

Station Name: Lochluichart Wind

Connection Site/GSP: Corriemollie

Company Name: LZN Ltd

MIT Substations: Beauly

Derogation Report Ref: 10-DR-003-B2-Rev1

**Part 1: Technical Description of Non Compliance** *[To be completed by the relevant Transmission Owner.]*

Relevant Paragraph(s) of NETS Security and Quality of Supply Standard	Cause	Part of System Affected	Initial Conditions		Interim Operational Solution	Long Term Solution, to include brief description of access requirements.	Derogation Expiry Date
			System Intact	Circuit Outage			
NETS SQSS Section 4 Clauses 4.4 – 4.10	<p>Trip of Kintore –Alyth double circuit line.</p> <p>Trip of Beauly-Denny double circuit line</p>	<p>Overload of Kintore – Tealing double circuit line for trip of Kintore –Alyth double circuit line.</p> <p>Overload of Errochty 132kV network for trip of Beauly-Denny double circuit line</p>	<p>System intact at ACS peak demand</p> <p>System conditions expected to arise in the course of a year</p>	<p>None</p> <p>Typical planned outage pattern</p>	<p>NETSO operational measures in operational timescales in accordance with Section 5 of the NETS SQSS</p>	<p>SHETL to develop and construct the following transmission reinforcements:</p> <ul style="list-style-type: none"> <li>i) Tealing-Glenrothes/Westfield Upgrade (2012)</li> <li>ii) Beauly-Denny 400kV (2014)</li> <li>iii) East Coast 400kV Upgrade (2015)</li> <li>iv) Blackhillock QBs (2016)</li> <li>v) Errochty reconfiguration (2017)</li> <li>vi) Kintore-Tealing 275kV reconductoring (2018)</li> <li>vii) Peterhead Hawthorn Pit HVDC Link (2018)</li> </ul> <p><i>Completion dates subject to subject to contents and regulatory approval</i></p>	<p>Derogation is sought until completion of listed long-term reinforcement solutions.</p> <p>Derogation triggered by advancing generator connections via connect and manage arrangements</p>

**See 2010 Seven Year Statement Figure C.1.6 – “SHETL Forecast Power Flows at Winter Peak, 2015/16” for network configuration**

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Company Name: LZN Ltd

MITS Substations: Beauly

Derogation Report Ref: 10-DR-003-B2-Rev1

**Part 2: Expected Consequence of Non -Compliance.** *[To be completed by the System Operator, with reference to appropriate Transmission Owner.]*

Value of Carbon Benefit (£k), (including time period over which cost benefit is calculated).	
Summary of proposed System Operator actions to manage non- compliance. <i>To include:</i> <i>pricing assumptions.</i> <i>Description of diversity within the</i> <i>group (not to include reference to</i> <i>particular projects)</i> <i>User agreements for services such</i> <i>as energy management or intertrips.</i> <i>Contribution of project to wider non</i> <i>compliance at boundary level.</i>	
Estimated range of costs to manage non compliance (£k). To include time period over which costs are assessed.	
Description of risk due to network non compliance. e.g. constraint increase due to project delay	

Station Name: Lochluichart Wind

Connection Site/GSP: Corriemollie

Company Name: LZN Ltd

MITs Substations: Beaully

Derogation Report Ref: 10-DR-004-B4-Rev1

**Part 1: Technical Description of Non Compliance** *[To be completed by the relevant Transmission Owner.]*

Relevant Paragraph(s) of NETS Security and Quality of Supply Standard	Cause	Part of System Affected	Initial Conditions		Interim Operational Solution	Long Term Solution, to include brief description of access requirements.	Derogation Expiry Date
			System Intact	Circuit Outage			
NETS SQSS Section 4 Clauses 4.4 – 4.10	<p>Trip of Alyth – Kincardine double circuit line.</p> <p>Trip of Beaully-Denny double circuit line</p>	<p>Overload of Tealing – Glenrothes/Westfield 275kV double circuit line for trip of Alyth – Kincardine 400kV double circuit line.</p> <p>Overload of Errochty 132kV network for trip of Beaully-Denny double circuit line</p>	<p>System intact at ACS peak demand</p> <p>System conditions expected to arise in the course of a year</p>	<p>None</p> <p>Typical planned outage pattern</p>	<p>NETSO operational measures in operational timescales in accordance with Section 5 of the NETS SQSS</p>	<p>SHETL to develop and construct the following transmission reinforcements:</p> <ul style="list-style-type: none"> <li>i) Tealing-Glenrothes/Westfield Upgrade (2012)</li> <li>ii) Beaully-Denny 400kV (2014)</li> <li>iii) East Coast 400kV Upgrade (2015)</li> <li>iv) Blackhillock QBs (2016)</li> <li>v) Errochty reconfiguration (2017)</li> <li>vi) Kintore-Tealing 275kV reconductoring (2018)</li> <li>vii) Peterhead Hawthorn Pit HVDC Link (2018)</li> </ul> <p><i>Completion dates subject to subject to contents and regulatory approval</i></p>	<p>Derogation is sought until completion of listed long-term reinforcement solutions.</p> <p>Derogation triggered by advancing generator connections via connect and manage arrangements</p>

