

LEGISLATIVE COUNCIL

Question On Notice

Thursday, 24 March 2022

645. Hon Martin Aldridge to the Minister for Regional Development representing the Minister for Energy

(1) I refer to the media statement issued on 31 January 2022 titled "Christmas 2021 power outage review begins" and Legislative Council question without notice 46, asked on 16 February 2022, and I ask:

(a) on what date did the Minister receive the report of the independent review mentioned in the statement?

(2) How many South West Interconnected System customers experienced an outage between 24 and 28 December 2021 and therefore fall within scope of the review?

(3) Of those identified in (2), how many customers were located in:

(a) a metropolitan region; and

(b) a region outside of the metropolitan region?

(4) Of those identified in (2), please provide a breakdown of customers by locality or suburb?

(5) Of those identified in (2), how many customers are eligible for an extended outage payment by locality or suburb?

(6) What was the cost of the independent review?

(7) I note paragraph 6 of the review terms of reference that suggests the Minister for Energy would outline to the Western Power Chair his expectations in relation to the review and I ask that any correspondence between the Minister and the Chair be tabled?

(8) Did review chair, Michelle Shepherd, receive full co-operation from Western Power in relation to the conduct of the review?

(9) If no to (8), what information was withheld from Ms Shepherd and what impact did that have on the review?

Answer

(1) The Minister received the Independent Review Report on Friday 18 March 2022.

(2) 107,020 supply points experienced one or more outages over the Christmas outage period. This excludes outages that are less than 30 seconds and which were successfully restored via an automatic auto-reclose scheme.

Data relating to outages is recorded from supply points, which does not distinguish between residential and non-residential connections.

(3) Of the supply points that experienced an outage during the Christmas outage period:

(a) 72,914 supply points were located in the metropolitan region

(b) 34,106 supply points were located outside of the metropolitan region

(4) Please see attached 'impacted distinct supply points' which provides impacted supply points by suburb and local government authority. Please see Tabled Paper [].

(5) Please see attached 'suburb count of extended outage'. The number of distinct supply points eligible is 18,053 however some supply points experienced more than one extended outage. Please see Tabled Paper [].

(6) The cost of the Independent Review is \$165,000 (ex-GST), with these costs recouped from Western Power.

(7) The Minister wrote to the Western Power Chair on 27 January 2022 regarding the expected compliance of Western Power in completion of the review. Please see Tabled Paper [].

(8) The Independent Reviewer advised the Minister that Western Power fully co-operated in the undertaking of the Review.

(9) N/A



MINISTER FOR ENERGY

9/5/22

BY Suburb	supply point count
ROLEYSTONE	2638
KELMSCOTT	1448
WELLARD	578
NORTHAMPTON	553
SCARBOROUGH	477
DIANELLA	406
NORTH PERTH	376
HILLARYS	331
BALCATT	318
WOODLANDS	315
BALGA	308
BOUVARD	299
BALDIVIS	273
DOUBLEVIEW	230
HALLS HEAD	226
GREENOUGH	221
SPEARWOOD	206
CAPE BURNEY	205
HERRON	198
HORROCKS	196
ROCKINGHAM	194
GREENFIELDS	190
HILTON	189
SORRENTO	182
MOUNT HAWTHORN	180
NORTH DANDALUP	171
SECRET HARBOUR	170
DALKEITH	166
YOKINE	165
DUNSBOROUGH	154
LOWER CHITTERING	143
MANDURAH	138
BECKENHAM	136
KARRINYUP	136
NOLLAMARA	130
MUNSTER	130
DUDLEY PARK	129
CLOVERDALE	127
PALMYRA	122
MORLEY	118
BASSENDEN	117
MARTIN	113
MARANGAROO	109
KEYSBROOK	109
CANNINGTON	106
BAYSWATER	106
CRAIGIE	104

MOSMAN PARK	103
GOLDEN BAY	101
CASUARINA	99
LEEDERVILLE	98
HAMERSLEY	97
WOOROLOO	94
WOODBIDGE	93
SEVILLE GROVE	91
WANNEROO	86
SOUTH YUNDERUP	86
KENSINGTON	86
FALCON	80
KARDINYA	78
GOOSEBERRY HILL	76
EMBLETON	76
STIRLING	76
BATEMAN	75
DARLINGTON	74
NABAWA	74
BUSSELTON	71
SILVER SANDS	71
ROSSMOYNE	71
BINNU	70
NANSON	69
GREGORY	67
SOUTH FREMANTLE	66
YALLINGUP	64
PORT KENNEDY	64
QUEDJINUP	63
RUDDS GULLY	62
CHIDLOW	56
COMO	50
INNALOO	50
ATWELL	50
WESTMINSTER	49
RIVERVALE	49
GWELUP	48
WARWICK	46
AJANA	44
KALAMUNDA	44
MAHOGANY CREEK	42
CARLISLE	42
YUNA	41
GABBADAH	40
OCEAN REEF	39
ALMA	37
BROOKDALE	36
OGILVIE	36
MOUNT LAWLEY	36
CARRAMAR	34

MIDLAND	34
BEECHBORO	33
BULLSBROOK	31
MURDOCH	31
KARRAGULLEN	30
DAWESVILLE	30
JANDAKOT	29
BANKSIA GROVE	29
YANCHEP	28
SANDY GULLY	27
WALKAWAY	25
GIDGEGANNUP	23
NOLBA	23
NARALING	22
BICKLEY	21
HILBERT	21
CAVERSHAM	19
LAKE COOGEE	19
GNANGARA	18
EAST YUNA	18
EAST BOWES	18
CARDUP	17
WEMBLEY DOWNS	17
SOUTH GREENOUGH	16
UPPER CAPEL	16
NIRIMBA	16
HERNE HILL	15
PINJARRA	15
CHITTERING	14
BRIGADOON	14
COOLOONGUP	13
BINDOON	13
WEST SWAN	12
HIGH WYCOMBE	12
QUINDALUP	12
NARRA TARRA	11
GEORGINA	11
OLDBURY	11
WELSHPOOL	10
WEST BUSSELTON	10
OAKFORD	10
CARBUNUP RIVER	10
JINDONG	10
DARTMOOR	10
WAGERUP	9
YALLABATHARRA	9
BELHUS	9
WANDANA	9
SERPENTINE	9
ARMADALE	9

