



SSEN SLC 31E – FLEXIBILITY SERVICES PROCUREMENT STATEMENT

30th MARCH 2022



SSEN Distribution SLC 31E Flexibility Services Procurement Statement

Revision: 1.1

Classification: Public

Issue Date: March 2022

CONTENTS

1	Executive Summary	3
2	Introduction	5
3	Flexibility Service Requirements.....	6
4	Tendering Process	14
5	Stakeholder Engagement	20
6	Detailed Quantitative Assessment.....	23
7	Closing Statement.....	25

SSEN Distribution SLC 31E Flexibility Services Procurement Statement

Revision: 1.1

Classification: Public

Issue Date: March 2022

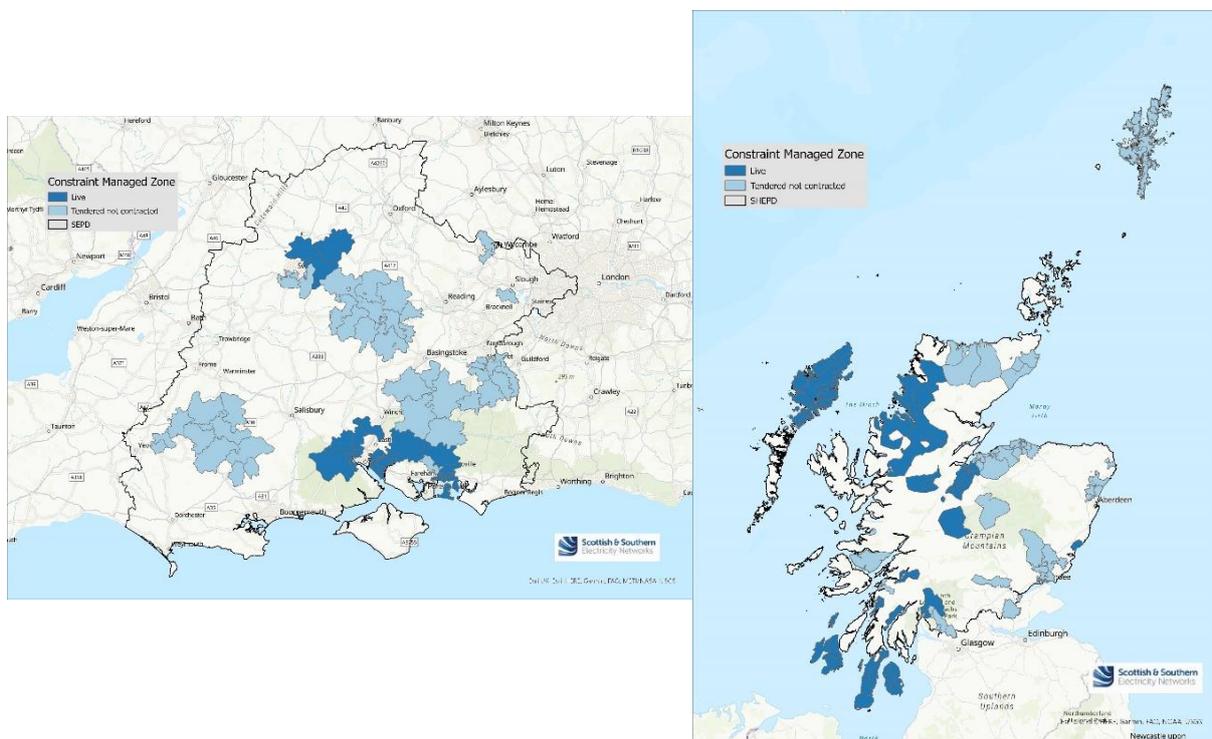
1 Executive Summary

The Climate Change Committee has been clear that the uptake of Low Carbon Technologies (LCTs) necessary to deliver net zero targets could almost treble GB electricity demand by 2050. The need for new system capacity to manage this growth in connections and meet customer demand is significant, whilst keeping costs to customers as low as possible.

SSEN Distribution is committed to 'Flexibility First'. This means that, where possible, we will seek to grow capacity through the use of flexibility services before investing in network reinforcement. The use of flexibility also enables us to improve the efficiency of the existing network through increased levels of utilisation. By taking this approach, we are able to accommodate LCTs and support the changing way our customers use our network whilst continuing to ensure we meet our obligations around developing and maintaining an efficient, co-ordinated and economical distribution system.

The approach set out herein aligns and promotes this approach, helping to ensure that all interested stakeholders can engage and participate in the opportunities that are right for them.

Specifically, in this Procurement Statement, SSEN Distribution details the types of flexibility services that it expects to procure over the 12-month period commencing on 1 April 2022. These are identified by areas of our existing network where we foresee a potential network issue that may affect customers' use of our network. These are called 'Constraint Managed Zones' (CMZs) or 'zones'. In 2022/23, across 17 new zones we hope to procure 96 MWs of new services, which will join the current 584 MWs of services already procured across both licence areas, as shown in the maps below.



This statement also provides information pertaining to our procurement processes, planned developments and engagement, as well as exploring how we have improved these processes over the last 12 months. SSEN Distribution continues to collaborate within the ENA's Open Networks project Workstream 1A (WS1A), which considers the end-to-end flexible services process and how to drive commonality and scalability in the uptake and deliverability of flexible services. In addition, we have continued to engage proactively with stakeholders to develop and deliver improvements to our processes and in this report are links to external pages where further supporting detail is available.

SSEN Distribution SLC 31E Flexibility Services Procurement Statement

Revision: 1.1

Classification: Public

Issue Date: March 2022

A great example of this engagement is the adoption of our Dynamic Purchasing System (DPS), which has driven significant improvements in how we procure services, reducing time and effort for providers, but also enabling us to progress towards greater alignment with the GB Electricity System Operator's (ESO) procurement processes, and facilitating greater accessibility across the industry.

These improvements are critical to the continued growth in local energy markets and the increasing provision of flexibility services. Flexibility is a cornerstone of our RIIO-ED2 submissions, which sets out our plans for the five-year period commencing on 1 April 2023. The success we have had in providing market opportunities, our procurement processes and how we have utilised services will be set out in our Procurement Report, which will be published in April/May 2022.

SSEN Distribution SLC 31E Flexibility Services Procurement Statement

Revision: 1.1

Classification: Public

Issue Date: March 2022

2 Introduction

Scottish and Southern Electricity Networks (SSEN) Distribution is responsible for ensuring a safe and reliable supply of electricity to 3.8 million customers in communities across our two Distribution licence areas: Scottish Hydro Electric Power Distribution (SHEPD) in the North of Scotland and Southern Electric Power Distribution (SEPD) in Central Southern England.

