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Table 8 Proposed turbine layout for the Project site [3]

Turbine ID	Easting ¹ [m]	Northing ¹ [m]	Base elevation [m]	Turbine ID	Easting ¹ [m]	Northing ¹ [m]	Base elevation [m]
T01	437223	5764842	208	T18	437039	5758139	198
T02	436464	5764422	254	T19	436935	5757281	206
T03	436525	5765561	293	T20	435123	5757829	265
T04	435819	5765128	314	T21	434250	5757623	231
T05	435296	5764592	317	T22	434458	5758419	221
T06	435648	5763965	245	T23	435046	5758935	236
T07	435562	5762911	220	T24	433800	5760517	254
T08	436508	5761045	196	T25	434294	5759876	217
T09	436574	5760048	222	T26	434761	5760476	217
T10	435933	5759594	247	T27	434768	5757077	261
T11	435580	5758395	254	T28	434290	5756512	259
T12	436043	5758962	246	T29	435818	5755871	181
T13	436975	5758811	215	T30	433871	5755768	243
T14	437368	5759666	197	T31	433005	5755169	229
T15	437301	5760459	193	T32	433276	5754264	192
T16	437789	5761008	191	T33	432628	5753703	189
T17	436184	5757839	220				

1. Coordinate system: MGA zone 55, GDA94 datum.

Table 9 Details of point-to-point links crossing the proposed Project site

Link no.	Assignment ID	Licence number	Frequency [MHz]	Licence owner
1	3076691, 3076692	10329969/1	7792.175	AusNet Transmission Group Pty Ltd (AusNet Services) SPI Powernet Pty Limited Locked Bag 1405 Licensing-ICT Business Office MELBOURNE CITY MAIL CENTRE VIC 8001
	3076690, 3076689	10329969/1	8103.495	
	3076695, 3076696	10329970/1	7851.475	
	3076694, 3076693	10329970/1	8162.795	
2	896369, 896370	1925030/1	14564.000	Central Gippsland Region Water Corporation (Gippsland Water) PO Box 348 TRARALGON VIC 3844
	896368, 896367	1925030/1	15208.000	
3	773899, 773898	1222580/1	5974.850	Digital Distribution Australia Pty Limited PO Box 1966 Macquarie Centre NORTH RYDE NSW 2113
	773896, 773897	1222580/1	6226.890	
	773907, 773906	1222581/1	6034.150	
	773904, 773905	1222581/1	6286.190	
	773915, 773914	1222582/1	6093.450	
	773912, 773913	1222582/1	6345.490	
4	1189185, 1189186	1990120/1	10815.000	Optus Mobile Pty Limited Singtel Optus Pty Ltd PO Box 888 NORTH RYDE NSW 1670
	1189184, 1189183	1990120/1	11305.000	
5	3859133, 3859132	10467326/1	6019.325	Vertical Telecoms Pty Limited (VerTel) PO Box 126 ROSEBERY NSW 2018
	3859130, 3859131	10467326/1	6271.365	
6	2615336, 2615337	10234394/1	6640.000	Vertical Telecoms Pty Limited (VerTel) PO Box 126 ROSEBERY NSW 2018
	2615335, 2615334	10234394/1	6980.000	

Table 10 Details of point-to-multipoint licences within 75 km of the proposed Project

Assignment ID	Site ID	Licence no.	Latitude [GDA94]	Longitude [GDA94]	Distance to Project [km]	Licence owner
1245541	47952	1565029/1	-38.346	146.475	15	Ausnet Electricity Services Pty Ltd Locked Bag 1405 Licensing-ICT Business Office MELBOURNE CITY MAIL CENTRE VIC 8001
1245544	47952	1565029/1	-38.346	146.475	15	
1245616	53019	1900011/1	-38.279	146.050	16	
1245613	53019	1900011/1	-38.279	146.050	16	
1245528	53019	1565024/1	-38.279	146.050	16	
1245525	53019	1565024/1	-38.279	146.050	16	
1245497	51143	1564676/1	-38.570	146.307	22	
1245500	51143	1564676/1	-38.570	146.307	22	
1245493	302113	1564674/1	-38.406	146.639	31	
1245496	302113	1564674/1	-38.406	146.639	31	
1247655	53018	1966701/1	-37.955	145.493	75	
1247659	53018	1966702/1	-37.955	145.493	75	
1247656	53018	1966702/1	-37.955	145.493	75	
1247652	53018	1966701/1	-37.955	145.493	75	
892089	54736	1922866/1	-38.130	146.484	19	Aussie Broadband Pty Ltd PO Box 3351 GIPPSLAND MC VIC 3841
892086	54736	1922866/1	-38.130	146.484	19	
1174973	9001659	1930055/1	-38.619	146.174	27	
1174976	9001659	1930055/1	-38.619	146.174	27	
892130	50549	1922869/1	-38.655	146.346	32	
892133	50549	1922869/1	-38.655	146.346	32	
892134	306018	1922870/1	-37.935	146.642	45	
892137	306018	1922870/1	-37.935	146.642	45	
980565	305493	1975738/1	-38.242	146.375	6	Australian Power Partners B V & Others Attn: Accounts Payable PO Box 195 IT Manager MORWELL VIC 3840
1372239	305493	9872738/1	-38.242	146.375	6	
1372236	305493	9872738/1	-38.242	146.375	6	
980562	305493	1975738/1	-38.242	146.375	6	
4767925	10011060	10605410/1	-38.194	146.531	20	Bureau of Meteorology GPO Box 1289 MELBOURNE VIC 3001
4767922	10011060	10605410/1	-38.194	146.531	20	
1306492	42152	1323748/1	-37.695	146.505	63	
1306495	42152	1323748/1	-37.695	146.505	63	
920285	9014501	1942092/1	-38.388	146.269	2	Central Gippsland Region Water Corporation (Gippsland Water) PO Box 348 TRARALGON VIC 3844
920288	9014501	1942092/1	-38.388	146.269	2	
908556	9011755	1934760/1	-38.218	146.248	4	
813991	9011755	1433619/1	-38.218	146.248	4	
908553	9011755	1934760/1	-38.218	146.248	4	
913037	9011755	1937848/1	-38.218	146.248	4	
913034	9011755	1937848/1	-38.218	146.248	4	
4278667	9011755	1300996/2	-38.218	146.248	4	
4278666	9011755	1300996/2	-38.218	146.248	4	
715460	9011755	197132/1	-38.218	146.248	4	
813994	9011755	1433619/1	-38.218	146.248	4	
715463	9011755	197132/1	-38.218	146.248	4	
792396	42768	1325578/1	-38.201	146.260	5	
792393	42768	1325578/1	-38.201	146.260	5	
908187	42764	1934415/1	-38.159	146.347	9	
908190	42764	1934415/1	-38.159	146.347	9	
744385	42764	1143457/1	-38.159	146.347	9	
744388	42764	1143457/1	-38.159	146.347	9	
1400404	42764	9896649/1	-38.159	146.347	9	
1400405	42764	9896649/1	-38.159	146.347	9	
715471	42764	197133/1	-38.159	146.347	9	
715468	42764	197133/1	-38.159	146.347	9	
1005198	9023520	1987417/1	-38.234	146.424	10	
1005201	9023520	1987417/1	-38.234	146.424	10	
874504	9009530	1911224/1	-38.194	146.446	13	
874507	9009530	1911224/1	-38.194	146.446	13	
2871045	10005987	1934759/2	-38.213	146.526	19	