WEST BINNU	8
MARDELLA	8
DINDILOA	8
EAST FREMANTLE	7
BOOKARA	7
SOUTH YUNA	7
MAYLANDS	7
BOWES	7
NORTH JINDONG	7
EAST NABAWA	6
PARKERVILLE	6
STAKE HILL	6
BEDFORD	6
JARRAHDALE	6
WEST PINJARRA	5
WHITTAKER	5
NEDLANDS	5
MUNDIJONG	5
HAMMOND PARK	4
IRWIN	4
UPPER SWAN	4
COOLUP	4
BLYTHEWOOD	4
YETNA	4
WANNANUP	3
TOOLIBIN	3
NAMBEELUP	3
ANKETELL	3
MORANGUP	3
GERALDTON	3
LAKE CLIFTON	3
MAIDA VALE	3
NARNGULU	3
MUNDARING	3
MOUNT ERIN	3
PAYNEDALE	3
ASHFIELD	2
AVELEY	2
MIDDLE SWAN	2
APPLECROSS	2
RIVERTON	2
HICKETY	2
HENLEY BROOK	2
DUNCRAIG	2
DONGARA	2
BALLAJURA	2
COOGEE	2
SUCCESS	2
MOUNT NASURA	2
THORNLIE	2

ROCKWELL	2
PADBURY	2
ALLANOOKA	2
TWO ROCKS	2
BEELIAR	2
COOLCALALAYA	1
AUGUSTA	1
VASSE	1
KARAKIN	1
LEDA	1
KARAWARA	1
BANJUP	1
QUINNS ROCKS	1
KULIN	1
RIVERSIDE GARDENS	1
CARINE	1
MULLALOO	1
BENTLEY	1
ILUKA	1
PARMELIA	1
DARLING DOWNS	1
KINGSLEY	1
INGLEWOOD	1
VIVEASH	1
BURNS BEACH	1
KWINANA BEACH	1
GIRRAWHEEN	1
WARRENUP	1
EDGEWATER	1
WEMBLEY	1
SAFETY BAY	1
WEST PERTH	1
NORTH BEACH	1
GRANVILLE	1
BOYA	1
WOODRIDGE	1
BUTLER	1
GOSNELLS	1
BELDON	1
BEACONSFIELD	1
CANNING VALE	1
GLEN FORREST	1
CONNOLLY	1
VICTORIA PARK	1
SINGLETON	1
KOONGAMIA	1
ARROWSMITH	1
WALLISTON	1
ERSKINE	1
WANDINA	1

123	1
OSBORNE PARK	1
KEWDALE	1
ALEXANDER HEIGHTS	1
ASHBY	1
HARRISDALE	1
MINDARIE	1
LANDSDALE	1
ST JAMES	1
BELMONT	1
MOONYOONOOKA	1
BULL CREEK	1
FAIRBRIDGE	1
FORRESTFIELD	1
BOOTENAL	1
WILLAGEE	1
SWAN VIEW	1
CLAREMONT	1
THE VINES	1
WOODVALE	1
NORTHBRIDGE	1
WUNGONG	1
HOLMWOOD	1
PICTON	1
TRIGG	1
JOONDANNA	1
DONNYBROOK	1
HUNTINGDALE	1
UDUC	1
ELLENBROOK	1
(blank)	
Grand Total	18053

Property_Suburb	Impacted Distinct Supply Points	Local Government Areas	Geographic Regions
YANCHEP	4,645	City of Wanneroo	Perth Metropolitan
DAWESVILLE	3,618	City of Mandurah	Peel
GOSNELLS	3,329	City of Gosnells	Perth Metropolitan
HEATHRIDGE	3,018	City of Joondalup	Perth Metropolitan
ROLEYSTONE	2,638	City of Armadale	Perth Metropolitan
KATANNING	1,947	Shire of Katanning	Great Southern
MADELEY	1,890	City of Wanneroo	Perth Metropolitan
OCEAN REEF	1,800	City of Joondalup	Perth Metropolitan
TWO ROCKS	1,778	City of Wanneroo	Perth Metropolitan
BALCATT	1,765	City of Stirling	Perth Metropolitan
PARMELIA	1,737	City of Kwinana	Perth Metropolitan
EGLINTON	1,683	City of Wanneroo	Perth Metropolitan
WANDINA	1,646	City of Greater Geraldton	Mid West
SOUTH YUNDERUP	1,628	Shire of Murray	Peel
ALKIMOS	1,575	City of Wanneroo	Perth Metropolitan
MINDARIE	1,571	City of Wanneroo	Perth Metropolitan
KELMSCOTT	1,563	City of Armadale	Perth Metropolitan
SPEARWOOD	1,525	City of Cockburn	Perth Metropolitan
WANNANUP	1,514	City of Mandurah	Peel
COODANUP	1,467	City of Mandurah	Peel
HIGH WYCOMBE	1,431	City of Kalamunda	Perth Metropolitan
MIDLAND	1,382	City of Swan	Perth Metropolitan
HELENA VALLEY	1,291	Shire of Mundaring	Perth Metropolitan
STIRLING	1,254	City of Stirling	Perth Metropolitan
HAMILTON HILL	1,235	City of Cockburn	Perth Metropolitan
HALLS HEAD	1,217	City of Mandurah	Peel
YANGEBUP	1,189	City of Cockburn	Perth Metropolitan
THORNIE	1,167	City of Gosnells	Perth Metropolitan
KEWDALE	1,159	City of Belmont (98%), City of Kalamunda (2%)	Perth Metropolitan
KALBARRI	1,149	Shire of Northampton	Mid West
FALCON	1,136	City of Mandurah	Peel
BOULDER	1,070	City of Kalgoorlie-Boulder	Goldfields - Esperance
ORELIA	1,069	City of Kwinana	Perth Metropolitan
QUINNS ROCKS	1,066	City of Wanneroo	Perth Metropolitan
PORT DENISON	1,004	Shire of Irwin	Mid West
BALDIVIS	948	City of Rockingham	Perth Metropolitan
GUILDFORD	938	City of Swan	Perth Metropolitan
DONGARA	933	Shire of Irwin	Mid West
MUNSTER	862	City of Cockburn	Perth Metropolitan
GREENMOUNT	859	Shire of Mundaring	Perth Metropolitan
MULLALOO	852	City of Joondalup	Perth Metropolitan
SCARBOROUGH	830	City of Stirling	Perth Metropolitan
NANNUP	782	Shire of Nannup	South West
CAPEL	757	Shire of Capel	South West
LANGFORD	739	City of Gosnells	Perth Metropolitan
DAYTON	722	City of Swan	Perth Metropolitan
BELDON	716	City of Joondalup	Perth Metropolitan
MOUNT TARCOOLA	690	City of Greater Geraldton	Mid West
MELVILLE	676	City of Melville	Perth Metropolitan
COOGEE	666	City of Cockburn	Perth Metropolitan
SOUTHERN RIVER	648	City of Gosnells	Perth Metropolitan
WOODVALE	630	City of Joondalup (92%), City of Wanneroo (8%)	Perth Metropolitan
WESTMINSTER	626	City of Stirling	Perth Metropolitan
HERNE HILL	612	City of Swan	Perth Metropolitan
WELLARD	579	City of Kwinana	Perth Metropolitan
NORTHAMPTON	553	Shire of Northampton	Mid West
TARCOOLA BEACH	537	City of Greater Geraldton	Mid West
VIVEASH	530	City of Swan	Perth Metropolitan
DOUBLEVIEW	521	City of Stirling	Perth Metropolitan
NORTH PERTH	498	City of Vincent	Perth Metropolitan
NORTH YUNDERUP	494	Shire of Murray	Peel
NORTH DANDALUP	480	Shire of Murray	Peel
ERSKINE	476	City of Mandurah	Peel
WOODLANDS	473	City of Stirling	Perth Metropolitan
BOUVARD	465	City of Mandurah	Peel
GUILDERTON	454	Shire of Gingin	Wheatbelt
BOYANUP	452	Shire of Capel	South West
DIANELLA	410	City of Stirling (99%)	Perth Metropolitan
DALKEITH	395	City of Nedlands	Perth Metropolitan
BUSHMEAD	394	City of Swan	Perth Metropolitan
PEPPERMINT GROVE BE/	388	Shire of Capel	South West
BELMONT	374	City of Belmont	Perth Metropolitan
LESCHENAULT	373	Shire of Harvey	South West
KINGSLEY	367	City of Joondalup	Perth Metropolitan
BASSEDEAN	361	Town of Bassendean	Perth Metropolitan
HUNTINGDALE	358	City of Gosnells	Perth Metropolitan
BEELIAR	352	City of Cockburn	Perth Metropolitan
MANDURAH	345	City of Mandurah	Peel
ASCOT	344	City of Belmont	Perth Metropolitan
MAYLANDS	344	City of Bayswater	Perth Metropolitan

