![Scottish & Southern Electricity Networks Transmission logo]

GB NETWORK ACCESS POLICY - OUTAGE PLANNING KPIs (2021/22) - TRANSMISSION OWNER

	DESCRIPTION	KPI MEASURE	COMMENTS
1	**Long Term Outage Planning Performance** Measure of the number of outages in the year ahead plan submitted at week 49 (Dec 2020) vs the number of actual outages delivered in the 2021/22 regulatory year (01 Apr 2021 and 31 Mar 2022). This is a high-level measure of Long-Term Outage		
	1.a. Number of outages in the year ahead plan	676	630 'out-of-service' outages, and 46 'in-service' outages.
	1.b. Number of these outages delivered	521	488 'out-of-service' outages, and 33 'in-service' outages.
	1.c. Percentage of year ahead plan delivered	77.1%	
2	**Accuracy of the Year Ahead Outage Plan** This is a measure of the TO's capability to construct and deliver a robust outage plan. This is detailed measure of Long-Term Outage Planning Performance		
	2.a. Percentage of outages started on the date agreed at the year ahead stage – week 49 (Dec 2020)	32.6%	Includes 'out-of-service' and 'in-service' outage bookings.
	2.b. Percentage of outages started within the outage week agreed at the year ahead stage – week 49 (Dec 2020)	37.1%	Includes 'out-of-service' and 'in-service' outage bookings.
	2.c. Percentage of outages changed in the year ahead plan for a "positive" reason.	19.2%	Includes; outage bundling, request to accelerate works, early completion of works, and User or ESO requests to change an outage.
3	**Within Year Outage Planning Performance** Measure of new outages requested within year by the TO during the relevant regulatory year. These are essential outages to carry out defect repairs, remove potential hazards or complete construction works. There is a balance of flexibility and these measures are intended to show a reduction in the number of short-term requests being made.		
	3.a. Number of new within year (2021/22) outages submitted to NGESO prior to the Optimisation phase (17 -52 weeks ahead)	Unavailable	
	3.b. Number of new within year (2021/22) outages submitted to NGESO during the Optimisation Phase (4 – 16 weeks ahead as specified in STCP 11.1)	Unavailable	The ESO's Outage Management tool (TOGA) was replaced during 2021/22 with their newly developed eNAMS system, going live on 01 Sep 2021. The functionality to calculate KPI 3 is only available in the eNAMS system, hence values for the whole 2021/22 working year are not fully available. From 2022/23 onwards the KPI 3 values will included in all year-end reports.
	3.c. Number of new within year (2021/22) outages submitted to NGESO during the delivery Phase (0 – 3 weeks ahead as specified in STCP 11.1)	Unavailable	
4	**How Many Connection Assets or Transmission Circuits Are Out of Service More Than Once Per Annum?** Measure of the number of times the same item of equipment or circuit is removed from service.	368	Out of service outages only. The total volume was primarily as a consequence of major infrastructure and connection works requiring local circuits on outage on multiple occasions to facilitate construction and commissioning activities. This included the major works at Fort Augustus, Tealing, Kintyre, New Deer, Carradale, and St Fergus.
5	**Outage Coordination** Measure of the number of times the TO has carried out different work during a single outage. Measure is based on the number of outages that have been combined into a single outage vs the total number of outages delivered in the regulatory year.	139	Out of service outages only. This covers alignment of construction, substation maintenance, and overhead line inspection activities where it was practical to do so in order to minimise outage impact to the ESO and to contracted Users.
6	**Percentage of TO Outages Started Within 60mins of Agreed Start Time** Measure of outage start time accuracy will be the agreed Planned Start Time compared to the Actual Start Time.	73.4%	This amounts to 854 outages of the 1,163 actual outages completed, which started within 60 mins of the agreed start times. The agreed start times include times re-scheduled up to the day before the actual outage start.
7	**Transmission Connected Generation - Percentage of Annual Access Curtailed by Bilateral Connection Agreement Per Annum - Firm Connections** Measure of lost network access due to transmission outages and connection agreements. Measure would be 100 x (total days of actual outages \ 365).	0	
8	**Transmission Connected Generation - Percentage of Annual Access Curtailed by Bilateral Connection Agreement Per Annum – Non-Firm Connections** Measure of lost network access due to transmission outages and connection agreements. Measure would be 100 x (total days of actual outages \ 365).	3.7%	25 generators were curtailed at some point in 2021/22, of the 45 transmission-connected generators in the SSEN Transmission area. This curtailment averaged across the 25 affected generators at 3.8% (13.8 days), varying between 16.1% for the worst affected generator, down to 0.1% for the least affected generator.
9	**Average Outage Duration Accuracy** Measure of TO ability to plan outage durations. 9.a Average outage duration accuracy – year ahead outage plan (week 49 - Dec 2020)		
	% of outages finished early	29.2%	Includes 'out-of-service' and 'in-service' outage bookings, and only the 521 planned outages (KPI 1b) included in the week 49 (Dec 2020) baseline plan that were delivered in the 2021/22 regulatory year between 01 Apr 2021 and 31 Mar 2022.
	% of outages finished late	20.7%	
	% of outages finished on time	50.1%	
	9.b Average outage duration accuracy - within year outages (01 Apr 2021 and 31 Mar 2022)		
	% of outages finished early	9.4%	Includes 'out-of-service' and 'in-service' outage bookings, and covers 642 of new additional outages not included in the week 49 (Dec 2020) baseline Outage Plan, and delivered in the 2021/22 regulatory year between 01 Apr 2021 and 31 Mar 2022.
	% of outages finished late	2.6%	
	% of outages finished on time	87.9%	
10	**Number of Unplanned Outages Due to Faults or Defects** This is a measure of the number of times an asset or circuit has been removed from service due to a system fault, has been removed from service by emergency switching or has been made unavailable to NGESO and removed from service.		
	10.a. Number of system faults removing an asset or circuit from service	110	Caused by operation of a protection system in response to component failures or external causes, and including circuit auto-reclosures. Also emergency switching within short operational timescales as a result of recognising a condition that is expected to develop into a fault.
	10.b. Number of emergency switching outages removing an asset or circuit from service	9	Covers scheduling of fault repair works within planning timescales.
	10.c. All other unplanned outages when an asset or circuit has been made unavailable to NGESO due to a defect	37	Includes; switchgear gas top-ups, and defect repairs on lines, cables, and substation plant/ equipment.
11	**Enhanced Service Provision** Measure of the number of STCP11.4 proposals identified within a regulatory year.		
	11.a. Number of proposals identified by NGESO or TO	1	Protection overload scheme on the Errochty - Killin 132kV OHL Circuit (ELW).
	11.b. Number of proposals delivered by the TO	1	Installed 14 July 2021
	11.c. Measure of System Operational costs savings vs cost to deliver by TO	£12.7 k	Scheme cost of £12.7k. ESO estimated operational constraint cost savings of £2.8M across the B04 transmission boundary. However due to changes in SSENT's and SPT's outage programmes, and changes in background generation conditions, no operational savings materialised.
12	**In Service Works** Measure of the number of "In Service" bookings to highlight works taking place without an asset being taken out of service.	128	Includes; OHL delayed auto-reclose (DAR) outages, circuit risk of trips, telecoms outages, and equipment/circuit testing outages