G59 Generator Protection Settings - Progress on Changes to new Values (Information received as at End of 2010 - Date of latest updates shown for each network.)

DNO [Western Power Distribution - South West Area] total responses as at 05/01/11

Oser Data Entry								Under	Frequency	Over F	requency	
Site name	Genset	Agreed to changes (Y/N)	Changes implemented (Y/N)	Generator capacity installed (MW)	Generator capacity agreed to change (MW)	implemented	Generator capacity unable to change (MW)	Stage 1 Frequency	Stage 2 Frequency (Hz)	Stage 1 Frequency (Hz)	Stage 2 Frequency (Hz)	Comments
Scottish and Southern Energy, Cantelo Nurseries, Bradon Farm, Isle Abbots, Taunton, Somerset	Gas	Υ	Υ	9.7	9.7	9.7	0.0	47.0	0	50.50)	Following Settings have been applied: 47.5Hz 20s, 47Hz 0.5s, 52Hz 0.5s
Bears Down Wind Farm Ltd, Bears Down Wind Farm, St Mawgan, Newquay, Cornwall	Wind onshore	Υ	N	9.6	9.6	0.0	0.0	47.0	0	50.50)	Contact made. Awaiting info.
British Gas Transco, Severn Road, Avonmouth, Bristol	Gas	Υ	Υ	5.5	5.5	5.5	0.0	47.0	0	50.50)	Generator has agreed to apply the new single stage settings (i.e. 47.5Hz 0.5s and 51.5Hz 0.5s) - complete 23/11/10
Cold Northcott Wind Farm Ltd, Cold Northcott, Launceston, Cornwall	Wind_onshore	Υ	Υ	6.8			0.0	0 47.0	0	50.50		Changes completed.
Connon Bridge Energy Ltd, Landfill Site, East Taphouse, Liskeard, Cornwall	Gas	Υ	Υ	5.3	5.3	5.3	0.0	0 47.0	0	50.50)	Generator has agreed to apply the new single stage settings (i.e. 47.5Hz 0.5s and 51.5Hz 0.5s). Abdul Sattar confirmed complete by email 19/11/10. Also two stage will be applied soon and confirmed.
Cornwall Light and Power, Bonython Wind Farm, Cury, Cornwall	Wind_onshore	Υ	Υ	13.8	13.8	13.8	0.0	47.5	0 47.00	51.50	52.00	Changes completed
District Energy, Marsh Lane, Huntworth, Bridgwater, Somerset	Gas	Υ	Υ	12.6	12.6	12.6	0.0	47.0	0	50.50)	Contact made. Changes complete 3/12/10
GCHQ, CSOS Morwenstow, Bude, Cornwall	Diesel	Υ	N	7.5	7.5	0.0	0.0	49.2	5	50.50		Lowest available UF setting is 48Hz. Generators are currently being replaced. New settings will comply.
Imerys Minerals Ltd, Par Intake, Par, Cornwall	Diesel / Gas	Υ	Υ	12.6	12.6	12.6	0.0	47.5	0	51.50)	Changes completed
Imerys Minerals Ltd, Drinnick Intake Drinninck Cornwall	Diesel / Gas	Υ	Υ	8.8	8.8	8.8	0.0	47.5	0	51.50)	Changes completed
Imerys Minerals Ltd, Bugle Intake, Bugle, Cornwall	Diesel / Gas	Υ	Υ	9.3	9.3	9.3	0.0	47.5	0	51.50)	Changes completed
Met Office, Fitzroy Road, Exeter, EX1 3PB	?	Υ	Υ	9.5	9.5	9.5	0.0	47.5	0 47.00	51.50	52.00	Changes completed
Powergen Renewables Ltd, St Breock Wind Farm St Breock Downs Wadebridge Cornwall	Wind-onshire	Υ	N	5.0	5.0	0.0	0.0	47.0	0	50.50)	Changes agreed. Awaiting confirmation.
Rolls Royce Power Developments Ltd, Filton Patchway Works (within Rolls Royce) Bristol	Gas	Υ	Y	49.0	49.0	49.0	0.0	47.5	0 47.0	0 51.50	52.00	Changes completed
Rolls Royce Power developments Ltd, Marsh Green Road Marsh Barton Industrial EstateExeter Devon	Gas	Υ	Υ	49.0	49.0	49.0	0.0	47.5	0 47.0	0 51.50	52.00	Changes completed
Scottish Power Renewables, Carland Cross Wind Farm Mitchell Truro Cornwall	Wind_onshore	Υ	N	6.0	6.0	0.0	0.0	47.0	0	51.50		Changes agreed
St Regis Paper Company, Wansborough Paper Mill WATCHET	?	N	N	7.5	0.0	0.0	0.0	47.0	0	50.50)	Generator agreed to supply information.
Viridor Waste Management, Broadpath Landfill Generation Scheme, Hemyock Devon	Gas	Υ	Υ	5.2	5.2	5.2	0.0	0 47.0	0	50.50)	Unable to apply 2 stage OF Setting (due to concern over possible generator damage). Alternative setting agreed. John Barker confirmed single stage settings applied email 23/11/10.
Wessex Water Ltd, Bristol Waste Water Treatment Works, Kings Weston Lane, Avonmouth, Bristol	Diesel	Υ	Υ	12.0	12.0	12.0	0.0	47.0	0	50.50)	Changes completed

		Totals	95%	74%	244.6	237.1	209.0	
--	--	--------	-----	-----	-------	-------	-------	--

Percentage of installed generator capacity with NEW G59 settings	85%

DNO [Western Power Distribution - South Wales Area] total responses as at 05/01/11

User Data Entry

User Data Entry								Under F	requency	Over Fi	equency	
Site name	Genset	Agreed to	Changes implemented (Y/N)	Generator capacity installed (MW)	Generator capacity agreed to change (MW)	implemented	Generator capacity unable to change (MW)	Stage 1 Frequency (Hz)	Stage 2 Frequency (Hz)		Stage 2 Frequency (Hz)	Comments
Beaufort Wind Ltd, Bryn Titli Windfarm Rhayader	Wind-onshore	Υ	To be applied Jan 2011	9.9	9.9			47.5Hz/0.5sec	Not possible	51.5Hz/0.5sec	Not possible	Owain Perry - RWE
Beaufort Wind Ltd, Taff Ely Wind Farm Blackmill nr Tonyrefail	Wind-onshore	Υ	To be applied Jan 2011	g	9 9			47.5Hz/0.5sec	Not possible	51.5Hz/0.5sec	Not possible	Owain Perry - RWE
Ffynnon Oer Wind Farm Ltd, Ffynnon Oer Wind Farm, Blaencreagan	Wind-onshore	Υ	To be applied Jan 2011	33.7	7 33.7	,		47.5Hz/20sec	47Hz/0.5sec	51.5Hz/90sec	52Hz/0.5sec	Owain Perry - RWE
Novera Energy, Processing Generation, Landfill Site, Porthcawl, South Glamorgan	Landfill Gas	Υ	3rd wk Jan 2011	5	5 5	5		47.5Hz/0.5sec	Not possible	51.5Hz/0.5sec	Not possible	Godfrey Mkushi - INFINIS
Infinis Ltd, Generator Site, Pwllfawatkin Landfill Site, SiteRhy Dy Fro	Wind-onshore	Υ	3rd wk Jan 2011	5.152	5.152	!		47.5Hz/0.5sec	Not possible	51.5Hz/0.5sec	Not possible	Godfrey Mkushi - INFINIS
Corus PLC, Margam, Port Talbot	?	Υ	To be applied Jan 2011	31	31			47.5Hz/0.5sec	Not possible	51.5Hz/0.5sec	Not possible	
Renewable Energy Systems, Dyffryn Brodyn Windfarm, Blaenwaun, Whitland	Wind-onshore	Υ	1st wk Jan 2011 by WPD	5.5	5.5			47.5Hz/0.5sec	Not possible	51.5Hz/0.5sec	Not possible	To be applied in 1st week of Jan by WPD contracting arm
Dow Corning, Cardiff Road, Barry	?		Confirmation with WPD policy - constraint on altering generator freq settings by gen manufacturer, conflict between G59/2 settings and individual gen settings	34.005	34.005			47		50.5		RWE agree to alter G59 settings but not individual generators following advice from generator manufacturer.
Western Bio-energy Ltd, Biomass Generation Site, Longlands Lane, Margam, Port Talbot	Wood Biomass	Υ	Shutdown to be arranged	19	19	,		47.5Hz/20sec	47Hz/0.5sec	51.5Hz/90sec	52Hz/0.5sec	Awaiting confrimation new two stage settings applied
Interbrew, The Brewery, Magor	?	Y	Shutdown to be arranged	8.402	2 8.402			47Hz/0.5sec (exist Setting)		50.5Hz/0.5sec (exist setting)		Propose to set U/F one stage 47.5Hz/0.5secs, Change O/F to two stage 51.5Hz/90secs and 52 Hz 0.5 secs
Biffa Waste Services Ltd, Trecatti Landfill Site, Fochriw Rd, Mid Glamorgan	LandfillGas	Υ	Υ	7.75	7.8	7.8		47.5Hz/0.5sec	Not possible	51.5Hz/0.5sec	Not possible	Connection Agreement to be amended
HLC North Talbot Ltd, Materials Energy Centre Crymlyn Burrows Swansea	Municipal Waste	Υ	Υ	5	5 5	5		47.5Hz/0.5sec	Not possible	51.5Hz/0.5sec	Not possible	Connection Agreement to be amended
Scottish & Southern Energy, South Corenelly Services Bridgend	Gas	Υ	Υ	12.51	12.5	12.5		47.5Hz/20sec	47Hz/0.5sec	52Hz/0.5sec		Following settings have been applied: 47.5Hz 20s, 47Hz 0.5s, 52Hz 0.5s
Novera Energy, Llyn Brianne Reservoir	Hydro	Υ	Υ	4.6	4.6	4.6		48Hz/0.25sec	Not possible	51.5Hz/0.25se c	Not possible	Less than 5 MW Installed, would need timer installed to achieve 0.5 sec time delay
Jamont Ltd, Bridgend Paper Mills Llan Gynwyd Maesteg	?	Υ	Υ	11.15	5 11.2	11.2		47.5Hz/0.5sec	Not possible	51.5Hz/0.5sec	Not possible	Connection Agreement to be amended
Milford Energy Ltd, Main Road Waterston Milford Haven	?	Υ	Υ	61.4	61.4	61.4		47.5Hz/0.5sec	Not possible	51.5Hz/50sec	52Hz/0.5sec	Connection Agreement to be amended

