

# SSEN SLC 31E – Flexibility Services Procurement Statement

October 2021



#### 1. 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.

Through its innovative Constraint Managed Zone (CMZ) initiative in 2016, SSEN Distribution was the first UK Distribution Network Operator (DNO) to introduce Flexibility Services and it continues to lead in the delivery of flexibility across the GB Distribution networks. Over the last 12 months, thanks to our ongoing commitment to 'flexibility first', our improving systems and supporting processes, and the evolving Local Energy Markets, we have grown from 6 MWs of live contracts at the beginning of the 2020 financial year to 468 MW of Flexible Service contracts in place today in twelve zones across our two Distribution licence areas.

By providing alternative means to securing our network, these contracts have allowed SSEN to work with both existing and new service providers and deliver environmental benefits of almost  $4,000 \text{ tCO}_2$ .

As part of the SSE Group, SSEN is a principal partner of the UK Government's hosting of COP26, the international climate change summit scheduled to take place in 2021, which will have a key role in focusing and driving international decarbonisation efforts. Through the setting of ambitious 2050 and 2045 Net Zero targets, the UK and Scottish Governments have respectively demonstrated leadership and SSEN Distribution is committed to developing the electricity Distribution networks necessary to achieve these targets.

Flexibility is a fundamental strand of this work and, building on the work to date and the collaborative efforts across the industry, primarily through the Energy Network Association's (ENA) Open Networks Project, SSEN Distribution is driving improvements and developments to embed and continue to maximise the potential for Flexibility Services where this economically and efficiently delivers the smarter networks necessary to achieve Net Zero.

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 2021-March 2022;
- 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 ESO in the procurement and use of flexibility services.

As this is the first report of this new annual reporting requirement for all GB electricity distribution licensees, SSEN Distribution is keen to receive any feedback from stakeholders on what works well, Page 2 of 22



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

## 2. Flexibility services requirements

We actively procure across all four of the different flexibility services identified.

**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.

**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.

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

**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.

#### Context on why the company procures flexibility services

The procurement and use of Distribution Flexibility Services to manage areas on our network that are subject to constraint, is a key tool to avoiding the need for expensive and time-consuming network reinforcement and promoting markets for service provision; which should drive more economic, efficient and smarter approaches. Furthermore, Flexibility Services gives SSEN optionality regarding its investment decisions. This allows SSEN to defer reinforcement until such time they are strategically required.

We also recognise that the greater use of flexibility across our Distribution businesses will be an important strand in efforts to decarbonise the energy sector and to deliver in a sustainable and efficient way the climate change ambitions and the Net Zero greenhouse gas emissions targets set by Government.

In being able to defer or avoid reinforcement, support planned maintenance works and to ease post fault management or restoration activities, SSEN is wholly committed to 'Flexibility First' where this is the most economic and efficient network response that meets our obligations of maintaining a safe and reliable network that works for all.

SSEN is also a key contributor to the ENA Open Networks Project, which alongside producing guidance, documentation and processes on the wider Distribution System Transition, specifically looks to provide alignment, accessibility and transparency to Flexibility Services through Workstream 1A (WS1A).

#### Description of activities to be undertaken & product types

Figure 1 – CMZ Service Types

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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 up-rating 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 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.

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 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 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 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 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 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.

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

#### **Other Service Types**

In the Western Isles, SSEN is developing a new service type expected to be trialled in 2022/23, where the use of CMZ-style services could provide a more economic and efficient approach that reduces local reliance on traditional diesel generation during outage scenarios and enables the release of additional capacity to 'intermittent' generation. This service will be called 'CMZ Stability' and will be confirmed in 2021.

In addition, through our Network Innovation Competition-funded project, TRANSITION, SSEN is trialling flexibility markets at six bulk supply points across Oxfordshire. Market trials will be divided into three trial periods, the first of which will start in September 2021 and run until February 2022. During this time, TRANSITION will seek to procure flexibility on both a season ahead (entire trial period) and a week-ahead basis across these six sites. 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/

#### 2021 indicative procurement forecast

To ensure we provide as much notice as possible of potential CMZ opportunities, SSEN is committed to sharing information on its network investment and network operational plans, which will outline where potential CMZ opportunities may occur in the short, medium and long term.

