



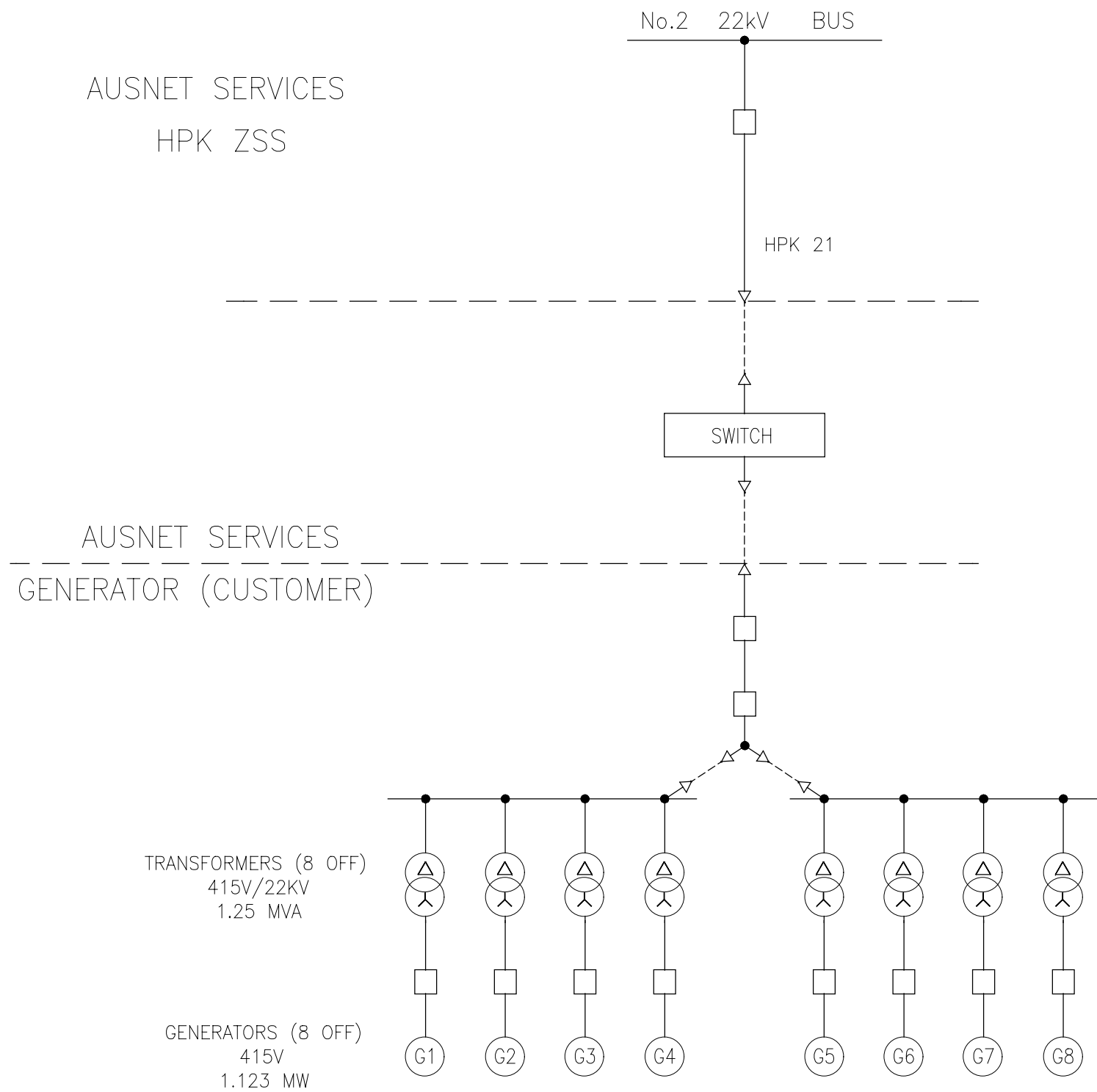
Register of Completed Embedded Generation Projects

Document number:	SOP 33-05B
Issue number:	4
Status:	Approved
Approver:	James Snaize
Date of approval:	11/11/2019

This register includes the details, as specified under clause 5.4.5 of the National Electricity Rules, for all completed embedded generation projects that have connected to AusNet Services distribution network since 1 October 2009. Permission has been sought from the respective Embedded Generators to publish this information. Any confidential information has been omitted from this register. AusNet Services will update this register by the DAPR date each year.

