

James Harvey Distribution and Residual Charging Team Ofgem 10 South Colonnade Canary Wharf London E14 4PU Emma Clark Inveralmond House 200 Dunkeld Road Perth PH1 3AQ

24 January 2025

Dear James,

Request for direction in accordance with SLC 13A Part E and SLC 13B Part E of the Electricity Distribution Licence

Summary of request

In relation to both of SSEN's distribution licences, Scottish Hydro Electric Power Distribution plc (SHEPD) and Southern Electric Power Distribution plc (SEPD), we hereby request a direction from Ofgem to charge outside of the Common Distribution Charging Methodology (CDCM) and Extra-High Voltage Distribution Charging Methodology (EDCM) for 2026-27 Distribution Use of System (DUoS) charges. This is in accordance with Ofgem's expectation that we make such a request, as set out in its 'Guidance for managing the effects of surplus residual charges' document published 14 November 2024.

Reason for request

As confirmed to Ofgem on 16 December 2024, excessive residual surplus¹ occurs in both SEPD and SHEPD tariffs due to take effect from 1 April 2026. In line with the Ofgem guidance, we have applied the relevant intervention options to the CDCM and EDCM charging methodologies:

	SEPD	SHEPD
CDCM	Option 1A - Reduce value of Distribution Reinforcement Model (DRM) such that the forward-looking charges of the CDCM recover a particular value (to a point where the residual surplus is at a level that allows production of a complete set of tariffs i.e. no #REF! errors)	
EDCM	Option 3: Carry over locational components and network use factors from previous years.	Option 3: Carry over locational components and network use factors from previous years.
		followed by;
		Option 1: Reapportion negative fixed charges for final demand consumers within a residual band to the capacity charge for the same group of consumers.

¹ Residual surplus is also understood as a 'negative residual' per the Ofgem guidance document.

Scottish and Southern Electricity Networks is a trading name of: Scottish and Southern Energy Power Distribution Limited Registered in Scotland No. SC213459; Scottish Hydro Electric Transmission plc Registered in Scotland No. SC213461; Scottish Hydro Electric Power Distribution plc Registered in Scotland No. SC213460; (all having their Registered Offices at Inveralmond House 200 Dunkeld Road Perth PH1 3AQ); and Southern Electric Power Distribution plc Registered in England & Wales No. 04094290 having their Registered Office at No.1 Forbury Place, 43 Forbury Road, Reading, RG1 3JH, which are members of the SSE Group.



What led to the residual surplus (principal cause)

EDCM

SSEN apply the Forward Cost Pricing (FCP) variant of the EDCM charging methodology as prescribed in Schedule 17 of the Distribution Connection and Use of System Agreement (DCUSA). The FCP methodology is based on allocating costs to EHV network users based on the projected load growth and the future network investments (aggregated up into network branches) that we expect to be triggered in their local region of the network. This is done according to the results of a power flow analysis of the network.

DCUSA Schedule 17 (paragraph 2.5) requires that the load data used in the power flow analysis is based on network demand data from the DNO Party's Long Term Development Statement (LTDS), which includes a five-year demand forecast from the previous financial year. A ten-year forecast, from the price setting period, is derived by extrapolating the LTDS forecast to cover the full period of FCP analysis. The forecast load growth outlined in our LTDS is consistent with our business planning assumptions and reflective of our expectations according to the Distribution Future Energy Scenarios (DFES) Consumer Transformation scenario. This scenario captures exponential load growth projections that reflect the electrification of our future energy system, including significant growth in the expected uptake of Electric Vehicles (EVs) and Heat Pumps (HPs).

The forward-looking component of the charge is designed to signal the costs to which a network user is contributing. Under a high growth/high investment scenario, these signals are increasingly strong (by design), meaning that a large amount of 'future cost' is being signalled in the forward-looking component of the charge.

Surplus Residual Charges have occurred in the 2026-27 EDCM tariff calculations as the 'forward-looking' component of the charge (based on our ten-year ahead demand projections and network development plan) overshoots the target revenue for the EDCM (based on 2026-27 Allowed Revenues).

The EDCM FCP model was implemented over a decade ago against a comparatively steady-state energy system background. We do not believe the methodology envisaged the levels of renewable energy investment and load growth on which our investment plans are based, and which will be critical to the delivery of a net zero carbon economy. Consequently, the EDCM methodology (both FCP and LRIC variants) requires a fundamental review to ensure it is fit for the future.