SSEN Distribution was the first GB Distribution Network Operator (DNO) to introduce flexibility services and it continues to lead in the delivery of flexibility across the GB Distribution networks. Since 2016, SSEN has been procuring flexibility services from the owners and operators of Distributed Energy Resources (DERs), to help manage constraints in certain areas of its electricity distribution network. These areas are known as Constraint Managed Zones (CMZs or 'zones' for short) and are broadly of two types:

- Areas where there is a risk that thermal or voltage stability limits could be reached; and
- Areas where work is planned that involves (or increases the risk of) outages.

Our approach to procuring flexibility services continues to evolve as requirements mature, markets develop, and confidence builds in the use of services. Thanks to our ongoing commitment to 'flexibility first', our improving systems and supporting processes, and evolving Local Energy Markets, we have grown from 6 MWs of live contracts in 2019 to 584 MW of Flexibility Service contracts in place today within 16 zones across our two Distribution licence areas.

We have maintained strong engagement with providers on flexible service opportunities, holding webinars to support procurement phases and presenting across industry to raise awareness and participation in our flexibility services. We have also delivered a new Dynamic Purchasing System (DPS) in 2021. This system significantly increases the ease with which providers can register and qualify their assets for new and future flexibility service opportunities.

SSEN Distribution has also continued to be a lead contributor in collaborative efforts across the industry to standardise processes and encourage wider uptake of flexibility, primarily through the Energy Network Association's (ENA) Open Networks Project. We also recognise the need for smart and fair procurement and supply of flexibility from markets and, through the ENA, we are leading on a new initiative to establish a code of practice for the domestic and Lower Voltage market.

In this Statement, SSEN Distribution sets out:

- The different types of Distribution flexibility services and services that we expect to be interested in procuring over the period April 2022 – March 2023
- The mechanisms that we expect to use to purchase these services;
- How and where interested parties can source the rules and technical requirements governing our procurement of flexibility;
- The actions we are taking to ensure active participation of prospective flexibility providers; and
- The actions that we plan to take to coordinate with other distribution licence holders and the Electricity System Operator (ESO) in the procurement and use of flexibility services.

SSEN Distribution is keen to receive any feedback from stakeholders on what works well, but also on any aspects of this Statement that could be improved in future years. Feedback can be submitted directly to the Flexible Solutions Team at the following address: FlexibleServices@sse.com

SSEN Distribution SLC 31E Flexibility Services Procurement Statement

Revision: 1.1

Classification: Public

Issue Date: March 2022

3 Flexibility Service Requirements

3.1 Context on why the company procures flexibility services

Flexibility services are a key tool in managing our networks and delivering net zero across our business-as-usual processes and through our continued commitment to 'Flexibility First' into RIIO-ED2. The benefits of flexibility are well recognised, allowing traditional investment in network reinforcement to be deferred or avoided, enabling smarter investment choices and optionality, workflow smoothing, which reduces cost and time impacts of constraints for our customers, and supporting our networks during faults.

Further, our use of flexibility services helps to accelerate renewable generation and contribute to the management of our distribution networks whilst avoiding traditional fossil-fuel resources.

3.2 Flexibility service types and activities

There are currently four service types that SSEN Distribution regularly procures across its networks. These service types are recognised by the ENA Open Networks Project and have been aligned through Workstream 1A, which has a specific focus on flexibility services and has been instrumental to delivering a standardised approach for stakeholders.

Table 1 – CMZ Service Types

Service	Description
Sustain	The Network Operator procures, ahead of time, a pre-agreed change in input or output over a defined time period to prevent a network going beyond its firm capacity.
Secure	Network Operator procures, ahead of time, the ability to access a pre-agreed change in Service Provider input or output based on network conditions close to real-time.
Dynamic	The Network Operator procures, ahead of time, the ability of a Service Provider to deliver an agreed change in output following a network abnormality.
Restore	Following a loss of supply, the Network Operator instructs a provider to either remain off supply, or to reconnect with lower demand, or to reconnect and supply generation to support increased and faster load restoration under depleted network conditions.

Sustain - Ahead of time procurement of a pre-agreed change in input or output over a defined time period to prevent a network going beyond its firm capacity.

Sustain (or pre-fault) services are those sought/deployed to manage electrical networks that are approaching a point where the pre-existing network capacity cannot meet power requirements should an outage coincide with periods of highest demand and the system's firm capacity (post outage) is lower than the demand.

Traditional reinforcement techniques increase overall capacity across all time periods by including an additional circuit or by uprating an existing one. Flexible techniques do not seek to increase capacity but rather reduce or time-shift demand to avoid capacity constraints. Since capacity constraints only occur at periods of local maximum demand, and only when this coincides with an outage, it means that pre-defined services can be procured in advance to manage these events.

SSEN will procure these services based on a four-year contract term with the opportunity to extend by one year.

SSEN Distribution SLC 31E Flexibility Services Procurement Statement

Revision: 1.1

Classification: Public

Issue Date: March 2022

Secure – Ahead of time procurement of the ability to access a pre-agreed change in the Service Provider input or output based on network conditions close to real-time.

In the same manner as Sustain activities, SSEN Distribution will procure ahead of time the required power injection/demand response services from available DER providers based on network conditions to manage pre-planned outages. This style of service will be appropriate for implementation across wide and locally specific areas, dependant on the maintenance scenarios affecting the network.

SSEN Distribution will procure these services based on a one-year rolling contract limited to a maximum five-year term.

Dynamic – Ahead of time procurement of the ability of a Service Provider to deliver an agreed change in output following a network abnormality.

SSEN Distribution will seek to procure Dynamic services ahead of time from providers able to deliver an agreed change in output to avoid, or following, a network fault. For example, in N-1 scenarios, to avoid overloading of the second circuit or to constrain loadings during restoration or repair scenarios. Utilisation is instructed when the fault occurs on the network (but only if loading is beyond the post fault rating of the remaining assets), or to enable constraint management during restoration activities.

SSEN Distribution will procure these services based on a one-year rolling contract limited to a maximum five-year term.

Restore – Instruction following a loss of supply for a provider to either remain off supply, or to reconnect with lower demand, or to reconnect and supply generation to support increased and faster load restoration under depleted network conditions.

SSEN Distribution will procure Restore services ahead of time from providers able to either remain off supply, to reconnect with lower demand, regulate frequency and voltage or to generate into a network zone isolated from the main fault to support increased and faster load restoration within a specific network area.

