





14 October 2016

Updated list of exemptions to Western Power's Technical Rules

Western Power has provided the Economic Regulation Authority (ERA) with the attached updated list of exemptions to its Technical Rules. The updated list includes exemptions granted from 1 July to 30 September 2016.

Western Power's Technical Rules set out the standard requirements for customer connection. Under certain circumstances, Western Power may exempt a customer from complying with one or more requirements of the Technical Rules.

When an exemption is made, Western Power is required under section 12.38 of the *Electricity Networks Access Code 2004* to notify the ERA. The ERA must then place the notice on its public register.

Western Power's list of exemptions to its Technical Rules is available on the ERA website.

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No	Date exemption granted	Exemption granted to:	Applicable clause(s)	Exemption expiring	Exemption details				
Ver	Version: 2007 Technical Rules								
1	16-Jan-08	Neerabup (two generating units - Units G11 and G12)	3.3.3.1(a)	Ongoing	Modified reactive power capability: 0.8 Lagging 101.3 MVAr 0.9 Leading 68.5 MVAr Basis: Financial contribution for the shortfall in reactive power capability, pursuant to clause 3.3.3.1(d).				
2	16-Jan-08	Neerabup (two generating units - Units G11 and G12)	3.3.3.3(b)	Ongoing	Modified off-nominal frequency capability: 47.0 – 47.5 Hz 20 seconds 47.5 – 51.5 Hz continuous 51.5 – 52.0 Hz 20 seconds 52.0 – 52.5 Hz 0 seconds Basis: Constrained operation for SWIS load below 1960MW.				
3	29-Jan-08	Bluewaters Power Station Unit 2	3.3.3.5	Ongoing	Modified ramping rates: The requirement to respond at a rate of 5% of nameplate rating per minute is modified to require the power station to respond by increasing output by 10 MW in the first 10 seconds and then after one minute increasing output at a rate of 3% of nameplate rating per minute. Basis: Identical to exemption for Unit 1, with System Management's acceptance.				
4	4-Sep-09	Collgar Wind Farm	3.3.3.10(c)(1)	Ongoing	De-energisation of Generator Circuits: Connection via two circuits and no circuit breakers in the generator's switchyard. Basis: Deemed to be technically and commercially optimal arrangement. Financial contribution made for the switchyard.				
5	7-Oct-09	Collgar Wind Farm	2.2.10	Ongoing	Modified overvoltage performance requirements:The overvoltage capability curve proposed by the generator applies in lieu of that of clause2.2.10, Figure 2.1.Basis:The connection point site-specific overvoltage performance requirements (as assessed by Western Power) are met by the generators over voltage capability.				



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6	10-Jun-10	Tesla, Harris Road, Leeming Road, Deepdale Road and Kemerton 10.0 MW Power Stations	3.3.1(c)	Ongoing	Requirements for generator units (general): Assessment permitted under clause 3.6 for small generators. Basis: Initial misinterpretation of the applicable requirements (by both Western Power and Tesla) and advanced stage of these projects at the time the correct interpretation became apparent.		
7	25-Oct-10	Grasmere Wind Farm	3.2.2	Ongoing	<i>Main Switch:</i> Utilisation of Western Power feeder circuit breaker to de-energise wind farm in lieu of wind farm 'main switch'. <i>Basis:</i> Integration into Albany zone substation and existing voltage control scheme via the 3rd 'identical 22kV (wind farm) feeder' is deemed the best solution. Additional cost of technical compliance would increase operational complexity and not provide any tangible benefit. Financial contribution made for the switchyard.		
8	23-Mar-11	Synergy	3.7.8.3(b)	Ongoing	<i>Inspection and testing:</i> Inspection and testing requirements waived, pursuant to the Office of Energy's Final Outcomes Report and subsequent recommendation to change the Technical Rules accordingly.		
9	24-Aug-11	Bluewaters Power Station Unit 2	3.3.3.1	Ongoing	 Modified reactive power capability: For steady state voltages from 90.5% to 90% of the rated voltage at the connection point, the required reactive power absorption is at least the amount equal to the product of the rated active power output of the generation unit at nominal voltage and 0.441. Basis: The connection point site-specific reactive power absorption capability is acceptable to Western Power and System Management. 		
Ver	Version: 2011 Technical Rules						
10	23-Feb-12	Extension Hill Pty Ltd (EHPL) transmission load	3.2.2	Ongoing	 Main Switch: Modified switchyard arrangement for the initial EHPL single circuit connection: Utilisation of Western Power circuit breaker to de-energise transmission load. Basis: There is no benefit in these particular circumstances in requiring EHPL to install its own 330kV main switch at Three Springs terminal substation. 		



