



Department for the
Economy

**ELECTRICITY SUPPLY EMERGENCY CODE
NORTHERN IRELAND
(ESEC)**

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Definitions of Terms

Associated load	Electricity which is unavoidably supplied to a site which is not a Protected Site, due to its connection to the same circuit as that of a Protected Site with no means of isolation.
Civil Contingencies Policy Branch (CCPB)	Civil Contingencies Policy Branch is part of the Executive Office and is responsible for delivering civil contingencies resilience, response and recovery policy in Northern Ireland, part of the Civil Contingencies Division.
Department for Economy (DfE)/ Department	<p>The lead government department for emergencies affecting the Northern Ireland energy sector. In the event of an emergency affecting the gas and/or electricity networks, DfE provide the interface between industry and government.</p> <p>It is responsible for:</p> <ul style="list-style-type: none"> • Primary liaison and briefing with ministers • Liaising with external stakeholders to build situational awareness and analysing the implications for public safety, energy supply, business and wider DfE/Government policy; • Co-ordinating lines to take and the wider communications strategy; • Handling Executive/ Assembly interest; • Maintaining an audit trail.
Discrete feeder	An electrical high voltage circuit, which is used solely to connect an individual site to a point of supply on the Network Operator's system. This circuit must be capable of being protected from disconnection by the ability to switch the remaining circuits connected to the point of supply by either local or remote operation.
Electricity supply emergency	An emergency affecting electricity supplies, which makes it necessary that the Department should temporarily have at its disposal statutory powers for controlling the sources and availability of energy.
Grid Code	An industry code that details the main technical requirements for connection to, and use of, the Electricity Transmission System (ETS) in NI. Compliance with the Grid Code is a requirement on users of the ETS under the Connection Agreement and Transmission Use of System (TUoS) Agreement). SONI is the code administrator for the Grid Code and maintains it. All changes to the Grid Code are

	subject to industry consultation and approval by the Utility Regulator (UR).
Lead Government Department	Lead Government Department (LGD) for a specific set of contingencies is that which has day-to-day policy oversight of the sector(s) that may be affected in an emergency.
Licensed Generator	Any person who has been granted a generation licence under Article 10(1) (a) of the Electricity (NI) Order 1992.
Load Blocks	Each distribution network is divided into 18 x 5% load blocks, with a suffix letter (A, B, C, D, etc) attributed to each. All connected customers are assigned a block letter corresponding to the relevant point of connection on the network. A block letter of Z indicates that the substation is not currently part of the rota load shedding schedule.
NIE Networks (NIEN)	The Distribution Network Operator (DNO) for Northern Ireland.
Protected Site	Any site that is protected in the terms set out in the ESEC. A list of Protected Sites is compiled and kept up to date by NIE Networks.
Rota Disconnection Plan (RDP)	The plan used to establish the disconnection and reconnection of electricity supplies in an electricity supply emergency.
Rota disconnection procedures	Pre-prepared plans held and produced by NIEN. They take into account the local network configuration, physical characteristics and limitations, Load Blocks, Protected Sites and the control tools used to operate the network.
Standby generation	Electricity generation equipment which is capable of providing a supply of electricity adequate for the continuation of activities to avoid damage to plant, for the continuous operation of manufacturing processes, or for safety reasons.
System Operator Northern Ireland (SONI)	The Transmission System Operator (TSO) for Northern Ireland.

1 Introduction

- 1.1 The Electricity Supply Emergency Code (ESEC) describes steps which can be taken in Northern Ireland (NI) to deal with a “civil emergency” as defined in article 58(7) of the Electricity (NI) Order 1992 - “*any natural disaster or other emergency which, in the opinion of the Department, is or may be likely to disrupt electricity supplies*” It sets out the actions which companies in the electricity industry should plan to take and which may be required to deal with an electricity supply emergency.
- 1.2 In the event of an electricity supply emergency, the ESEC enables an equal distribution of electricity supply to customers as far as reasonably practicable, whilst ensuring that pre-designated Protected Sites maintain supplies for as long as possible.
- 1.3 Should these measures require to be introduced, it is very likely there would be accompanying appeals to the public and industry to reduce electricity demand.
- 1.4 The actions described in the ESEC are not used to handle sudden shortfalls in generation, or to deal with day-to-day repair and recovery of faulty or damaged parts of the transmission and distribution networks. Such matters are handled by SONI, in its role as Transmission System Operator (TSO) in Northern Ireland, and NIEN in its role as Distribution Network Operator (DNO) using powers available to them in the Grid Code and/or in company emergency system defence and recovery plans. However, long-term and significant damage to the system, or prolonged shortfalls in generation, could result in SONI and NIEN looking to the Department to implement the arrangements and powers described in the ESEC. Likewise, if a problem is looming and might be solved or ameliorated by early action, then the ESEC or aspects of it can be considered.
- 1.5 The Risk Preparedness Plan¹ for the Electricity Sector in Northern Ireland identifies and assesses crisis scenarios which may lead to an electricity emergency. It outlines the preventative, preparatory and emergency response measures that are available within NI. Section 3.1(d) outlines the framework for Manual Load Shedding, including rota load shedding and ESEC requirements.
- 1.6 The ESEC is subject to continuing development, review and testing. The Department for Economy is responsible for carrying out this work.
- 1.7 If the Department proposes to make any amendments to the ESEC, it will first consult with SONI, NIEN and Licensed Generators affected by the proposals. In consulting them, the Department will set out in detail the amendments proposed, together with an explanation for these, and take account of comments on the proposed modifications before deciding whether to amend the ESEC.
- 1.8 In extreme circumstances and if deemed necessary, the UK Government can also invoke powers outlined in the Energy Act 1976².

