construction	SEGRO	0.37	Mar-23	23/0908
Premier Park Road, Unit 9 - Solar Panels	Awaiting construction	SEGRO	0.28	Mar-23	23/0909
Premier Park, Park Royal - Solar Panels	Awaiting construction	SEGRO	0.21	Feb-24	24/0357
Premier Park Road, Units 10-11 - Solar Panels	Awaiting construction	SEGRO	0.279	Mar-23	23/0916
Premier Park Road, Units 20-23 - Solar Panels	Awaiting construction	SEGRO	0.38	Oct-23	23/3164
Rock Building, Waxlow Road - Solar panels	Awaiting construction	ABRDN (Investments Trust/Standard Life)	0.3704	Nov-23	23/3479
Bighams Global Gastronomy, Mcnicol Drive - Solar Panels	Revised	Private Developer	0.34	Nov-23	23/3703
Charlie Bighams, Mcnicol Drive - Solar Panels	Awaiting construction	Charlie Bighams	0.34256	Dec-23	23/3956
Nucleus, Central Way - Solar Panels	Awaiting construction	Boreal UK Industrial 2 Unit Trust	0.3152	Jul-23	23/2272
Nucleus, Central Way - Solar Panels	Awaiting construction	Boreal UK Industrial 2 Unit Trust	0.164	Aug-23	23/2703
Light House, Western Road - Solar Panels	Awaiting construction	Excel Energy Limited	0.434	Jul-24	24/0109/PRNOPDC
Unit 6, Origin Business Park, Rainsford Road - Solar Panels	Awaiting construction	SEGRO	0.268	Mar-23	23/0961
Unit 5, Origin Business Park, Rainsford Road - Solar Panels	Awaiting construction	SEGRO	0.554	Mar-23	23/0960
Unit 2, Origin Business Park, Rainsford Road - Solar Panels	Awaiting construction	SEGRO	0.285	Mar-23	23/0957

Unit 3, Origin Business Park, Rainsford Road - Solar Panels	Awaiting construction	SEGRO	0.509	Apr-23	23/0958
Unit 4, Origin Business Park, Rainsford Road - Solar Panels	Awaiting construction	SEGRO	0.99	May-23	23/0959
Unit 1, Origin Business Park, Rainsford Road - Solar Panels	Awaiting construction	SEGRO	0.69	Mar-23	23/0956
			9.1		

Source: Renewable Energy Planning Database, DESNZ, <https://data.barbour-abi.com/smart-map/repd/desnz/?type=repd>