**See 2010 Seven Year Statement Figure C.1.6 – “SHETL Forecast Power Flows at Winter Peak, 2015/16” for network configuration**

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Company Name: LZN Ltd

MITS Substations: Beauly

Derogation Report Ref: 10-DR-004-B4-Rev1

**Part 2: Expected Consequence of Non -Compliance.** *[To be completed by the System Operator, with reference to appropriate Transmission Owner.]*

Value of Carbon Benefit (£k), (including time period over which cost benefit is calculated).	
Summary of proposed System Operator actions to manage non- compliance. <i>To include:</i> <i>pricing assumptions.</i> <i>Description of diversity within the</i> <i>group (not to include reference to</i> <i>particular projects)</i> <i>User agreements for services such</i> <i>as energy management or intertrips.</i> <i>Contribution of project to wider non</i> <i>compliance at boundary level.</i>	
Estimated range of costs to manage non compliance (£k). To include time period over which costs are assessed.	
Description of risk due to network non compliance. e.g. constraint increase due to project delay	

**Table 1 (of Schedule 8.1) - Relief Granted in respect of the Licensee's System**

1 PART OF THE SYSTEM FOR WHICH RELIEF IS GIVEN	2 NATURE OF RELIEF	3 DEROGATION PERIOD	4 DETAILED DESCRIPTION OF RELIEF GRANTED		
			ISSUE	INTERIM SOLUTION	LONG TERM SOLUTION
<p><b>SPT-NGET Interconnection</b> (NETS SYS Boundary 6)</p> <p>All circuits supported on the following overhead line routes:</p> <p><b>ZV Route:</b> Strathaven 400kV Substation to the SPT-NGET Boundary</p> <p><b>ZA Route:</b> Eccles 400kV Substation to the SPT-NGET Boundary</p> <p><b>SPT-SHETL Interconnection</b> (NETS SYS Boundary 4)</p> <p>All circuits supported on the following overhead line routes:</p> <p>XL Route: Kincardine 275kV Substation to the SPT-SHETL Boundary</p> <p>TD Route: Denny 400/275kV Substation to the SPT-SHETL Boundary</p>	<p>National Electricity Transmission System Security and Quality of Supply Standard</p> <p>Section 4 - Design of Main Interconnected Transmission System Criteria 4.1 to 4.13 inclusive.</p>	<p>Definite.</p> <p>Effective until completion of the Transmission Construction Works set out in Appendix 3 Part 4.2 of the TO Construction Offer referred to in this Connect and Manage Derogation Report<sup>1</sup>.</p>	<p>Under Planned Transfer plus appropriate Interconnection Allowance with intact system and ACS peak demand, and under conditions expected to arise in the course of a year of operation, with generation and demand background as per the Construction Planning Assumptions referenced in Appendix 8.3.2 of the TO Construction Offer referred to in this Connect and Manage Derogation Report, secured events may give rise to:</p> <p>Unacceptable overloading of primary transmission equipment;</p> <p>Unacceptable voltage conditions and insufficient voltage performance margins; and / or,</p> <p>System instability.</p>	<p>Application of pre-fault and / or post-fault constraints to generation in Scotland to permit compliance with NETS SQSS Section 5.</p>	<p>Transmission construction works as set out in Appendix 3 Part 4.2 of the TO Construction Offer referred to in this Connect and Manage Derogation Report.</p>

<sup>1</sup> The completion of the Transmission Construction Works will be subject to change based on any change to the related dates set out in the relevant TO Reinforcement Instruction(s).

**Table 2 (of Schedule 8.1) - Impact Assessment of Relief Granted in respect in respect of the Licensee’s System**

1 CONSUMERS	2 SECURITY OF SUPPLY	3 COMPETITION	4 SUSTAINABLE DEVELOPMENT	5 HEALTH AND SAFETY	6 OTHER PARTIES AFFECTED
<p>It will be the responsibility of the National Electricity Transmission System Operator to manage any generation constraints arising from this non-compliance while ensuring compliance with NETS SQSS Section 5, ‘Operation of the Onshore Transmission System’. During the Derogation Period there may be an increase in generation constraints costs.</p>	<p>There will be no adverse impact on security of supply.</p>	<p>The connection of generating plant is consistent with the Licensee’s Statutory obligation to facilitate competition in generation.</p>	<p>None.</p>	<p>There are no health and safety issues resulting from this non-compliance.</p>	<p>There are no other parties directly affected.</p>