BAYSWATER	342 City of Bayswater	Perth Metropolitan
FURNISSDALE	333 Shire of Murray	Peel
HILLARYS	332 City of Joondalup	Perth Metropolitan
MAIDA VALE	327 City of Kalamunda	Perth Metropolitan
YOKINE	326 City of Stirling	Perth Metropolitan
RAVENSTHORPE	317 Shire of Ravensthorpe	Goldfields - Esperance
STRATHAM	317 Shire of Capel	South West
WOODRIDGE	314 Shire of Gingin	Wheatbelt
BALGA	313 City of Stirling	Perth Metropolitan
UPPER SWAN	290 City of Swan	Perth Metropolitan
BUNBURY	289 City of Bunbury	South West
WELSHPOOL	273 City of Canning (76%), Town of Victoria Park (24%)	Perth Metropolitan
RIVERVALE	271 City of Belmont	Perth Metropolitan
CAVERSHAM	265 City of Swan	Perth Metropolitan
BENNETT SPRINGS	263 City of Swan	Perth Metropolitan
CLOVERDALE	242 City of Belmont	Perth Metropolitan
MOSMAN PARK	240 Town of Mosman Park	Perth Metropolitan
HILTON	239 City of Fremantle	Perth Metropolitan
BRUNSWICK	238 Shire of Harvey	South West
ROSSMOYNE	224 City of Canning	Perth Metropolitan
GREENOUGH	223 City of Greater Geraldton	Mid West
CANNING VALE	222 City of Gosnells (63%), City of Canning (37%)	Perth Metropolitan
DUDLEY PARK	215 City of Mandurah	Peel
KARRINYUP	213 City of Stirling	Perth Metropolitan
CRAIGIE	212 City of Joondalup	Perth Metropolitan
CAPE BURNEY	205 City of Greater Geraldton	Mid West
HERRON	200 City of Mandurah	Peel
MORLEY	200 City of Bayswater	Perth Metropolitan
ROCKINGHAM	198 City of Rockingham	Perth Metropolitan
MIDDLE SWAN	197 City of Swan	Perth Metropolitan
SECRET HARBOUR	197 City of Rockingham	Perth Metropolitan
HORROCKS	196 Shire of Northampton	Mid West
GREENFIELDS	192 City of Mandurah	Peel
SORRENTO	187 City of Joondalup	Perth Metropolitan
MOUNT HAWTHORN	182 City of Vincent	Perth Metropolitan
LOWER CHITTERING	177 Shire of Chittering	Wheatbelt
WANGARA	175 City of Wanneroo	Perth Metropolitan
THE VINES	171 City of Swan	Perth Metropolitan
SOUTH BOULDER	167 City of Kalgoorlie-Boulder	Goldfields - Esperance
QUEENS PARK	165 City of Canning	Perth Metropolitan
BELLEVUE	161 City of Swan (75%), Shire of Mundaring (25%)	Perth Metropolitan
DUNCRAIG	160 City of Joondalup	Perth Metropolitan
KIRUP	160 Shire of Donnybrook-Balingup	South West
BULLSBROOK	159 City of Swan	Perth Metropolitan
DUNSBOROUGH	158 City of Busselton	South West
MILLENDON	157 City of Swan	Perth Metropolitan
CARRAMAR	155 City of Wanneroo	Perth Metropolitan
KENSINGTON	153 City of South Perth (99%)	Perth Metropolitan
BUSSELTON	150 City of Busselton	South West
AUSTRALIND	138 Shire of Harvey	South West
BECKENHAM	138 City of Gosnells	Perth Metropolitan
NOLLAMARA	137 City of Stirling	Perth Metropolitan
COCKBURN CENTRAL	136 City of Cockburn	Perth Metropolitan
GERALDTON	135 City of Greater Geraldton	Mid West
BARRAGUP	134 Shire of Murray	Peel
DARLINGTON	126 Shire of Mundaring	Perth Metropolitan
BEDFORD	124 City of Bayswater	Perth Metropolitan
PALMYRA	124 City of Melville	Perth Metropolitan
WILLAGEE	114 City of Melville	Perth Metropolitan
MARTIN	113 City of Gosnells	Perth Metropolitan
KEYSBROOK	109 Shire of Serpentine-Jarrahdale (79%), Shire of Murray (21%)	Peel
MARANGAROO	109 City of Wanneroo	Perth Metropolitan
GWELUP	108 City of Stirling	Perth Metropolitan
WEST SWAN	108 City of Swan	Perth Metropolitan
CANNINGTON	107 City of Canning	Perth Metropolitan
GOLDEN BAY	104 City of Rockingham	Perth Metropolitan
CHIDLOW	102 Shire of Mundaring	Perth Metropolitan
PADBURY	101 City of Joondalup	Perth Metropolitan
CASUARINA	100 City of Kwinana	Perth Metropolitan
LEEDERVILLE	100 City of Vincent	Perth Metropolitan
IRWIN	99 Shire of Irwin	Mid West
HAMERSLEY	97 City of Stirling	Perth Metropolitan
SEVILLE GROVE	97 City of Armadale	Perth Metropolitan
WOOROLOO	96 Shire of Mundaring	Perth Metropolitan
JALBARRAGUP	95 Shire of Nannup	South West
SOUTH GUILDFORD	95 City of Swan (100%)	Perth Metropolitan
DARCH	94 City of Wanneroo	Perth Metropolitan
SWAN VIEW	94 Shire of Mundaring (65%), City of Swan (35%)	Perth Metropolitan
WOODBIDGE	93 City of Swan	Perth Metropolitan
RANGEWAY	92 City of Greater Geraldton	Mid West
BINNINGUP	89 Shire of Harvey	South West