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11	18-Apr-12	Karara Power Pty Ltd (KPPL) transmission load	3.2.2	Ongoing	 Main Switch: Modified switchyard arrangement for the initial KPPL connection: Utilisation of Western Power circuit breakers to de-energise transmission load. Basis: There is no benefit in these particular circumstances in requiring KPPL to install its own 132kV main switch at Eneabba substation and 330kV main switch at Three Springs terminal substation.
12	25-Sep-12	PTA, City railway substation	3.2.1(d)(2)	Ongoing	Negative phase sequence: Two-phase connection accepted. Basis: The exemption is granted pursuant to clause 1.9.4(a), as the project was well advanced before 23 Dec 2011, being the commencement date for the revised Technical Rules (current) in which clause 3.2.1(d)(2) was materially changed.
13	6-Nov-12	West Hills and Anderson wind farms	2.9.2(b)	Ongoing	Duplication of protection: Two external generator protection relays supplied from a single voltage transformer (VT). Basis: In case of loss of the VT input to the protection relay, the VT supervision function of the relay will send the trip signal to disconnect the wind farm, which is considered as an acceptable functional alternative to duplication of the VTs.
14	17-Jan-13	Verve Energy, Muja D	2.2.8(a); 2.2.8(b)	Ongoing	 Modified damping of oscillations: The respective damping ratios must be at least 0.07 and 0.27. Basis: The performance (after automatic voltage regulator replacement) is at least equivalent to the previous performance.
15	17-Jan-13	Verve Energy Kwinana HEGT 200 MW Power Station	2.2.8(a); 2.2.8(b)	Ongoing	Modified damping of oscillations: Power system studies and commissioning test results that showed that connection of the Kwinana HEGT power station with modified damping ratios will cause no adverse impact on the South West Interconnected System



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16	23-Jan-13	Inverter connected generation units 30 to 150kVA	2.9.2(b)	Ongoing	<i>Duplication of protection:</i> One (only) IEC60255 compliant external generator protection relay required in conjunction with protections integral to AS4777-2005 compliant inverters in the capacity range of 30 to 150 kVA. <i>Number of Exemptions (to 30-Sept-2016): 99</i>
17	14-Feb-13	Grasmere Wind Farm	3.3.4.5(g), Table 3.2	Ongoing	 Modified rise time: The maximum permitted rise time is 3.0 seconds. Basis: There is no benefit in these particular circumstances in requiring modification of the integrated Albany wind farm control scheme (of which Grasmere is Stage 2) to achieve compliance.
18	21-Jun-13	Collgar Wind Farm, Stage 1	3.3.3.3(h)(2)	Ongoing	 Modified active power recovery time: The maximum permitted recovery time is 1,000 milliseconds. Basis: No adverse effect on the network performance or other customers for the currently installed wind farm capacity outweighs the significant cost of compliance.
19	17-Sep-13	Bluewaters Power Station Unit 1 & Unit 2	3.3.4.4(b)	08-Dec-15	<i>Primary frequency control:</i> Temporary exemption to complete repairs. <i>Basis:</i> Reasonable repair time frame agreed to suit both parties in order to bring the Units back into compliance.
20	23-Dec-13	Kwinana Donaldson Road Power Station Unit 1 & Unit 2	2.2.8(a) & (b)	Ongoing	Modified damping requirements: The exemption was based on the analysis conducted by Western Power, which determined that the exemption does not create material impact on Western Power's network performance and other customers for the currently installed power station capacity.
21	20-Jan-14	NewGen Kwinana	3.3.4.4	30-Jun-14	Primary frequency control: Exemption granted in order to allow sufficient time for the investigation and implementation of a solution in line with the capability of the units and the governor compliance issues.