SSEN Distribution will procure these services based on a one-year rolling contract limited to a maximum five-year term.

Other Service Types

In 2021, across the Western Isles, SSEN Distribution trialled a new service type called 'CMZ Offset', where the use of CMZ-style services reduced local reliance on traditional diesel generation during outage scenarios by enabling the release of additional capacity to 'intermittent' generation. This service is now being developed into a BAU offering as part of our ED2 plans and will contribute to our efforts to reduce our business carbon footprint and meet our accredited 1.5 degree science based target.

In addition, through our Network Innovation Competition-funded project, TRANSITION, SSEN Distribution is trialling flexibility markets and new technologies and commercial approaches designed to support these flexibility markets. The trial areas cover six bulk supply points across Oxfordshire and are divided into three trial periods, the first of which started in November 2021. Throughout the trials, which run until February 2023, TRANSITION will be seeking to procure flexibility on a season-ahead, week-ahead and day-ahead basis across all six sites and for a range of different flexibility services. TRANSITION is also investigating the potential of the DNO enabling Peer to Peer trading of spare energy capacity (export and import) between two 'network neighbours'. More information on this project and the opportunities that exist under this trial can be accessed via the following link:

<https://ssen-transition.com/get-involved/>

SSEN Distribution SLC 31E Flexibility Services Procurement Statement

Revision: 1.1

Classification: Public

Issue Date: March 2022

3.3 Load Managed Areas (LMA)

Load Managed Areas (LMAs) in SHEPD cover approximately 87,000 customers, spread right across the geographic licence area, including the islands and many towns and cities. LMAs reduce the maximum demand on circuits at all voltage levels and at substations by effectively smoothing demand over the 24-hour period. LMAs are a legacy arrangement in SHEPD, introduced as an alternative to traditional reinforcement.

Subject to Ofgem's approval of our ED2 proposals and funding requirements, we are proposing to trial the use of market flexibility services to replace LMA mandated switching patterns – including activities to define, develop and stimulate the market – alongside, and in accordance with, development and facilitation of flexibility markets to support Distribution System Operation (DSO).

Our short to medium-term (ED1/early ED2) approach is to maintain switching patterns using smart metering via suppliers, as per current DCUSA obligations. However, going forward, SSEN Distribution expects our SLC 31E Statements to include opportunities pertaining to LMA associated services.

3.4 Long Term Development Statement (LTDS) and Network Development Plan (NDP)

In addition to this Statement, SSEN Distribution already shares information relating to the future development of its system and those parts that are likely to reach the limit of their capability a number of years from now. Further, in May 2022, SSEN Distribution will publish its first Network Development Plan (NDP), which provides network information out to 2032 and beyond. Both this and the Long Term Development Statement (LTDS) allow interested parties access to network information that can be used to assess future opportunities on our network.

Long Term Opportunities

SSEN Distribution commissioned Regen to develop scenarios for the growth of new sources of demand and distributed generation across both our licence areas between 2018 and 2032. The analysis uses National Grid's four Future Energy Scenarios (FES) as a framework. The areas included in the scope of the study are:

- sources of demand - electric vehicles, heat pumps and air conditioning, and strategic new housing and commercial developments;
- distributed generation - both renewable and fossil fuel; and
- battery storage.

The results from the Distribution-FES feed directly into our network development planning process and soon to be published NDP, which will also reflect flexibility services procured into the long-term horizon. This NDP will be published every two years, in addition to the medium-term LTDS and our more regular releases on immediate CMZ opportunities.

Medium Term Opportunities

SSEN Distribution publishes its Long-Term Development Statement (LTDS) on an annual basis. This provides information pertaining to the likely development of our Distribution system over the next five years and identifies parts of our system that are likely to reach the limit of their capability during that time. Flexibility providers can therefore use the LTDS as an indication of areas on the network where

SSEN Distribution SLC 31E Flexibility Services Procurement Statement

Revision: 1.1

Classification: Public

Issue Date: March 2022

SSEN Distribution may require a service in the coming years. SSEN Distribution's LTDS and supporting information can be found here: [Long term development statements \(LTDS\) - SSEN](#)

Short term Opportunities

In addition to this annual Flexibility Services Procurement Statement, SSEN Distribution has committed to providing detail on both past procurement activities and new CMZ opportunities on the ENA Open Networks' pages. Details of upcoming events and timelines for flexibility tenders can be accessed via the following links:

<https://www.energynetworks.org/creating-tomorrows-networks/open-networks>

<https://www.preceden.com/timelines/523803-flexibility-in-gb-timeline>

SSEN Distribution continues to deliver advanced engagement prior to formal release of CMZ Procurement activities through our website and the Flexible Power platform, press releases, engagement activities and direct interaction with our customers, further detail of this process is available later in this report.

3.5 2022 Procurement statement

All flexibility services that SSEN Distribution intends to procure in 2022/23 fall within the types listed above, covering reinforcement deferral, pre-fault and post fault services across our two licence areas.

In the following table we have called out the specific services we expect to tender for in each geographical/network zone, alongside any detail currently available on the size and expected volumes required and maximum connection voltage. Importantly, all SSEN Distribution CMZ services are technology-agnostic. As such, providers of storage, generation, demand-side response or energy efficiency services can respond to any tender.

Importantly, whilst this Statement sets out our immediate forecast of the potential requirements for flexibility services, SSEN Distribution will continue to review schemes throughout the year that may be triggered by, but not exclusively, changing network conditions, load growth and maintenance updates, all of which could identify new opportunities, as well as nullify or replace schemes included herein.

In addition, should new service types be developed or become available, these services may be implemented in addition to the zones covered by this Statement. In these cases, SSEN Distribution is committed to consulting with Ofgem and will produce, submit and an publish updated version of this Statement as required, in addition to advertising these new services through the normal routes.

Lastly, we have forecasted the services in the following table based upon the current Common Evaluation Methodology (CEM), which is due to be updated through the ENA Open Networks Project in the coming months. As such, prices included within this Statement are indicative, informed by CEM calculation but adjusted to values in line with our RIIO-ED2 plan. We will commit to re-running the CEM valuation for each service pre-tender to release more accurate price indications. The price structure of the Sustain service is also currently under review, with other DNOs amending this to become a Utilisation only service. We are involved in these discussions and, if ratified by the ENA Open Networks Project WS1A group, we will align and revise these procurements to ensure a common approach.