¹ This Risk Preparedness Plan has been developed in accordance with the requirements of Article 10 of Regulation 2019/941 of the European Parliament and of the Council of 5th June 2019 on Risk Preparedness in the Electricity Sector (RPR).

² <https://www.legislation.gov.uk/ukpga/1976/76/section/3>

2. **When and how the ESEC will be used**

Use of Emergency Powers

- 2.1 In an electricity supply emergency it may be necessary to restrict customers' consumption of electricity. Restrictions over the longer term can be achieved by one or more of the following methods:
- Public appeals for voluntary restraint; or
 - Directions under the Electricity (NI) Order 1992³ requiring rota disconnections and associated restrictions;
- 2.2 Directions by DfE under Article 58 of the Electricity (NI) Order 1992 may be required to restrict consumption by industrial, commercial and other sites by a certain percentage. They may contain a schedule exempting certain premises and purposes from the scope of the direction. These directions are to be distinguished from a direction instituting rota disconnection. The categories exempted in these schedules are likely to be more extensive than the categories of sites protected from rota disconnections.
- 2.3 If SONI advises that rota disconnections must be introduced, DfE will invoke emergency response procedures and will determine if the ESEC is applicable. If this is the case DfE will issue a direction to NIEN to implement a schedule of rota disconnections across its licence area throughout the period of the emergency. Subsequent changes to that period and/or level(s) of disconnection will be confirmed by the giving of an amended direction. Under these directions and within the provisions of the Grid Code, SONI will instruct NIEN to achieve a specified level of reduced demand by rota disconnections of electricity to sites, other than Protected Sites. The period over which the overall process of rota disconnections continues, together with the level(s) of disconnection, will be determined by SONI through Grid Code procedures.
- 2.4 A shortfall in available generation could initially be handled via Grid Code arrangements. Alternatively, the electricity supply emergency could dictate an orderly and planned move to rota disconnections without utilising the Grid Code arrangements if, for example, the situation developed over the weekend and it is clear that there is likely to be a substantial difference between demand and available generation on the Monday.

³ In the event of a civil emergency, the Department will use the Electricity (NI) Order 1992 under which it can give a direction.

Protected Sites

- 2.5 Sites are protected if they need to have their electricity supply maintained because of:
- a national or regional critical need;
 - public health and safety issues;
 - potential for catastrophic damage to high value plant.
- 2.6 The sites' details will be held on a list maintained by NIEN. This will be known as the "Protected Sites List" or PSL. For further details, see section 4.1 below.

Rota Disconnection Plan

- 2.7 The ESEC utilises a Rota Disconnection Plan (RDP). The RDP is intended to ensure that the available supplies of electricity in an electricity supply emergency are shared as equitably as possible amongst all non-protected sites.
- 2.8 The RDP divides non-protected sites in the NIEN licence area into 18 groups of near equal demand. For the purposes of the ESEC, these groups are referred to as Load Blocks. Supply to these Load Blocks is sequenced for rota disconnections in the RDP. It sets out the nominal three-hour disconnection periods, i.e. six periods between the hours of 06:00 and 24:00, and respects the need for equality of treatment between non-protected sites as far as reasonably practicable. The rota level and level of disconnection will be based on the shortage of supply. During an emergency, if available supplies diminish, higher levels of disconnection will mean that an increasing number of Load Blocks are disconnected in any one period.

Sequencing of Load Blocks

- 2.9 The RDP contains a master sequence of Load Block disconnections nominally starting and finishing within the six periods of the day. During an electricity supply emergency, SONI will regularly update NIEN and DfE on the levels of disconnection considered necessary. SONI will normally advise NIEN no later than 14.00 each day of the disconnection level it considers necessary for the following 24-hour period, scheduled to commence at 06:00.

When advising NIEN and DfE of the disconnection level required, SONI will take into account an optimum margin of remaining generation available and the level of flows on interconnections with neighbouring transmission systems, national generation/demand position and shape of the load curve. NIEN will confirm the RDP to be used, taking into account the level of disconnection required, no later than 15.00. SONI will seek to minimise the amount of rota disconnection for the following day.

- 2.10 SONI will continue to review the demand/generation position and may reissue modified disconnection levels if necessary. DfE will keep the level of disconnection under continuous review throughout the emergency, and if necessary NIEN may change the RDP at any time.