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22	20-Jan-14	Alinta Cogeneration Wagerup Power Station - Unit 1 & Unit 2	3.3.4.4	31-Dec-14	Primary frequency control: Exemption granted in order to allow sufficient time for the investigation and implementation of a solution in line with the capability of the units and the governor compliance issues.
23	20-Jan-14	Alinta Cogeneration Pinjarra Power Station - Unit 1 & Unit 2	3.3.4.4	31-Mar-15	Primary frequency control: Exemption granted in order to allow sufficient time for the investigation and implementation of a solution in line with the capability of the units and the governor compliance issues.
24	7-Mar-14	Ferngrove Vineyards Ltd 200kVA Solar PV Power Station	3.6.10.1(g) & 2.9.2(b)	31-Dec-14	Protection (general) and duplication of protection: Temporary exemption to allow for the installation of voltage transformer and NVD protection.
25	29-Apr-14	Mitchell Foods Pty Ltd 150kVA Solar PV Power Station	3.2.1(c)(3)	31-Jul-14	<i>Harmonics:</i> Exemption granted to allow sufficient time for the procurement of an isolation transformer and installation and completion of the final facility to achieve compliance.
26	2-Oct-14	Dradgin Pty Ltd, 502 Hay street, Subiaco	3.6.10.1(a)	Ongoing	Protection (Location): All protection functions specified in 3.6.10 must be provided with protection equipment located as close as practicable to the connection point.
27	2-Jan-15	Department of Defence, Carnegie Wave Energy Unit	3.6.10	02-Jan-16	Protection: Exemption allows variation of protection requirements to allow sufficient time for Department of Defence to upgrade protection equipment and switchboards at the connection point.
28	1-Dec-14	Low voltage invertor connected generator systems rated between 30kVA and 150 kVA	3.6.10.1(g)	31-Aug-16	Network Earth Fault (E/F) Protection: E/F and Neutral Voltage Displacement (NVD) protection requirements will be assessed on a case by case basis by Western Power. Number of Exemptions (to 30-Sept-2016): 128
29	28-Apr-15	Brockway DiCOM Facility Pty Ltd Shenton Park PPG	3.6.10.1(a)	Ongoing	Protection (Location): All protection functions specified in 3.6.10 must be provided with protection equipment located as close as practicable to the connection point.



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30	15-May-15	Low voltage connection points	3.2.1(c)(3)	31-Dec-16	<i>Modified DC Injection Limits:</i> Users must complete the 'Technical Rules Direct Current (DC) Injection Transition Exemption form available on the Western Power web site and meet the requirements therein. <i>Number of Exemptions (to 30-Sept-2016): 75</i>
31	17-Jun-16	NewGen Power Kwinana	3.3.4.5, Table 3.1	30-Jun-17	Settling time: Amended requirements reflect realistic performance capability of plant.
32	17-Jun-16	NewGen Power Kwinana	3.3.3.3(d)	30-Jun-18	Rate of change of frequency (RoCoF): Amended requirements reflect realistic performance capability of plant.
33	06-Jul-16	Bluewaters Power	3.3.4.4	30-Jun-17	Primary frequency control: Amended requirements reflect present tested performance capability of plant.
34	12-Sep-16	NewGen ERM Neerabup	3.3.4.4(f)(1)	01-Jul-17	<i>Frequency control:</i> Investigation ongoing to establish maximum 'rate of response' capability of plant.