**Table 10 Details of point-to-multipoint licences within 75 km of the proposed Project
(continued)**

Assignment ID	Site ID	Licence no.	Latitude [GDA94]	Longitude [GDA94]	Distance to Project [km]	Licence owner
2871042	10005987	1934759/2	-38.213	146.526	19	Central Gippsland Region Water Corporation (Gippsland Water) PO Box 348 TRARALGON VIC 3844
4322392	42773	10543600/1	-38.210	146.526	19	
1399783	42773	9896646/1	-38.210	146.526	19	
1399786	42773	9896646/1	-38.210	146.526	19	
4322391	42773	10543600/1	-38.210	146.526	19	
908182	9011756	1934414/1	-38.185	145.930	29	
908179	9011756	1934414/1	-38.185	145.930	29	
786335	100232	1312078/1	-38.185	145.929	29	
786338	100232	1312078/1	-38.185	145.929	29	
813995	305763	1433620/1	-38.374	146.677	33	
832504	305763	1565581/1	-38.374	146.677	33	
813998	305763	1433620/1	-38.374	146.677	33	
832507	305763	1565581/1	-38.374	146.677	33	
2527175	305763	10220583/1	-38.374	146.677	33	
2600596	305763	10231253/1	-38.374	146.677	33	
2600595	305763	10231253/1	-38.374	146.677	33	
2527176	305763	10220583/1	-38.374	146.677	33	
2527172	305763	10220582/1	-38.374	146.677	33	
2527171	305763	10220582/1	-38.374	146.677	33	
1399788	305763	9896648/1	-38.374	146.677	33	
1399789	305763	9896648/1	-38.374	146.677	33	
715459	305763	197131/1	-38.374	146.677	33	
715456	305763	197131/1	-38.374	146.677	33	
893079	141953	1923318/1	-38.150	145.840	38	
893082	141953	1923318/1	-38.150	145.840	38	
740962	133457	1140150/1	-38.001	145.951	39	
740967	133457	1140150/1	-38.001	145.951	39	
792380	305228	1325576/1	-37.960	146.793	52	
792377	305228	1325576/1	-37.960	146.793	52	
792385	305229	1325577/1	-37.882	146.780	57	
792388	305229	1325577/1	-37.882	146.780	57	
2527167	305229	10220581/1	-37.882	146.780	57	
2527168	305229	10220581/1	-37.882	146.780	57	
792412	305232	1325580/1	-37.961	146.972	66	
792409	305232	1325580/1	-37.961	146.972	66	
2527184	301089	10220585/1	-38.108	147.052	66	
2527183	301089	10220585/1	-38.108	147.052	66	
2527160	301089	10220579/1	-38.108	147.052	66	
2527159	301089	10220579/1	-38.108	147.052	66	
715435	301089	197125/1	-38.108	147.052	66	
715438	301089	197125/1	-38.108	147.052	66	
975443	301089	1973297/1	-38.108	147.052	66	
975446	301089	1973297/1	-38.108	147.052	66	
981764	301089	1976255/1	-38.108	147.052	66	
981767	301089	1976255/1	-38.108	147.052	66	
792401	305231	1325579/1	-38.107	147.054	67	
792404	305231	1325579/1	-38.107	147.054	67	
2527188	305231	10220586/1	-38.107	147.054	67	
2527187	305231	10220586/1	-38.107	147.054	67	
832523	461630	1565583/1	-38.112	147.061	67	
832520	461630	1565583/1	-38.112	147.061	67	
908198	9008444	1934416/1	-37.941	146.985	68	
908195	9008444	1934416/1	-37.941	146.985	68	
2527164	9008444	10220580/1	-37.941	146.985	68	
2527163	9008444	10220580/1	-37.941	146.985	68	
715446	9008444	197127/1	-37.941	146.985	68	
715443	9008444	197127/1	-37.941	146.985	68	
715479	42743	197134/1	-38.189	147.084	68	
715476	42743	197134/1	-38.189	147.084	68	

**Table 10 Details of point-to-multipoint licences within 75 km of the proposed Project
(continued)**

Assignment ID	Site ID	Licence no.	Latitude [GDA94]	Longitude [GDA94]	Distance to Project [km]	Licence owner
727427	52632	491772/1	-38.208	146.366	6	EnergyAustralia Yallourn Pty Ltd Attn: Neil Firmin PO Box 444 MOE VIC 3825
727424	52632	491772/1	-38.208	146.366	6	
757180	12029	1187159/1	-38.406	146.638	31	ESSO Australia Pty Ltd GPO Box 400C Level 4 EMIT Invoice Management MELBOURNE VIC 3001
757177	12029	1187159/1	-38.406	146.638	31	
715320	12041	191259/1	-38.372	146.677	33	
715323	12041	191259/1	-38.372	146.677	33	
868048	42394	1905840/1	-38.221	147.156	74	
989329	42394	1980218/1	-38.221	147.156	74	
989326	42394	1980218/1	-38.221	147.156	74	
868045	42394	1905840/1	-38.221	147.156	74	
789685	42394	1322428/1	-38.221	147.156	74	
789688	42394	1322428/1	-38.221	147.156	74	
785895	301406	1309544/1	-38.175	146.007	24	Fonterra Australia Pty Ltd 150 Darnum Park Road DARNUM VIC 3822
785892	301406	1309544/1	-38.175	146.007	24	
1220124	403605	1425351/1	-38.000	146.658	40	Gippsland Southern Rural Water Corporation (Southern Rural Water) Accounts Payable PO Box 153 MAFFRA VIC 3860
1220127	403605	1425351/1	-38.000	146.658	40	
1220069	306301	1326457/1	-37.943	147.009	69	
1220066	306301	1326457/1	-37.943	147.009	69	
1219876	306301	1141792/1	-37.943	147.009	69	
1219879	306301	1141792/1	-37.943	147.009	69	
922635	9014872	1944112/1	-38.156	146.352	10	Kallistrate Pty Ltd (Speedweb Wireless Internet) PO Box 356 MORWELL VIC 3840
922638	9014872	1944112/1	-38.156	146.352	10	
1448112	9027494	9938336/1	-38.137	146.281	11	
1448115	9027494	9938336/1	-38.137	146.281	11	
926185	9015290	1946547/1	-38.354	146.437	12	
926182	9015290	1946547/1	-38.354	146.437	12	
922619	9014871	1944110/1	-38.138	146.485	19	
922622	9014871	1944110/1	-38.138	146.485	19	
922611	9014865	1944109/1	-38.030	146.625	36	
922614	9014865	1944109/1	-38.030	146.625	36	
4052206	10011059	10502978/1	-38.355	146.438	12	Latrobe City Council (Latrobe Shire Council) PO Box 264 MORWELL VIC 3840
4052209	10011059	10502978/1	-38.355	146.438	12	
787803	302912	1317096/1	-38.397	146.562	24	
787806	302912	1317096/1	-38.397	146.562	24	
787359	302666	1316032/1	-38.252	146.410	9	Loy Yang Power Management Pty Ltd PO Box 1799 TRARALGON VIC 3844
787362	302666	1316032/1	-38.252	146.410	9	
2399897	9003020	10182410/1	-38.241	146.560	22	
2399900	9003020	10182410/1	-38.241	146.560	22	
4047026	52625	10501450/1	-38.238	146.561	22	
4047023	52625	10501450/1	-38.238	146.561	22	