#### **Long Term Opportunities**

In 2018, SSEN commissioned Regen to develop scenarios for the growth of new sources of demand and distributed generation in SEPD's licence area 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 RIIO-ED2 business planning and, from this, SSEN has identified potential flexible service opportunities in 120 zones across both its licence areas. This provides the market with an early indication of SSEN's longer-term (from 2023 onwards) flexibility requirements and these sites were the subject of a signposting event running from December 2020 to the end of March 2021. Detail on this signposting event can be found here:

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



#### **Medium Term Opportunities**

SSEN 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 may require a service in the coming years. SSEN's LTDS and supporting information can be found here:

https://www.ssen.co.uk/Connections/UsefulDocuments/

#### **Short term Opportunities**

In addition to this Flexibility Services Procurement Statement which will be produced and published annually, SSEN 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 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.

#### **2021 Procurement statement**

All Flexible Services that SSEN intends to procure in the next financial year fall within the types listed above, covering reinforcement deferral, pre-fault and post fault services across our licence areas. We also expect to trial a new 'stability' service on the Western Isles, designed to reduce reliance on diesel generation by enabling increased utilisation of intermittent renewable generation capacity during outage scenarios.

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 from our forecasting on the size and expected volumes required and maximum connection voltage for any providers wishing to respond to the tenders. 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 tenders.

Importantly, whilst this Statement sets out a 'snapshot' of the potential requirements for Flexible Services, SSEN 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.

Flexibility Services contracts in all zones tendered will generally be multi-year contracts based on either:

Scottish & Southern Electricity Networks

- a one-year rolling agreement, capped at a maximum of five years; or
- a four-year agreement, with an optional one-year extension.

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

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

In addition, SSEN 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 retendered during this time and details on these zones are included below.

We will keep this under review and engage on any changes that may be appropriate as the market evolves and develops, or as new recommendations are made through the Open Networks Project.

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, which will be made available on the following websites:

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

https://www.flexiblepower.co.uk/locations/scottish-and-southern-electricity-networks/mapapplication-ssen

#### **2021 New Zones**

Figure 2 – SSEN Distribution 2021 CMZ procurement forecast

Licence area	Zone	Services required	MW required	Max voltage level	Forecasted volume required (MWh, Season, Window)	Dispatch mechanism <sup>1</sup>
SHEPD	Abernethy	Secure, Dynamic & Restore	Uncapped	11kV	Outage/Fault linked	SSEN TEC + Manual Process
SHEPD	Milnathort	Secure, Dynamic & Restore	Uncapped	11kV	Outage/Fault linked	SSEN TEC + Manual Process

<sup>&</sup>lt;sup>1</sup> TEC refers to Total Evaluated Cost. Further detail pertaining to this is set out in Sections 4 and 5 of this Statement. Page 7 of 22



Licence area	Zone	Services required	MW required	Max voltage level	Forecasted volume required (MWh, Season, Window)	Dispatch mechanism²
SHEPD	Aviemore	Secure, Dynamic & Restore	Uncapped	11kV	Outage/Fault linked	SSEN TEC + Manual Process
SHEPD	Dalwhinnie	Secure, Dynamic & Restore	Uncapped	11kV	Outage/Fault linked	SSEN TEC + Manual Process
SHEPD	Thimblerow	Secure, Dynamic & Restore	Uncapped	11kV	Outage/Fault linked	SSEN TEC + Manual Process
SHEPD	Redgorton	Secure, Dynamic & Restore	Uncapped	11kV	Outage/Fault linked	SSEN TEC + Manual Process
SHEPD	Carradale	Secure, Dynamic & Restore	Uncapped	11kV	Outage/Fault linked	SSEN TEC + Manual Process
SHEPD	Dyce	Secure, Dynamic & Restore	Uncapped	33kV	Outage/Fault linked	SSEN TEC + Manual Process
SHEPD	Elgin	Secure, Dynamic & Restore	Uncapped	33kV	Outage/Fault linked	SSEN TEC + Manual Process
SHEPD	Fasnakyle	Secure, Dynamic & Restore	Uncapped	33kV	Outage/Fault linked	SSEN TEC + Manual Process
SHEPD	Inverness	Secure, Dynamic & Restore	Uncapped	33kV	Outage/Fault linked	SSEN TEC + Manual Process

 $<sup>^2</sup>$  TEC refers to Total Evaluated Cost. Further detail pertaining to this is set out in Sections 4 and 5 of this Statement. Page 8 of 22