LAKE COOGEE	87 City of Cockburn	Perth Metropolitan
WANNEROO	87 City of Wanneroo	Perth Metropolitan
AUGUSTA	86 Shire of Augusta-Margaret River	South West
BROOKHAMPTON	85 Shire of Donnybrook-Balingup	South West
MOUNT LAWLEY	84 City of Stirling (60%), City of Vincent (32%), City of Bayswater (7%)	Perth Metropolitan
KAMBALDA WEST	82 Shire of Coolgardie	Goldfields - Esperance
KARDINYA	80 City of Melville	Perth Metropolitan
DONNYBROOK	78 Shire of Donnybrook-Balingup	South West
GOOSEBERRY HILL	78 City of Kalamunda	Perth Metropolitan
BATEMAN	76 City of Melville	Perth Metropolitan
BULL CREEK	76 City of Melville	Perth Metropolitan
DARLING DOWNS	76 Shire of Serpentine-Jarrahdale	Peel
EMBLETON	76 City of Bayswater	Perth Metropolitan
NABAWA	74 Shire of Chapman Valley	Mid West
COTTESLOE	73 Town of Cottesloe	Perth Metropolitan
MANNING	73 City of South Perth	Perth Metropolitan
SPRINGFIELD	73 Shire of Irwin	Mid West
BELHUS	72 City of Swan	Perth Metropolitan
SOUTH FREMANTLE	72 City of Fremantle	Perth Metropolitan
VASSE	72 City of Busselton	South West
SILVER SANDS	71 City of Mandurah	Peel
ARMADALE	70 City of Armadale	Perth Metropolitan
BINNU	70 Shire of Northampton	Mid West
KOONGAMIA	69 City of Swan	Perth Metropolitan
NANSON	69 Shire of Chapman Valley	Mid West
UPPER CAPEL	69 Shire of Donnybrook-Balingup	South West
MAHOMETS FLATS	68 City of Greater Geraldton	Mid West
NEERGABBY	68 Shire of Gingin	Wheatbelt
APPLECROSS	67 City of Melville	Perth Metropolitan
GREGORY	67 Shire of Northampton	Mid West
BASKERVILLE	66 City of Swan	Perth Metropolitan
YALLINGUP	66 City of Busselton	South West
EDEN HILL	65 Town of Bassendean	Perth Metropolitan
PORT KENNEDY	65 City of Rockingham	Perth Metropolitan
QUEDJINUP	63 City of Busselton	South West
ELGIN	62 Shire of Capel	South West
RUDDS GULLY	62 City of Greater Geraldton	Mid West
BIBRA LAKE	61 City of Cockburn	Perth Metropolitan
BRIGADOON	60 City of Swan	Perth Metropolitan
NEWLANDS	59 Shire of Donnybrook-Balingup	South West
BRIDGETOWN	57 Shire of Bridgetown-Greenbushes	South West
WALKAWAY	57 City of Greater Geraldton	Mid West
GNANGARA	56 City of Wanneroo	Perth Metropolitan
COMO	55 City of South Perth	Perth Metropolitan
YORK	55 Shire of York	Wheatbelt
GELORUP	54 Shire of Capel	South West
INNALOO	54 City of Stirling	Perth Metropolitan
EAST BUNBURY	53 City of Bunbury	South West
THOMSON BROOK	52 Shire of Donnybrook-Balingup	South West
ATWELL	51 City of Cockburn	Perth Metropolitan
KARAKIN	49 Shire of Gingin	Wheatbelt
DONNELLY RIVER	48 Shire of Nannup	South West
MOUNT NASURA	48 City of Armadale	Perth Metropolitan
WARWICK	48 City of Joondalup	Perth Metropolitan
CARLISLE	45 Town of Victoria Park	Perth Metropolitan
CURRAMBINE	45 City of Joondalup	Perth Metropolitan
AJANA	44 Shire of Northampton	Mid West
BANJUP	44 City of Cockburn	Perth Metropolitan
BEACONSFIELD	44 City of Fremantle	Perth Metropolitan
KALAMUNDA	44 City of Kalamunda	Perth Metropolitan
DEEPPALE	43 City of Greater Geraldton	Mid West
MAHOGANY CREEK	42 Shire of Mundaring	Perth Metropolitan
GABBADAH	41 Shire of Gingin	Wheatbelt
YUNA	41 Shire of Chapman Valley	Mid West
HAMEL	40 Shire of Waroona	Peel
INGLEWOOD	40 City of Stirling	Perth Metropolitan
EDGEWATER	39 City of Joondalup	Perth Metropolitan
HAZELMERE	39 City of Swan	Perth Metropolitan
ALMA	37 Shire of Northampton	Mid West
BROOKDALE	37 City of Armadale	Perth Metropolitan
WAROONA	37 Shire of Waroona	Peel
OGILVIE	36 Shire of Northampton	Mid West
BEECHBORO	35 City of Swan	Perth Metropolitan
WOORREE	33 City of Greater Geraldton	Mid West
BOOKARA	32 Shire of Irwin	Mid West
ALLANOOKA	31 Shire of Irwin	Mid West
BONNIEFIELD	31 Shire of Irwin	Mid West
MURDOCH	31 City of Melville	Perth Metropolitan
CUNDINUP	30 Shire of Nannup (78%), Shire of Donnybrook-Balingup (22%)	South West
DARRADUP	30 Shire of Nannup	South West
DENMARK	30 Shire of Denmark	Great Southern