Table 10 Details of point-to-multipoint licences within 75 km of the proposed Project (continued)

Assignment ID	Site ID	Licence no.	Latitude [GDA94]	Longitude [GDA94]	Distance to Project [km]	Licence owner
1235455	305291	1919623/1	-38.321	145.607	54	Multinet Gas DB No1 Pty Ltd Multinet Gas DB No2 Pty Ltd Multinet Gas Distribution Partnership PO Box 449 MOUNT WAVERLEY VIC 3149
1235452	305291	1919623/1	-38.321	145.607	54	
750367	42778	1149019/1	-38.440	145.934	27	South Gippsland Region Water Corporation (South Gippsland Water) PO Box 102 FOSTER VIC 3960
750370	42778	1149019/1	-38.440	145.934	27	
1009809	9024061	1989850/1	-38.645	146.210	30	
1009812	9024061	1989850/1	-38.645	146.210	30	
882125	9010281	1916656/1	-38.586	146.011	31	
882128	9010281	1916656/1	-38.586	146.011	31	
742953	9000510	1142258/1	-38.658	146.372	33	
742950	9000510	1142258/1	-38.658	146.372	33	
748213	9001159	1147200/1	-38.442	145.836	35	
748210	9001159	1147200/1	-38.442	145.836	35	
5164222	9001159	10670426/1	-38.442	145.836	35	
5164219	9001159	10670426/1	-38.442	145.836	35	
811174	9000509	1430555/1	-38.666	146.431	36	
811171	9000509	1430555/1	-38.666	146.431	36	
806660	403440	1424576/1	-38.398	145.815	36	
806657	403440	1424576/1	-38.398	145.815	36	
761978	9003574	1192052/1	-38.630	145.955	37	
761981	9003574	1192052/1	-38.630	145.955	37	
806732	403442	1424646/1	-38.716	146.121	39	
806729	403442	1424646/1	-38.716	146.121	39	
748935	9001277	1148024/1	-38.374	145.705	45	
748938	9001277	1148024/1	-38.374	145.705	45	
833223	46457	1566525/1	-38.673	146.694	51	
833226	46457	1566525/1	-38.673	146.694	51	
758980	9003022	1188768/1	-38.812	146.041	51	
758983	9003022	1188768/1	-38.812	146.041	51	
762436	9003596	1192427/1	-38.663	145.671	58	
762439	9003596	1192427/1	-38.663	145.671	58	
3112625	44091	10335279/1	-38.608	145.597	61	
997347	44091	1984167/1	-38.608	145.597	61	
997350	44091	1984167/1	-38.608	145.597	61	
3112624	44091	10335279/1	-38.608	145.597	61	
762440	44091	1192428/1	-38.608	145.597	61	
762443	44091	1192428/1	-38.608	145.597	61	
704828	38559	86886/1	-37.575	146.190	74	Telstra Corporation Limited Radio Engineering Attn: Nik Patel Locked Bag 3501 BRISBANE QLD 4001
704825	38559	86886/1	-37.575	146.190	74	
1395520	9027170	9891130/1	-38.015	146.815	51	W C and T L Warren 2057 Sale-Heyfield Road DENISON VIC 3858
1395523	9027170	9891130/1	-38.015	146.815	51	
788803	303670	1320365/1	-38.149	145.923	32	Warragul Country Club Inc PO Box 2 WARRAGUL VIC 3820
788800	303670	1320365/1	-38.149	145.923	32	

**Table 10 Details of point-to-multipoint licences within 75 km of the proposed Project
(continued)**

Assignment ID	Site ID	Licence no.	Latitude [GDA94]	Longitude [GDA94]	Distance to Project [km]	Licence owner
866905	9008521	1904647/1	-38.531	145.411	73	Westernport Region Water Corporation 2 Boys Home Road NEWHAVEN VIC 3925
866908	9008521	1904647/1	-38.531	145.411	73	

Table 11 Details of other licences identified within 75 km of the proposed Project

Licence category	Licence type	Number of assignment IDs
1800 MHz Band	Spectrum	1180
2 GHz Band	Spectrum	1098
2.3 GHz Band	Spectrum	5964
2.5 GHz Band	Spectrum	471
3.4 GHz Band	Spectrum	2151
700 MHz Band	Spectrum	1452
800 MHz Band	Spectrum	1012
Aeronautical Assigned System	Aeronautical	77
Amateur Beacon	Amateur	2
Amateur Repeater	Amateur	95
Ambulatory - Initial	Land Mobile	14
Ambulatory System	Land Mobile	206
CBRS Repeater	Land Mobile	12
Commercial Radio	Broadcasting	6
Commercial Television	Broadcasting	9
Community Broadcasting	Broadcasting	7
Earth Receive	Earth Receive	1
Fixed Earth	Earth	1
Fixed Receive	Fixed Receive	3
Land Mobile System - > 30MHz	Land Mobile	2052
Land Mobile System 0-30MHz	Land Mobile	264
Limited Coast Assigned System	Maritime Coast	32
Narrowband Area Service station(s)	Broadcasting	2
Narrowcasting Service (Fixed Tax)	Broadcasting	4
Narrowcasting Service (LPON)	Broadcasting	26
National Broadcasting	Broadcasting	12
Paging System - Exterior	Land Mobile	46
Paging System - Interior	Land Mobile	22
PMTS Class B	PTS	1126
PMTS Class B (935-960 MHz)	PTS 900 MHz	235
Radiodetermination	Radiodetermination	11
Retransmission	Broadcasting	26

Table 12 Emergency services with radiocommunication assets in the vicinity of the proposed Project