Percentage of installed generator capacity with NEW G59 settings	39%

Totals 94% 38% 263.1 263.2 102.5

User Data Entry											
							Under		Over		
							Frequency		Frequency		
			Generator	Generator	Generator						
		Changes	capacity	capacity	capacity changes		Stage 1	Stage 2	_	Stage 2	
		Agreed to implemented	installed	agreed to	implemented	capacity unable		Frequency	Frequency	Frequency	
Site name	Genset	changes (Y/N) (Y/N)	(MW)	change (MW)	(MW)	to change (MW)	(Hz)	(Hz)	(Hz)	(Hz)	Comments
											Generator currently out of service, will be implementing revised settings during re-
Sedalcol Ltd (ex Whites recycling Solutions)	Natural Gas	Y N	5.5)	52.00		commissioning. Can move to 2 stage under frequency, 1 stage over.
Sedalcol Ltd (ex Whites recycling Solutions)	Diesel Gen 1	Y Y	1.6)	51.50	1	Changed
Sedalcol Ltd (ex Whites recycling Solutions)	Diesel Gen 1	Y	1.6	1.6	1.6	0.0	0 47.50)	51.50)	Changed
											Frequency settings stated are proposed settings, not current. Update for Jan 2011 - awaiting
Wheldale	Natural Gas	Y N	13.2	2 13.2	0.0	0.0	0 47.50)	51.50		written confirmation that settings have been changed.
											In their response, Harworth Power have stated that they can only realistically achieve the single
											stage settings without threat to the safety of the generators. Update for Jan 2011 - awaiting
Stillingfleet	Mine gas gen1	Y N	3	3	0.0	0.0	0 48.94	1	50.50		written confirmation that settings have been changed.
Stillingfleet	Mine gas gen2	Y N	3	3	0.0	0.0	0 48.93	3	50.53	1	See above
Stillingfleet	Mine gas gen3	Y N	3	3	0.0	0.0	0 48.97	7	50.53		See above
Stillingfleet	Mine gas gen4	Y N	3	3	0.0	0.0	0 48.94	1	50.50)	See above
Harworth Colliery	Mine gas gen1	Y N	1.4	1.4	0.0	0.0	0 47.00)	50.51		See above
Harworth Colliery	Mine gas gen2	Y N	1.4	1 1.4			_		50.51		See above
Harworth Colliery	Mine gas gen3	Y N	1.4				_		50.51		See above
Harworth Colliery	Mine gas gen4	Y N	1.4				_		50.51		See above
Harworth Colliery	Mine gas gen5	ly N	1.4				_		50.51		See above
Veolia Sheffield (Onyx)	CHP	ly ly	21.0								Changed on 10/12/10
voolid ChipAj	5111		21.0	21.0	21.0	, 0.0	47.50	77.00	51.50	32.00	Confirmed they have the relay capability to go to the proposed 2 stage settings. Update for Jan
				İ					I		2011- CE E UK requested earlier change than their plan to change in summer 2011. Awaiting
Ecotricity (Fen wind farm)	Wind	l _V	20.0	20	0.0	0.0	0 47.00		50.50		information on revised plan to change.
Sita Kirklees Huddersfield	Steam	lv v	12.1				_				Changed on 5/11/10.
Sita Kirkiees Huudeisileid	Steam	T T	12.1	12.1	12.	0.0	47.50	47.00	51.50	52.00	Customer has referred back to their engineering dept for proposed settings - no further
Npower Cogen Stallingborough (Millenium IC)	Gas turbine 1	N N	6.45		0.0		0 47.50		52.50		information received.
		IN IN	6.45		0.0		0 47.50) 	52.50		See above
Npower Cogen Stallingborough (Millenium IC)	Gas turbine 2	IN IN						<u> </u>			
Npower Cogen Stallingborough (Millenium IC)	Steam turbine	N N	2.8		0.0		0 47.50)	52.50		See above
Star Energy Ltd, Gainsborough	Gen1	Y Y	1	1 1	1.0)	51.50		Changed on 09/12/10
Star Energy Ltd, Gainsborough	Gen2	Y Y	1	1 1	1.0)	51.50	1	Changed on 09/12/10
Star Energy Ltd, Gainsborough	Gen3	Y Y	1	1 1	1.0)	51.50		Changed on 09/12/10
Star Energy Ltd, Gainsborough	Gen4	Y Y	1	1 1	1.0)	51.50	1	Changed on 09/12/10
Star Energy Ltd, Gainsborough	Gen5	Y	1	1 1	1.0	0.0	0 47.50)	51.50		Changed on 09/12/10
Star Energy Ltd, Gainsborough	Gen6	Y	1	1 1	1.0	0.0	0 47.50)	51.50		Changed on 09/12/10
Star Energy Ltd, Gainsborough	Gen7	Y Y	1	1 1	1.0	0.0	0 47.50)	51.50)	Changed on 09/12/10
Star Energy Ltd, Gainsborough	Gen8	Y Y	1	1 1	1.0	0.0	0 47.50)	51.50		Changed on 09/12/10
Star Energy Ltd, Gainsborough	Gen9	Y	1	1 1	1.0	0.0	0 47.50)	51.50		Changed on 09/12/10
											Customer has agreed to change to the 2 stage settings from existing 1 stage. Update for Jan
Maltby Colliery (Hargreaves)	Gas turbine 1	Y N	1.4	1.4	0.0	0.0	0 48.50		50.50)	2011 - awaiting written confirmation that settings have been changed.
Maltby Colliery (Hargreaves)	Gas turbine 2	Y N	1.4	1 1.4	0.0	0.0	0 48.50)	50.50		See above
Maltby Colliery (Hargreaves)	Gas turbine 3	Y N	1.4	1.4	0.0	0.0	0 48.50)	50.50		See above
Maltby Colliery (Hargreaves)	Gas turbine 4	Y N	1.4	1 1.4			0 48.50)	50.50)	See above
Maltby Colliery (Hargreaves)	Gas turbine 5	Y N	1.4)	50.50	1	See above
Maltby Colliery (Hargreaves)	Gas turbine 6	Y N	1.4						50.50	1	See above
Maltby Colliery (Hargreaves)	Gas turbine 7	V N	1.4)	50.50		See above
Mailby Colliery (Haigreaves)	Gas turbine /	1 10	1.5	1.5	0.0	0.0	47.50	,	30.30		Customer has stated that any changes will have to go through EON modification process -
											update requested. Update for Feb 2011 - Customer has stated that he will be visiting site early
Arch chemicals (EON)	CCGT 1	N N	25	5	0.0		0 48.00		50.50	52.00	2011 and making changes if possible.
Arch chemicals (EON) Arch chemicals (EON)	CCGT 2	N N	25		0.0		0 48.00		50.50		See above
Thornhill Cogen	CCGT	N N	50		0.0		0 49.00				See above
St James' Hospital	Gas turbine 1	N N	6.08		0.0		0 48.00		50.10		See above
Mill Nurseries	CHP1	V V	1.547				0 48.00		51.50		Changed, assumed to single stage, awaiting confirmation.
			1.547				_	1	51.50		
Mill Nurseries	CHP2	T Y					0 47.50	<u> </u>			Changed, assumed to single stage, awaiting confirmation.
Mill Nurseries	CHP3	Y Y	1.547				0 47.50	7	51.50		Changed, assumed to single stage, awaiting confirmation.
Mill Nurseries	CHP4	Y Y	1.547				0 47.50	7	51.50		Changed, assumed to single stage, awaiting confirmation.
Mill Nurseries	CHP5	Y	1.547				0 47.50)	51.50		Changed, assumed to single stage, awaiting confirmation.
Mill Nurseries	CHP6	Y Y	1.547				0 47.50)	51.50		Changed, assumed to single stage, awaiting confirmation.
Mill Nurseries	CHP7	Y Y	1.547				0 47.50)	51.50		Changed, assumed to single stage, awaiting confirmation.
Mill Nurseries	CHP8	Y	1.547				0 47.50)	51.50	1	Changed, assumed to single stage, awaiting confirmation.
Mill Nurseries	CHP9	Υ Υ	1.547	7 1.547	1.547	7	0 47.50)	51.50		Changed, assumed to single stage, awaiting confirmation.
Mill Nurseries	CHP10	Y	1.547	7 1.547	1.547	7	0 47.50		51.50		Changed, assumed to single stage, awaiting confirmation.
											Update for Feb 2011 - Site ownership changes have required further contact attempts, awaiting
Burstwick (Ellifoot Lane)	CHP1	N N	1.875) (0 47.00		50.50	<u> </u>	feedback from customer
Burstwick (Ellifoot Lane)	CHP2	N N	1.875	1.875	0.0)	0 47.00)	50.50)	See above
Burstwick (Ellifoot Lane)	CHP3	N N	1.875				0 47.00)	50.50	1	See above
Burstwick (Ellifoot Lane)	CHP4	N N	1.875				0 47.00		50.50	1	See above
, , , , , , , , , , , , , , , , , , , ,	· ·		1	1	1		1	1	1		Customer has agreed to change to 1 stage settings and we have made a formal request for
				İ					1		them to do so. Update for Jan 2011 - awaiting written confirmation that settings have been
Roxby Quarry landfill	Gas turbine 1	Y N	6.3	6.3	0.0) (0 49.00	ol	50.50		changed.
EPR Glandford Ltd (Fibrogen)	Gen1	Υ	15				0 47.50		51.50		Changed
Infinis (Welbeck landfill)	Gas turbine 1	ly ly	6.75				0 47.50		51.50		Changed March 2010, informed Dec 2010
- 1	, , , , , , , , , , , , , , , , , , , ,	<u> </u>	3.70	5.70	0.0	1		1	500	1	• • • • • • • • • •