Name	Location	Technology of generating unit including make and model	Maximum power generation capacity of all embedded generating units comprised in the relevant generating system	Contribution to fault levels	Size and rating of the relevant transformer	A single line diagram of the connection arrangement	Protection systems and Communications Systems	Voltage control and reactive power capability
Project # 1	Thomson Dam, Victoria (No street address available)	Type: Induction Generator (Hydro) Make: NEBB Model: QG 900 Za 8 L	7.45MW	0.68(3ph-g) kA	7.8MVA	This can not be published due to confidentiality reasons.	Live line blocking and communication systems: None (Closest remote controlled switch - MO104)	Voltage control: No Reactive power capability: 1.1 MVar
Project # 2	Hampton Park, Victoria	Synchronous (bioenergy) Make: Caterpillar Model: 3516LE	8.9MW	1.45 kA (3ph, @ 22kV sub-transient)	8x 1.25 MVA	Refer to the connection diagram within this document	Remote Trip and SCADA	Yes (22kV Voltage Set Point) and reactive power capability per engine: 1.1 MVar absolute maximum export capability. However, the connection agreement regulates power factor to range: 0.95 lag (supplying 0.37MVar) to 0.95 lead (absorbing 0.37MVar).
Project # 3	Wollert, Victoria	Synchronous (bioenergy) Make: Caterpillar Model: 3516LE	8.9MW	1.14 kA (3ph, @ 22kV sub-transient)	7x 1.25MVA + 1x 2.50MVA	Refer to the connection diagram within this document	Remote Trip and SCADA	Yes (22.66kV Voltage Set Point) and reactive power capability per engine: 1.1 MVar absolute maximum export capability. However, the connection agreement regulates power factor to range: 0.95 lag (supplying 0.37MVar) to 0.95 lead (absorbing 0.37MVar).
Project # 4	Traralgon, Victoria	Synchronous (gas engine) Make: Caterpillar	10MW	1.37(3ph-g) kA	12.5MVA	Refer to the connection diagram within this document	Remote controlled switch - TN198 & SCADA to incomer CB	Voltage control: No and reactive power capability: 0 MVar
Project # 5	South Gippsland, Victoria	Asynchronous Generator Make: Senvion SE Model: Senvion SE MM92	106.6MW	At 66kV Connection Point LSSS1: 3 phase = 1.32 kA, 1 phase = 0.32kA At 66kV Connection Point LSSS2: 3 phase = 1.43 kA, 1 phase = 0.29kA	2 x 33/66kV 70MVA Dyn 11 ONAF Transformers	Refer to the connection diagram within this document	Protection: Current differential protection with Distance backup (line), CB Fail, Auto reclose (at LGA and WGI only, no reclose at wind farm), Anti-Islanding Scheme, Runback Scheme Communication Systems: Current differential protection, Remote Trip, SCADA, Anti-Islanding Scheme, Runback Scheme	Voltage control: 0.99 lagging Power Factor (absorbing reactive power). Seek to maintain voltage between 0.95 and 1.05p.u at the connection point. Reactive power capability: Wind Farm can operate to a power factor of 0.93 both leading and lagging.