Emergency service	Contact details	Distance from closest site to Project boundary [km]
Ambulance Victoria	Ambulance Victoria Attn: Tim McCallum 303 Gillies Street North WENDOUREE VIC 3355	24
Australian Maritime Safety Authority	Australian Maritime Safety Authority GPO Box 2181 Attn: Response Division Administration Canberra ACT 2601	64
Australian Radio Rescue Service Inc	Australian Radio Rescue Service Inc VMR Westernport PO Box 353 (Attn: Ian Cuthbertson) FRANKSTON VIC 3199	69
Country Fire Authority (CFA)	Country Fire Authority PO Box 701 MOUNT WAVERLEY VIC 3149	2
Department of Justice and Regulation – Corrections Victoria S&ES Group	Department of Justice and Regulation Corrections Victoria S&ES Group Radiocommunications Coordinator Locked Bag 7 LARA VIC 3212	59
Department of Justice and Regulation – ESTA Emergency Services Telecommunications Authority	Department of Justice and Regulation ESTA Emergency Services Telecommunications Authority c/-10 Wesley Court - Motorola MMR Project Tally Ho Bus Park EAST BURWOOD VIC 3151	35
Department of Justice and Regulation – RMR Regional Mobile Radio	Department of Justice and Regulation RMR Regional Mobile Radio c/- Level 2 Building M5 30 Henderson Road CLAYTON VIC 3168	7
Department of Justice and Regulation – Visionstream Australia	Department of Justice and Regulation Visionstream Australia Locked Bag 4001 Attn: Rosario Holden HEATHERTON VIC 3202	5
Life Saving Victoria Limited	Life Saving Victoria Limited PO Box 353 (Paul Kildea) SOUTH MELBOURNE VIC 3205	64
St. John Ambulance Australia Incorporated	St. John Ambulance Australia Incorporated Attn: Paul Stein 170 Forster Road MOUNT WAVERLEY VIC 3149	7
The Australian Volunteer Coast Guard Association Inc	The Australian Volunteer Coast Guard Association Inc PO Box 64 SANDRINGHAM VIC 3191	22
Victoria State Emergency Service	Victoria State Emergency Service 168 Sturt Street SOUTHBANK VIC 3006	7

Table 13 BoM radar sites in the vicinity of the proposed Project

BoM radar site	Radar type	Latitude ¹	Longitude ¹	Distance to Project [km]
Bairnsdale	Standard weather watch	-37.888	147.576	117
Broadmeadows	Doppler	-37.691	144.946	131
Melbourne	Doppler	-37.691	144.946	131
Yarrawonga	Doppler	-37.855	144.755	138
NW Tasmania	Doppler	-36.030	146.023	247
Wagga Wagga	Standard weather watch	-41.181	145.579	317
Canberra	Doppler	-35.167	147.467	357
Rainbow	Doppler	-35.661	149.512	404

1. Coordinate system: Lat/Lon WGS84 datum.

Table 14 Trigonometrical stations in the vicinity of the proposed Project

Station name	Datum	Latitude ¹	Longitude ²	Distance to Project [km]
Allambee	AGD66, AGD84, GDA94	-38.262	146.046	17
Andersons	AGD66	-38.154	146.332	10
Austins Hill	AGD66, AGD84, GDA94	-38.478	146.285	11
Austins Hill RM1	AGD66	-38.478	146.285	11
Boola	AGD66	-38.134	146.468	18
Budgerie	AGD66, AGD84, GDA94	-38.422	146.363	11
Davey	AGD66	-38.257	146.365	5
Dobbins	AGD66	-38.355	146.438	13
Gooding	AGD66	-38.136	146.287	11
Haunted Hills	AGD66	-38.185	146.323	6
Hazelwood	AGD66	-38.278	146.382	7
Hernes Oak	AGD66	-38.216	146.306	2
Hooghly	AGD66, AGD84, Astro, GDA94	-38.387	146.466	16
Howletts	AGD66	-38.169	146.345	8
Kayes	AGD66	-38.132	146.384	13
Kerrie Brae	AGD66, AGD84, GDA94	-38.245	146.049	17
Mardan	AGD66, AGD84, GDA94	-38.443	146.109	13
Medews	AGD66	-38.315	146.415	10
Mills	AGD66	-38.303	146.461	14
Moe	AGD66, AGD84, GDA94	-38.221	146.227	5
Morwell North Base	AGD66	-38.253	146.455	13
Morwell South Base	AGD66	-38.273	146.437	11
Morwell WT	AGD66	-38.225	146.416	9
Ronalds	AGD66	-38.259	146.394	8
Sayers	AGD66	-38.233	146.303	1
Shaws	AGD66	-38.325	146.308	1
Silcocks	AGD66	-38.304	146.349	4
Tanjil East	AGD66	-38.152	146.405	13
Thorpdale	AGD66, AGD84, Astro, GDA94	-38.304	146.215	2
Traralgon South	AGD66	-38.262	146.509	18
Tyers	AGD66, AGD84, GDA94	-38.130	146.483	19
Tyers North	AGD66, AGD84, GDA94	-38.119	146.477	20
Tyers North Trav Point A	AGD66, AGD84, GDA94	-38.122	146.478	20
Tyers West	AGD66	-38.150	146.428	14
Walkers Hill	AGD66	-38.353	146.486	17

1. Coordinate system: Lat/Lon GDA94 datum.

Table 15 Dwellings with potential to experience interference to NBN fixed wireless internet signals from NBN towers in the vicinity of the Project

Dwelling ID	Easting ¹ [m]	Northing ¹ [m]	May be receiving signals from the Boolarra NBN tower	May be receiving signals from the Narracan NBN tower
44	429015	5759172	X	
45	429096	5759045	X	
46	428824	5759012	X	
62	425839	5752479	X	
63	426048	5752406	X	
64	426102	5752181	X	
67	426039	5751200	X	
68	426312	5751217	X	
93	429940	5752608	X	
94	430195	5752601	X	
95	429915	5752846	X	
764	431206	5752889	X	
765	431155	5752966	X	
766	431253	5752942	X	
795	432088	5752531	X	
796	431377	5752829	X	
811	431033	5753784	X	
826	432624	5758517	X	X
827	432809	5758713	X	X
828	432992	5758778	X	X
829	432961	5758727	X	X
830	432914	5758908	X	X
832	433210	5759227	X	X
1202	427286	5752312	X	
1203	425759	5752387	X	
1211	426923	5754892	X	
1220	429920	5758731	X	
1221	429853	5758891	X	
1222	429343	5759113	X	
1450	431998	5752488	X	
4180	429917	5759178	X	
4181	430072	5759229	X	
4182	430369	5759419	X	
4184	430601	5759313	X	
4185	430583	5759282	X	
4534	432567	5757582	X	X

1. Coordinate system: MGA zone 55, GDA94 datum.

Table 16 Summary of service operators contacted by DNV GL and responses received to date