KARRAGULLEN	30 City of Armadale	Perth Metropolitan
BANKSIA GROVE	29 City of Wanneroo	Perth Metropolitan
COOLUP	29 Shire of Murray	Peel
GIDGEGANNUP	29 City of Swan	Perth Metropolitan
JANDAKOT	29 City of Cockburn	Perth Metropolitan
CARLOTTA	28 Shire of Nannup	South West
SANDY GULLY	27 Shire of Northampton	Mid West
STAKE HILL	27 Shire of Murray	Peel
HOLMWOOD	26 Shire of Mingenew	Mid West
JINDALEE	26 City of Wanneroo	Perth Metropolitan
MINNENOOKA	25 City of Greater Geraldton	Mid West
YAKAMIA	24 City of Albany	Great Southern
CHITTERING	23 Shire of Chittering	Wheatbelt
NOLBA	23 Shire of Chapman Valley	Mid West
NORTH BOYANUP	23 Shire of Capel	South West
WEST BUSSELTON	23 City of Busselton	South West
NARALING	22 Shire of Chapman Valley	Mid West
QUINDALUP	22 City of Busselton	South West
RAVENSWOOD	22 Shire of Murray	Peel
WEST PERTH	22 City of Perth (72%), City of Vincent (28%)	Perth Metropolitan
BICKLEY	21 City of Kalamunda	Perth Metropolitan
HILBERT	21 City of Armadale (100%)	Perth Metropolitan (100%)
SOUTH BUNBURY	21 City of Bunbury	South West
YALLABATHARRA	21 Shire of Northampton	Mid West
WILLIAMS	20 Shire of Williams	Wheatbelt
JARRAHWOOD	19 City of Busselton	South West
SHELLEY	19 City of Canning	Perth Metropolitan
EAST BOWES	18 Shire of Northampton	Mid West
EAST YUNA	18 Shire of Chapman Valley	Mid West
GREENHILLS	18 Shire of York	Wheatbelt
WEMBLEY DOWNS	18 City of Stirling (100%)	Perth Metropolitan
BRAZIER	17 Shire of Donnybrook-Balingup	South West
CARDUP	17 Shire of Serpentine-Jarrahdale	Peel
PINJARRA	17 Shire of Murray	Peel
WEST COOLUP	17 Shire of Murray	Peel
NIRIMBA	16 Shire of Murray	Peel
SOUTH GREENOUGH	16 City of Greater Geraldton	Mid West
YARDARINO	16 Shire of Irwin	Mid West
COOLOONGUP	14 City of Rockingham	Perth Metropolitan
GINGIN	14 Shire of Gingin	Wheatbelt
BINDOON	13 Shire of Chittering	Wheatbelt
BOORALAMING	13 Shire of Koorda	Wheatbelt
ENEABBA	13 Shire of Carnamah	Mid West
STIRLING ESTATE	13 Shire of Capel	South West
CARBUNUP RIVER	12 City of Busselton	South West
COBLININE	12 Shire of Katanning	Great Southern
EAST NANNUP	12 Shire of Nannup	South West
MINGENEW	12 Shire of Mingenew	Mid West
NANGETTY	12 Shire of Mingenew	Mid West
WHITE GUM VALLEY	12 City of Fremantle	Perth Metropolitan
ANNIEBROOK	11 City of Busselton	South West
CARABAN	11 Shire of Gingin	Wheatbelt
CHARLEY CREEK	11 Shire of Donnybrook-Balingup	South West
GEORGINA	11 City of Greater Geraldton	Mid West
HESTER BROOK	11 Shire of Bridgetown-Greenbushes	South West
KOJARENA	11 City of Greater Geraldton	Mid West
NARRA TARRA	11 Shire of Chapman Valley	Mid West
OLDBURY	11 Shire of Serpentine-Jarrahdale	Peel
ARROWSMITH EAST	10 Shire of Three Springs	Mid West
DARTMOOR	10 Shire of Chapman Valley	Mid West
GNOWANGERUP	10 Shire of Gnowangerup	Great Southern
JINDONG	10 City of Busselton	South West
MARGARET RIVER	10 Shire of Augusta-Margaret River	South West
MOUNT HORNER	10 Shire of Irwin	Mid West
OAKFORD	10 Shire of Serpentine-Jarrahdale	Peel
TOOLIBIN	10 Shire of Wickpin	Wheatbelt
YORNUP	10 Shire of Bridgetown-Greenbushes	South West
KADATHINNI	9 Shire of Three Springs	Mid West
MANMANNING	9 Shire of Dowerin	Wheatbelt
MARYBROOK	9 City of Busselton	South West
MOONYOONOOKA	9 City of Greater Geraldton	Mid West
NEENDALING	9 Shire of Lake Grace	Wheatbelt
ROELANDS	9 Shire of Harvey	South West
SERPENTINE	9 Shire of Serpentine-Jarrahdale	Peel
WAGERUP	9 Shire of Waroona	Peel
WANDANA	9 Shire of Chapman Valley	Mid West
WANDILLUP	9 Shire of Bridgetown-Greenbushes	South West
BOWES	8 Shire of Northampton	Mid West
CROOKED BROOK	8 Shire of Dardanup	South West
DINDILOA	8 Shire of Chapman Valley	Mid West
MARDELLA	8 Shire of Serpentine-Jarrahdale	Peel