HALLAM RD POWER STN – INTERCONNECTION DIAGRAM

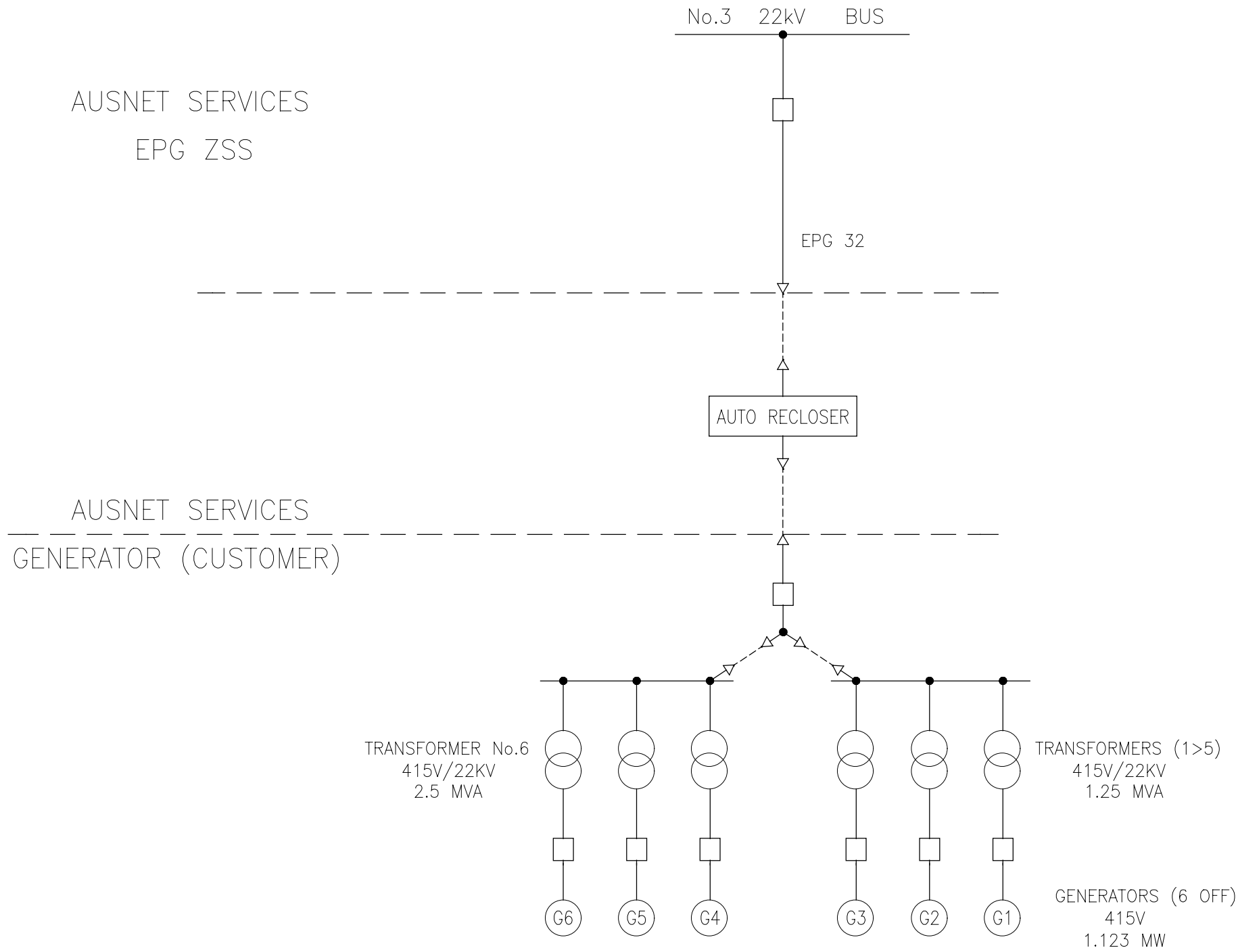


AusNet Services STD A3

REFERENCE DRAWINGS		REVISION			 DRAWN Drawn By BJH ENDORSED REV A	SKETCH LMS - HALLAM		
							ENDORSED DATE 11/09/2014	SPEC No. ORDER No.
DRAWING TITLE	DRAWING No.	DATE	REV	DESCRIPTION	BY	CONTRACTOR	ISSUED	CONTRACTORS No
		9.9.14	A	FIRST ISSUE	BJH	AUSNET SERVICES	11/09/2014	

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WOLLERT POWER STN – INTERCONNECTION DIAGRAM



AusNet Services STD A3

REFERENCE DRAWINGS	
DRAWING TITLE	DRAWING No.

REVISION		DESCRIPTION	BY	CONTRACTOR
16.9.14	C	ADDED THREE WAY CONNECTION TO GEN TRANSF BUSES	BJH	AUSNET SERVICES
16.9.14	B	ADDED GENERATOR TRANSFORMER No.6	BJH	AUSNET SERVICES
9.9.14	A	FIRST ISSUE	BJH	AUSNET SERVICES
DATE	REV	DESCRIPTION	BY	CONTRACTOR