Other priority needs in an ongoing emergency

- 2.11 Should the supply emergency be prolonged, it may be in the public interest for additional sites to be considered as Protected Sites within the criteria for receiving this status, e.g. essential pharmaceutical companies manufacturing vaccines or anti-viral medication during a pandemic. Sponsoring lead government departments may make representations to DfE directly or the Civil Contingencies Policy Branch within the Executive Office if essential services are significantly impacted. This process may take several days to complete and, although directions to NIEN to include new Protected Sites may be given after consideration of the wider consequences/benefits for the public against the availability of supplies, this should not be assumed. Organisations should ensure that they have robust business continuity arrangements in place to maintain adequate electricity supplies and not rely on these arrangements.

Severe shortages of power

- 2.12 In the event of a severe shortage of electrical power, it may not be possible to maintain equal distribution of available power supplies while protecting critical industries and services.
- 2.13 It is considered impractical to enforce statutory restrictions on domestic customers. Therefore, it will be necessary to use the non-protected site Load Blocks set out in the RDP for as long as possible.
- 2.14 All Protected Sites are expected to, as far as is reasonably practicable, reduce load broadly in line with the level of disconnections applied to non-protected sites. As the situation worsens, Protected Sites may be directed to reduce their consumption to the minimum load necessary for the avoidance of damage to major plant.
- 2.15 The needs of Protected Sites may vary daily or even by the hour in an extreme situation. In the event of electricity supplies being insufficient to meet the needs of all the Protected Sites within the licence area, NIEN may need to exercise discretion in allocating the available electricity supplies. In such cases, priority should be given to the maintenance of life and to minimising the risk of disasters, which would involve loss of life or major damage to plant. It is recognised that the electricity industry's own requirements need to be met, particularly those to maintain generating capacity.
- 2.16 In the event of a partial or total system shutdown during an electricity supply emergency, SONI and NIEN will implement the operating procedures set out in the Grid Code, so that affected demand may be restored in the shortest possible time.

Restoration of supplies

- 2.18 As supplies of electricity are restored it may be necessary for DfE to give further directions on rota disconnections, following advice from SONI. Once supplies have been fully restored and stabilised, DfE should inform the industry of a formal stand down from the ESEC.

3 Network Operator Responsibilities for Protected Sites

Rota disconnection procedures

- 3.1 NIEN is obliged by the ESEC to keep up to date procedures for the introduction of rota disconnections. These should be available for activation as soon as possible, and within 48 hours of the DfE's decision that ESEC must be implemented. Except for Protected Sites, the procedures will apply equally, as far as is reasonably practicable, to all customers supplied through NIEN's Distribution network. This includes non-embedded customers (i.e. customers, other than NIENs, receiving electricity direct from the ETS).
- 3.2 NIEN may identify areas of the network within a Load Block that contain one or more unlicensed generators. Depending on the circumstances at the time, these areas may provide a net output on to the network which is deemed sufficiently significant such that disconnection should be avoided if reasonably practicable. Consequently, some sites could find their supplies maintained despite the expectation they would be disconnected according to published information. Protection of unlicensed generators would only occur in exceptional circumstances and is at the discretion of NIEN at the time.

Protected Sites

- 3.3 The Protected Site List (PSL) should contain the name, address, and business activity of each Protected Site, with NIEN taking all reasonable steps to keep this accurate. NIEN should write out to each site owner every two years to validate their eligibility for Protected Site status, and provide an updated PSL to DfE on the 1st October each year, enabling DfE to review and ensure the criteria for listing are being applied consistently.
- 3.4 Section 4 below sets out the criteria for being designated as a Protected Site.
- 3.5 NIEN is required to use reasonable endeavours to maintain supply to listed Protected Sites during an ESEC activation period and will give as much notice as possible if protection from disconnection is at risk.
- 3.6 NIEN should inform successful applicants for Protected Site status that their sites have been listed.
- 3.7 Unsuccessful applicants for Protected Site status, where the applicant has grounds for disputing NIEN's decision, may seek a determination from the DfE who will review the case. DfE will liaise with the sponsoring LGD, providing ESEC PSL guidance and

case details. If a compelling case is made by both the site and the sponsoring LGD, DfE can direct NIEN to allow the site onto the PSL.

Commercial implications

- 3.8 Rota disconnections constitute a permitted discontinuation of supply under regulation 30 of the Electricity Safety, Quality and Continuity Regulations (Northern Ireland) 2012. NIEN should make reasonable efforts to give adequate notice of disconnections.
- 3.9 DfE would require, at least, daily reporting by NIEN regarding the ongoing situation. Precise timings and other requirements of the reporting would be set by DfE at the time.

4 Protected Sites

Introduction

- 4.1 The criteria for receiving Protected Site status are set out below. Customers who consider that their site or sites meet these criteria can apply to NIEN for the site(s) to be part of the PSL. By seeking and securing Protected Site status, customers also agree to certain obligations.

Criteria

- 4.2 The criteria consist of two main elements, both of which must be met. Firstly, a customer's site must fall within the list of approved designated services set out in Table 1. For activities where the definition includes 'major' or 'of national significance', the relevant LGD will have a say in the NIEN's decision. Secondly, Protected Sites must also meet the additional criteria in section 4.3 below, and customers must agree to the obligations in section 4.11 below. By exception, sites which do not meet the above criteria may make a representation to the DfE and the relevant LGD for consideration of Protected Site status, given that the criteria and obligations set out in sections 4.3 and 4.11 below are met, and the significant impact of not having Protected Site status can be demonstrated.