								Customer has agreed to change to 1 stage settings. Requested confirmation that settings have
Novartis Grimsby Ltd	CHP1 Y	N	8.4	8.4	0.0	0 48.00	50.50	been adopted.
Rusholme wind farm	Wind turbine 1 N	N	2.05	0	0.0	0		With Operations Manager for consideration
Rusholme wind farm	Wind turbine 2 N	N	2.05	0	0.0	0		See above
Rusholme wind farm	Wind turbine 3 N	N	2.05	0	0.0	0		See above
Rusholme wind farm	Wind turbine 4 N	N	2.05	0	0.0	0		See above
Rusholme wind farm	Wind turbine 5 N	N	2.05	0	0.0	0		See above
Rusholme wind farm	Wind turbine 6 N	N	2.05	0	0.0	0		See above
Rusholme wind farm	Wind turbine 7 N	N	2.05	0	0.0	0		See above
Rusholme wind farm	Wind turbine 8 N	N	2.05	0	0.0	0		See above
Rusholme wind farm	Wind turbine 9 N	N	2.05	0	0.0	0		See above
Rusholme wind farm	Wind turbine 10 N	N	2.05	0	0.0	0		See above
Rusholme wind farm	Wind turbine 11 N	N	2.05	0	0.0	0		See above
Rusholme wind farm	Wind turbine 12 N	N	2.05	0	0.0	0		See above
Lissett wind farm	Wind turbine 1 N	N	2.5	0	0.0	0		Update for Feb 2011 - under consideration by operations manager
Lissett wind farm	Wind turbine 2 N	N	2.5	0	0.0	0		Update for Feb 2011 - under consideration by operations manager
Lissett wind farm	Wind turbine 3 N	N	2.5	0	0.0	0		Update for Feb 2011 - under consideration by operations manager
Lissett wind farm	Wind turbine 4 N	N	2.5	0	0.0	0		Update for Feb 2011 - under consideration by operations manager
Lissett wind farm	Wind turbine 5 N	N	2.5	0	0.0	0		Update for Feb 2011 - under consideration by operations manager
Lissett wind farm	Wind turbine 6 N	N	2.5	0	0.0	0		Update for Feb 2011 - under consideration by operations manager
Lissett wind farm	Wind turbine 7 N	N	2.5	0	0.0	0		Update for Feb 2011 - under consideration by operations manager
Lissett wind farm	Wind turbine 8 N	N	2.5	0	0.0	0		Update for Feb 2011 - under consideration by operations manager
Lissett wind farm	Wind turbine 9 N	N	2.5	0	0.0	0		Update for Feb 2011 - under consideration by operations manager
Lissett wind farm	Wind turbine 10 N	N	2.5	0	0.0	0		Update for Feb 2011 - under consideration by operations manager
Lissett wind farm	Wind turbine 11 N	N	2.5	0	0.0	0		Update for Feb 2011 - under consideration by operations manager
Lissett wind farm	Wind turbine 12 N	N	2.5	0	0.0	0		Update for Feb 2011 - under consideration by operations manager
						1		Update for Feb 2011 - Site electrical engineer confident that changes can be made and will
Monckton Coke	CHP 1 N	N	11.5	0	0.0	0		inform us when changes implemented
Out newton wind farm	Wind N	N	9.3	0	0.0	0		Update for Feb 2011 - Customer currently considering changes
Lindsey oil refinery	CHP N	N	39.4	0	0.0	0		Formal request to change made
								Update for Feb 2011 - Customer currently considering changes, plus any impact on ability to
LGI Leeds	CHP N	N	23.9	0	0.0	0		achieve island mode
Sonoco Board Mills	CHP N	N	7	0	0.0	0		Update for Feb 2011 - Customer currently considering changes
Bagmoor wind farm	Wind turbine 1 N	N	2	0	0.0	0		Update for Feb 2011 - Customer currently considering changes
Bagmoor wind farm	Wind turbine 2 N	N	2	0	0.0	0		Update for Feb 2011 - Customer currently considering changes
Bagmoor wind farm	Wind turbine 3 N	N	2	0	0.0	0		Update for Feb 2011 - Customer currently considering changes
Bagmoor wind farm	Wind turbine 4 N	N	2	0	0.0	0		Update for Feb 2011 - Customer currently considering changes
Bagmoor wind farm	Wind turbine 5 N	N	2	0	0.0	0		Update for Feb 2011 - Customer currently considering changes
Bagmoor wind farm	Wind turbine 6 N	N	2	0	0.0	0		Update for Feb 2011 - Customer currently considering changes
Bagmoor wind farm	Wind turbine 7 N	N	2	0	0.0	0		Update for Feb 2011 - Customer currently considering changes
Bagmoor wind farm	Wind turbine 8 N	N	2	0	0.0	0		Update for Feb 2011 - Customer currently considering changes
Bagmoor wind farm	Wind turbine 9 N	N	2	0	0.0	0		Update for Feb 2011 - Customer currently considering changes
Syngenta	CHP N	N	6.22	0	0.0	0		Update for Feb 2011 - Customer currently considering changes
Cyrigenia	OTII IV	TV TV	0.22	<u> </u>	0.0			Update for Feb 2011 - Customer minded to decline settings changes on safety grounds due to
								frequency sensitive operation of plant and processes on site, awaiting written confirmation of
CIBA Low Moor, Bradford	CHP N	N	9.2	0	0.0	0		customer's stance.
,		<u>r</u>		-				Update for Feb 2011 - Owner/operator is currently considering implications of changes on their
Royd Moor wind farm	Multiple turbines N	N	8	0	0.0	0		turbines with manufacturer
Grimsby CHP (Ex Tioxide)	CHP N	N	26	0	0.0	0		Update for Feb 2011 - Customer currently considering changes
								·

Percentage of installed generator capacity with NEW G59 settings	16%
--	-----

Totals 46% 25% 507.1 172.2 82.5

DNO CE - NEDL total responses as at 01/02/11

All frequency settings stated are current settings and NOT proposed settings unless otherwise stated in the comments field.