Licence/ service type and distance of closest site		Operator name and DNV GL reference	Response received to date
1	Fixed point-to-point: one link crossing the Project site, no turbines in diffraction exclusion zone set by DNV GL, no turbines in requested clearance zone	AusNet Transmission Group Pty Ltd (AusNet Services) PP227556-AUME-L-01-A	<u>Response received by email on 10 April 2019, based on preliminary turbine layout:</u> "From our desktop analysis, the maximum height allowed to the top of the turbine blade is 180m if they are in between our direct LOS. In our analysis we have allowed for the desktop error margin and our future requirements. The height could be increased if the turbine structures are moved to the side to avoid direct LOS on our link. Our clearance criteria is 2x Fresnel radii (8GHz frequencies)." <u>Coordinates of towers received on 11 April 2019</u> <u>Current turbine layout provided on 29 May 2020</u> <u>Response received by email on 5 June 2020, based on current turbine layout:</u> "After looking at the kmz file of the turbine layout, I can confirm that these proposed new turbine locations will not have an impact on the path link between Jeeralang and Campbells Hill radio stations."
	Fixed point-to-multipoint: 15 km from Project boundary		
2	Fixed point-to-point: one link crossing the Project site, no turbines in diffraction exclusion zone set by DNV GL	Central Gippsland Water Corporation (Gippsland Water) PP227556-AUME-L-03-A	<u>Response received by email on 22 May 2019, based on preliminary turbine layout:</u> "We have analysed the coordinate location data provided by DNV GL – Energy and have identified that radio communication paths traverse the proposed wind farm site and associated turbines. Gippsland Water have radio communications assets at Moe South, these assets communicate to numerous other sites in the areas of Boolarra, Yinnar, Churchill, Jeeralang Junction and Hazelwood. Gippsland Water also have a digital mobile radio (DMR) base located at the Moe South site. Due to the number of communications pathways traversing the site, Gippsland Water's assets, services and DMR coverage will be impacted by the proposed wind farm. In regards to the clearances required, we acknowledge your diffraction exclusion zone calculations and are seeking your assurance that our radio communications will not be impacted."
	Fixed point-to-multipoint: 2 km from Project boundary Mobile radio: 4 km from Project boundary		<u>Coordinates of towers and details of point-to-multipoint link paths received on 24 May 2019</u> <u>Current turbine layout and advice from DNV GL provided on 2 June 2020</u>

Table 16 Summary of service operators contacted by DNV GL and responses received to date (continued)

Licence/service type and distance of closest site	Operator name and DNV GL reference	Response received to date
		Response received by email on 27 August 2020:
		<i>"We operate Supervisory Control and Data Acquisition (SCADA) and telemetry Digital Mobile Radio (DMR) repeaters from our Moe South site.</i>
		<i>A recent audit of our telemetry network interconnections and remote radio locations against the proposed development footprint found that it could interfere with our Chapel Street Yinnar SCADA radio link. This analysis looked at both the second and 60% of the first Fresnel zone, both of which showed inadequate clearance from Turbine T03.</i>
	Central Gippsland Water Corporation (Gippsland Water) (continued)	<i>Our DMR repeater is used for emergency voice communications and location services, and forms a critical part of our safety system.</i>
		<i>Approximately 140 square kilometers of our operating area in the Yinnar/Boolarra region is in the shadow of the proposed project area. This could lead to diffraction, reflection and scattering-induced interference for our staff working in the affected area."</i>
		<u>Details of new point-to-multipoint link received by email on 31 August 2020</u>
		<u>Follow-up response received by email on 14 September 2020:</u>
		<i>"We believe mitigation options exist for potential impacts to our links and are willing to work with the wind farm developer to design and implement an appropriate mitigation solution. "</i>

Table 16 Summary of service operators contacted by DNV GL and responses received to date (continued)

Licence/service type and distance of closest site	Operator name and DNV GL reference	Response received to date	
3 Fixed point-to-point: one link crossing the Project site, no turbines in diffraction exclusion zone set by DNV GL, no turbines in requested clearance zone	Digital Distribution Australia Pty Ltd	<p><u>Response received by email on 17 April 2019, based on preliminary turbine layout:</u></p> <p>"Digital Distribution Australia (DDA) has reviewed the information presented in relation to the proposed Delburn Wind Farm and its potential impacts on DDA's existing telecommunications infrastructure and services...</p> <p>DDA's network that is traversing over this proposed windfarm carries on-air commercial television as well as carrier grade Ethernet backhaul services. It is imperative that there are no adverse impacts to the performance of the network during and post installation of this windfarm.</p> <p>At this stage, we don't believe that the turbines... will have any negative impacts on the performance of the current point to point microwave radio link.</p> <p>DDA have conducted clearance checks to ensure that the first 3 Fresnel zones remain unobstructed... none of the proposed turbines are within the exclusion zone.</p> <p>DDA don't believe... that the proposed turbines would have an impact on our existing microwave radio links. This is however only based on desk top study, and DDA would request to be kept up to date in relation to the schedule and installation of this project.</p> <p>In summary, the proposed windfarm and turbine locations do not appear to have any impacts on the existing DDA infrastructure and point to point links currently in operation."</p>	
	PP227556-AUME-L-04-A	<p><u>Coordinates of towers received on 8 May 2019</u></p> <p><u>Current turbine layout provided on 29 May 2020</u></p>	

Table 16 Summary of service operators contacted by DNV GL and responses received to date (continued)

Licence/service type and distance of closest site	Operator name and DNV GL reference	Response received to date
		Response received by email on 29 June 2020, based on current turbine layout:
		"Digital Distribution Australia (DDA) has reviewed the information presented in relation to the revised proposed Delburn Wind Farm and its potential impacts on DDA's existing telecommunications infrastructure and services...
		DDA's network that is traversing over this proposed windfarm carries on-air commercial television as well as carrier grade Ethernet backhaul services. It is imperative that there are no adverse impacts to the performance of the network during and post installation of this windfarm.
		As per the amended turbine layouts, issued to DDA 29th May 2020, there is one turbine, T21, that is within close proximity to the DDA established point to point microwave link.
		DDA's analysis is based on the current proposed location of each turbine, and a maximum tip to ground height of 250m... DDA have conducted clearance checks to ensure that the first 3 Fresnel zones remain unobstructed at a statistical minimal k value. Based on these criteria for exclusion zones, it is calculated that the proposed turbines are all outside the exclusion zone.
	Digital Distribution Australia Pty Ltd (continued)	At a minimal value for k, it is estimated that DDA's boresight line is approx 320m AGL. With tip to ground heights of 250m and F3 radius of 41m, there is sufficient vertical clearance under this k value. These figures improve slightly under nominal values of k.
		Our analysis was based on quantifiable data in relation to obstruction and diffraction losses (near field effects were not looked at due to the distance between the antennas and windfarm). What is harder to determine is the effects of any reflections or scattering of the RF signal and how this would impact the overall performance of the link.
		If there are any changes to these designs, then DDA would need to undertake the analysis again. Changes include any geographic alteration to location or overall height of the blade tip to ground.
		In summary the proposed windfarm and turbine locations do not appear to have any impacts on the existing DDA infrastructure and point to point links currently in operation. This is based on the information supplied and desk top study of the factors that can be modelled. DD reserve the right to make any changes to this response in the future."