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services

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SKETCH
LMS - WOLLERT

ENDORSED DATE 16/09/2014

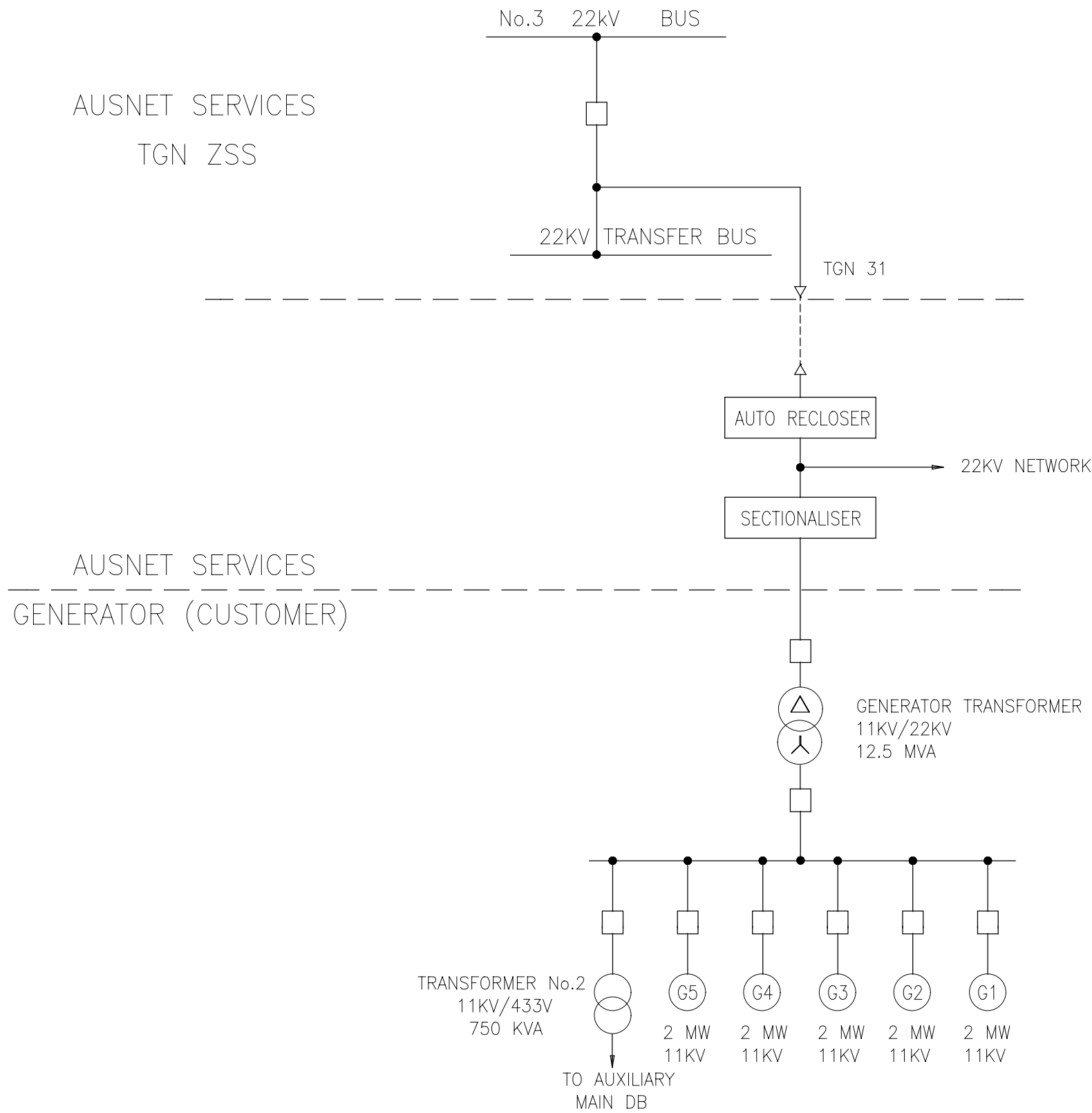
SPEC No. ORDER No. AusNet services No

CONTRACTORS No

SKT/100/107

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TRARALGON NETWORK SUPPORT STATION (TGNSS) NOVA POWER – INTERCONNECTION DIAGRAM