User Data Entry	1	Т	T			Т	T		-			
							1	Under	Frequency	Over F	requency	
Site name	Genset	Agreed to changes (Y/N)	Changes implemented (Y/N)	Generator capacity installed (MW)	Generator capacity agreed to change (MW)	Generator capacity changes implemented (MW)	Generator capacity unable to change (MW)		Stage 2 Frequency (Hz)	Stage 1 Frequency (Hz)	Stage 2 Frequency (Hz)	Comments
Knapton generating station	Natural Gas	Υ	N	50.0	50.0	0.0	0.0) 48.0	0	50.5	0	Agreed in principle to change, need to check with OM to confirm. Believe they should not have to pay for changes. Update for November 2010 - have now agreed to change as its now a mandatory requirement of the Dcode. Update for Jan 2011 - generator failed in service, currently trying to repair/replace and are planning to make changes during re-commissioning.
												Although Ineos have not yet agreed to change their settings, we are still in discussions with them and they may yet adopt the required or alternative settings. Update for November 2010 - decision still lies with their service provider @ Siemens, they will chase them for an answer.
Ineos Newton Aycliffe	CHP1	N	N	2.5		0	0	48.0	0 47	.00 50.5	0	Requested update on progress in Jan 2011.
Ineos Newton Aycliffe	CHP2	N	N	2.5	(0	0	48.0	0 47	.00 50.5	0	See above
Ineos Newton Aycliffe	CHP3	N	N	5	(0	0	49.0	0 48	.50 51.50	0	See above
GrowHow generation	Steam	N	N	23.0	0.0	0.0	0.0	N/A	N/A	N/A	N/A	Customer has confirmed that no under or over frequency protection is installed.
West Durham windfarm (Stonefoot)	Wind	Υ	N	25.3	25.3	0.0	0.0	47.0	0	50.5	0	Update for Feb 2011 - Changes scheduled to be made on 11 Feb 2011.
Kielder Hydro	Unit20 (synchronous)	N	N	5.5	0.0	0.0	0.0) 47.7	5	53.0	0	Although the customer has not yet agreed to change their settings, we are still in discussions with them and they may yet adopt the required or alternative settings. Update for Feb 2011 - Currently considering asking customer to install timers and adjust low frequency from 47.75 to 47.5Hz AND reduce high frequency from existing 53Hz down to 51.5Hz.
Kielder Hydro	Unit19 (induction)	N	N	0.5	0.0	0.0	0.0	N/A	N/A	N/A	N/A	No under/over frequency installed
Viking Power Ltd (Teesside gas processing plant)	Natural Gas	Y	Y	50.0								Customer has confirmed adoption of 2 stage settings during shutdown 17/05/10.
												Both gensets exceed proposed requirements in terms of frequency, but not time, customer has
Cleveland Potash	CHP1	N	N	11			11.0			52.5		stated that, for site supply stability and protection reasons there will be no change.
Cleveland Potash	CHP2	N	N	11	0.0	0.0	11.0	47.5	0	52.5	0	See above
Haverton Hill	Gen 1	Υ	Υ	28.0	28.0	28.0	0.0	47.5	0	51.5	0	Customer has compliant frequency settings, but have no timers and will trip on over frequency in c0.05s and under frequency in c0.08s. Update for Feb 2011 - Owner/operator is currently considering implications of changes on their
Holmeside wind farm	Wind turbine 1	N	N	2.8	0.0	0.0	0.0					turbines with manufacturer
Holmeside wind farm	Wind turbine 2	N	N	2.8			0.0)				See above
High volts wind farm	Wind turbine 1	N	N	2.8								See above
High volts wind farm	Wind turbine 2	N	N	2.8		0.0	0.0					See above
High volts wind farm	Wind turbine 3	N	N	2.8)				See above
Harehills wind farm	Wind turbine 1	N	N	2.8	0.0	0.0	0.0)				See above
Harehills wind farm	Wind turbine 2	N	N	2.8	0.0	0.0	0.0)				See above
RVI	CHP 1	N	N	8.5								Update for Feb 2011 - Customer currently considering changes, plus any impact on ability to achieve island mode
Freeman hospital		1	N	1.2								See above
Freeman hospital		1 2 2	N	1.2								See above
Freeman hospital		1 2 2	N	1.4								See above
Freeman hospital		***	N N	1.5								See above
Freeman hospital		N N	N N	1.5					_			See above
Freeman hospital Knabs Ridge wind farm			N	1.5	0.0				+			See above Update for Feb 2011 - Progress update requested from owner/operator
Knabs Ridge wind farm			N	2	0.0							Update for Feb 2011 - Progress update requested from owner/operator
Knabs Ridge wind farm			N	2	0.0							Update for Feb 2011 - Progress update requested from owner/operator
Knabs Ridge wind farm		N	N	2	0.0							Update for Feb 2011 - Progress update requested from owner/operator
Knabs Ridge wind farm		N	N	2	0.0)				Update for Feb 2011 - Progress update requested from owner/operator
Knabs Ridge wind farm	Wind turbine 6	N	N	2	0.0	0.0	0.0)				Update for Feb 2011 - Progress update requested from owner/operator
Knabs Ridge wind farm	Wind turbine 7	N	N	2	0.0	0.0	0.0)				Update for Feb 2011 - Progress update requested from owner/operator
Knabs Ridge wind farm	Wind turbine 8	N	N	2	0.0)				Update for Feb 2011 - Progress update requested from owner/operator
High Swainston wind farm	Multiple wind turbir	n N	N	14)				Update for Feb 2011 - With Operations Manager for consideration
Langley wind farm	Multiple wind turbing	n N	N	8.4								See above
High Hedley Hope wind farm	Multiple wind turbing		N	5.4								See above
Broom Hill wind farm	Multiple wind turbing		N	8.4								See above
Trimdon wind farm	Multiple wind turbing	n N	N	5.5								See above
Northumbrian Water	CHP	N	N	10	0.0	0.0	0.0)	1		1	Update for Feb 2011 - Formal request to change made and followed up, no response yet
Nestle, York	CHP 1	N	N	_	0.0	0.0	0.0					Update for Feb 2011 - Formal request to change made, owner/operator currently considering changes
Nestle, York	CHP 2	N	N	5	0.0				+		+	See above
HOURS FOR	0111 2	1.		+	0.0	0.0	0.0	1	+		+	Customer contacted and asked to change settings, stated that they'd need to contact
Cleveland Incinerator	Gen 1	N	N	18.6	0.0	0.0	0.0					manufacturer, no further response received.

Totals 9% 5% 346.7	153.3	78.0
--------------------	-------	------

Percentage of installed generator capacity with NEW G59 settings	23%

ENW total responses as at 31/01/11

								Under F	requency	Over Fi	equency	
Site name	Genset	Agreed to changes (Y/N)	Changes implemented (Y/N)	Generator capacity installed (MW)	Generator capacity agreed to change (MW)	Generator capacity changes implemented (MW)	Generator capacity unable to change (MW)		Stage 2 Frequency (Hz)	Stage 1 Frequency (Hz)	Stage 2 Frequency (Hz)	Comments
Astra Zeneca Macclesfield	Natural_Gas	Υ	Υ	31.4	31.4	31.4		47.50 Hz @ 20 secs	47.0 Hz @ 500ms	51.5 Hz @ 90 secs	52.0 Hz @ 500ms	New relay fitted.
BNFL Salwick	Natural_Gas	Y	Υ	13.0	13.0	13.0			47.0 Hz @ 500ms		52.0 Hz @ 500ms	Not compliant with DPC7.4.3.7 - reflects stage 2 OF/UF setting for two-stage relay - considered acceptable.
Bolton Waste	Waste	Y	Υ	11.7	11.7	11.7		49.50Hz @120 sec	47.5 Hz @ 500ms	50.5 Hz @ 120 sec		Abnormal relay fitted - settings shown are the best available on the relay. New relay requested which will provide full compliance - expected in 12 months.
Innovia Films	Fuel_Oil	Υ	N	5.3	5.3	0.0		0.2000	47.0 Hz @ 500ms		50.5 Hz @ 500ms	Non compliant relay fitted. Seem reluctant to comply. Avoiding issue - will need formal letter to force issue
Cerestar phase 1	Natural_Gas	Υ	Y	14.0	14.0	14.0			48.0 Hz @ 500ms	51.5 Hz @ 500ms	54.68 Hz Inst.	Single stage relay fitted - changes have been made but reamin non-compliant. E-mail sent to request revision to the LF setting.
Coal Clough Wind Farm,	Wind_onshore	Y	Y	9.6	9.6	9.6			47.5 Hz @ 500ms		51.5 Hz @ 500ms	Single stage relay with compliant settings.
Iggesund Board (Thames Board Mill)	Natural_Gas	N	N	49.0	0.0	0.0		48Hz @ 3.0secs	47.0 Hz @ 300ms		52.0 Hz @ 300ms	Still assessing impact on plant.
James Cropper	Natural_Gas	Y	Y	14.3	14.3	14.3		47.5hz @ 10 secs			51.5 Hz @ 10 secs	Single stage relay fitted. Setting amended following discussion however setting remain non- compliant.
Lambrigg Windfarm	Wind_onshore	Y	N	6.5	6.5	0.0			48.0 Hz @ 500ms		50.5 Hz @ 500ms	No progress to report.
Matthews Farm	Natural_Gas	Y	Y	10.1	10.1	10.1		47.5 Hz @ 20secs	47.0 Hz @ 500ms		52.0 Hz @ 500ms	Partially complient. L/F settings - two stage but only sngle stage on H/F. Needs bringing into line with settings requested.
Mirror Colour Papers	Fuel_Oil	N	N	5.3	0.0	0.0			47.0 Hz @ 500ms		50.5 Hz @ 500ms	Non compliant. Relay seems adequate but can't get progress on re-setting.
Oldside Windfarm	Wind_onshore	N	N	5.4	0.0	0.0						EoN should be contacted regarding discussions on status.
Winscales Windfarm 2	Wind_onshore	Y	Y	6.8	6.8	6.8		47.5 Hz @ 20secs	47.0 Hz @ 500ms	51.5 Hz @ 90secs	52.0 Hz @ 500ms	Compliant two stage relay.
Clifton Marsh Landfill	Landfill_Gas	Y	Y	6.1	6.1	6.1			47.5 Hz @ 500ms		51.5 Hz @ 500ms	Compliant single stage relay.
Wharrells Hill Windfarm	Wind_onshore	Y	Υ	10.4	10.4	10.4		47.5 Hz @ 20secs	47.0 Hz @ 500ms	51.5 Hz @ 90secs	52.0 Hz @ 500ms	Compliant two stage relay.
Cerestar phase 2	Natural_Gas	Y	Y	15.6	15.6	15.6			48.0 Hz @ 500ms	51.5 Hz @ 500ms.	54.68 Hz Inst.	Single stage relay fitted - changes have been made but reamin non-compliant. E-mail sent to request revision to the LF setting.
Kelloggs Trafford Park	Natural_Gas	Y	Y	5.6	5.6	5.6		47.5 Hz @ 20secs	47.0 Hz @ 500ms		51.5 Hz @ 500ms	Changes have been made which are now much cloer to new requirements.
Caton Moor Windfarm (New)	Wind_onshore	Y	N	16.0	16.0	0.0			48.0 Hz @ 500ms		50.5 Hz @ 500ms	No progress to report.
Winscales Moor Windfarm	Wind_onshore	Y	Y	6.0	6.0	6.0		47.5 Hz @ 20secs	47.0 Hz @ 500ms		52.5 Hz @ 500ms	Unusual HF setting. This needs clarification.
Scottish & Newcastle, Royal Brewery	Biomass	Υ	N	5.9	5.9	0.0			47.0 Hz @ 340ms		50.5 Hz @ 340ms	Contacted several times and agree to investigate but refuse to respond.