Table 1 - List of Approved Designated Services

Designated Service	Lead Government Department
Gas reception terminals; storage installations including boosting and compression equipment; gas compressor stations and principal development and control sites for the control of gas supply systems and emergency procedures	Department for Economy
Licensed electricity generators, and licensed network operators	Department for Economy
Vital oil pumping stations	Department for Economy

Sites with a continuous manufacturing process, not sustainable through standby generation, where regular shutdown for 3 hour periods is not possible and would cause significant financial damage	Department for Economy
Major airports and associated control facilities	Department for Infrastructure
Significant railway operations	Department for Infrastructure
Ports and docks which have a national infrastructure significance	Department for Infrastructure
Essential water and sewerage installations	Department for Agriculture, Environment and Rural Affairs
A major location for essential food manufacture, processing or storing	Department of Agriculture, Environment and Rural Affairs
Hospitals as agreed with NHS Trusts	Department of Health
Digital and telecommunication services where there is a national need for continued operation	Department for Economy
Emergency services of regional significance	Department of Health
Armed forces sites that provide civil protection support	Ministry of Defence
Financial services where there is a national need for continued operation	HM Treasury

Additional Criteria

4.3 To ensure the total demand from the PSL remains at a manageable level, the following additional criteria will apply to Protected Sites:

- the site does not have standby generation and has demonstrated that it is not possible to install standby generation; and
- either
 - the site is connected to a discrete feeder; or
 - in the opinion of the NIEN, maintaining supply during rota disconnections would involve retention of not more than a marginal amount of associated load; or
 - NIEN has been required to list the site by DfE pursuant to section 4.6 below.

Process for listing Protected Sites

4.4 Sites shall only be listed in the PSL if:

- customers have informed NIEN in writing that they consider their sites' activities fall into one of the categories set out in Table 1;
 - NIEN agrees that the activities fall into one of those categories; and
 - customers have also informed NIEN in writing, and NIEN agrees, that the sites meet the additional criteria.
- 4.5 If NIEN is unsure whether a site's activities fall into one of the categories, it will inform the customer accordingly. The customer may then:
- provide further clarification to NIEN on the site's activities, or
 - approach the LGD responsible for the service or industry concerned, which will advise DfE if the site's activities fall within the approved designated services and whether it should be listed.
- 4.6 Only on DfE's written instructions will NIEN include the site on the PSL. Pending resolution of the matter, the site shall not be listed.
- 4.7 If NIEN considers that the site's activities fall into one of the categories, and: a) the site does not have standby generation; b) the site is not connected to a discrete feeder; and c) maintaining supply to the site during rota disconnections would, in the opinion of the NIEN, involve retention of more than a marginal amount of associated load, then NIEN will advise the customer that they should either pay for a new or modified connection by means of a discrete feeder or install standby generation.
- 4.8 If the site is not prepared to install standby generation and pay for a discrete feeder, NIEN will refer the matter to DfE with an estimate of the amount of associated load which would need to be kept on supply if the site were to be protected. DfE will consult with the LGD, and with NIEN and will instruct the latter whether the site should exceptionally be listed. Pending resolution of the matter, the site shall not be listed.
- 4.9 If the site does not have standby generation, it will be required to provide justification to NIEN as to why it is not possible to install standby generation.
- 4.10 If the site has standby generation but the service it provides is deemed vital to a region or nationally, rather than locally, then the customer may approach the LGD responsible for the service, which will ask DfE to consider whether the site should be listed. Pending resolution of the matter, the site shall not be listed.

Obligations for Protected Sites

- 4.11 By applying for, and being given, Protected Site status, Protected Sites agree to meet certain obligations:
- 4.12 In the event of NIEN being directed to make rota disconnections, Protected Sites will reduce their consumption by a percentage broadly commensurate with rota disconnections as far as is reasonably practicable. Protected Sites must retain records of consumption and make these available to DfE for monitoring purposes if requested. Protected Sites that are deemed to be of national or regional

significance, and which cannot reduce consumption whilst still providing their service, may agree an exemption from this obligation.

- 4.13 Protected Sites will notify NIEN immediately if their activities change and no longer meet the criteria, and of any change to the customer's name and registered contact details.
- 4.14 NIEN will also confirm with Protected Sites every two years that they still meet the criteria to qualify for Protected Site status. Failure to disclose details to NIEN at this point may result in removal from the PSL.