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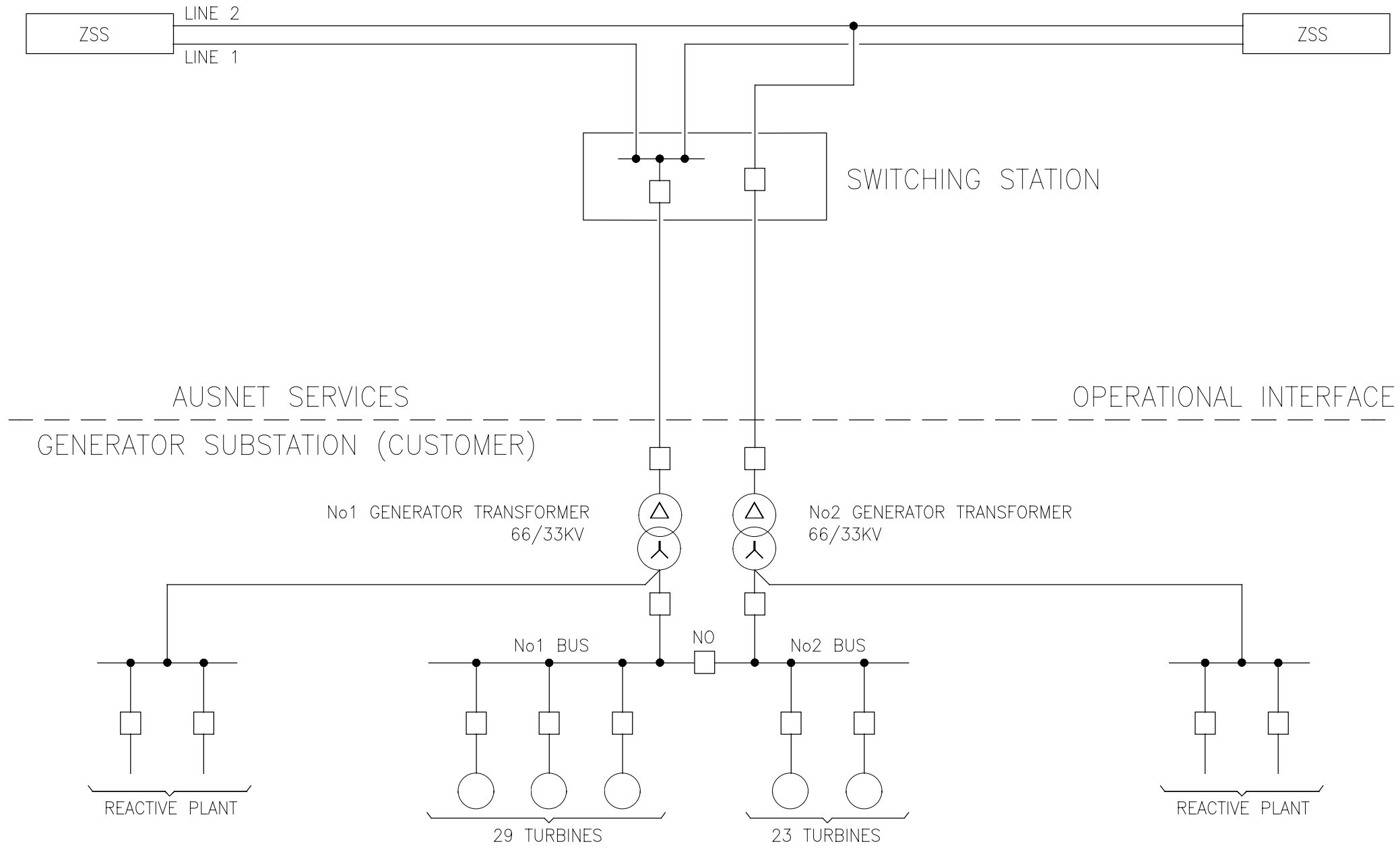
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REVISION					
DATE	REV	DESCRIPTION	BY	CONTRACTOR	ISSUED
9.9.14	A	FIRST ISSUE	BJH	AUSNET SERVICES	11/09/2014

		SKETCH TRARALGON NETWORK SUPPORT SUBSTATION (TGNSS) - NOVA POWER STATION	
ENDORSED DATE	SPEC No.	ORDER No.	AusNet services No
ISSUED	CONTRACTORS No		SKT/100/105 A

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BALD HILLS WIND FARM – INTERCONNECTION DIAGRAM



LOCATION TARWIN LOWER

REFERENCE DRAWINGS		REVISION			SKETCH BALD HILLS WIND FARM INTERCONNECTION DIAGRAM	SPEC No.		ORDER No.	AusNet services No	
						BY	CONTRACTOR	ISSUED	CONTRACTORS No	SKT/100/1012 A.3
	DRAWING TITLE		DRAWING No.			DATE	REV	DESCRIPTION	APPROVED DATE	

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