Licence area	Zone	Services required	MW required	Max voltage level	Forecasted volume required (MWh, Season, Window)	Dispatch mechanism <sup>3</sup>
SHEPD	Lunanhead	Secure, Dynamic & Restore	Uncapped	33kV	Outage/Fault linked	SSEN TEC + Manual Process
SHEPD	Lyndhurst	Secure, Dynamic & Restore	Uncapped	11kV	Outage/Fault linked	SSEN TEC + Manual Process
SHEPD	Milton of Craigie	Secure, Dynamic & Restore	Uncapped	11kV	Outage/Fault linked	SSEN TEC + Manual Process
SHEPD	Mybster	Secure, Dynamic & Restore	Uncapped	33kV	Outage/Fault linked	SSEN TEC + Manual Process
SHEPD	Nairn	Secure, Dynamic & Restore	Uncapped	33kV	Outage/Fault linked	SSEN TEC + Manual Process
SHEPD	Peterhead	Secure, Dynamic & Restore	Uncapped	11kV	Outage/Fault linked	SSEN TEC + Manual Process
SHEPD	Arrochar	Secure, Dynamic & Restore	Uncapped	11kV	Outage/Fault linked	SSEN TEC + Manual Process
SHEPD	Inverarnan	Secure, Dynamic & Restore	Uncapped	33kV	Outage/Fault linked	SSEN TEC + Manual Process
SHEPD	Blairlinnans	Secure, Dynamic & Restore	Uncapped	11kV	Outage/Fault linked	SSEN TEC + Manual Process

<sup>&</sup>lt;sup>3</sup> TEC refers to Total Evaluated Cost. Further detail pertaining to this is set out in Sections 4 and 5 of this Statement. Page 9 of 22



Licence area	Zone	Services required	MW required	Max voltage level	Forecasted volume required (MWh, Season, Window)	Dispatch mechanism <sup>4</sup>
SHEPD	Drymen	Secure, Dynamic & Restore	Uncapped	11kV	Outage/Fault linked	SSEN TEC + Manual Process
SHEPD	Killearn	Secure, Dynamic & Restore	Uncapped	11kV	Outage/Fault linked	SSEN TEC + Manual Process
SHEPD	Taynuilt	Secure, Dynamic & Restore	Uncapped	33kV	Outage/Fault linked	SSEN TEC + Manual Process
SHEPD	Oban	Secure, Dynamic & Restore	Uncapped	11kV	Outage/Fault linked	SSEN TEC + Manual Process
SHEPD	Lochailort	Secure, Dynamic & Restore	Uncapped	33kV	Outage/Fault linked	SSEN TEC + Manual Process
SHEPD	Ardtornish	Secure, Dynamic & Restore	Uncapped	33kV	Outage/Fault linked	SSEN TEC + Manual Process
SHEPD	Shetland	Secure, Dynamic & Restore*	Not specified	33kV	Outage/Fault linked	SSEN TEC + Manual Process
SHEPD	Lewis and Harris	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

 $<sup>^4</sup>$  TEC refers to Total Evaluated Cost. Further detail pertaining to this is set out in Sections 4 and 5 of this Statement. Page 10 of 22



Licence area	Zone	Services required	MW required	Max voltage level	Forecasted volume required (MWh, Season, Window)	Dispatch mechanism <sup>5</sup>
SHEPD	Western Isles	Stability Service **	Not Specified	33kV	Outage/Fault linked	SSEN TEC + Manual Process
SEPD	Cippenham	Dynamic & Restore	Uncapped	33kV	Outage/Fault linked	SSEN TEC + Manual Process
SEPD	Netley Common	Dynamic & Restore	Uncapped	132kV	Outage/Fault linked	SSEN TEC + Manual Process
SEPD	Waterloovill e	Dynamic & Restore	Uncapped	33kV	Outage/Fault linked	SSEN TEC + Manual Process
SEPD	Lydiard Plain	Dynamic & Restore	Uncapped	132kV	Outage/Fault linked	SSEN TEC + Manual Process
SEPD	Toothill	Dynamic & Restore	Uncapped	132kV	Outage/Fault linked	SSEN TEC + Manual Process
SEPD	Stanton Fitzwarren	Dynamic & Restore	Uncapped	33kV	Outage/Fault linked	SSEN TEC + Manual Process
SEPD	Sherborne	Dynamic & Restore	Uncapped	33kV	Outage/Fault linked	SSEN TEC + Manual Process
SEPD	Wycombe Marsh	Dynamic & Restore	Uncapped	33kV	Outage/Fault linked	SSEN TEC + Manual Process
SEPD	Thatcham	Dynamic & Restore	Uncapped	132kV	Outage/Fault linked	SSEN TEC + Manual Process