Annex 1 - Variable Rota Disconnection Plan

Order of Disconnection for Load Blocks A to U

Day of Week	Period	Time	Increasing percentage levels of disconnection, derived by dividing the maximum amount of load available for disconnection into 18 equivalent amounts. Although each disconnection period is a nominal three hours the amount of switching involved at higher levels of disconnection may delay the restoration of some blocks by up to an hour.																					
			1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18				
Monday	1	0030-0330	A	B	C	H	T	N	L	M	K	G	J	R	D	S	P	E	U	Q				
	2	0330-0630	D	E	G	A	J	U	R	L	M	Q	N	T	J	A	E	C	D	S	H			
	3	0630-0930	B	C	A	K	J	U	S	L	P	M	Q	N	T	J	A	E	C	D	S	H		
	4	0930-1230	E	G	D	H	T	P	Q	R	L	U	S	H	D	C	E	A	P	E	J	K		
	5	1230-1530	C	A	B	J	U	M	N	L	S	D	H	U	Q	N	S	E	A	P	E	J	K	
	6	1530-1830	G	D	E	K	L	A	Q	M	R	P	G	H	J	C	R	U	D	B	Q	J	C	
	7	1830-2130	B	H	T	L	A	M	S	K	P	A	H	J	C	R	U	D	B	Q	J	C	D	
	(Tuesday)	8	2130-0030	C	J	U	N	K	S	T	A	L	B	H	M	E	P	G	Q	D	R			
Tuesday	1	0030-0330	E	G	D	A	M	P	Q	R	C	K	B	U	H	L	S	J	N	T				
	2	0330-0630	H	J	K	B	N	U	S	R	T	M	E	C	Q	G	A	N	D	L	P	U	Q	
	3	0630-0930	G	D	E	C	L	Q	R	R	P	B	J	M	L	K	A	N	T	P	U	Q	S	
	4	0930-1230	J	K	H	A	M	S	R	T	P	U	N	L	G	H	A	B	C	M	J	K	G	
	5	1230-1530	D	E	G	B	N	R	T	P	U	Q	S	L	A	H	D	A	N	H	P	L	J	
	6	1530-1830	K	H	J	C	L	T	U	S	K	A	B	U	D	H	P	J	S	K	N	T	H	
	7	1830-2130	E	A	N	P	D	Q	L	E	Q	A	D	P	J	S	K	N	T	H	U			
	(Wednesday)	8	2130-0030	G	B	M	R	C	L	E	Q	A	D	P	J	S	K	N	T	H	U			
Wednesday	1	0030-0330	J	K	H	D	Q	S	T	U	G	A	E	L	B	P	M	C	R	N				
	2	0330-0630	B	C	A	J	G	P	T	M	U	N	S	Q	E	R	C	H	P	D	S	L	T	
	3	0630-0930	K	H	A	B	D	Q	M	N	S	L	T	P	E	R	C	H	P	D	S	L	T	
	4	0930-1230	C	A	B	D	Q	M	N	S	L	T	P	E	R	C	H	P	D	S	L	T	M	U
	5	1230-1530	H	J	K	E	R	U	N	S	L	T	P	E	R	C	H	P	D	S	L	T	M	U
	6	1530-1830	A	B	C	G	P	N	S	L	M	A	D	E	H	L	B	S	P	C	A			
	7	1830-2130	H	D	R	T	J	G	P	A	T	D	E	H	L	B	S	P	C	A				
	(Thursday)	8	2130-0030	K	E	Q	U	J	P	J														
Thursday	1	0030-0330	L	M	N	S	J	C	A	B	U	R	T	G	P	H	D	Q	K	E				
	2	0330-0630	P	Q	R	T	K	G	D	B	E	J	L	U	A	M	S	B	N	H	C	G	A	
	3	0630-0930	M	N	L	U	H	A	D	B	C	T	Q	J	D	R	N	K	T	E	C	G	A	
	4	0930-1230	Q	R	P	S	J	D	E	G	A	K	M	H	S	B	E	C	H	L	U	J	T	
	5	1230-1530	N	L	M	T	K	B	E	C	G	A	H	S	K	P	S	C	H	L	U	J	T	
	6	1530-1830	R	P	Q	U	H	E	G	D	A	S	N	K	P	S	C	H	L	U	J	T	N	
	7	1830-2130	M	S	J	A	L	B	U	R	L	A	M	S	B	Q	D	R	E	P	G			
	(Friday)	8	2130-0030	N	T	K	C	U	H	J	L	A	M	S	B	Q	D	R	E	P	G			
Friday	1	0030-0330	Q	R	P	L	B	D	E	G	N	U	M	K	S	A	H	T	C	J				
	2	0330-0630	S	T	U	M	C	K	H	J	B	Q	N	E	R	L	G	P	S	A	L	K	E	
	3	0630-0930	R	P	Q	N	A	E	H	G	J	D	K	M	C	A	L	C	M	J	D	S	Q	
	4	0930-1230	T	U	S	L	B	H	J	K	C	R	B	A	H	G	J	P	T	Q	H	J	C	
	5	1230-1530	P	Q	R	M	C	G	D	E	A	S	P	L	C	S	D	A	T	H				
	6	1530-1830	U	S	T	N	A	J	K	H	U	E	M	L	K	P	S	D	H					
	7	1830-2130	Q	L	C	D	P	E	A	N	Q													
	(Saturday)	8	2130-0030	R	M	B	G	N	A	Q														
Saturday	1	0030-0330	T	U	S	P	E	H	J	K	R	L	Q	A	M	D	B	N	G	C				
	2	0330-0630	M	N	L	Q	G	A	B	C	H	E	T	R	E	J	P	K	S	M	T	P	R	
	3	0630-0930	U	N	S	T	R	D	J	K	H	Q	N	E	D	J	B	K	C	H	A	J	B	
	4	0930-1230	N	S	L	M	P	E	B	C	H	A	J	D	G	D	P	S	G	H	A	J	B	
	5	1230-1530	S	T	U	Q	G	K	H	A	J	D	G	D	P	S	G	H	A	J	B	M	G	
	6	1530-1830	L	M	N	R	D	C	A	B	L	P	S	G	H	D	N	B	L	G				
	7	1830-2130	S	P	G	H	T	K	R	L	P	Q	A	M	D	B	N	G	C					
	(Sunday)	8	2130-0030	U	Q	E	J	R	D	T	P	K	S	H	N	B	L	G	C					
Sunday	1	0030-0330	A	B	C	L	N	M	E	G	D	Q	R	P	K	H	J	U	S	T				
	2	0330-0630	D	E	G	P	Q	R	U	J	M	K	N	H	L	P	S	A	D	H	J	M	Q	
	3	0630-0930	H	J	K	S	T	U	M	R	N	R	T	B	E	C	G	K	N	R	U	P	S	
	4	0930-1230	L	M	N	A	C	B	Q	R	L	P	E	G	D	H	L	M	C	A	D	H	J	
	5	1230-1530	P	Q	R	U	D	E	G	T	U	C	S	A	M	Q	N	L	M	C	A	D	H	
	6	1530-1830	S	T	U	H	J	K	A	B	L	C	A	D	H	L	M	C	A	D	H	J	M	
	7	1830-2130	P	T	E	U	C	J	B	A	S													
	(Monday)	8	2130-0030	D	G	Q	J	K	S	U	R	T	N	L	M	C	A	D	H	J	M	Q	T	