Table 16 Summary of service operators contacted by DNV GL and responses received to date (continued)

Licence/service type and distance of closest site		Operator name and DNV GL reference	Response received to date
4	Fixed point-to-point: two links crossing the Project site, no turbines in diffraction exclusion zones set by DNV GL, no turbines in requested clearance zones PMTS/spectrum (mobile phone): 4 km from Project boundary	Optus Mobile Pty Limited PP227556-AUME-L-05-A	Response received by email on 29 March 2019, based on preliminary turbine layout: "There are two Optus owned Microwave radio links that cross the proposed wind farm."
			Follow-up response received by email on 7 May 2019: "At least a minimum of 30m of clearance is required."
			Coordinates of one tower for link 5 obtained from Telstra on 7 May 2019, other tower for link 5 is shared with AusNet Services. No tower locations obtained for link 6. Current turbine layout provided on 29 May 2020
			Response received by email on 2 June 2020, based on current turbine layout: "Considering the given coordinates for the turbine locations, both MW link has a safe clearance from T8/T15 and T33 and has no effect on the Fresnel zones worst case scenario." Follow up response received by email on 17 July 2020: "No objection received from mobile services planning team."
5	Fixed point-to-point: one link crossing the Project site, one turbine in diffraction exclusion zone set by DNV GL in horizontal plane (clear in vertical plane), one turbine in requested clearance zone in horizontal plane (clear in vertical plane)	Vertical Telecoms Pty Ltd (VerTel) PP227556-AUME-L-06-A	Response received by email on 15 April 2019, based on preliminary turbine layout: "Based on the calculations, we have first Fresnel zone F1 =24.4m for the point to point link... We would like to have a minimum buffer distance of 15m between the [turbine] rotor's edge and first Fresnel zone F1."
			Coordinates of towers received on 16 April 2019 Follow-up response received by email on 3 May 2019, after receiving advice from DNV GL that the link crosses the Project site well above the maximum turbine tip height:
			No concerns provided that "terrain elevation height plus turbine height is less than 610 m." Current turbine layout provided on 29 May 2020
			Response received by email on 17 June 2020, based on current turbine layout: "Confirming that the revised turbine layout may not cause any impacts to Vertel's radio links."

Table 16 Summary of service operators contacted by DNV GL and responses received to date (continued)

Licence/service type and distance of closest site		Operator name and DNV GL reference	Response received to date
6	Fixed point-to-multipoint: 19 km from Project boundary	Aussie Broadband Pty Ltd PP227556-AUME-L-02-A	<p><u>Response received by email on 15 April 2019, based on preliminary turbine layout:</u></p> <p><i>"We don't have any concerns about the proposed wind farm."</i></p> <p>Current turbine layout not provided, as response was considered conclusive</p>
7	Fixed point-to-multipoint: 10 km from Project boundary	Kallistrate Pty Ltd (Speedweb Wireless Internet) PP227556-AUME-L-08-A	<p><u>Response received by email on 2 April 2019:</u></p> <p><i>"I see no problem with your windfarm development."</i></p> <p><i>As far as any problems with interference we are happy to work around them..."</i></p> <p>Current turbine layout not provided, as response was considered conclusive</p>
8	Fixed point-to-point: two proposed links crossing the Project site – details yet to be confirmed Fixed point-to-multipoint: 12 km from Project boundary Flood warning system	Latrobe City Council PP227556-AUME-L-09-A	<p><u>Response received by email on 21 May 2019, based on preliminary turbine layout:</u></p> <p><i>"We don't have any impact in... our Microwave Comms network."</i></p> <p><u>Follow-up response received by email on 19 August 2019:</u></p> <p><i>"In regards to the flood monitoring network, the only location that is nearby is the Moe South sensor which is near the cluster of comms sites in Moe South. We have sensors to the west in Thorpdale Peak, Thorpdale and Yarragon South which are relayed via Mount Tassie and Jerralang [sic]. It's a simplex store and forward repeater network."</i></p> <p><i>To the east it won't be a problem as they are on the other side of the wind farm towards Traralgon and Traralgon South."</i></p> <p><u>Current turbine layout provided on 4 June 2020</u></p> <p><u>Response received by phone on 26 June 2020, based on current turbine layout:</u></p> <p>Latrobe Valley flood warning system:</p> <ul style="list-style-type: none"> - The Latrobe Valley system is administered by Latrobe City Council and the BoM. - The DELWP is not involved in the Latrobe Valley system – the monitoring locations shown in the WMIS for the area around the Project may be part of a separate network, but located near the Latrobe Valley system monitoring stations. - Given the age of the Latrobe Valley system, the exact locations of the monitoring stations are not known by Latrobe City Council. - Impacts to the Latrobe Valley system are considered unlikely, as the 151 MHz signals do not need a clear line of sight to operate and the monitoring stations only transmit data hourly unless the river heights increase or decrease rapidly.

Table 16 Summary of service operators contacted by DNV GL and responses received to date (continued)

Licence/service type and distance of closest site		Operator name and DNV GL reference	Response received to date
9	Point-to-multipoint: 6 km from Project boundary	ENGIE (formerly Australian Power Partners B V & Others) PP227556-AUME-L-10-A	<p><u>Response received by email on 26 June 2020:</u></p> <p>"ENGIE operates plant and equipment as well as its IT infrastructure via radiocommunication assets (transmitters and receivers) installed at their Hazelwood Power Station and Mine site. In addition to the two point-to-multipoint licences, ENGIE hold several licences for Land Mobile/Ambulatory and Land Mobile/Paging Systems.</p> <p>The location of ENGIE's towers for point-to-multipoint radio communication stated in... your letter is correct. With reference to the location of these ENGIE assets, none of the associated radio links pass over the Delburn wind farm site shown in the Boundary and Turbine Locations maps provided in your email.</p> <p>Based on the information provided about the proposed Delburn Wind Farm, we do not foresee electromagnetic effects on ENGIE's operation due to the presence of the wind farm which is 6km from Hazelwood site."</p>
10	Point-to-multipoint: 20 km from Project boundary Meteorological radar: 116 km from Project boundary	Bureau of Meteorology PP227556-AUME-L-11-A	<p><u>Response received by email on 17 June 2020:</u></p> <p>"The proposed Delburn wind farm poses no issues to Laverton, Broadmeadows or Bairnsdale weather radars."</p> <p><u>No response regarding point-to-multipoint licences received to date</u></p> <p>Initial enquiry sent by email on 26 May 2020 First follow-up sent by email on 15 June 2020 Second follow-up sent by email on 17 June 2020</p> <p>New contact identified and general enquiry sent by email on 14 August 2020 Specific enquiry sent to new contact by email on 8 September 2020</p>

Table 16 Summary of service operators contacted by DNV GL and responses received to date (continued)

