#### LEGISLATIVE COUNCIL

#### C1379

# QUESTION WITHOUT NOTICE (Of which some notice has been given)

### Tuesday, 25 November 2014

Hon Robin Chapple to the Leader of the House representing the Minister for Energy.

Please provide a summary of all active power stations in Western Australia, including: age; capacity profile; fuel and/or mine type; number of employees; whether it is on or off the grid; and the closure schedule.

## I thank the Hon. Member for some notice of this question.

I table the attached document.

The Public Utilities Office has relied on the Independent Market Operator for data concerning generators on the SWIS and has reported the maximum sent out capacity offered by these facilities into the Balancing Market, as of 25 November 2014. These figures may differ slightly from the number of capacity credits awarded and from facility nameplate capacity owing to factors including parasitic load and ambient temperature.

For NWIS and NIS facilities, various sources have been used as there is no single definitive list of facilities. The nature of mining operations has not been investigated.

The Public Utilities Office does not have access to data on the number of employees or on the closure schedule of power stations. The expected plant life of power stations is variable, a function of maintenance regimes and commercial considerations.

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# ATTACHMENT TO QWN C1379

Power Station	Fuel	Age (years)	Rated Capacity (MW)
South West Interconnected System (SWIS) on grid			
Albany Wind Farm	wind	13	21.6
Alcoa Wagerup	gas	21	25
Atlas	landfill gas	9	1.123
Bluewaters 1	coal	6	217
Bluewaters 2	coal	5	217
Bremer Bay Wind Farm	wind	10	0.6
Canning-Melville Landfill Gas	landfill gas	20	1
Cockburn Power Station	gas	12	236.6
Collgar Wind Farm	wind	4	206
Collie Power Station	coal	16	318
Denmark Community Wind Farm	wind	2	1.44
Emu Downs	wind	9	80
Grasmere (Albany Stage 2)	wind	3	13.8
Greenough Solar Farm	solar pv	2	10
Henderson Waste Recovery Park	landfill gas	9	3
Kalbarri Wind Farm	wind	7	1.6
Kalgoorlie Nickel Smelter Power Plant	gas	19	23
Karakin Wind Farm	wind	3	5
Kemerton Peaking Station	gas, diesel	10	154
Kemerton Peaking Station	gas, diesel	10	154
Kwinana C	coal, gas, diesel	39	184
Kwinana Gas Turbine	gas	43	20.8
Kwinana High-efficiency Gas Turbine	gas, diesel	3	100.1
Kwinana High-efficiency Gas Turbine	gas, diesel	3	100.1
Kwinana Swift Power Station	gas, diesel	5	116
Merredin Peaking Turbine	gas	2	82
Mt Barker Windfarm	wind	4	2.43
Muja A (refurbished)	coal	49	55
Muja A (refurbished)	coal	49	55
Muja B (refurbished)	coal	49	55
Muja B (refurbished)	coal	49	55
Muja C	coal	30	195.7
Muja C	coal	29	190.75
Muja D	coal	34	211
Muja D	coal	34	211
Mumbida Wind Farm	wind	2	55
Mungurra Gas Turbine Power Station	gas	25	37.2
Mungurra Gas Turbine Power Station	gas	25	37.2
Mungurra Gas Turbine Power Station	gas	25	38.2
Neerabup Power Station	gas	5	342
Newgen Kwinana Power Station	gas	6	324
Old Kalamunda Landfill Station	diesel	18	1.3
Parkeston Power Plant	gas, diesel	19	68
Perth Power Partnership – Kwinana Cogen Plant	gas	19	85.7
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Power Station	Fuel	Age	Rated Capacity
		(years)	(MW)
Pinjar A and B	gas, diesel	26	37.2
Pinjar A and B	gas, diesel	26	37.2
Pinjar A and B	gas, diesel	26	38.2
Pinjar A and B	gas, diesel	26	38.2
Pinjar A and B	gas, diesel	26	38.2
Pinjar A and B	gas, diesel	26	38.2
Pinjar C and D	gas	24	116
Pinjar C and D	gas	24	123
Pinjar C and D	gas	24	116
Pinjarra Power Station 1	gas	9	143
Pinjarra Power Station 1	gas	9	143
Red Hill Landfill Gas	landfill gas	22	3.8
Rockingham Landfill	landfill gas	11	4
Rottnest Island	wind/diesel	Nil	1.7
South Cardup Renewable Energy Facility	landfill gas	10	3.369
Synergy Geraldton Power Station	gas, diesel	42	20.8
Synergy West Kalgoorlie Power Plant	gas, diesel	31	38.2
Synergy West Kalgoorlie Power Plant	gas, diesel	31	24.6
Synergy Worsley Power Station	gas	15	116.4
Tamala Park Landfill Gas	landfill gas	11	4.8
Tesla Geraldton Power Station	diesel	3	9.9
Tesla Kemerton Power Station	diesel	3	9.9
Tesla Northam Power Station	diesel	3	9.9
Tesla Picton Power Station	diesel	3	9.9
Tiwest Pigment Power Plant	gas	16	39.7
Wagerup Power Station	gas, diesel	8	190
Wagerup Power Station	gas, diesel	8	190
Walkaway Wind Farm	wind	11	89.1
SWIS subtotal	111114	1	5,947
	-		3,341
North West Interconnected System (NWIS) on grid	1	1	
Cape Lambert Power Station	gas	Nil	130
Yurralyi Maya (7 Mile)	gas	4	180
Karratha Power Station	gas	4	86
Boodarie	gas	18	82
Port Hedland Power Station	gas	16	126
NWIS subtotal			604
Non-interconnected Systems off-grid			
Ardyaloon	diesel	7	0.8
Argyle Diamond Mine	diesel	n/a	32
Beagle Bay	diesel	7	0.7
Bidyadanga	diesel	7	1.3
Bronzewing Gold Mine	diesel	n/a	1.5
Broome	gas/diesel	6,7	49
Camballin/Looma	gas/diesel	n/a	1.04
Carnaryon		Nil	1.04
	gas diesel	n/a	10
Carosue Dam	ulesel	11/a	10