Level 3 Disconnection

Each period is of nominal 3 hours duration. Detailed timings of disconnections and reconnections will be confirmed by an Activation Schedule issued by the SONI otherwise this is the default rota disconnection plan.

DAY	MONDAY								TUESDAY								WEDNESDAY								THURSDAY								FRIDAY								SATURDAY								SUNDAY																															
PERIOD	1	2	3	4	5	6	7	8	1	2	3	4	5	6	7	8	1	2	3	4	5	6	7	8	1	2	3	4	5	6	7	8	1	2	3	4	5	6	7	8	1	2	3	4	5	6	7	8	1	2	3	4	5	6	7	8	1	2	3	4	5	6	7	8																
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Level 4 Disconnection

Each period is of nominal 3 hours duration. Detailed timings of disconnections and reconnections will be confirmed by an Activation Schedule issued by the NESO otherwise this is the default rota disconnection plan.

DAY	MONDAY								TUESDAY								WEDNESDAY								THURSDAY								FRIDAY								SATURDAY								SUNDAY															
PERIOD	1	2	3	4	5	6	7	8	1	2	3	4	5	6	7	8	1	2	3	4	5	6	7	8	1	2	3	4	5	6	7	8	1	2	3	4	5	6	7	8	1	2	3	4	5	6	7	8	1	2	3	4	5	6	7	8	1	2	3	4	5	6	7	8
A	X		X		X				X		X		X				X		X		X												X			X																												
B		X		X		X		X		X		X		X		X																																																
C	X		X		X		X										X		X		X																				X																							
D	X		X		X		X		X		X		X		X		X																									X																						
E		X		X		X		X		X		X		X		X		X																							X																							
G		X		X		X		X		X		X		X		X																										X																						
H	X		X		X		X		X		X		X		X		X		X																							X																						
J		X		X		X		X		X		X		X		X																										X																						
K		X		X		X		X		X		X		X		X		X																								X																						
L							X																																			X																						
M													X																														X																					
N							X						X																														X																					
P												X																															X																					
Q															X																												X																					
R											X																																X																					
S																																											X																					
T							X								X																												X																					
U							X								X																												X																					

Level 5 Disconnection

Each period is of nominal 3 hours duration. Detailed timings of disconnections and reconnections will be confirmed by an Activation Schedule issued by the SONI otherwise this is the default rota disconnection plan.

DAY	MONDAY								TUESDAY								WEDNESDAY								THURSDAY								FRIDAY								SATURDAY								SUNDAY																							
PERIOD	1	2	3	4	5	6	7	8	1	2	3	4	5	6	7	8	1	2	3	4	5	6	7	8	1	2	3	4	5	6	7	8	1	2	3	4	5	6	7	8	1	2	3	4	5	6	7	8	1	2	3	4	5	6	7	8	1	2	3	4	5	6	7	8								
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Level 8 Disconnection

Each period is of nominal 3 hours duration. Detailed timings of disconnections and reconnections will be confirmed by an Activation Schedule issued by the SONI otherwise this is the default rota disconnection plan.