CDCM

The revenue that SEPD and SHEPD is allowed to collect per the ED2 price control for 2026-27 is lower than the revenue derived by the CDCM methodology's pre-scaled charges.

Tariffs affected (relative to the status quo)

The EHV tariffs for 2026-27 prior to intervention indicate that final demand customers would receive large credits via the 'residual' component of the charge, despite the model also indicating that load growth is the main driver of network cost. Without intervention, the magnitude of the year-on-year change in overall charges based on following the EDCM methodology as prescribed would involve a six or seven figure swing for some customers.

For CDCM, there is a floor within the methodology which ensures there will be no negative fixed charges when there is a negative residual surplus. In order to target the allowed revenue, the model will initially start discounting the fixed charge rates of Final Demand tariffs (in accordance with the conclusion of Ofgem's Targeted Charging Review, residual revenue is applied to the fixed charge (p/MPAN) of 'Final Demand' sites only). Once this has been exhausted, it will move to discounting and redistributing unit charges within the model to get back down to target revenue.

Scottish and Southern Electricity Networks is a trading name of: Scottish and Southern Energy Power Distribution Limited Registered in Scotland No. SC213459; Scottish Hydro Electric Transmission plc Registered in Scotland No. SC213461; Scottish Hydro Electric Power Distribution plc Registered in Scotland No. SC213460; (all having their Registered Offices at Inveralmond House 200 Dunkeld Road Perth PH1 3AQ); and Southern Electric Power Distribution plc Registered in England & Wales No. 04094290 having their Registered Office at No.1 Forbury Place, 43 Forbury Road, Reading, RG1 3JH, which are members of the SSE Group.



Consequently, this can result in some highly unintuitive tariffs post intervention based on following the methodology as prescribed. For example, in both SEPD and SHEPD areas for 2026-27, the HV Site Specific Band 4 tariff has zero unit rates and a zero fixed charging rate.

How the intervention option is sufficient to correct for the issue in those circumstances

For both SEPD and SHEPD, EDCM Option 3 was identified as the most appropriate intervention as the primary driver of the excessive residual surplus in 2026-27 is an increase in forward-looking charges. This is also consistent with the approach applied to 2025-26 tariffs. However, for SHEPD specifically, we have also had to apply EDCM Option 1 to 2026-27 calculations (the SHEPD forecast allowed revenue for 2026-27 is lower than the 2025-26 tariff set case). Reverting the locational costs to 2024-25 data initially eliminated the negative residual revenue, but once the model was updated with the latest CDCM data via the iteration process between models, it resulted in further negative residual revenue and hence fixed credit charging rates. Consequently, we have applied Option 1 to shift the negative residual revenue to the capacity charge, having exhausted the limits of Option 3 and this being the only alternative specified in Ofgem's guidance note.

The cap and collar Network Use Factors have been recalculated for 2026-27 as part of the triennial review process across all DNOs. With Ofgem agreement, we have input the revised cap and collar NUFs within the 2026-27 EDCM models, ensuring these values are applied to the same sites which would have been subject to cap/collar data in the 2024-25 (and 2025-26) tariff set cases. Site specific network use factors have been carried over from prior years.

During population of the 2026-27 SHEPD EDCM model, we noted a difference between the 'Total revenue from indirect costs charge' and 'Shared and sole-use asset indirect operating expenditure' which triggers a warning flag within the model. DCUSA Schedule 17 paragraph 26.11 states "For EDCM Connectees connected to the LDNO's Distribution System, the capacity based charge for the DNO Party's indirect costs and 20% of the residual fixed charge for the EDCM Connectee, would be scaled down by a factor of 50 per cent, however, the scaling down will not apply where the residual revenue is negative." This could be read to imply that IDNO discounts on indirect cost recoveries are disapplied when the residual is negative. Consequently, we queried with the model developer whether a formula within the model required amendment to accurately capture the volume to which the indirect cost charging rate will apply. We were advised that the model was suitable for 2026-27 charge setting purposes and, having informed Ofgem of this advice, proceeded on that basis.

Applying EDCM intervention Options 1 and 3 in this way will ensure charge stability for customers. Given the disruptive commercial ramifications that such drastic year-on-year changes could have for our EHV customers (and the counter-intuitive behaviours this may incentivise), we do not think it would be in their interests to publish tariffs based on a methodology that is not producing coherent results, under a load-growth outlook for which it was not designed.