Licence/service type and distance of closest site		Operator name and DNV GL reference	Response received to date
11	Point-to-multipoint: 6 km from Project boundary	EnergyAustralia Yallourn Pty Ltd PP227556-AUME-L-12-A	<p><u>Response received by email on 15 June 2020:</u></p> <p>"EnergyAustralia Yallourn operates several ACMA Licenced communications links in its Yallourn Operation.</p> <p>We note the proximity to our Witts Gulley High Level Water storage asset from the northern boundary of the proposed Delburn Wind Farm...</p> <p>While we do not believe Radio Communication services to this Asset will be affected by the Windfarm proposal during operation, the use of high Powered Differential GPS equipment (DGPS) and other Radio communication services during any construction phase of the project may impact on our service. We ask that [Delburn Wind Farm Pty Ltd] keep us informed as the project proceeds with information relevant in this area."</p>
12	Point-to-multipoint: 31 km from Project boundary	Esso Australia Pty Ltd PP227556-AUME-L-13-A	<p><u>Response received by email on 15 June 2020:</u></p> <p>"We don't expect the wind farm will have any impact on our radio communications in the area."</p>
13	Point-to-multipoint: 40 km from Project boundary	Gippsland Southern Rural Water Corporation (Southern Rural Water) PP227556-AUME-L-14-A	<p><u>Response received by email on 23 June 2020:</u></p> <p>"We do not have any issues with impacts [based on feedback received from equipment supplier]."</p>
14	Point-to-multipoint: 9 km from Project boundary	Loy Yang Power Management Pty Ltd PP227556-AUME-L-15-A	<p><u>Response received by email on 18 June 2020:</u></p> <p>"I don't believe that the Delburn Wind Farm will have any impact on any of AGL's local radio network's [sic]."</p> <p><u>Follow-up response received by phone on 8 July 2020:</u></p> <p>Impacts to microwave and point-to-point links are not expected.</p>

Table 16 Summary of service operators contacted by DNV GL and responses received to date (continued)

Licence/service type and distance of closest site		Operator name and DNV GL reference	Response received to date
15	Land mobile: 24 km from Project boundary	Ambulance Victoria PP227556-AUME-L-16-A	<p><u>Response received by email on 16 June 2020:</u></p> <p>"Ambulance Victoria communications facilities located at Mt Tassie are designed to provide targeted portable coverage communications by means of a UHF repeater via a directional antenna targeting the townships of Morwell and Traralgon along with any fortuitous coverage of the Princes Highway corridor east of Morwell. Mt Tassie also hosts Telstra's SMR equipment, part of which provides Ambulance Victoria VHF communications (RAVnet). Notwithstanding EMI potentially introduced into the Telstra network, it is unlikely your proposed Delburn development will impact the Ambulance Victoria local UHF communications provided by its Mt Tassie facility."</p>
16	Land mobile: 2 km from Project boundary	Country Fire Authority (CFA) PP227556-AUME-L-17-A	<p><u>Response received by email on 25 May 2020:</u></p> <p>"I confirm that the CFA radio services (fixed radio links and land mobile services) are not affected by the proposed wind turbines at Delburn wind farm (based on the attached wind farm boundary details supplied by DNV GL – Energy)."</p>
17	Land mobile: 7 km from Project boundary	St John Ambulance Australia Incorporated PP227556-AUME-L-18-A	<p><u>Response received by email on 11 June 2020:</u></p> <p>"St John Ambulance does not have any concerns in relation to your proposed Wind Farm impacting on our radio link paths or other communication assets."</p>
18	Land mobile: 35 km from Project boundary	Department of Justice and Regulation – ESTA Emergency Services Telecommunications Authority PP227556-AUME-L-20-A	<p><u>Response received by email on 18 September 2020</u></p> <p>"I am confident that there is not likely to be any interference experienced by the MMR [Metropolitan Mobile Radio] site at Camp Hill, or users, from the Delburn Wind Farm. The Camp Hill site provides coverage back into the south-eastern suburbs of Melbourne, with little coverage east of the site."</p>
19	Land mobile: 7 km from Project boundary	Department of Justice and Regulation – RMR Regional Mobile Radio PP227556-AUME-L-21-A	<p><u>Response received by email on 29 June 2020:</u></p> <p>"I have investigated the proposed wind farm and found no RMR microwave backhaul passing through the wind farm boundary and the distance from the Radio sites is such that it is not considered to cause any noticeable radio propagation distortion."</p>

Table 16 Summary of service operators contacted by DNV GL and responses received to date (continued)

Licence/service type and distance of closest site		Operator name and DNV GL reference	Response received to date
20	Land mobile: 5 km from Project boundary	Department of Justice and Regulation – VisionStream PP227556-AUME-L-22-A	<p><u>Response received by email on 18 September 2020:</u></p> <p><i>"The EAS [Emergency Alerting System] Paging Site identified at Moe South, provides coverage to 7 CFA Brigades, 1 Forest Industry Brigade and 1 Ambulance Victoria Branch all located around the perimeter of the planned turbine locations. Two Brigades, Boolarra and Yinnar, are less than 5km from the nearest turbines.</i></p> <p><i>I expect that this would not be impacted, however, there may be some interference experienced if members were on active duty in the proximity of the turbines. But at this time, with a number of Wind Farms located across Victoria and in close proximity to EAS Sites, I am unaware of any examples or evidence to support any interference claims.</i></p> <p><i>The service provider (Visionstream) is contractually required to conduct Message Decode Performance measurements of the network annually. This is conducted by driving along agreed routes and recording signal level measurements. The results are then compared to previous results. To date, we have not experienced any degradation to signal levels around existing locations with Wind Farm Turbines.</i></p> <p><i>The drive route used in this part of the state travels along the Monash from Yinnar to Boolarra, so measurements will be taken in the future and compared.</i></p> <p><i>In Summary, based on previous Wind Turbine Farms constructed across the State and having no examples or evidence of interference to the EAS network, I would expect that the proposed Delburn Wind Farm would also not have any impact to coverage of the EAS network to the Emergency Service Organisations based in the Latrobe Valley and the area surrounding the turbine locations."</i></p>
			<p><u>Response received by email on 8 July 2020:</u></p> <p><i>"We don't currently have any point to point systems that pass through the proposed wind farm location. As such we don't anticipate any issues with VICSES licensed radio operations. Also as discussed we (along with Victoria Police, CFA, DWELP [sic], and soon to be Ambulance Victoria) primarily use the Telstra RMR (Regional Mobile Radio) network within this area."</i></p>
21	Land mobile: 7 km from Project boundary	Victoria State Emergency Service (SES) PP227556-AUME-L-23-A	

Table 16 Summary of service operators contacted by DNV GL and responses received to date (continued)

Licence/service type and distance of closest site		Operator name and DNV GL reference	Response received to date
22	Trig station: 1 km from Project boundary	Geoscience Australia PP227556-AUME-L-24-A	<u>Response received by email on 10 June 2020:</u> "Geoscience Australia do not foresee any impact to our trigonometric stations, GNSS reference stations or associated assets from the proposed Delburn Wind Farm."
	GNSS station: 7 km from Project boundary		
23	Trig station: 1 km from Project boundary	Department of Environment, Land, Water and Planning (DELWP) PP227556-AUME-L-25-A	<u>Response received by email on 1 June 2020:</u> "I have assessed the proposed locations of the wind turbines and can advise that they will not have any significant impact to the surrounding survey control or positioning infrastructure. My only concern would be the destruction of marks during construction of access routes to the turbines, particular [sic] from the Strzelecki Hwy. It looks like the turbines are well clear of the survey marks, but please avoid any potential disturbance to the survey marks."
	GNSS station: 7 km from Project boundary Permanent survey mark: 178 m from nearest turbine		
24	PMTS/spectrum (mobile phone): 3 km from nearest turbine	Telstra PP227556-AUME-L-26-A	<u>Response received by email on 29 June 2020:</u> "I can confirm that no Telstra point to point radio systems traverse the Delburn Wind Farm and as such will not be affected by any of the proposed wind turbines. With regards to Mobile services, there is no impact on Telstra mobile coverage. Any changes to the current proposal is to be resent to Telstra and re-assessed. Copper/Fibre network on the Strzelecki Hwy and Morwell-Thorpdale Rd is minor with active services. No impact on underground network."
25	PMTS/spectrum (mobile phone): 4 km from Project boundary	Vodafone PP227556-AUME-L-27-A	<u>Response received by email on 26 May 2020:</u> "Vodafone... don't have any concerns with respect to your deployment."