DAY	MONDAY								TUESDAY								WEDNESDAY								THURSDAY								FRIDAY								SATURDAY								SUNDAY							
PERIOD	1	2	3	4	5	6	7	8	1	2	3	4	5	6	7	8	1	2	3	4	5	6	7	8	1	2	3	4	5	6	7	8	1	2	3	4	5	6	7	8	1	2	3	4	5	6	7	8	1	2	3	4	5	6	7	8
A	0	1	0	1	0	1	0	1	0	1	0	1	0	1	0	1	0	1	0	1	0	1	0	1	0	1	0	1	0	1	0	1	0	1	0	1	0	1	0	1	0	1														
B	0	1	0	1	0	1	0	1	0	1	0	1	0	1	0	1	0	1	0	1	0	1	0	1	0	1	0	1	0	1	0	1	0	1	0	1	0	1	0	1	0	1														
C	0	1	0	1	0	1	0	1	0	1	0	1	0	1	0	1	0	1	0	1	0	1	0	1	0	1	0	1	0	1	0	1	0	1	0	1	0	1	0	1	0	1														
D	0	1	0	1	0	1	0	1	0	1	0	1	0	1	0	1	0	1	0	1	0	1	0	1	0	1	0	1	0	1	0	1	0	1	0	1	0	1	0	1	0	1														
E	0	1	0	1	0	1	0	1	0	1	0	1	0	1	0	1	0	1	0	1	0	1	0	1	0	1	0	1	0	1	0	1	0	1	0	1	0	1	0	1	0	1														
G	0	1	0	1	0	1	0	1	0	1	0	1	0	1	0	1	0	1	0	1	0	1	0	1	0	1	0	1	0	1	0	1	0	1	0	1	0	1	0	1	0	1														
H	0	1	0	1	0	1	0	1	0	1	0	1	0	1	0	1	0	1	0	1	0	1	0	1	0	1	0	1	0	1	0	1	0	1	0	1	0	1	0	1	0	1														
J	0	1	0	1	0	1	0	1	0	1	0	1	0	1	0	1	0	1	0	1	0	1	0	1	0	1	0	1	0	1	0	1	0	1	0	1	0	1	0	1	0	1														
K	0	1	0	1	0	1	0	1	0	1	0	1	0	1	0	1	0	1	0	1	0	1	0	1	0	1	0	1	0	1	0	1	0	1	0	1	0	1	0	1	0	1														
L	0	1	0	1	0	1	0	1	0	1	0	1	0	1	0	1	0	1	0	1	0	1	0	1	0	1	0	1	0	1	0	1	0	1	0	1	0	1	0	1	0	1														
M	0	1	0	1	0	1	0	1	0	1	0	1	0	1	0	1	0	1	0	1	0	1	0	1	0	1	0	1	0	1	0	1	0	1	0	1	0	1	0	1	0	1														
N	0	1	0	1	0	1	0	1	0	1	0	1	0	1	0	1	0	1	0	1	0	1	0	1	0	1	0	1	0	1	0	1	0	1	0	1	0	1	0	1	0	1														
P	0	1	0	1	0	1	0	1	0	1	0	1	0	1	0	1	0	1	0	1	0	1	0	1	0	1	0	1	0	1	0	1	0	1	0	1	0	1	0	1	0	1														
Q	0	1	0	1	0	1	0	1	0	1	0	1	0	1	0	1	0	1	0	1	0	1	0	1	0	1	0	1	0	1	0	1	0	1	0	1	0	1	0	1	0	1														
R	0	1	0	1	0	1	0	1	0	1	0	1	0	1	0	1	0	1	0	1	0	1	0	1	0	1	0	1	0	1	0	1	0	1	0	1	0	1	0	1	0	1														
S	0	1	0	1	0	1	0	1	0	1	0	1	0	1	0	1	0	1	0	1	0	1	0	1	0	1	0	1	0	1	0	1	0	1	0	1	0	1	0	1	0	1														
T	0	1	0	1	0	1	0	1	0	1	0	1	0	1	0	1	0	1	0	1	0	1	0	1	0	1	0	1	0	1	0	1	0	1	0	1	0	1	0	1	0	1														
U	0	1	0	1	0	1	0	1	0	1	0	1	0	1	0	1	0	1	0	1	0	1	0	1	0	1	0	1	0	1	0	1	0	1	0	1	0	1	0	1	0	1														

Level 10 Disconnection

Each period is of nominal 3 hours duration. Detailed timings of disconnections and reconnections will be confirmed by an Activation Schedule issued by the SONI otherwise this is the default rota disconnection plan.