MOUNT HARDEY	8 Shire of York	Wheatbelt
NARRALOGGAN	8 Shire of York	Wheatbelt
REDCLIFFE	8 City of Belmont	Perth Metropolitan
WEST BINNU	8 Shire of Northampton	Mid West
BEELA	7 Shire of Harvey	South West
BIRCHMONT	7 Shire of Murray	Peel
EAST FREMANTLE	7 Town of East Fremantle	Perth Metropolitan
JACKITUP	7 Shire of Gnowangerup	Great Southern
LAKE CLIFTON	7 Shire of Waroona	Peel
NORTH JINDONG	7 City of Busselton	South West
PARKERVILLE	7 Shire of Mundaring	Perth Metropolitan
SOUTH YUNA	7 Shire of Chapman Valley	Mid West
ARRINO	6 Shire of Three Springs	Mid West
BALINGUP	6 Shire of Donnybrook-Balingup	South West
COWALELLUP	6 Shire of Gnowangerup	Great Southern
EAST NABAWA	6 Shire of Chapman Valley	Mid West
HAMMOND PARK	6 City of Cockburn	Perth Metropolitan
JARRAHDALE	6 Shire of Serpentine-Jarrahdale	Peel
KAURING	6 Shire of York	Wheatbelt
NAMBEELUP	6 Shire of Murray	Peel
PEMBERTON	6 Shire of Manjimup	South West
WELLESLEY	6 Shire of Harvey	South West
LUDLOW	5 City of Busselton (61%), Shire of Capel (39%)	South West
MOORIARY	5 Shire of Mingenew	Mid West
MORANGUP	5 Shire of Toodyay	Wheatbelt
MUCKENBURRA	5 Shire of Gingin	Wheatbelt
MULLALYUP	5 Shire of Donnybrook-Balingup	South West
MUNDIJONG	5 Shire of Serpentine-Jarrahdale	Peel
NEDLANDS	5 City of Nedlands (90%), City of Perth (10%)	Perth Metropolitan
PAYNDALE	5 Shire of Donnybrook-Balingup	South West
PEERABEELUP	5 Shire of Nannup	South West
TENINDEWA	5 City of Greater Geraldton	Mid West
WEST PINJARRA	5 Shire of Murray	Peel
WHITTAKER	5 Shire of Murray	Peel
ALBANY	4 City of Albany	Great Southern
BALLAJURA	4 City of Swan	Perth Metropolitan
BEVERLEY	4 Shire of Beverley	Wheatbelt
BLYTHEWOOD	4 Shire of Murray	Peel
DALYELLUP	4 Shire of Capel	South West
DARDANUP	4 Shire of Dardanup	South West
FAIRBRIDGE	4 Shire of Murray	Peel
JURIEN BAY	4 Shire of Dandaragan	Wheatbelt
KALLAROO	4 City of Joondalup	Perth Metropolitan
KOORDA	4 Shire of Koorda	Wheatbelt
SOUTH GLENCOE	4 Shire of Katanning	Great Southern
WUNGONG	4 City of Armadale	Perth Metropolitan
YALYALUP	4 City of Busselton	South West
YETNA	4 Shire of Chapman Valley	Mid West
ANKETELL	3 City of Kwinana	Perth Metropolitan
ARROWSMITH	3 Shire of Irwin	Mid West
BADGERIN ROCK	3 Shire of Koorda	Wheatbelt
BENTLEY	3 City of Canning (89%), Town of Victoria Park (11%)	Perth Metropolitan
CANNA	3 Shire of Morawa	Mid West
CLAREMONT	3 Town of Claremont (95%), Town of Cottesloe (3%)	Perth Metropolitan
DARDANUP WEST	3 Shire of Dardanup	South West
ELLENBROOK	3 City of Swan	Perth Metropolitan
FERNDAL	3 City of Canning	Perth Metropolitan
FORRESTFIELD	3 City of Kalamunda	Perth Metropolitan
GIRRAWHEEN	3 City of Wanneroo	Perth Metropolitan
ILUKA	3 City of Joondalup	Perth Metropolitan
KULIN	3 Shire of Kulin	Wheatbelt
KWINANA BEACH	3 City of Kwinana	Perth Metropolitan
KWINANA TOWN CENTR	3 City of Kwinana	Perth Metropolitan
MANJIMUP	3 Shire of Manjimup	South West
MERREDIN	3 Shire of Merredin	Wheatbelt
MORESBY	3 City of Greater Geraldton	Mid West
MOUNT ERIN	3 Shire of Chapman Valley	Mid West
MULLEWA	3 City of Greater Geraldton	Mid West
MUNDARING	3 Shire of Mundaring	Perth Metropolitan
NARNGULU	3 City of Greater Geraldton	Mid West
PARKFIELD	3 Shire of Harvey	South West
PEPPERMINT GROVE	3 Shire of Peppermint Grove	Perth Metropolitan
PINWERNYING	3 Shire of Katanning	Great Southern
SANDSPRINGS	3 City of Greater Geraldton	Mid West
SHADFORTH	3 Shire of Denmark	Great Southern
SINGLETON	3 City of Rockingham	Perth Metropolitan
TARIN ROCK	3 Shire of Dumbleyung	Wheatbelt
YALLINGUP SIDING	3 City of Busselton	South West
YARRAGADEE	3 Shire of Mingenew	Mid West
YUNDERUP	3 City of Mandurah	Peel
ASHFIELD	2 Town of Bassendean	Perth Metropolitan