To	otals	85%	65%	248	188	154
----	-------	-----	-----	-----	-----	-----

Percentage of installed generator capacity with NEW G59 settings	62%

SSE - SEPD G59 Frequency Change Response - 14/01/11

User Data Entry							Γ	Under F	requency	Over F	requency	1
Site name	Genset	Agreed to changes (Y/N)	Changes implemented (Y/N)	Generator capacity installed (MW)	Generator capacity agreed to change (MW)	implemented		Stage 1 Frequency (Hz)	Stage 2 Frequency (Hz)	Stage 1 Frequency (Hz)	Stage 2 Frequency (Hz)	Comments
Arreton Nurseries	Medium CHP	Υ	Υ	15	15	15		47.5	N/A	51.5	5 N/A	Done
BP - Enichem - Fawley Now Npower	Gas	Υ		49.9	49.9			47		50.5	5	Agreed changes - Awaiting confirmation of implementation
BP- Wytch Farm	Medium CHP	V		12	12			47		50.5		Agreed changes - Awaiting confirmation of implementation
br- wyton raini		1		12	12			47		50.0		Awaiting commitment of implementation
Chineham	Waste Incineration (not CHP)	Υ	Υ	12	12	12		47.5	N/A	51.5	N/A	Done
Esso 37 - Fawley	Oil	Y		37	37			47		50.5	5	Agreed to implement changes. In Negotiation to bring forward implementation. - Customer requested implementation to be deferred until next planned shutdown JUNE 2011 Generation DCRP Representative to apply pressure to comply.
												In Negotiation - Negotiating with BPI, Excel's consultant.
Excel Energy Centre Heathrow	? Medium CHP	Y	Y	9 13.5	13.5	13.5		47 47		50.5 51.5		Awaiting confirmation of implementation Done
Heatillow		1	1	15.5	13.3	15.5		47		31.0	7	Doile
Hilsea	Waste Incineration (not CHP)	Υ	Υ	16.9	16.9	16.9		47.5	N/A	51.5	N/A	Done
Humbley Grove	Other Generation	Υ	Υ	20	20	20		47.5	N/A	51.5	N/A	Done
	Waste Incineration											
Lakeside Generation - Grundon Waste	(not CHP)	Υ	Υ	45.7	45.7	45.7		47.5	4	7 51.5	5 52	Done
Marchwood	Waste Incineration (not CHP)	V		17	17			47		50.5	-	Agreed to implement changes. In Negotiation to bring forward implementation. - Customer requested implementation to be deferred until next planned shutdown MAY 2011 Generation DCRP Representative to apply pressure to comply.
Mogden Sewage Works	Medium CHP	Y	Υ	24.6		24.6			N/A		5 N/A	Done
Portals Overton	Medium CHP	Υ	Υ	6	6	6		47.5	N/A	51.5	N/A	Done
SEPG - Burghfield	Other Generation	Υ	Υ	48	48	48		47.5	N/A	51.5	N/A	Done
SEPG - Chickerell	Other Generation	Υ	Υ	48	48	48		47.5	N/A	51.5	N/A	Done
SEPG Chippenham	Other Generation	Υ	Υ	10.5	10.5	10.5		47	N/A	52	N/A	Done
SEPG Five Oaks	Other Generation	Υ	Υ	8	8	8		47		51.5	5	Done, Site Specific - Well over G59/2 New control panels being fitting at present new G59/2 relays fitted settings applied on witness testing Jan 2011
SEPG - Thatcham	Other Generation	Υ	Υ	10	10	10		47	N/A	52	N/A	Done
Shanks Waste	Waste Incineration (not CHP)	V	V					47		51.5		Dana
Slough Industrial Estates	, ,	T	T	0		0						Done
No. 9 T/A	Gas / HFO	Υ	Υ	8	8	8		47.5	4	7 52.5	5 N/A	Done
Slough Industrial Estates	Landfill gas,sewage gas,											
No. 12 T/A Slough Industrial Estates	biogas (not CHP)	Υ	Υ	15	15	15		47.5	4	7 52.5	N/A	Done
No. 14 T/A	Gas / HFO	Υ	Υ	15	15	15		47.5	4	7 52.5	N/A	Done
Slough Industrial Estates No. 15 T/A	Landfill gas,sewage gas, biogas (not CHP)	Y	Υ	37.5	37.5	37.5		47.5	4	7 52.5	5 N/A	Done
Slough Industrial Estates No. 16 T/A	Landfill gas,sewage gas, biogas (not CHP)	Y	Υ	8.1	8.1	8.1		47.5		7 52.5	5 N/A	Done
Slough Industrial Estates GT (Gas Turbine)	Landfill gas,sewage gas, biogas (not CHP)	Y	Y	23	23	23		47.5	4	.7 52.5	5 N/A	Done
Slough Fibre Fuels No. 17 T/A	Landfill gas,sewage gas, biogas (not CHP)	Υ	Υ	12	12	12		47	N/A	51 5	5 N/A	Done
Southampton General Hospital	Medium CHP	Y	Y	8.6	8.6	8.6		47.5	N/A	51.5	N/A	Done
Southampton Geothermal	Medium CHP	Υ	Υ	7	7	7		47	N/A	52	N/A	Done

	1	1	T	1	ı					
	Landfill									
	gas,sewage gas,									
Sutton Courtney	biogas (not CHP)	Υ	Y 13	13	13	47.5	47	51.5	N/A	Done
Tangmere	Medium CHP	Υ	Y 10.25	10.25	10.25	47.5		51.5		Done
	Landfill									
	gas,sewage gas,									
Wapseys Wood	gas,sewage gas, biogas (not CHP)	Υ	Y 11.2	11.2	11.2	47.5		51.5		Done
Westmill Windfarm	Onshore Wind	Υ	Y 6.9	6.9	6.9	47.5	N/A	51.5	N/A	Done
	Landfill									
	gas,sewage gas,									
Whites Pit	gas,sewage gas, biogas (not CHP)	Υ	Y 7.5	7.5	7.5	47	N/A	52	N/A	Done