DAY	MONDAY								TUESDAY								WEDNESDAY								THURSDAY								FRIDAY								SATURDAY								SUNDAY															
PERIOD	1	2	3	4	5	6	7	8	1	2	3	4	5	6	7	8	1	2	3	4	5	6	7	8	1	2	3	4	5	6	7	8	1	2	3	4	5	6	7	8	1	2	3	4	5	6	7	8	1	2	3	4	5	6	7	8	1	2	3	4	5	6	7	8
A	1	2	3	4	5	6	7	8	1	2	3	4	5	6	7	8	1	2	3	4	5	6	7	8	1	2	3	4	5	6	7	8	1	2	3	4	5	6	7	8	1	2	3	4	5	6	7	8	1	2	3	4	5	6	7	8								
B	2	3	4	5	6	7	8	1	3	4	5	6	7	8	1	2	4	5	6	7	8	1	2	3	5	6	7	8	1	2	3	4	6	7	8	1	2	3	4	5	7	8	1	2	3	4	5	6	8	1	2	3	4	5	6	7	8							
C	3	4	5	6	7	8	1	2	4	5	6	7	8	1	2	3	5	6	7	8	1	2	3	4	6	7	8	1	2	3	4	5	7	8	1	2	3	4	5	6	8	1	2	3	4	5	6	7	8	1	2	3	4	5	6	7	8							
D	4	5	6	7	8	1	2	3	5	6	7	8	1	2	3	4	6	7	8	1	2	3	4	5	7	8	1	2	3	4	5	6	8	1	2	3	4	5	6	7	8	1	2	3	4	5	6	7	8	1	2	3	4	5	6	7	8							
E	5	6	7	8	1	2	3	4	6	7	8	1	2	3	4	5	7	8	1	2	3	4	5	6	8	1	2	3	4	5	6	7	8	1	2	3	4	5	6	7	8	1	2	3	4	5	6	7	8	1	2	3	4	5	6	7	8							
G	6	7	8	1	2	3	4	5	7	8	1	2	3	4	5	6	8	1	2	3	4	5	6	7	8	1	2	3	4	5	6	7	8	1	2	3	4	5	6	7	8	1	2	3	4	5	6	7	8	1	2	3	4	5	6	7	8							
H	7	8	1	2	3	4	5	6	8	1	2	3	4	5	6	7	8	1	2	3	4	5	6	7	8	1	2	3	4	5	6	7	8	1	2	3	4	5	6	7	8	1	2	3	4	5	6	7	8	1	2	3	4	5	6	7	8							
J	8	1	2	3	4	5	6	7	8	1	2	3	4	5	6	7	8	1	2	3	4	5	6	7	8	1	2	3	4	5	6	7	8	1	2	3	4	5	6	7	8	1	2	3	4	5	6	7	8	1	2	3	4	5	6	7	8							
K	1	2	3	4	5	6	7	8	2	3	4	5	6	7	8	1	3	4	5	6	7	8	1	2	4	5	6	7	8	1	2	3	5	6	7	8	1	2	3	4	6	7	8	1	2	3	4	5	7	8	1	2	3	4	5	6	7	8						
L	2	3	4	5	6	7	8	1	3	4	5	6	7	8	1	2	4	5	6	7	8	1	2	3	5	6	7	8	1	2	3	4	6	7	8	1	2	3	4	5	7	8	1	2	3	4	5	6	8	1	2	3	4	5	6	7	8							
M	3	4	5	6	7	8	1	2	4	5	6	7	8	1	2	3	5	6	7	8	1	2	3	4	6	7	8	1	2	3	4	5	7	8	1	2	3	4	5	6	8	1	2	3	4	5	6	7	8	1	2	3	4	5	6	7	8							
N	4	5	6	7	8	1	2	3	5	6	7	8	1	2	3	4	6	7	8	1	2	3	4	5	7	8	1	2	3	4	5	6	8	1	2	3	4	5	6	7	8	1	2	3	4	5	6	7	8	1	2	3	4	5	6	7	8							
P	5	6	7	8	1	2	3	4	6	7	8	1	2	3	4	5	7	8	1	2	3	4	5	6	8	1	2	3	4	5	6	7	8	1	2	3	4	5	6	7	8	1	2	3	4	5	6	7	8	1	2	3	4	5	6	7	8							
Q	6	7	8	1	2	3	4	5	7	8	1	2	3	4	5	6	8	1	2	3	4	5	6	7	8	1	2	3	4	5	6	7	8	1	2	3	4	5	6	7	8	1	2	3	4	5	6	7	8	1	2	3	4	5	6	7	8							
R	7	8	1	2	3	4	5	6	8	1	2	3	4	5	6	7	8	1	2	3	4	5	6	7	8	1	2	3	4	5	6	7	8	1	2	3	4	5	6	7	8	1	2	3	4	5	6	7	8	1	2	3	4	5	6	7	8							
S	8	1	2	3	4	5	6	7	8	3	4	5	6	7	8	1	4	5	6	7	8	1	2	3	5	6	7	8	1	2	3	4	6	7	8	1	2	3	4	5	7	8	1	2	3	4	5	6	8	1	2	3	4	5	6	7	8							
T	1	2	3	4	5	6	7	8	4	5	6	7	8	1	2	3	5	6	7	8	1	2	3	4	6	7	8	1	2	3	4	5	7	8	1	2	3	4	5	6	8	1	2	3	4	5	6	7	8	1	2	3	4	5	6	7	8							
U	2	3	4	5	6	7	8	1	5	6	7	8	1	2	3	4	6	7	8	1	2	3	4	5	7	8	1	2	3	4	5	6	8	1	2	3	4	5	6	7	8	1	2	3	4	5	6	7	8	1	2	3	4	5	6	7	8							