ATTADALE	2 City of Melville	Perth Metropolitan
AVELEY	2 City of Swan	Perth Metropolitan
BOYA	2 Shire of Mundaring	Perth Metropolitan
BROOMEHILL WEST	2 Shire of Broomehill-Tambellup	Great Southern
BUTLER	2 City of Wanneroo	Perth Metropolitan
CONNOLLY	2 City of Joondalup	Perth Metropolitan
EAGLE BAY	2 City of Busselton	South West
ELLEDALE	2 City of Greater Geraldton	Mid West
FORREST BEACH	2 Shire of Capel	South West
FREMANTLE	2 City of Fremantle	Perth Metropolitan
GEOGRAPHE	2 City of Busselton	South West
GREENBUSHES	2 Shire of Bridgetown-Greenbushes	South West
HARRISDALE	2 City of Armadale	Perth Metropolitan
HENLEY BROOK	2 City of Swan	Perth Metropolitan
HICKETY	2 Shire of Chapman Valley	Mid West
IKAWA	2 Shire of Mingenew	Mid West
JANE BROOK	2 City of Swan	Perth Metropolitan
LAKELANDS	2 City of Mandurah	Peel
LESMURDIE	2 City of Kalamunda	Perth Metropolitan
MADDINGTON	2 City of Gosnells	Perth Metropolitan
MEADOW SPRINGS	2 City of Mandurah	Peel
MILLS LAKE	2 Shire of Gnowangerup	Great Southern
MILO	2 Shire of Irwin	Mid West
MOUNT BUDD	2 Shire of Mingenew	Mid West
NEEDILUP	2 Shire of Jerramungup	Great Southern
NORTH COOGEE	2 City of Cockburn	Perth Metropolitan
NORTH LAKE GRACE	2 Shire of Lake Grace	Wheatbelt
NORTHBRIDGE	2 City of Perth	Perth Metropolitan
NORTHCLIFFE	2 Shire of Manjimup	South West
RIVERTON	2 City of Canning	Perth Metropolitan
ROCKWELL	2 Shire of Chapman Valley	Mid West
SHENTON PARK	2 City of Subiaco (96%), City of Nedlands (4%)	Perth Metropolitan
SOUTH PERTH	2 City of South Perth	Perth Metropolitan
SOVEREIGN WATERS	2	Perth Metropolitan
SUCCESS	2 City of Cockburn	Perth Metropolitan
TRIGG	2 City of Stirling	Perth Metropolitan
VICTORIA PARK	2 Town of Victoria Park	Perth Metropolitan
WARNBRO	2 City of Rockingham	Perth Metropolitan
WEMBLEY	2 Town of Cambridge (77%), City of Stirling (23%)	Perth Metropolitan
WEST CASUARINAS	2 City of Greater Geraldton	Mid West
WHITE PEAK	2 Shire of Chapman Valley	Mid West
WILBINGA	2 Shire of Gingin	Wheatbelt
ABBAY	1 City of Busselton	South West
ALEXANDER HEIGHTS	1 City of Wanneroo	Perth Metropolitan
ASHBY	1 City of Wanneroo	Perth Metropolitan
AUBIN GROVE	1 City of Cockburn	Perth Metropolitan
BADINGARRA	1 Shire of Dandaragan	Wheatbelt
BAKERS HILL	1 Shire of Northam	Wheatbelt
BALKULING	1 Shire of Quairading	Wheatbelt
BAYONET HEAD	1 City of Albany	Great Southern
BEECHINA	1 Shire of Mundaring	Perth Metropolitan
BEERMULLAH	1 Shire of Gingin	Wheatbelt
BERESFORD	1 City of Greater Geraldton	Mid West
BERTRAM	1 City of Kwinana	Perth Metropolitan
BICTON	1 City of Melville	Perth Metropolitan
BIDDELIA	1 Shire of Nannup	South West
BLUFF POINT	1 City of Greater Geraldton	Mid West
BODDINGTON	1 Shire of Boddington	Peel
BOORAGOON	1 City of Melville	Perth Metropolitan
BOOTENAL	1 City of Greater Geraldton	Mid West
BRINGO	1 City of Greater Geraldton	Mid West
BUNJIL	1 Shire of Perenjori	Mid West
BURNS BEACH	1 City of Joondalup	Perth Metropolitan
BURNSIDE	1 Shire of Augusta-Margaret River	South West
BYFORD	1 Shire of Serpentine-Jarrahdale	Peel
CARABOODA	1 City of Wanneroo	Perth Metropolitan
CARINE	1 City of Stirling	Perth Metropolitan
CARLOTTA BROOK	1 Shire of Nannup	South West
CHURCHLANDS	1 City of Stirling	Perth Metropolitan
CLARKSON	1 City of Wanneroo	Perth Metropolitan
CODJATOTINE	1 Shire of Wandering	Wheatbelt
COLLIE	1 Shire of Collie	South West
COOKERNUP	1 Shire of Harvey	South West
COOLBELLUP	1 City of Cockburn	Perth Metropolitan
COOLCALALAYA	1 Shire of Northampton	Mid West
CORRIGIN	1 Shire of Corrigin	Wheatbelt
DOODLAKINE	1 Shire of Kellerberrin	Wheatbelt
DUDININ	1 Shire of Kulin	Wheatbelt
DUMBARTON	1 Shire of Toodyay	Wheatbelt
DWELLINGUP	1 Shire of Murray	Peel
EAST PERTH	1 City of Perth (98%), City of Vincent (2%)	Perth Metropolitan