SSEN Distribution aims to run procurement over two distinct time horizons:

Long Horizon. Procured up to a year ahead of need and where services may be required for multiple years. These are typically for 4 year or rolling 1-year contracts, limited to 5 years in total, for the following service types:

SSEN Distribution SLC 31E Flexibility Services Procurement Statement

Revision: 1.1

Classification: Public

Issue Date: March 2022

- a. Sustain services, based on long-term forecasts of network demand; and
- b. Pre-emptive Dynamic & Restore services, for areas with less resilience to faults and where flexibility services can be used in general contingency plans.

Near Horizon. Procured a few weeks or months ahead of need, these are typically one year rolling contracts (again limited to 5-years in total), for the following service types:

- c. Secure, Dynamic or Restore Services, as required for specific network planned works.

The capping of contracts to five years is in line with industry best practice, detailed in the Open Networks Project WS1A Product 4 2019 report. This report is available here:

<https://www.energynetworks.org/creating-tomorrows-networks/open-networks>

In addition, SSEN Distribution may choose to re-tender existing zones when yearly contracts expire/approach the rolling over period, should new market applicants become available. These zonal contracts have all been placed under a one-year rolling agreement, capped at five years. Some zones may be re-tendered during this time and details on these zones are included below.

When moving into the formal procurement process, all new zones will be supported ahead of formal procurement through the release of zone maps, supporting detail and process guidance, all of which will be made available on the following websites:

<https://www.ssen.co.uk/ConnectionsInformation/GenerationAndStorage/FlexibleConnections/CurrentCallsForFlexibility/>

[Scottish and Southern Electricity Networks \(flexiblepower.co.uk\)](https://flexiblepower.co.uk)

SSEN Distribution SLC 31E Flexibility Services Procurement Statement

Revision: 0.3

Classification: Public

Issue Date: March 2022

3.6 2022 New Zones

Table 2 – SSEN Distribution 2022 CMZ procurement forecast

License Area	Zone	Services Required	Max MW Required*	Max Voltage Level	Forecasted Utilisation (MWh)**	Seasons Required	Availability Ceiling Price*** (£/MW/h)	Utilisation Ceiling Price *** (£/MWh)	Availability Service Windows	Dispatch Mechanism	Contract Start year
SEPD	Alderton	Sustain	0.45	11kV	51	Winter/Spring/Autumn	£300	£150	17:30 - 20:00	SSEN TEC + Manual Process	2023
SEPD	Alresford	Sustain	0.98	11kV	6.88	Winter/Spring/Autumn	£300	£150	17:00- 18:00	SSEN TEC + Manual Process	2023
SEPD	Amesbury	Sustain	6.9	132kV	23	Spring/Autumn/Summer	£300	£150	7:00 - 19:30	SSEN TEC + Manual Process	2024
SEPD	Ashling Road	Sustain	6	11kV	152	Winter/Spring/Autumn	£300	£150	07:30 - 08:30 16:00 - 22:00	SSEN TEC + Manual Process	2024
SEPD	Ashton Park	Sustain	7.13	33kV	231	Winter/Spring/Autumn	£300	£150	15:30 - 22:00	SSEN TEC + Manual Process	2024
SEPD	Denham	Sustain	21.4	132kV	4229	Winter/Spring/Summer/Autumn	£75	£30	07:30 - 22:30	SSEN TEC + Manual Process	2023
SEPD	Egham	Sustain	2.08	11kV	44	Winter/Spring/Autumn	£300	£150	17:00 - 20:30	SSEN TEC + Manual Process	2023
SEPD	Farrington	Sustain	5.32	11kV	327	Winter/Spring/Autumn	£300	£150	15:00 - 22:00	SSEN TEC + Manual Process	2023
SEPD	Fulscot	Sustain	1.44	33kV	6	Winter/Spring/Autumn	£300	£150	17:00 - 19:00	SSEN TEC + Manual Process	2023
SEPD	Goring and Cholsey	Sustain	4.73	33kV	156	Winter/Spring/Autumn	£75	£150	16:30 - 21:00	SSEN TEC + Manual Process	2023
SEPD	Harvard Lane	Sustain	2.84	11kV	118	Winter/Spring/Autumn	£300	£150	16:30 - 22:00	SSEN TEC + Manual Process	2023
SEPD	Oxford	Sustain	3.5	132kV	30	Spring/Autumn	£300	£150	16:30 - 20:00	SSEN TEC + Manual Process	2024
SEPD	Stokenchurch	Sustain	2.75	11kV	147	Winter/Spring/Autumn	£300	£150	7:30 - 08:30 & 15:00 - 22:00	SSEN TEC + Manual Process	2023
SEPD	Upton	Sustain	13.1	33kV	551	Winter/Spring/Summer/Autumn	£300	£150	14:30 - 22:00	SSEN TEC + Manual Process	2024
SEPD	Yattendon	Sustain	16.62	33kV	2,274	Winter/Spring/Autumn	£300	£150	05:00 - 23:30	SSEN TEC + Manual Process	2023
SEPD	Yeovil	Sustain	0.83	33kV	1	Winter/Spring/Autumn	£300	£150	17:00 - 18:30	SSEN TEC + Manual Process	2023
SEPD	Yetminster	Sustain	0.4	11kV	17	Winter/Spring/Autumn	£300	£150	07:30 - 08:30 16:00 - 19:30	SSEN TEC + Manual Process	2023

3.7 *This is the max MW required over the period of the contract. The earlier years will require less MW's as the overload grows over time.

**Total utilisation over the period of the proposed contract, we could add a column in for contract length. However, this may restrict options as lower prices may drive longer contracts/deferral.