For CDCM specifically, there is currently only one intervention option stipulated in the Ofgem guidance note should the CDCM model fail to run due to the scale of excessive residual surplus - reducing the gross asset costs in order to lower the forward-looking charge. It is our understanding that this solution is consistent with the approach applied by other DNOs who have experienced excessive residual surplus historically.

Impact assessment

The proposed 2026-27 final tariffs for SEPD and SHEPD (post implementation of the CDCM and EDCM intervention options and iterative process) have been provided alongside this Direction request. Assurance checks are ongoing; hence the tariffs are marked draft, but we do not expect any changes to the proposed tariffs. Note, the amended

Scottish and Southern Electricity Networks is a trading name of: Scottish and Southern Energy Power Distribution Limited Registered in Scotland No. SC213459; Scottish Hydro Electric Transmission plc Registered in Scotland No. SC213461; Scottish Hydro Electric Power Distribution plc Registered in Scotland No. SC213460; (all having their Registered Offices at Inveralmond House 200 Dunkeld Road Perth PH1 3AQ); and Southern Electric Power Distribution plc Registered in England & Wales No. 04094290 having their Registered Office at No.1 Forbury Place, 43 Forbury Road, Reading, RG1 3JH, which are members of the SSE Group.



import capacity and fixed charging rates per the application of EDCM Option 1 for SHEPD have been calculated outside of the EDCM model in a manner that is consistent with the Ofgem guidance.

Enduring Solution

A fundamental review of the CDCM and EDCM is urgently required in advance of the 2027-28 final charge setting process in 2025. We do not believe that it is sustainable for DNOs to continue to be in a situation where the charging models produce spurious and/or volatile results due to outdated methodologies whilst reform efforts under the DUoS Significant Code Review (which has been ongoing in some form for over six years) appear to have stalled. This is now exceedingly urgent. We do not think that a further set of short-term workarounds to enable DNOs to produce tariffs will be a viable solution for 2027-28 tariffs.

The workarounds applied this year have been deemed necessary to get the models to run and output acceptable results. However, in having to apply a workaround for a second year in a row we are highly concerned that DUoS tariffs are becoming increasingly detached from robust economic principles that informed the design of the tariff models (and principles of good charging practice more broadly). This requires clear regulatory choices to be made about how the costs of the network should be allocated based on a first principles assessment. It is not sustainable for cost allocation to be determined by what prevents an error state in the tariff model, nor do we believe it reasonable for the regulator to expect that we apply a methodology that we have informed them contains logical flaws.

SSEN wrote to Ofgem directly on two occasions in 2023 detailing our concerns with the DUoS models – see Appendices 1 and 2. The workarounds to both the CDCM and EDCM models are not sustainable in the longer term, and we urge Ofgem to prioritise a fundamental review with our continued support.

Necessary Direction

We request a direction under SLC 13A Part E and SLC 13B Part E of the Electricity Distribution Licence to relieve SEPD and SHEPD of the necessary obligations, to enable CDCM and EDCM Distribution Use of System charges for regulatory year 2026-27 to be set in accordance with the information outlined in this letter, and in alignment with the guidance provided by Ofgem. This direction should also enable any new EDCM connections between the publication of charges and the 2026-27 charging year to have their charges set on an equivalent basis.

Please do not hesitate to get in touch if you require any further detail.

Yours sincerely

Emma Clark Pricing Manager, SSEN Distribution

Enc: Appendix 1 – SSEN Distribution Letter on EDCM volatility Appendix 2 – SSEN Distribution Letter – Call for Review of the CDCM and the Charge Setting Timetable

Scottish and Southern Electricity Networks is a trading name of: Scottish and Southern Energy Power Distribution Limited Registered in Scotland No. SC213459; Scottish Hydro Electric Transmission plc Registered in Scotland No. SC213461; Scottish Hydro Electric Power Distribution plc Registered in Scotland No. SC213460; (all having their Registered Offices at Inveralmond House 200 Dunkeld Road Perth PH1 3AQ); and Southern Electric Power Distribution plc Registered in England & Wales No. 04094290 having their Registered Office at No.1 Forbury Place, 43 Forbury Road, Reading, RG1 3JH, which are members of the SSE Group.