 $^{5}$  TEC refers to Total Evaluated Cost. Further detail pertaining to this is set out in Sections 4 and 5 of this Statement. Page 11 of 22



Licence area	Zone	Services required	MW required	Max voltage level	Forecasted volume required (MWh, Season, Window)	Dispatch mechanism <sup>6</sup>
SEPD	Shaftesbury	Dynamic & Restore	Uncapped	132kV	Outage/Fault linked	SSEN TEC + Manual Process
SEPD	Alton	Dynamic & Restore	Uncapped	132kV	Outage/Fault linked	SSEN TEC + Manual Process
SEPD	Petersfield	Dynamic & Restore	Uncapped	33kV	Outage/Fault linked	SSEN TEC + Manual Process
SEPD	Aldershot	Dynamic & Restore	Uncapped	132kV	Outage/Fault linked	SSEN TEC + Manual Process

<sup>\*</sup> SSEN is in the process of procuring a large-scale energy solution to maintain security of supply on the distribution system for when planned and unplanned outages occur on the transmission system supplying Shetland. The service requested in this statement for Shetland could contribute to, or offset, that energy solution. A link to the tender documentation for the energy solution can be found here: https://www.find-tender.service.gov.uk/Notice/022833-2021

<sup>&</sup>lt;sup>6</sup> TEC refers to Total Evaluated Cost. Further detail pertaining to this is set out in Sections 4 and 5 of this Statement. Page 12 of 22



<sup>\*\*</sup> In the Western Isles SSEN is developing a new service type expected to be trialled in 2021, where the use of CMZ style services could reduce local reliance on traditional diesel generation. This can be achieved by allowing additional capacity to existing 'intermittent' generation or providing frequency stability in place of some of the diesel machines.. This service will be called 'CMZ Stability' and will be confirmed in 2021.

# **Current Zones which may be re-tendered**

Figure 3 – SSEN Distribution existing CMZ for potential re-tender in 2021

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

Licence area	Zone	Services required	MW requi red	Max voltage level	Forecasted volume required (MWh, Season, Window)	Dispatch mechanism
SEPD	Rownhams	Secure, Dynamic & Restore	Uncap ped	33kV	Outage/Fault linked	SSEN TEC + Manual Process
SEPD	Havant	Secure, Dynamic & Restore	Uncap ped	33kV	Outage/Fault linked	SSEN TEC + Manual Process

# 3. Tendering process

SSEN 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.

The specific process followed at present to award Flexibility Service contracts is the Negotiated Procedure with Prior Call for Competition, and opportunities are formally published through the issuing of Contract Notices in Find a Tender (formally in the Official Journal of the European Union (OJEU)).

However, 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 and selection of a leading supplier system, SSEN plans to establish a DPS for Flexibility Services.

To facilitate competition, SSEN engages in a process of 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. All SSEN CMZ services are technology-agnostic. As such, providers of storage, generation, demand-side response or energy efficiency services can respond to any tenders. 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.



#### **Visibility of Opportunities**

For every new procurement and in addition to the formal requirement to publish Contract Notices, SSEN will release details on forthcoming opportunities on both its website and its Flexible Power system, as well as through updating the ENA Flexibility timeline.

Flexible Power is a collaborative system developed across five DNOs (SSEN, Western Power Distribution, Scottish Power Energy Networks, Northern Power Grid and Energy 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 links below:

SSEN Flexibility Pages -

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

SSEN Flexible Power -

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

ENA Flexibility Timeline -

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

#### **Pricing strategy**

Regardless of the process used, the pricing strategy adopted for all Flexibility Services at this time is to achieve a market clearing price following an initial sealed bid process and a second, Best and Final Offer tender round. We anticipate the move to a DPS and the industry's evolution towards more framework-based procurement of Flexibility Services (ENA Open Networks WS1A Product 4) will drive changes to this process towards the end of the 2021 financial year.

Under our Sustain service, both availability and utilisation prices are agreed at the point of contract and SSEN 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.

Under our Secure service, 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 commits to setting the availability periods with the provider no less than 48 hours before the requirement (usually up to 8 weeks prior) and will pay any availability and utilisation in response to services provided during the service window.