Totals	100%	85%	592	592	467
Totals	10070	0070	332	332	407

Percentage of installed generator capacity with NEW G59 settings	79%

SSE - SHEPD total responses as at 14/01/11

								Under F	requency	Over Fi	equency	
Site name	Genset		Changes		Generator capacity agreed to change (MW)	Generator capacity changes implemented (MW)	Generator capacity unable to change (MW)		Stage 2 Frequency (Hz)	Stage 1 Frequency (Hz)		Comments
Achairn	Wind	Υ	Υ	7.5	7.5	7.5		47.5Hz	47.0Hz	52.0Hz	N/A	
Artfield Fell	?	Υ	Υ					47.5Hz	47.0Hz	51.5Hz	52.0Hz	
Balcas	?	Υ	Υ					47.5Hz	47.0Hz	52.0Hz	N/A	
Cairnmore	?	Υ	Υ					47.5Hz	47.0Hz	52.0Hz	N/A	
Carcant	?	Υ	Υ					47.5Hz	47.0Hz	51.5Hz	52.0Hz	
Clachan Flats	?	Υ	Υ					47.5Hz	47.0Hz	52.0Hz	N/A	
Dalswinton	?	Υ	Υ					47.5Hz	47.0Hz	51.5Hz	52.0Hz	
Eday EMEC	?	Υ	Υ					47.0Hz	N/A	52.0Hz	N/A	
Fairburn	?	Υ	Υ					47.5Hz	47.0Hz	52.0Hz	N/A	
Farr	?	Υ	Υ					47.0Hz	N/A	52.0Hz	N/A	
Forss 2	Wind	Υ	Υ	5.3	5.3	5.3		47.5Hz	N/A	51Hz	N/A	
Hill of Fiddes	Wind	Υ	Υ	7.5	7.5	7.5		47.5Hz	47.0Hz	52.0Hz	N/A	
Kilbraur	?	Υ	Υ					47.5Hz	47.0Hz	52.0Hz	N/A	
Lochaber Smelter	Hydro	Υ		6	6							
Lochaber Smelter (New)	?	Υ	Υ					47.5Hz	47.0Hz	52.0Hz	N/A	
Meall An Tuirc (Novar)	Wind	Υ	Υ	8	8	8		47Hz	45Hz	50.5Hz	51Hz	
Millennium	?	Υ	Υ					48.5Hz	47.0Hz	51.5Hz	52.5Hz	
Bendeallt Novar (Bendealt)	?	Υ						47Hz	45Hz	50.5Hz	51Hz	
Sanday (Spurness)	Wind	Υ		8.25	8.25			47.0Hz	N/A	51Hz	N/A	
Stromness EMEC	Wind	Υ	Υ	7	7	7		47.5Hz	47.0Hz	52.0Hz	52.5Hz	
Struie	?	Υ	Υ					47.0Hz	N/A	52.0Hz	N/A	
Toddleburn	?	Υ	Υ					47.0Hz	N/A	52.0Hz	N/A	
Tullo Windfarm	?	Υ	Υ					47.5Hz		51.5Hz		
Baldovie Waste	Waste incineration (not CHP)	V	V	10	10	10		47.5Hz		51.5Hz		
Dummuie (Insch)	Onshore wind	V	<u> </u>	10	10	10		47.5Hz		51.5Hz		
Cassley	Hydro	T V	<u> </u>	10				47.5Hz		51.5Hz		
Bendealt	Onshore wind	V	<u> </u>	10	10	10		47.5Hz		51.5Hz		
Beinn Ghlas	Onshore wind	V	<u> </u>	9	9	3		47.5Hz		51.5Hz		
Meall An Tuirc	Onshore wind	V	<u> </u>	0	0	0		47.5Hz		51.5Hz		
Striven	Hydro	V	<u> </u>	0	0	0		47.5Hz		51.5Hz		
Sanday	Onshore wind	T V	<u> </u>	7.5	7.5	7.5		47.5Hz		51.5Hz		
Sanuay	Tidal stream &	ī	T	7.5	7.5	7.5		47.3HZ		51.502		
Stromness METC	wave power	v	V	7	7	7		47.5Hz		51.5Hz		
Fasnakyle	Hydro	· Y	· Y	7	7	7		47.5Hz		51.5Hz		
Gaur	Hydro	· V	· V	6.5	6.5	6.5		47.5Hz	 	51.5Hz		
Lochgair	Hydro	· V	<u> </u>	0.5	0.5	0.5		47.5Hz	 	51.5Hz		
Alt na Lairge		Y	<u>'</u>	0	0	6		47.5Hz	1	51.5Hz		
Sron Mor	Hydro	· V	<u>'</u>	5.2	5.2	5.2		47.5Hz	1	51.5Hz		
Foyers Falls	Hydro	· V	<u>'</u>	5.2	5.2	5.2		47.5Hz	1	51.5Hz		
Beatrice Windfarm	Off Shore Wind	· V	· V	10	10	10		47.5Hz	 	51.5Hz		
Deathice Williami	On Shore wind	1	1	10	10	10	1	TI.JIIZ		01.0HZ		

Totals	100%	92%	173	173	159
--------	------	-----	-----	-----	-----

Percentage of installed generator capacity with NEW G59 settings	92%

DNO SPD total responses as at 28/01/11

•							Under F	requency	Over F	requency	
Site name	Genset	Agreed to changes (Y/N)	Changes implemented (Y/N)		Generator capacity agreed to change (MW)	impiementea		Stage 2 Frequency (Hz)	Stage 1 Frequency (Hz)	Stage 2 Frequency (Hz)	Comments
SPD1	wind - onshore			6.0)						Will change to revised settings at earliest opportunity
SPD2	wind - onshore	у	n	24.0	24.0		47.50	47.00	51.50	52.00	Will change to revised settings at earliest opportunity
SPD3	wind - onshore	у	n	6.0	6.0		47.50	47.00	51.50	52.00	Will change to revised settings at earliest opportunity
SPD4	?			6.0)						Commissioning delayed, will apply G59/2
SPD5	landfill gas	у		5.0	5.0						Currently apply 3 frequency will change to 2 stages as per revised settings.
SPD6	landfill gas	у		4.3	4.3						Currently apply 3 frequency will change to 2 stages as per revised settings.
SPD7	landfill gas	у		3.2	3.2						Currently apply 3 frequency will change to 2 stages as per revised settings.
SPD8	wind - onshore	n	n	8.0)		48.00)	51.00		Confirmed following settings:48Hz @ 0.2s, 51Hz @ 0.2sec. No indication of intention to change.
SPD9	wind - onshore	n	n	20.0)		47.00)	52.00		Settings already set wider than request due to nuisance tripping (47Hz @ 1s and 52 Hz @ 1s). Do not expect them to move to the proposed settings Will change to revised settings following confirmation from SP that we have modified ours to
SPD10	wind - onshore	у		18	18		47.50	47.00	51.50		coordinate. Existing settings revised 26/10/2009 to stage 1 47.5Hz @ 20s, 51.5Hz @ 0.5s. Stage 2
SPD11	biomass	У		12.5	12.5		47.50	47.00	51.50)	47Hz@0.5s, HF - n/a
SPD12	natural gas	у		5	5 5						Will arrange for settings to be revised.
SPD16	natural gas	у	у	15		15	47.5	5	51		Revised settings applied as follows: ST G1 UF 47.5Hz, ST G2 UF 47.5Hz (both previously 45Hz), GT G3 - unchanged at 48.5Hz @ 0.02062s and 51Hz @ 0.01961s
SPD17	wind - onshore	у		15.6							Will change to revised settings at earliest opportunity
SPD18	wind - onshore	У		17.5							Will change to revised settings at earliest opportunity
SPD19	wind - onshore	У		13.2							Will change to revised settings at earliest opportunity
SPD20	wind - onshore	У		18.2							Will change to revised settings at earliest opportunity
SPD21	?	У		29.4							Will change to revised settings at earliest opportunity
SPD22	wind - onshore	у		27							Will change to revised settings at earliest opportunity
SPD23	wind - onshore	У		19.5							Will change to revised settings at earliest opportunity
SPD24	wind - onshore			22	2						No response
SPD25	hydro	у	n	11	11		48	3	50.5		Current settings as indicated - will apply revise settings when a suitable outage can be obtained.
SPD26	hydro	у	n	6	6		48	3	50.5		Will apply revise settings when a suitable outage can be obtained.
SPD27	hydro			12							No frequency protection fitted
SPD28	hydro			13	3						No frequency protection fitted
SPD29	hydro	у	n	23							No frequency protection fitted except at Drumjohn (<5MW). Will apply revised settings at Drumjohn at next suitable outage.
SPD30	hydro			23	3						No frequency protection fitted

Tatala 700/ 40/ 200 270 45	
Totals 70% 4% 383 273 15	

Percentage of installed generator capacity with NEW G59 settings	4%

DNO SPM total responses as at 28/01/11

								Under	Frequency	Over F	requency	
Site name	Genset	Agreed to	Changes	Generator capacity installed (MW)		implemented	Generator capacity unable to change (MW)		Stage 2 Frequency (Hz)	Frequency	Stage 2 Frequency (Hz)	Comments
SPM1	CHP	у	у	5	5	5		47.5		51.5		Relay type: GEC MFVU21. Stage 1 relay only
SPM12	onshore wind			14.5	14.5							Will change to revised settings following confirmation from SP that we have modified ours to coor
SPM17	hydro	У	n	30	30				47		51.02	Settings unchanged as yet
SPM20	CHP			49	49							Do not have a generator at their site! Have a large motor.
SPM24	CHP			10	10							Generation not connected any more
SPM28	onshore wind	у		7.2	7.2							Will require a site visit to confirm - may take some time. Still awaiting confirmation
SPM29	onshore wind	у		14	14							Will arrange to change settings and advise when complete
SPM30	onshore wind	у		20	20							Will arrange to change settings and advise when complete