***ED2 quoted figures.

SSEN Distribution SLC 31E Flexibility Services Procurement Statement

Revision: 0.3

Classification: Public

Issue Date: March 2022

3.8 Current Zones which may be re-tendered

Table 3 – SSEN Distribution existing CMZ for potential re-tender in 2022

Licence area	Zone	Services required	MW required	Max voltage level	Forecasted volume required (MWh, Season, Window)	Dispatch mechanism
SHEPD	Islay	Secure, Dynamic & Restore	Uncapped	11kV	Outage/Fault linked	SSEN TEC + Manual Process
SHEPD	Skye & Western Isles	Secure, Dynamic & Restore	Uncapped	33kV	Outage/Fault linked	SSEN TEC + Manual Process
SHEPD	Port Ann	Secure, Dynamic & Restore	Uncapped	33kV	Outage/Fault linked	SSEN TEC + Manual Process
SHEPD	Achintee	Secure, Dynamic & Restore	Uncapped	11kV	Outage/Fault linked	SSEN TEC + Manual Process
SHEPD	Cassley	Secure, Dynamic & Restore	Uncapped	33kV	Outage/Fault linked	SSEN TEC + Manual Process
SHEPD	Kilmelford	Secure, Dynamic & Restore	Uncapped	11kV	Outage/Fault linked	SSEN TEC + Manual Process
SHEPD	Dunoon	Secure, Dynamic & Restore	Uncapped	33kV	Outage/Fault linked	SSEN TEC + Manual Process
SHEPD	Aultbea	Secure, Dynamic & Restore	Uncapped	11kV	Outage/Fault linked	SSEN TEC + Manual Process
SHEPD	Ullapool	Secure, Dynamic & Restore	Uncapped	11kV	Outage/Fault linked	SSEN TEC + Manual Process
SHEPD	Fort William	Secure, Dynamic & Restore	Uncapped	33kV	Outage/Fault linked	SSEN TEC + Manual Process
SHEPD	Logie Pert	Sustain, Secure, Dynamic & Restore	2.6MW, Uncapped	33kV	95MWh, May-August 00:00-23:59	SSEN TEC + Manual Process
SEPD	Rownhams	Secure, Dynamic & Restore	Uncapped	33kV	Outage/Fault linked	SSEN TEC + Manual Process
SEPD	Havant	Secure, Dynamic & Restore	Uncapped	33kV	Outage/Fault linked	SSEN TEC + Manual Process

SSEN Distribution SLC 31E Flexibility Services Procurement Statement

Revision: 1.1

Classification: Public

Issue Date: March 2022

3.9 Potential Future Tenders

Table 4 – SSEN Distribution potential CMZ opportunities for 2023 onwards (future reporting years)

Licence Area	Zone	Services Required	Max Voltage Level	Market Test Year
SHEPD	Abernethy	Sustain	33kV	2023
SEPD	Bemerton	Sustain	33kV	2023
SEPD	Bruton	Sustain	33kV	2023
SEPD	Calne	Sustain	33kV	2023
SHEPD	Keith	Sustain	33kV	2023
SHEPD	Port Ann	Sustain	33kV	2023
SHEPD	Scorradale	Sustain	33kV	2023
SEPD	Wareham	Sustain	33kV	2023

SSEN Distribution SLC 31E Flexibility Services Procurement Statement

Revision: 1.1

Classification: Public

Issue Date: March 2022

4 Tendering Process

SSEN Distribution considers the procurement of flexibility services to be a regulated contract under the Utilities Contract Regulations 2016 / Utilities Contract (Scotland) Regulations 2016 and, as such, procurement is directly managed by SSE's Procurement & Commercial teams to ensure non-discrimination, fairness and transparency.

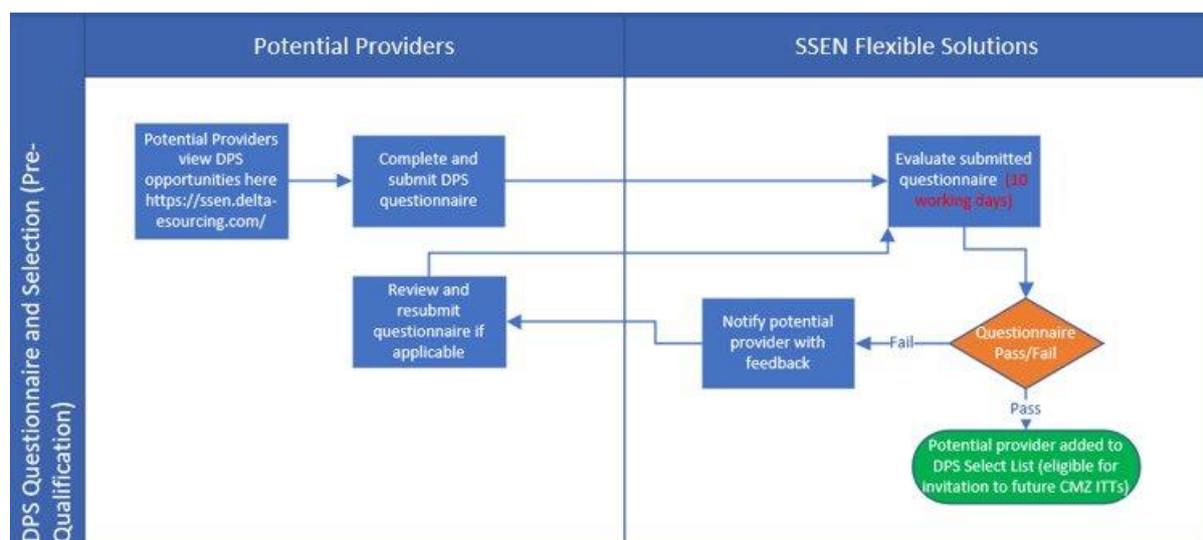
A Dynamic Purchasing System (DPS) is considered to be the most efficient means of procuring these services at scale within the procurement regulations. In 2021, following a process of market consultation, SSEN Distribution implemented a DPS for its procurement of all current and future flexibility services.

Providers wishing to be included in tenders must register on SSEN Distribution's DPS and complete a Pre-Qualification Questionnaire (PQQ) to confirm they meet the minimum eligibility criteria for providing flexibility services. The steps for this process are described and illustrated (in Diagram 1) below:

- There is a separate PQQ for each SSEN Distribution licence area: the North of Scotland (for our Scottish Hydro Electric Power Distribution plc (SHEPD) licence area) and South England (for our Southern Electric Power Distribution plc (SEPD) licence area). Providers should complete the PQQs for the region where their assets are located.
- Providers can register and complete pre-qualification at any time, but it must be no later than 10 working days before participating in an Invitation to Tender.

Providers that pass pre-qualification will be added to the 'Select List' of qualified providers and will receive any Invitation To Tender (ITT) issued for that region. Providers only need to pass pre-qualification once to receive invitations to all future tenders.

Diagram 1: DPS Process Map



The number of tenders and their dates/durations are driven by demand within SSEN Distribution. We are working to establish a regular calendar for long-horizon procurement that is aligned with other DNOs, as per the diagram (Diagram 2) below, where both formal, bi-annual tender blocks and infrequent mini tenders are shown. Mini tenders are used to cover individual or small groups of zones where flexibility requirements have been identified within a shorter timeframe, having not been used

SSEN Distribution SLC 31E Flexibility Services Procurement Statement

Revision: 1.1

Classification: Public

Issue Date: March 2022

previously. For example, where new planned outages are being defined as part of maintenance works, which were not visible at the point of annual studies being completed. These mini tenders are still compliant within the procurement processes detailed within this Statement and will also use the DPS to register and run the tender activity.