Our Dynamic and 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.

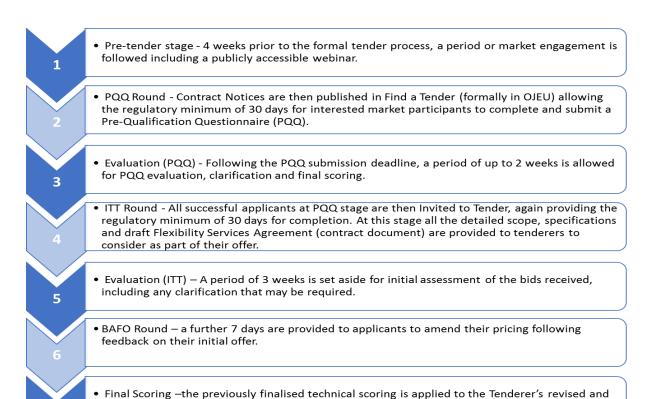
Pricing is currently not negotiated. However, in step 4 below (the Invitation To Tender (or ITT) Round), providers are given the opportunity to adjust pricing if it is recognised to be higher than expectations or the average level of other bidders. SSEN feels this is both in the best interests of providers, as higher prices may restrict use following the 'Total Evaluated Cost' (TEC) process, and benefits networks by potentially reducing the cost of flexibility.

#### **Contract award arrangements**

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.

Figure 4 sets out the timescales targeted.

Figure 4 – SSEN Distribution Contract award process



#### CONTRACTAWARD

final commercial offers. Cumulative time to this stage = 18 Weeks.



At the point of Contract Award, the time taken to finalise contractual details can vary, but this is mitigated through the use of standard / common clauses as per the ENA Open Networks Standard contract (Version 1.2, released in February 2021). SSEN 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/

#### Service dispatch mechanism

SSEN currently utilises a manual dispatch process, using a combination of email and telephone-based communications. However, in 2021, the Flexible Power system will provide automation to this process. We have also contributed to the ENA Open Networks WS1A Product 3, which looked to identify good practise and encourage alignment within dispatch and Settlement processes, with outputs from that Product 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 utilises a 'Total Evaluated Cost' (TEC) process to both our bid assessment and our dispatching principles, with dispatch priority across multiple providers based on the following criteria:

- Asset Location (in relation to the constraint);
- Asset type/ability (Intermittent generation or assets unable to provide incremental increase/decrease may not qualify in certain scenarios);
- Asset Service Price;
- CO<sub>2</sub>/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. Our Dispatch Mechanism and Criteria principles governing how we decide the optimum way to dispatch multiple providers are available to download on our Flexible Connections webpage:

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

#### 4. Stakeholder Engagement

SSEN has developed a successful support process to encourage response to our new CMZ opportunities, with contracts being placed in every zone released since 2019. Previously SSEN has released tender opportunities on an 'as identified' basis. However, through Open Networks Workstream 1A Product 2 outputs, the industry is now seeking to align procurement windows across network operators. This alignment is still under review within SSEN, but key procurement windows will run from April and October each year with additional, critical zones being released and tendered for as they are identified.



#### **Procurement timetable and process**

Within the procurement windows, SSEN will follow the steps in the procurement timetable below in terms of publishing information. In addition, recognising the value to Service Providers in providing advance notice of potential zones when this is available, we are improving our approach to the signposting of our activities in advance of formal tender release. In term of published data, utilising the procurement process from section 3, the data release/publication steps are outlined below:

Figure 5 – SSEN Distribution engagement and information release strategy

# Signposting (Up to 6 months in advance)

Basic zone detail - Area maps, Services required and expected procurement release dates

#### Pre-Tender Stage (Approximately 1 month in advance of procurement)

Pre-tender information including - Area maps, Services required, MW/MWH (if capped/limited), Service Windows (If capped/limited), Connection Voltages, Procurement dates and links to further information are uploaded to the SSEN Website, Flexible Power system and the ENA Flexibility Timeline. SSEN will host a Zone/Group of Zones Webinar.

# PQQ Round (Min 30 days ahead of ITT)

Contract Notices published in Find a Tender allowing a minimum of 30 days for interested market participants to complete and submit a PQQ. SSEN website updated with all zone maps, service requirement detail and links to register interest. Similar data releases are undertaken on the SSEN Flexible Power site which include reference to the closing date for registration. One on one meetings are held between SSEN technical experts and providers to offer additional information as required.