Power Station	Fuel	Age (years)	Rated Capacity (MW)
Cawse Nickel	gas	16	21.5
Christmas Creek Mine	diesel	n/a	56
CITIC	gas	Nil	450
Cloud Break Mine	diesel	7, 13	44
Cloud Break Mine	diesel	6	2
Coral Bay	wind/diesel	7	3.3
CSBP Kwinana	gas	8	28.6
Cue	diesel	11	0.8
Darlot Gold Mine	gas/diesel	6	11.2
Denham	wind/diesel	17, 16, 7	2.5
Derby	gas/diesel	6	13.2
Djarindjin/Lombadina	diesel	6	0.7
Esperance	gas/diesel	10	35
Esperance Wind	wind	10, 21	5.625
Eucla	diesel	n/a	0.92
Exmouth (Department of Defence)	diesel	n/a	18
Exmouth (serves Horizon Power)	CNG/LPG	n/a	7.96
Fitzroy Crossing	gas/diesel	n/a	3.65
Gascoyne Junction	diesel	n/a	0.4
Gorgon	gas	<1	584
Gwalia Deeps Gold Mine	gas/diesel	n/a	17
Halls Creek	gas/diesel	n/a	3.28
Hamersley Iron Dampier	gas	n/a	120
Hamersley Iron Paraburdoo	gas	n/a	140
Higginsville Gold Mine	diesel	n/a	11
Hopetoun	wind/diesel	10	3.44
Jundee Gold Mine	gas/diesel	17	13.2
Kalumburu	diesel	1	1
Karratha Gas Plant	gas	7	240
Kununurra	diesel	n/a	10
Laverton (Barrick Gold)	diesel	n/a	23.8
Laverton (serves Horizon Power)	diesel	n/a	1.5
Leinster Nickel Mine	gas/diesel	18	65
Leonora (serves Horizon Power)	gas	n/a	4.43
Leonora (Minara Resources)	gas	n/a	78
Marble Bar	solar/diesel	4	1.31
Meekatharra	diesel	n/a	2.9
Menzies	diesel	n/a	0.3
Mt Keith Nickel Mine	gas	n/a	116
Murrin Murrin	gas	16	86
Mt Magnet	gas	n/a	1.9
Newman (Alinta)	gas	5, 18	140
Norseman	diesel	16	9
Nullagine	solar/diesel	4	1.16
Old Onslow Power Station	gas	15	3.6
Onslow Temporary Generation	diesel	15	3

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Power Station	Fuel	Age (years)	Rated Capacity (MW)
Ord Dam	hydro	18	30
Paraburdoo (Rio Tinto)	gas	8	120
Paraburdoo (Rio Tinto)	gas	29	20
Pluto Phase 1	gas	4	160
Plutonic	gas	17	28.3
Ravensthorpe Nickel Mine	gas	7	55.5
Roy Hill Port Temporary Generation	diesel	n/a	35
Sally Malay Nickel	diesel	n/a	10.1
Sandstone	diesel	n/a	0.4
Savannah Nickel	diesel	n/a	10.8
Solomon Hub Power	gas/diesel	2	125
Sunrise Dam	diesel	n/a	20
Telfer Gold Mine	gas/diesel	9, 34	161
Warmun	diesel	7	1.3
West Angelas (Rio Tinto)	gas	n/a	40
Wiluna (Blackham Gold)	gas/diesel	9, 17	12
Wiluna (serves Horizon Power)	diesel	6	1.3
Wodgina (Energy Generation)	gas/diesel	n/a	13.7
Yalgoo	diesel	11	0.4
Yarnima (BHP Billiton)	gas	Nil	190
Yungngora	diesel	1	0.7
Non-interconnected systems subtotal			3,550
Total power station capacity for Western Australia			10,100

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