Diagram 2: Example Procurement Timeline



All SSEN Distribution CMZ services are technology-agnostic. As such, providers of storage, generation, demand-side response or energy efficiency services can respond to any tenders as long as they have registered and pass the pre-qualification stage. This also enables providers or consortiums to collate separate technologies or approaches to meet the requirements of specific bids, providing the 'combined' offer is prequalified in the DPS ahead of the tender.

SSEN may opt to limit or restrict the amount of intermittent generation within a tender based solely on the network topography where the ability to maintain a stable voltage is crucial for the resilience of supplies. Where this is the case, this will be clearly set out in the relevant documentation / tender specification.

4.1 Visibility of Opportunities

To facilitate fair competition, SSEN Distribution hosts pre-tender market engagement, including a formal webinar to explain to interested parties the principles of flexibility services and the full end-to-end process. This ensures potential providers have sufficient time to register before the tender is released.

For every new procurement and in addition to notices released within the DPS, SSEN Distribution will release details on forthcoming opportunities on both its website and its Flexible Power system, as well as through updating the ENA flexibility timeline.

4.2 Flexible Power is a collaborative system developed across five DNOs (SSEN Distribution, Western Power Distribution, Scottish Power Energy Networks, Northern Power Grid and Electricity North West Limited) and is designed to improve efficiency and scalability of flexibility service implementation, as well as offering an improved customer experience, contract management and settlement functions.

Access to the abovementioned sites can be obtained through the following links:

SSEN Distribution Flexibility Pages –

<https://www.ssen.co.uk/ConnectionsInformation/GenerationAndStorage/FlexibleConnections/CurrentCallsForFlexibility/>

SSEN Distribution Flexible Power –

<https://www.flexiblepower.co.uk/scottish-and-southern-electricity-networks>

SSEN Distribution SLC 31E Flexibility Services Procurement Statement

Revision: 1.1

Classification: Public

Issue Date: March 2022

ENA Flexibility Timeline –

<https://www.preceden.com/timelines/523803-flexibility-in-gb-timeline>

4.3 Pricing strategy

In previous years, SSEN Distribution's pricing strategy has been to achieve a market clearing price following an initial sealed bid process and a second, Best and Final Offer tender round.

We are constantly engaging with our stakeholders to understand how we can facilitate greater participation in flexibility services. On the basis of this feedback, and to standardise approaches with other DNOs, we are moving to more framework-based procurement. This direction aligns with ESO flexibility services and is being detailed within the ENA Open Networks Project WS1A, outputs of which will inform SSEN Distribution's approach. Following the implementation of our new DPS and the ongoing goal to move closer to real-time procurement of flexibility, beginning in April 2022, SSEN Distribution will set and publish indicative prices for each service, based on the price of alternatives to flexibility as follows:

- For Secure/Dynamic services: The market price of mobile diesel generation.
- For Restore services: The cost of customer compensation for power cuts.

This does not preclude providers from bidding in at higher prices, however their services are unlikely to be used if there are cheaper alternatives available.

For Sustain tenders, any price guidance will depend on the specific CMZ requirements. However, in all cases, given that Sustain guide prices are based on achieving annual flexibility costs lower than the net present value of network reinforcement capital investment, this will be determined through our use of the CEM Tool.

Under our Sustain service, both availability and utilisation prices are agreed at the point of contract and SSEN Distribution commits to paying Service Providers an availability payment for this response within the identified service windows and for the duration of the contract. This gives providers an assured income under the contract independent of actual use. Utilisation is only paid should the service be called upon. However, other DNO's are proposing or implementing a Utilisation only Sustain service, in the interests of commonality and standardisation SSEN is in discussion through the ENA Open Networks project to ensure any changes are reviewed and implemented across all DNOs. As such we may update our Sustain service payment structure early in the 2022-23 financial year.

Under our Secure service and in some dynamic services, both availability and utilisation prices are agreed at the point of contract. However, no availability periods are agreed as outages can be subject to change. SSEN Distribution commits to setting the Dynamic availability periods with the provider no less than 48 hours before the requirement and will pay any availability and utilisation in response to services provided during the service window.

Our Restore services are utilisation only services. Utilisation prices are agreed at the point of contract. Should faults occur, the provider is called upon, and, if available to respond, paid for all services provided until such time as the network has been restored to intact conditions.

SSEN Distribution SLC 31E Flexibility Services Procurement Statement

Revision: 1.1

Classification: Public

Issue Date: March 2022

4.4 Contract award arrangements

Each tender is usually divided into lots, where each lot is for a specific CMZ. Via the DPS, those providers invited to tender will be able to view details of the requirements for each CMZ, ask questions and decide if they wish to participate.

In a standard services tender, providers will be asked to:

- Confirm which lots (CMZs) and services they are bidding for;
- Answer the Tender Evaluation Criteria questions;
- Submit price bids; and
- Agree to the standard contract terms and conditions.

The deadline for submissions will be communicated in the ITT. Bidders for standard services that meet the minimum technical/service criteria and agree to the contract terms and conditions will be awarded a contract. Sustain and other bespoke services are subject to business case review before contract award.

Flexibility service contracts are awarded for a minimum of 1 year, with the option to renew annually up to 5 years if there are ongoing requirements in the CMZ.

Contracts provide a framework agreement under which services can be called off (with the exception of Sustain contracts which may include specific service windows). Whilst we strive to ensure flexibility is procured where and when needed, a contract does not guarantee that services will be used for the following reasons:

- SSEN Distribution may award contracts to multiple providers within a CMZ to reach required capacity or to achieve greater resilience.
- Decisions about which provider to use are taken based on several factors including cost and quality, but most importantly the suitability of the provider and DER to each service event.
- The demand for flexibility in an area may change with time.

Every effort is made to ensure that the timescales for each stage of the procurement process allow market participants to effectively participate and respond to opportunities.

Table 5 sets out the timescales targeted.

Table 5 – SSEN Distribution Procurement and Contract award process

Stage	Activity	Who can participate	Typical Duration/Deadline	
			Long-Horizon Procurement	Near Horizon Procurement
Registration and Pre-Qualification	Providers register on DPS, answer pre-qualification questions/upload	Any provider with existing or planned assets in SSEN	Can be done at any time but must be completed 10 working days prior to an ITT to be included in that tender.	