Totals	63%	13%	150	150	5

Percentage of installed generator capacity with NEW G59 settings	3%

DNO Central Networks (East) as at 05/11/10

								Under F	requency	Over F	requency	
Site name	Genset	Agreed to changes (Y/N)	Changes implemented (Y/N)	Generator capacity installed (MW)	Generator capacity agreed to change (MW)	implemented	Generator capacity unable to change (MW)		Stage 2 Frequency (Hz)	Stage 1 Frequency (Hz)	Stage 2 Frequency (Hz)	Comments
Mr Andrew Estrop, Enviroenergy, London Road Heat Store 12, Nottingham, NG2 3AB.	Steam Turbine			11.37								Customer visit to be arranged early February 2011 to discuss issue and provide guidance and support.
Mr David Henson, Wykes Power, Goosey Lodge Power Plant, Wymington, Rushden, Northamptonshire, NN10 9LU.	Landfill	N	N	15.00	0.00	0.00	15.00	N/A	47.00(0.2s)	N/A	50.50(0.2s)	Existing settings retained using 2-stage relay - altering settings could lead to overspeed tripping on generator.
Mr Graham Heatrick, British Sugar plc, Muskham Road, Kelham, Newark, Nottinghamshire, NG24 1DL.	Natural Gas	Y	Υ	10.00	10.00	10.00	0.00	47.50(0.5s)	N/A	52.00(0.5s)	N/A	New setting applied using 1-stage relay.
Mr Rob Robinson, Chief Electrical Engineer, The Boots Company plc, Thane Road, Beeston, Nottingham, Nottinghamshire, NG9 1BS.	Liquid Fuel Oil (LFO) (3 x 4.5)	N	N	13.50	0.00	0.00	3 x 4.50	48.00(3.1s)	N/A	52.0(3.1s)	N/A	Existing setting using 1-stage relay - no change.
Mr Kevin Starkey, Roquette, 9-11, Sallow Road, Weldon North Industrial Estate, Corby, Nothamptonshire, NN17 5JX.	CHP Line 1 (Natural Gas/LFO)	N	N	7.50	0.00	0.00	7.50	48.6(2.5s)	46.50(0.1s)	50.50(0.5s)	N/A	Existing settings retained will advise posible changes at end of year after review of plant etc.
Mr Kevin Starkey, Roquette, 9-11, Sallow Road, Weldon North Industrial Estate, Corby, Nothamptonshire, NN17 5JX.	CHP Line 2 (Natural Gas/LFO)	N	N	7.50	0.00	0.00	7.50	48.6(2.5s)	46.50(0.1s)	50.50(0.5s)	N/A	Existing settings retained will advise posible changes at end of year after review of plant etc.
Mr Ray Carvell, Celenese Acetate, Station Road, Spondon, Derby, DE 21 7BP.	CHP (2 x 12.65)	N	N	25.30	0.00	0.00	2 x 12.65	48.75(10s)	N/A	N/A	N/A	Site closing September 2011 no further works intended.

10.0

14% 14%

Totals

Percentage of installed generator capacity with NEW G59 settings	11%

90.2 10.0

DNO Central Networks (West) as at 05/11/10

								Under	Frequency	Over F	requency	
Site name	Genset	Agreed to changes (Y/N)	Changes implemented (Y/N)	Generator capacity installed (MW)	Generator capacity agreed to change (MW)	Generator capacity changes implemented (MW)	Generator capacity unable to change (MW)		Stage 2 Frequency (Hz)	Stage 1 Frequency (Hz)	Stage 2 Frequency (Hz)	Comments
Mr Malcolm Harrison, Welsh Power-Leven Power, Redditch Gas Turbines, Windsor	Liquid Fuel Oil										1	
Road, Redditch, Worcestershire, B97 6DJ.	(LFO)	Y	Υ	25.00	25.00	25.00	0.00	47.49(0.5s)	N/A	51.49(0.5s)	N/A	New setting applied using 1-stage relay.
Mr Graham Muir, MES Environmental, Crown Street Wolverhampton, West	, ,							, ,		` '		
Midlands, WV1 1QB - Site Crown Street Wolverhampton.	Ansaldo Steam	N	N	7.50	0.00	0.00	7.50	48.0(0.5s)	N/A	50.5(0.5s)	N/A	Existing setting using 1-stage relay - no change.
Mr Graham Muir, MES Environmental, Crown Street Wolverhampton, West												
Midlands, WV1 1QB - Site Lister Road, Dudley.	Ansaldo Steam	N	N	6.00	0.00	0.00	6.00	48.0(0.5s)	N/A	51.0(0.5s)	N/A	Existing setting using 1-stage relay - no change.
Mr Graham Muir, MES Environmental, Crown Street Wolverhampton, West												
Midlands, WV1 1QB - Site Sideway, Stoke-On-Trent.	Waste to Energy	Υ	Υ	15.23	15.23	15.23	0.00	47.5(0.5s)	N/A	51.5(0.5s)	N/A	New setting applied using 1-stage relay.
Mr Jon Arkley, Gastec Packington Partnership, Packington Lane, Little Packington,												
Meriden, Coventry, CV7 7HN.	Landfill			8.65								Customer contacted again 28/1/2011 by email requesting information.
Mr Paul Boulton, Control Maintenance Manager, Kraft Foods Ltd, Ruscote Avenue,	CHP/Gas Oil (2											
Banbury Oxon, OX16 7QU.	x 3.8)	Y	Y	7.60	7.60	7.60	0.00	48(0s)	N/A	50.5(0s)	N/A	New setting applied using 1-stage relay.
Mr Barry Coleman, Operations Manager, Alta Estate Services Ltd, University of												
Birmingham, Maintenance Building, South West Campus, Edgbaston, Birmingham,												Customer contacted again 28/1/2011. Information already sent (not received by CN) - will send
B15 2TT.	Natural Gas			7.37								again.