Table 16 Summary of service operators contacted by DNV GL and responses received to date (continued)

Licence/service type and distance of closest site	Operator name and DNV GL reference	Response received to date
26	Spectrum (wireless internet): 2 km from nearest turbine NBN Co PP227556-AUME-L-28-A	<p><u>Response received by email on 30 June 2020:</u></p> <p>"I have reviewed the data provided and based on the proposed wind farm locations it would appear to have a low risk line of sight (LOS) impact between the nearby nbn LTE-TDD base station sites and premises within the current nbn Wireless Coverage Areas. There are areas of planned nbn wireless coverage inside the wind farm polygon area including some planned premises within the wind farm boundaries requiring a nbn FW (Fixed Wireless) connection.</p> <p>A standard nbn response for wind farm applications regarding potential interference impact on nbn FW network is as follows and should be noted;</p> <p>Potential impacts of the Proposed Delburn Wind Farm on NBN Co Spectrum Communications Assets</p> <p>Referring your letter dated 3 June 2020 regarding the application by Delburn Wind Farm. We confirm that NBN Co Spectrum Pty Ltd (nbn Spectrum) has a number of fixed point-to-point licences within 75 km of the proposed Delburn Wind Farm.</p> <p>nbn have strict obligations to provide internet services to the community, and this area has been determined as a FW service area where the footprint of this service is now in place.</p> <p>nbn will be forced to consider its position as part of the planning should there be an [sic] interference issue.</p> <p>If the Application is amended before it is lodged we request that we are sent any amended Application so we can determine whether we have any objections to the amended Application."</p>

Table 16 Summary of service operators contacted by DNV GL and responses received to date (continued)

Licence/service type and distance of closest site		Operator name and DNV GL reference	Response received to date
27	FM radio: 2 km from nearest turbine Television transmission: 14 km from Project boundary	NBN Co (continued)	<p><u>Follow-up response received by email on 2 July 2020:</u></p> <p>"The numbers [of premises at risk of LOS impact] are unknown as premises may be added to the coverage areas at some future point. Currently my assessment identified no premises where the proposed turbines locations would impact LOS.</p> <p>[Premises within the wind farm boundaries] are most likely to get service from the nearest nbn eNB (eNodeB base station) on the same side of the wind farm.</p> <p>If there is physical obstruction to the LOS caused by a wind turbine and no alternative eNB and RF path is available, no mitigation would be possible. However I see this as a low risk event."</p> <p><u>Follow-up response received by email on 2 July 2020:</u></p> <p>"This situation [where there is physical line-of-sight obstruction caused by a wind turbine and no alternative tower and signal path] has never occurred and unlikely to in this case as well. There is also some flexibility in the position on the premises or the property where nbn can install a FW service so by moving the location of the service should remove the turbine tower for the RF Profile path and therefore as an obstruction."</p>
			<p><u>Response received by email on 19 August 2020:</u></p> <p>"BAI has undertaken an assessment of the proposed Delburn Wind Farm and the likelihood of it impacting upon broadcast sites operated by BAI and RBAH [RBA Holdings] in this region. The report is currently being finalised but initial findings are:</p> <ul style="list-style-type: none"> - For the digital television services operating from RBAH sites (Silcocks, Haunted Hills, Earls Road, Boolarra) modelling predicts no impact from the proposed wind farm development; - For the FM radio services operating in this region (this would include former SCA site known as Coalville – ACMA site ID: 47336, McDonalds Track, Driffield) modelling predicts no impact (studies suggest FM radio services can have minor reflections, but these would not be noticeable on reception); - For digital television services operated by BAI from Mt Tassie, it appears that the wind farm development is predicted to cause interference to a number of households in the region, due to possible scattering reflections from the turbines. We are currently assessing this in more detail and will provide our report as soon as possible."

Table 16 Summary of service operators contacted by DNV GL and responses received to date (continued)

Licence/service type and distance of closest site	Operator name and DNV GL reference	Response received to date
		Response received by email on 22 October 2020:
		<p>"BAI Communications has done a study on the proposed wind farm located in Delburn... The impact on six broadcast facilities were studied, all television. The results show that only one of the broadcast facility is impacted (Mt Tassie) and that 257 persons are predicted to be at low risk whilst 20 persons are predicted to be in high risk of interference to digital television services due to the scatter interference effects of the wind farm, when taking into account an alternative broadcast facility.</p>
		<p>...The six broadcast sites that have been identified to provide coverage around the wind farm area are Mt Tassie (ACMA Site ID 12042), Mills Trig (ACMA Site ID 40943), Silcocks RBAH (ACMA Site ID 153447), Boolara RBAH (ACMA Site ID 41125), Earls Road RBAH (ACMA Site ID 139394) and Haunted Hills RBAH (ACMA Site ID 131809). BA has conducted field tests on existing wind farms in the past for the impact on FM services. The field test measurements concluded that FM radio had some minor reflections observed but these would not be expected to cause any noticeable effect on reception. Thus, this report will not consider further impacts on FM broadcast.</p>
	BAI Communications (continued)	<p>BA have modelled the proposed Delburn Wind Farm to assess how they will affect DTV services broadcast from the above listed sites... Locations within 10 km of the wind farm were assessed, as scatter interference outside of this 10 km radius is not likely to occur...</p>
		<p>...there is no impact predicted from the wind farms, to the digital TV reception from Silcocks RBAH [and] Haunted Hills RBAH [and] Earls Road RBAH [and] Boolarra RBAH [and] Mills Trig.</p>
		<p>[For digital TV reception from Mt Tassie] the majority of the impact will be confined to the wind farm boundary. Population analysis was done on the potentially impacted area (ABS Census 2016 data) and showed 747 people are at low risk and 23 people are at high risk of having degraded digital television reception from Mt Tassie.</p>
		<p>A further study was done to include Mills Trig coverage as an alternative to the Mt Tassie interference affected areas. RBAH sites were not considered for this further analysis. The final study concluded... that 257 people are at low risk and 20 people are at high risk of having degraded digital television reception from Mt Tassie."</p>
28	Television retransmission: 3 km from nearest turbine	<p>RBA Holdings PP227556-AUME-L-30-A</p>
		<p>Response received from BAI Communications on behalf of RBA Holdings on 19 August 2020 and 22 October 2020 (see above for details)</p>