SSEN Distribution SLC 31E Flexibility Services Procurement Statement

Revision: 1.1

Classification: Public

Issue Date: March 2022

	related documentation.	Distribution regions.		
Respond to ITT	Providers answer tender questionnaire, submit pricing and agree to standard terms and conditions.	Providers who have passed pre-qualification and invited to tender.	1 month	1 week
Clarify and evaluate responses	SSEN Distribution will discuss any clarifications and score provider submissions.	Providers who have responded to tender.	1 month	1 week
Award Contracts	Providers and SSEN Distribution complete contract schedules and sign.	Providers who meet the minimum technical/service criteria.	2 weeks	1 week
Onboarding	Providers enter details on Achilles so that Purchase Orders can be raised and payments made for any services provided.	Contracted providers	2 weeks	1 week
Flexible Power Onboarding (optional)	Providers create API endpoint and test integration, with 3 rd party support if required.	Contracted Providers	1 month	n/a

At the point of Contract Award, the time taken to finalise contractual details can vary, but this is mitigated through the use of the Industry Standard Agreement developed as per the ENA Open Networks Standard contract (Version 2, released in December 2021). SSEN Distribution is a leading party on the production of this industry standard contract, implementing it in any new tenders and uploading the latest approved version as soon as it is signed off. This contract can be accessed through our Flexible Connections webpage: <https://www.ssen.co.uk/FlexibleConnections/>

4.5 Service dispatch mechanism

SSEN Distribution currently utilises a manual dispatch process, using a combination of email and telephone-based communications. However, our Flexible Power system will provide automation to this process and following significant development we expect to trial this functionality in 2022. We have also contributed to the ENA Open Networks Project WS1A Product 3, which sought to identify good practice and encourage alignment within dispatch and Settlement processes, with outputs feeding into and revising our approach. Details on the outputs of that Product can be found here:

<https://www.energynetworks.org/industry-hub/resource-library/open-networks-2019-ws1a-p3-dispatch-settlement-processes.pdf>

SSEN Distribution SLC 31E Flexibility Services Procurement Statement

Revision: 1.1

Classification: Public

Issue Date: March 2022

SSEN Distribution utilises a 'Total Evaluated Cost' (TEC) process to inform both our bid assessment and dispatching principles, with dispatch priority across multiple providers based on the following criteria:

- Asset location (in relation to the constraint);
- Asset type/ability (for example, intermittent generation or assets unable to provide incremental increase/decrease may not qualify in certain scenarios);
- Asset service price;
- CO2/Environmental impact; and
- Asset reliability.

This transparent process should ensure flexibility services are delivered within the optimum balance of cost effectiveness and network reliability while remaining fair to providers. The principles governing our dispatch mechanism and criteria are available to download on our Flexible Connections webpage:

<https://www.ssen.co.uk/FlexibleConnections/>

SSEN Distribution SLC 31E Flexibility Services Procurement Statement

Revision: 1.1

Classification: Public

Issue Date: March 2022

5 Stakeholder Engagement

Throughout the year, SSEN Distribution engages with the market via a number of channels to encourage potential providers to register on our DPS and complete the PQQ. This general market engagement serves to increase the pool of providers that can participate in our flexibility tenders, increase the success of those tenders and continually increase awareness of flexibility service opportunities to new market participants.

General market engagement includes:

- Social media updates (LinkedIn, Facebook, Twitter, Instagram);
- Presentations at industry conferences and other forums; and
- Publishing the requirements and geographical area of each zone online (Flexible Power and SSEN Distribution Website).

Additional market engagement is carried out according to the type of tender:

For long-horizon procurement

- Webinars, advertised via Social Media channels (LinkedIn, Facebook, Twitter, Instagram).
- Targeted promotional email communications to existing connected DERs, where possible.

For near-horizon procurement

- Direct email to pre-qualified providers with DERs in specific zones.

5.1 Procurement timetable and process

Within the procurement windows, SSEN Distribution will publish information according to the steps in the procurement timetable below:

Figure 5 – SSEN Distribution engagement and information release strategy

SSEN Distribution SLC 31E Flexibility Services Procurement Statement

Revision: 1.1

Classification: Public

Issue Date: March 2022

Signposting (Up to 6 months in advance of a full tender)

Zone maps & service requirements (including capacity and service windows if applicable) published online.

Indicative procurement calendar published online.

Pre-Tender Stage (Starts 30 days before a full tender)

Updated requirements published if necessary including tender date. Contract Notices published and pre-tender webinars held.

Full Regulated Tender (Duration varies with scale of response)

Invitations to Tender sent to pre-qualified providers. Bids submitted, clarified and evaluated. Contracts awarded to successful bidders.

Post Contract Award (Duration varies with complexity)

Provider onboarding.

Within one month of contracting, details of tender outcome published on SSEN website.

5.2 Stakeholder engagement

We hold live webinars to support all new zones and those that may be re-tendered. These webinars are recorded and uploaded to our website and, as such, remain a resource for potential future providers.

Through these sessions, which include live Q&A sessions, these webinars are a regular opportunity for our staff to engage, help and listen to stakeholders. We also collect feedback from attendees and act on this going forward to drive continual improvements in the service we offer and the uptake of flexibility services across our networks.

Please note that, if appropriate, we may group zones together for the purposes of this engagement based on geographical location, service alignment or procurement release date.

An example recorded webinar is available here:

<https://www.ssen.co.uk/ConnectionsInformation/GenerationAndStorage/FlexibleConnections/CurrentCallsForFlexibility/>

We also support periodic engagement sessions across SSEN Distribution and wider industry forums, providing updates on existing zones, new opportunities, process improvements and industry changes. Key examples of this ongoing commitment are:

- SSEN Distribution Distributed Generation and Connections Customer Forums (Periodic)
- SSEN Distribution Flexible Solutions Webinar (Annual)
- SSEN Distribution Distributed Energy Resources (DER) Forums (Annual)
- ENA Energy Networks Innovation Conference (ENIC) (Annual)

SSEN Distribution SLC 31E Flexibility Services Procurement Statement

Revision: 1.1

Classification: Public

Issue Date: March 2022

Community and Energy Group bespoke sessions, including sessions organised by:

- Community Energy Scotland
- Energy Hubs/Local Enterprise Partnerships
- Regional Energy Groups, for example the Country Land and Business Association (CLA) and Isle of Wight 'Future Wight' group.

5.3 Engagement with the ESO/other DNOs

The ENA's Open Networks Project provides the main forum for engagement with the ESO and other DNOs on flexibility services, with specific focus on the alignment of service types, contracts and processes. The project continues to deliver increasing accessibility and transparency for SSEN Distribution's CMZ services, with SSEN Distribution actively contributing to the industry Standard Agreement, baselining methodology, procurement parameters and processes.