Totals	43%	43%	77.4	47.8	47.8

Percentage of installed generator capacity with NEW G59 settings	62%

DNO UK Power Networks (EPN) as at 17/12/10								Under F	requency	Over Fr	equency	1
Site Name	Geneset	Agreed to Changes (Y/N)	Changes implemented (Y/N)	Generator capacity installed (MW)	Generator capacity agreed to change (MW)	Generator capacity changes implemented (MW)	Generator capacity unable to change (MW)	Stage 1 Frequency (Hz)	Stage 2 Frequency (Hz)	Stage 1 Frequency (Hz)	Stage 2 Frequency (Hz)	Comments
POWER STATION GREEN LANE, SHANKS WASTE SOLUTION, GREEN LANE, STEWARTBY, BEDFORD, BEDFORDSHIRE, MK43 9LY	BIOMASS	N	N	12.000	0	0		47.5		51.5		No Response to Date
SUTTON POWER STATION, ENERGY POWER RESOURCES LTD, ELEAN BUSINESS PARK, SUTTON, ELY, CAMBRIDGESHIRE, CB6 2QE	BIOMASS	N	N	38.000	0	0		47.5		51.5		No Response to Date
EPR EYE POWER STATION, OAKSMERE BUSINESS PARK, EYE AIRFIELD INDUSTRIAL ESTATE, EYE, SUFFOLK, IP23 7DH	WASTE INCINERATION	N	N	14.000	0	0		47.5		51.5		No Response to Date
MUCKING LANDFILL SITE, EDL OPERATIONS LIMITED, MUCKING WHARF ROAD, MUCKING, STANFORD-LE-HOPE, ESSEX, SS17 0RN	LANDFILL GAS	N	N	7.890	0	0		47.5		51.5		No Response to Date
BRITISH SUGAR PLC, SUGAR BEET FACTORY, HOLLOW ROAD, BURY ST EDMUNDS, SUFFOLK, IP32 7BZ	CHP	Y	N	50.000	50	0	0	47		50.5		Need futher advise
AVERLEY LANDFILL SITE, INFINIS PLC, AVERLEY, LANDFILL SITE, SANDY LANE, AVELEY, RM15 4HL	LANDFILL GAS	N	N	6.000	0	0		47.5		51.5		No Response to Date
33kV GENERATOR MUCKING MARSHES, EDL OPERATIONS LIMITED, MUCKING MARSHES, ESSEX, SS17 0RN	LANDFILL GAS	N	N	21.000	0	0		47.5		51.5		No Response to Date
RAINHAM LANDFILL, EDL OPERATIONS, COLDHARBOUR LANE, RAINHAM, ESSEX, RM13 9DA	LANDFILL GAS	N	N	25.000	0	0		47.5		51.5		No Response to Date
BRITISH SUGAR PLC, CANTLEY SUGAR FACTORY REFINERY, CANTLEY, NORWICH, NORFOLK, NR13 3ST	CHP	N	N	18.500	0	0		47.5		51.5		No Response to Date
THETFORD POWER STATION, FIBROPHOS LIMITED, TWO MILE BOTTOM, MUNDFORD ROAD, THETFORD, NORFOLK, IP24 1LX	BIOMASS	N	N	48.125	0	0		47.5		51.5		No Response to Date
BARLING LANDFILL SITE, CORY ENVIRONMENTAL LTD, CHURCH ROAD, BARLING MAGNA, SOUTHEND-ON-SEA, ESSEX, SS3 0UL	LANDFILL GAS	N	N	6.700	0	0		47.5		51.5		No Response to Date
COLDHAM WINDFARM, SCOTTISH POWER UK PLC, WISBECH, CAMBRIDGESHIRE, PE14 0LU	WIND	N	N	16.000	0	0		47.5		51.5		No Response to Date
PITSEA LANDFILL SITE, EDL OPERATIONS LIMITED, PITSEA HALL LANE, PITSEA, ESSEX, SS16 4UW	LANDFILL GAS	N	N	40.000	0	0		47.5		51.5		No Response to Date
GLASSMOOR WINDFARM, FENLAND WINDFARMS LTD, OLMILLS ROAD, WHITTLESEY, PETERBOROUGH, CAMBRIDGE, PE7 2LT	Wind	N	N	16.600	0	0		47.5		51.5		No Response to Date
DOGSTHORPE LANDFILL SITE, INFINIS PLC, WELLAND ROAD, DOGSTHORPE, PETERBOROUGH, CAMBRIDGESHIRE, PE1 3TD	LANDFILL GAS	N	N	5.500	0	0		47.5		51.5		No Response to Date
NORTH PICKENHAM WINDFARM, ENERTAG UK LIMITED, NORTH PICKENHAM ROAD, SWAFFHAM, NORFOLK, PE37 7QX	WIND	N	N	16.640	0	0		47.5		51.5		No Response to Date
REDTILE WINDFARM, FENLAND WINDFARMS LTD, STRAIGHT DRIVE, WARBOYS, HUNTINGDON, CAMBRIDGESHIRE, PE28 2UH	WIND	N	N	24.000	0	0		47.5		51.5		No Response to Date
RANSON MOOR WINDFARM, FENPOWER LTD, BENWICK ROAD, DODDINGTON, MARCH, CAMBRIDGESHIRE, PE15 0TY	WIND	N	N	10.000	0	0		47.5		51.5		No Response to Date
STAGS HOLT WINDFARM, EON UK RENEWABLE DEVELOPMENTS LTD, COLDHAM BANK, MARCH, CAMBRIDGE SHIRE, PE15 0BT	WIND	Y	Υ	20.000	20	20	0	47.5	47	51.5	52	
MCCAIN FOODS (GB) LTD, FUNTHAMS LANE, WHITTLESEY, PETERBOROUGH, PE7 2PG	WIND	Y	Υ	8.000	8	8	0	47.5	47	51.5	52	
LANDFILL GENERATION MEDEBRIDGE, VIRIDOR WASTE MANAGEMENT, MEDEBRIDGE ROAD, GRAYS, ESSEX, RM16 5TZ	LANDFILL GAS	N	N	5.250	0	0		47.5		51.5		No Response to Date
BAYER CROPSCIENCE LTD, SWEETBRIAR ROAD, NORWICH, NORFOLK, NR6 5AP	CHP	N	N	5.024	0	0		47.5		51.5		No Response to Date
KODAK HARROW LTD (UK), HEADSTONE DRIVE, HARROW, MIDDLESEX, HA1 4TY	CHP	Y	N	18.750	18.75	0	0	47.5		51.5		
EDMONTON INCINERATION PLANT, LONDON WASTE LTD, ANGEL ROAD, EDMONTON, LONDON, N18 3AG	WASTE INCINERATION	Y	N	60.000	60	0	0	48.5		51.5		London Waste need to investigate futher to determin whether they could alter the proposed settings.

Totals	21%	8%	493.0	156.8	28.0

Percentage of installed generator capacity with new G59 settings 5.68%

DNO UK Power Networks (LPN) as at 17/12/10								Under F	requency	Over Fro	equency	
Site Name	Geneset	Agreed to Changes (Y/N)	Changes implemented (Y/N)	Generator capacity installed (MW)		capacity changes implemented	Generator capacity unable to change (MW)		Stage 2 Frequency (Hz)	Stage 1 Frequency (Hz)	Stage 2 Frequency (Hz)	Comments
VEOLIA ES SELCHP LTD, KENNELS SITE, DEPTFORD BUSINESS CENTRE, LANDMANN WAY, LONDON, SE14 5RS	CHP	N	N	35.900	0	0		47.5		51.5		No Response to Date
ARCHER DANIELS MIDLAND ERITH LTD, ALBION WHARF, CHURCH MANORWAY, ERITH, KENT, DA8 1DL (ERITH OIL WORKS)	CHP	N	N	18.505	0	0		47.5		51.5		No Response to Date
THAMES WATER UTILITIES LTD, CROSSNESS SEWAGE TREATMENT WORKS, BELVEDERE ROAD, ABBEY WOOD, LONDON, SE2 9AQ	DIESEL	Y	N	19.200	19.2	0	0	47.5	46.5	51.5	52.5	Various different relays with different settings, see email 7-12-10
TATE & LYLE INDUSTRIES LTD, THAMES REFINERY, FACTORY ROAD, LONDON, E16 2EW TATE AND LYLE	CHP	N	N	28.530	0	0		47.5		51.5		No Response to Date
CITIGEN LONDON LTD, 47-53 CHARTERHOUSE STREET, LONDON, EC1M 6AH	CHP	N	N	39.500	0	0		47.5		51.5		No Response to Date

Percentage of installed generator capacity with new G59 settings 0.00%

Totals 20% 0% 141.6 19.2

DNO UK Power Networks (SEPN) as at 17/12/10								Under Frequency		Over Frequency		
Site Name	Geneset	Agreed to Changes (Y/N)	Changes implemented (Y/N)	Generator capacity installed (MW)	capacity	impiementea	Generator capacity unable to change (MW)	Stage 1 Frequency (Hz)	Stage 2 Frequency (Hz)	Stage 1 Frequency (Hz)	Stage 2 Frequency (Hz)	Comments
INFINIS PLC, STANGATE QUARY, LANDFILL SITE, BOROUGH GREEN, SEVENOAKS, KENT, TN15 8RA	LANDFILL GAS	N	N	6.000	0	0		47.5		51.5		No Response to Date
BRETT WASTE MANAGEMENT, SHELFORD LANDFILL, BROAD OAK ROAD, CANTERBURY, KENT, CT2 0PR	LANDFILL GAS	N	N	7.000	0	0		47.5		51.5		No Response to Date
GROVEHURST ENERGY LTD, KEMSLEY MILL, RIDHAM AVENUE, KEMSLEY, SITTINGBOURNE, KENT, ME10 2TD	?	N	N	42.000	0	0		47.5		51.5		No Response to Date
TOWNSEND HOOK LTD, PAPERS MILL, MILL STREET, SNODLAND, KENT, ME6 5AX	CHP	N	N	40.000	0	0		47.5		51.5		No Response to Date
STAR ENERGY, OILD FIELD, BOG COMMON, PULBOROUGH, WEST SUSSEX, RH20 ER	GAS	N	N	10.800	0	0		47.5		51.5		No Response to Date
S A PRODUCE (UK) LTD, THANET NURSERIES, LITTLE WATERHAM FARM, FAVERSHAM, KENT, ME13 9EJ	CHP	N	N	10.000	0	0		47.5		51.5		No Response to Date
SUSSEX WASTE RECYCLING LTD, UNIT 2, CHARTWELL ROAD, LANCING, WEST SUSSEX, BN15 8TU	LANDFILL GAS	N	N	5.400	0	0		47.5		51.5		No Response to Date
BEECHAMS WORKS	?	Y	N	1.600	1.6	0	0.0	47.05		50.41		Now exporting below 5MW
KENT ENVIROPOWER LTD, ALLINGTON GENERATION, 20/20 INDUSTRIAL ESTATE, LAVERSTOKE ROAD, MAIDSTONE, KENT, ME16 0LE	DIESEL	N	N	40.000	0	0		47.5		51.5		No Response to Date
THANET ENERGY LIMITED, THANET EARTH EXEMPT NETWORK, SEMARK ROAD, BROOKSEND, BIRCHINGTON, KENT, CT7 0JL	GAS	N	N	30.000	0	0		47.5		51.5		No Response to Date
BIFFA LTD, LANDFILL GENERATION, BROOKHURST WOOD LANDFILL SITE, LANGHURSTWOOD ROAD, HORSHAM, WEST SUSSEX, RH12 4QD	LANDFILL GAS	N	N	5.330	0	0		47.5		51.5		In Contact email 18-11-10
BIFFA LTD, BEDDINGHAM LANDFILL SITE, BEDDINGHAM, LEWES, EAST SUSSEX, BN8 6JX	LANDFILL GAS	N	N	5.200	0	0		47.5		51.5		No Response to Date

Percentage of installed generator capacity with new G59 settings 0.00%

Totals 8% 0% 203.3 1.6

National Summary

Generator capacity installed (MW)	Generator capacity agreed to change (MW)	Generator capacity changes implemented (MW)
3912.7	2437.3	1358.1

Percentage of installed generator capacity confirmed agreed to change to new G59 settings

62.3%

Percentage of installed generator capacity with new G59 settings

tor langes nted)		
34.7%		