EAST ROCKINGHAM	1 City of Rockingham	Perth Metropolitan
EAST VICTORIA PARK	1 Town of Victoria Park	Perth Metropolitan
FITZGERALD	1 Shire of Ravensthorpe	Goldfields - Esperance
FLOREAT	1 Town of Cambridge (87%), City of Nedlands (13%)	Perth Metropolitan
GLEN FORREST	1 Shire of Mundaring	Perth Metropolitan
GLENLYNN	1 Shire of Bridgetown-Greenbushes	South West
GNARABUP	1 Shire of Augusta-Margaret River	South West
GRANVILLE	1 Shire of Gingin	Wheatbelt
GREENWOOD	1 City of Joondalup	Perth Metropolitan
GWINDINUP	1 Shire of Capel	South West
HAYNES	1 City of Armadale	Perth Metropolitan
HAZELVALE	1 Shire of Denmark	Great Southern
HESTER	1 Shire of Bridgetown-Greenbushes	South West
HILLMAN	1 City of Rockingham	Perth Metropolitan
HILLSIDE	1 Shire of Narrogin	Wheatbelt
JERRAMUNGUP	1 Shire of Jerramungup	Great Southern
JOONDANNA	1 City of Stirling	Perth Metropolitan
KALGOORLIE	1 City of Kalgoorlie-Boulder	Goldfields - Esperance
KAMBALDA	1 City of Kalgoorlie-Boulder	Goldfields - Esperance
KANGAROO GULLY	1 Shire of Bridgetown-Greenbushes	South West
KARAWARA	1 City of South Perth	Perth Metropolitan
KARLOO	1 City of Greater Geraldton	Mid West
KENWICK	1 City of Gosnells	Perth Metropolitan
KINGS PARK	1 City of Perth	Perth Metropolitan
KULIKUP	1 Shire of Boyup Brook	South West
LANDSDALE	1 City of Wanneroo	Perth Metropolitan
LEDA	1 City of Kwinana	Perth Metropolitan
LEDGE POINT	1 Shire of Gingin	Wheatbelt
LOCKRIDGE	1 City of Swan	Perth Metropolitan
LOCKYER	1 City of Albany	Great Southern
LOWDEN	1 Shire of Donnybrook-Balingup	South West
LOWER KING	1 City of Albany	Great Southern
MERRIWA	1 City of Wanneroo	Perth Metropolitan
MILING	1 Shire of Moora	Wheatbelt
MINDARABIN	1 Shire of Gnowangerup	Great Southern
MINNIVALE	1 Shire of Dowerin	Wheatbelt
MOOJEBING	1 Shire of Katanning	Great Southern
MORAWA	1 Shire of Morawa	Mid West
MOUNT CLARENCE	1 City of Albany	Great Southern
MOUNT PLEASANT	1 City of Melville	Perth Metropolitan
MUCHEA	1 Shire of Chittering	Wheatbelt
MUMBERKINE	1 Shire of Goomalling	Wheatbelt
MYALUP	1 Shire of Harvey	South West
NARROGIN	1 Shire of Narrogin	Wheatbelt
NILGEN	1 Shire of Gingin	Wheatbelt
NORTH BEACH	1 City of Stirling	Perth Metropolitan
NORTH FREMANTLE	1 City of Fremantle	Perth Metropolitan
NUNILE	1 Shire of Toodyay	Wheatbelt
OSBORNE PARK	1 City of Stirling (100%)	Perth Metropolitan
PELICAN POINT	1 City of Bunbury	South West
PERTH	1 City of Vincent (52%), City of Perth (48%)	Perth Metropolitan
PICTON	1 City of Bunbury	South West
PITHARA	1 Shire of Dalwallinu	Wheatbelt
QUAIRADING	1 Shire of Quairading	Wheatbelt
RIVERSIDE GARDENS	1	Perth Metropolitan
RIVERVIEW	1	Perth Metropolitan
ROSA BROOK	1 Shire of Augusta-Margaret River	South West
ROSA GLEN	1 Shire of Augusta-Margaret River	South West
SAFETY BAY	1 City of Rockingham	Perth Metropolitan
SHOALWATER	1 City of Rockingham	Perth Metropolitan
SOUTHERN CROSS	1 Shire of Yilgarn	Wheatbelt
ST JAMES	1 City of Canning (62%), Town of Victoria Park (38%)	Perth Metropolitan
STRATHALBYN	1 City of Greater Geraldton	Mid West
SUBIACO	1 City of Subiaco (100%)	Perth Metropolitan
SWANBOURNE	1 City of Nedlands (50%), Town of Claremont (50%)	Perth Metropolitan
TAKALARUP	1 Shire of Plantagenet	Great Southern
THE PLAINS	1 Shire of Capel	South West
TUART HILL	1 City of Stirling	Perth Metropolitan
UDUC	1 Shire of Harvey	South West
USHER	1 City of Bunbury	South West
WAGGRAKINE	1 City of Greater Geraldton (93%), Shire of Chapman Valley (7%)	Mid West
WALLISTON	1 City of Kalamunda	Perth Metropolitan
WARRENUP	1 City of Albany	Great Southern
WEST LEEDERVILLE	1 Town of Cambridge	Perth Metropolitan
WHITBY	1 Shire of Serpentine-Jarrahdale	Peel
WICHERINA	1 City of Greater Geraldton	Mid West
WILSON	1 City of Canning	Perth Metropolitan
WILYABRUP	1 City of Busselton	South West
YARLOOP	1 Shire of Harvey	South West
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Hon Bill Johnston MLA
Minister for Mines and Petroleum; Energy; Corrective Services;
Industrial Relations

Our Ref: 71-23369

Mr Colin Beckett
Chair
Western Power


Dear Mr Beckett

I am writing to advise you that I have commissioned an Independent Review of the Christmas 2021 power outages (Review), which affected approximately 34,000 customers on the Western Power network between 24 and 28 December 2021.

The Review will commence on Monday, 31 January 2022, and will conclude with a report outlining findings and recommendations, which I expect by Monday 14 March 2022.

Please find attached the Review *Terms of Reference* for your information. The Review will include a summary of the outages and the reason for each outage, having regard to a range of matters including, but not limited to, network design, planning, historical performance and maintenance, as well as operational planning and load forecasting. The scope of the Review will also look at Western Power's operational response and risk assessment during the events, communication with external parties, and its compliance with existing regulatory, statutory and market obligations.

I have appointed Ms Michelle Shepherd, currently a Commissioner at the Australian Energy Market Commission, to the role of Independent Reviewer. Ms Shepherd will be supported by a technical advisor as required, as well as Energy Policy WA staff, who will provide a secretariat function and host Ms Shepherd at their offices.

Please note that while the Independent Reviewer is not provided with statutory authority to collect information for this Review, it is my expectation that Western Power will cooperate fully with any requests for information and interviews made by the Independent Reviewer.

The timely provision of fulsome information to the Independent Reviewer is essential to the accuracy and success of this Review, which may require dedicated Western Power resources for the duration of the Review. I trust that Western Power will ensure resources with the appropriate skills and capacity are made available and will provide details for key contacts to the Review team.

Lastly, while I have appointed Ms Shepherd as the Independent Reviewer, Energy Policy WA will be contracting with Ms Shepherd directly. Energy Policy WA will then invoice Western Power for the cost of these services. I understand that these costs are estimated to be in the order of \$150,000 (ex-GST), and I ask that Western Power cooperate with Energy Policy WA in the payment of these invoices.

Thank you in advance for your assistance in this Review, and I look forward to reading the findings and recommendations.

Yours sincerely

A handwritten signature in black ink, appearing to read 'Bill Johnston', with a stylized flourish at the end.

Hon Bill Johnston MLA
Minister for Mines and Petroleum; Energy;
Corrective Services; Industrial Relations
27 JAN 2021

Att. Independent Review into the Christmas 2021 Power Outages Terms of Reference

cc. Mr Ed Kalajzic Chief Executive Officer, Western Power