SSEN Distribution is committed to continued and active involvement in the ENA Open Networks Project in 2022, with focus on the following key outputs for flexibility services:

- Further evolution of the industry Standard Agreement for flexibility services;
- A standard approach to flexibility services baselining, supporting providers of demand side response and energy efficiency services as well as those who may struggle to provide regular metering data to network operators;
- Updates to the Common Evaluation Methodology Tool (CEM); and
- Primacy rules to manage service conflicts.

In addition, we have undertaken collaboration with the ESO within their Regional Development Plans (RDPs), which actively look to provide a 'whole system' planning approach to areas experiencing Transmission constraints, where the use of flexibility services could be utilised in place of traditional alternatives in the short and medium term. Flexibility services are also recognised as essential elements to Whole System CBA and planning processes, which SSEN Distribution continues to develop, support and implement through interaction with the ESO, TOs and other DNOs through the Whole System Development Forum chaired by the ESO.

SSEN Distribution SLC 31E Flexibility Services Procurement Statement

Revision: 1.1

Classification: Public

Issue Date: March 2022

6 Detailed Quantitative Assessment

6.1 How we determine service needs

Based upon current forecasts, SSEN Distribution plans to procure flexibility services across the Sustain types in both licence areas, covering 17 new CMZ zones. In addition, we reserve the option to re-tender any of the existing CMZ zones should new providers express an interest, existing providers seek to cancel their contracts, or our service requirements change in response to updated forecasted requirements. We also reserve the option that our forecasts identify new requirements for flexibility resulting in new CMZ zones. If this occurs, we will consult with Ofgem to revise and re-publish this report as well as carrying out the standard market engagement activities.

When seeking to procure Secure, Dynamic and Restore services, SSEN Distribution does not set a ceiling MW or 'cap' within its procurement process. In so doing, the aim is to secure a significant and diverse range of contracts that can be utilised within a range of fault scenarios. We believe this provides dual benefits to both the network and potential service providers, increasing the opportunity and decreasing the risk of reduced network stability.

This is in contrast to our Sustain services, where SSEN Distribution does target a specific MW requirement based on forecast load growth within a defined window.

6.2 Networks Reinforcement Assessments

Since 2019, SSEN Distribution has embedded an internal investment process that allows flexible approaches and reinforcement to be assessed on their individual merits. However, to standardise our approach and embed consistency and transparency, SSEN Distribution now utilises the Common Evaluation Methodology (CEM) tool. This is a product of the Open Networks Project, designed specifically to assess optimum deployment of flexibility and reinforcement.

All Sustain schemes listed in this document have been evaluated using the CEM and the merits of flexible procurement over reinforcement evidenced.

6.3 Outage, Pre Fault and Post Fault Assessments

To identify new Secure, Dynamic and Restore Services, our Outage Planning teams review all circuits where planned outages are required, or those with the potential for single circuit risk while works are being undertaken. For these sites, restoration plans are scrutinised to identify areas that could experience sustained outages in the event of a secondary fault and / or require Mobile Diesel Generation (MDG) to restore or maintain supplies. In pre-fault scenarios, consideration will also be given to demand curtailment where this could mitigate the network risk.

Using the flexibility services Pricing Model, a baseline cost of flexibility specific to each zone is derived to inform our procurement process.

For 2022/23, any new zones relating to outage, pre- and post-fault scenarios will be identified on a more real-time basis, with any changes resultant from new zones being submitted to the regulator and, where required, updated versions of this Statement being published alongside our engagement to signal these opportunities to the market.

6.4 Additional Flexibility Value Modelling

The CEM and the Flexibility Services Pricing Model developed with Frontier Economics Ltd allow SSEN Distribution to allocate optimum price levels to service requirements using a wide range of variables. These models allow us to confidently commit to releasing service tenders that provide benefit to our networks, the customers that our networks serve, and providers of flexibility services.

SSEN Distribution SLC 31E Flexibility Services Procurement Statement

Revision: 1.1

Classification: Public

Issue Date: March 2022

6.5 Tender Assessment Methodology

As part of the tender evaluation, SSEN Distribution scores providers of each CMZ service based on quality and price criteria. Where there is more than one provider in a CMZ, this score is used to determine the order in which providers are called upon to provide services. Details of the scoring mechanism are included with each tender.

SSEN's Distribution procurement process and decision-making principles can be found on our website via the following link: <https://www.ssen.co.uk/FlexibleConnections/>

Whilst the weighting given to individual criteria will vary for each project, the main criteria used to assess bids are set out below:

- Bid quality, which includes the technical elements and considers approaches to management, Health and Safety and the environment, as well as the methodology for providing services, metering data, the programme of works and the assets' ability to meet the requirements of the service;
- Price;
- Information security; and
- The proposed commercial terms and any supplier driven deviations from the required service set out in the tender.

Each qualifying bid will be assessed by at least two evaluators, who will award a score out of 100. The final score awarded to each qualifying bid will be derived as the average score across all evaluators of that bid.

The quality weighting is applied to the total cost of the applicant's offer to determine their Total Evaluated Cost (TEC).

Whilst the number of successful tenders will depend on the amount of flexibility required, flexibility service contract awards are made based upon those that score the highest final score and are selected in order, awarding the highest scoring bidder first until the service requirement for flexibility is met.

These parameters are clearly laid out in our procurement process to ensure full transparency is maintained from the onset of any service agreements.

SSEN Distribution SLC 31E Flexibility Services Procurement Statement

Revision: 1.1

Classification: Public

Issue Date: March 2022

7 Closing Statement

In this Statement, SSEN Distribution has detailed the types of flexibility services that it expects to procure over the 12-month period commencing on 1 April 2022, and provided information pertaining to our procurement processes, planned developments and engagement.

Through our commitment to 'Flexibility First' and continued stakeholder engagement, SSEN Distribution is committed to supporting emerging markets to develop and realise the benefits that flexibility services can bring, whilst delivering and maintaining a resilient and reliable network for our customers.

We continue to review and develop our own internal processes and systems to support the increase in flexibility across our networks, driving forward important improvements in how we streamline and procure flexibility services across our network areas, including measures such as the implementation of our Dynamic Purchasing System. A key part in this evolution is ensuring that we have the necessary skill sets and resources to support and foster this market, as well as continuing to drive co-ordinated processes and systems across the industry that will benefit all stakeholders. SSEN Distribution continues to take a very active role in this space.

Notwithstanding this, we are always looking for ways to improve how we do things. Therefore, we welcome any feedback on the information contained within this Statement. Feedback can be submitted directly to the Flexible Solutions Team at the following address: FlexibleServices@sse.com