## **Evaluation Round**

Once the PQQ round has closed, website detail and zone maps are updated to reflect the zones are now in tender effectively closing the opportunity to new applicants. From this point (ITT Round) through to Contract Award SSEN does not publish any updated information on the tender process, instead engaging directly with tendering providers within the regulated Procurement process.

# Post Contract Award

Within one calendar month of contract placement the details of successful CMZ placement are updated on the SSEN website, in the event that the tender process has been unsuccessful detail is added to the 'past tenders' table on the website, available to download from the 'Historical Tender Information' section here;

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



#### Planned stakeholder engagement

We hold live webinars to support all new Zones and those which 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.

Through these webinars, we seek to 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 and wider industry forums, providing updates on existing zones, new opportunities, process improvements and industry changes. Key examples of this ongoing commitment are:

- SSEN Distributed Generation and Connections Customer Fora (Periodic)
- SSEN Flexible Solutions Webinar (Annual)
- SSEN DER Forums (Annual)
- ESO EMEX Events (Annual)
- ENA ENIC Event (Annual)

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.

# Planned 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. This Project has been integral in delivering increasing accessibility and transparency for SSEN's CMZ services, with SSEN actively contributing to the industry Standard Agreement (WS1A P4), accepted service types, parameters and procurement timelines (WS1A P2 and P3 2019/2020). SSEN Page 19 of 22



is committed to continued involvement in the Open Networks Project in 2021 and beyond, with key outputs for Flexibility Services expected in 2021/22 being:

- The first industry Standard Agreement for Flexibility Services to include and be used by the ESO for Transmission network 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;
- An updated 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.

#### 5. Detailed quantitative assessment

#### How we determine service needs

Based upon current forecasts, in 2021, SSEN plans to procure Flexibility services across all service types in both licence areas, covering 38 new CMZ zones. In addition, we reserve the option to retender in any of the existing 12 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.

When seeking to procure Secure, Dynamic and Restore services, SSEN 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.

For Sustain services, SSEN does target a specific MW requirement based on forecast load growth within a defined window, which would have traditionally triggered reinforcement of that section of network.

#### **Networks Reinforcement Assessments**

SSEN continues to assess all significant networks reinforcement from a 'Flexibility First' perspective, reviewing the opportunity for flexibility to avoid, defer or reduce the requirement for, what would be considered, 'traditional' works.

https://www.energynetworks.org/industry-hub/resource-library/open-networks-flexibility-commitment-2019.pdf

In 2019, SSEN established an internal investment process that allowed flexible approaches and reinforcement to be assessed on their individual merits. However, to standardise our approach and

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embed consistency and transparency, SSEN now utilises the Common Evaluation Methodology (CEM). 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.

In addition to the CEM, in 2020, SSEN engaged Frontier Economics Ltd to develop a Flexibility Services Pricing Model to support our CMZ processes. This model enables us to allocate optimum price levels to service requirements taking in a wide range of variables, for example, the costs of deploying and running mobile diesel generation, having customers off supply and the traditional Net Present Value (NPV) of deferring investment. By using this model to evaluate flexibility service benefits alongside the CEM, SSEN can confidently commit to releasing service tenders that provide benefit to our networks, the customers that our networks serve and providers of flexibility services.

#### **Outage, Pre-Fault and Post Fault Assessments**

To identify new Secure, Dynamic and Restore Services, the Network Management Centre (NMC) Outage Planning teams review all circuits expecting maintenance 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.

#### **Tender Assessment Methodology**

SSEN's 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 depending on the importance that SSEN assigns to them, 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 in order to arrive at 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.

# **Summary/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 2021, and provided information pertaining to our procurement processes, planned developments and engagement.

We recognise the benefits of procuring and using Flexibility Services and whilst this challenges the way in which network operators have traditionally managed their distribution networks, SSEN Distribution is committed to efforts – informed through stakeholder engagement - to unlock these benefits and support emerging markets while delivering and maintaining a resilient and reliable network for our customers.

In so doing, we are committed to the ongoing review of systems and processes to ensure that we have the necessary skill sets and resources to support and foster this market. We want to maintain a leading position in Flexibility Service implementation, deliver a world class customer experience across our market interactions, and ensure Flexibility Services are used economically and efficiently to provide the UK customer base with a cost effective, innovative and responsive energy system.

To this end, 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

