



**APPENDIX 18**

**Cumulative Impact Scoping Summary**

# Wattle Creek Solar Farm - Cumulative Impacts Summary

Likelihood	LOW - No potential overlap – no further consideration of cumulative impacts undertaken.
	MODERATE - Minor potential for overlap however unlikely to result in significant cumulative impacts – no further consideration of cumulative impacts required.
	HIGH - Overlap is likely/certain and there is potential for substantial cumulative impacts – qualitative assessment of the cumulative impacts undertaken.

Project	Proximity /Location	Details/Timing/Overlap	Key Issue										
			Biodiversity	Waste	Social/ Economic	Noise	Visual	Bushfire	Aboriginal Heritage	Historic Heritage	Hazards and Risk	Land Use	Transport
Renewable projects – Approved / Construction underway or development is operational													
Crookwell 2 Wind Farm (DA176-9-2004)	25 km west  Crookwell, Upper Lachlan Shire LGA	<ul style="list-style-type: none"> <li>110 MW Wind Farm</li> <li>CIV = \$175 Million</li> <li>Approximate disturbance area = up to 20 paddock trees, some improved pastures and less than 5 ha of native grasslands</li> <li>It is unknown what the operational traffic movements are, however, they're expected to be minimal</li> </ul>											
Taralga Wind Farm (DA241/04)	30 km northwest  Taralga, Upper Lachlan Shire LGA	<ul style="list-style-type: none"> <li>93- 124 MW Wind Farm</li> <li>CIV = \$185 Million</li> <li>Approximate disturbance area = 13.8 ha of native vegetation based off 0.2 ha per turbine</li> <li>It is unknown what the operational traffic movements are, however, they're expected to be minimal</li> </ul>											
Gullen Range Wind Farm (MP07_0118)	50 km west  Bannister, Upper Lachlan Shire LGA	<ul style="list-style-type: none"> <li>278 MW Wind Farm</li> <li>CIV = \$200 Million</li> <li>Approximate disturbance area = 91 ha development footprint on predominantly pastures with minimal disturbance to native vegetation</li> <li>It is unknown what the operational traffic movements are, however, they're expected to be minimal</li> </ul>											

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Gullen Solar Farm (DA 7/2016)	50 km west  Bannister, Upper Lachlan Shire LGA	<ul style="list-style-type: none"> <li>11 MW Solar Farm</li> <li>CIV = Less than \$30 Million</li> <li>Approximate disturbance area = 64 ha of predominately pastures, less than 2 ha of native vegetation clearance</li> <li>It is unknown what the operational traffic movements are, however, they're expected to be minimal</li> </ul>												
Woodlawn Wind Farm (DA250-10-2004)	69 km southwest  Bungendore, Queanbeyan-Palerang Regional Council LGA	<ul style="list-style-type: none"> <li>50 MW Wind Farm</li> <li>CIV = \$96 Million</li> <li>Approximate disturbance area = 4.8 ha including 1 ha of native vegetation (Black She-oak (<i>Allocasuarina littoralis</i>) and Black Wattle (<i>Acacia mearnsii</i>)) identified for removal</li> <li>It is unknown what the operational traffic movements are, however, they're expected to be minimal</li> </ul>												
Capital Wind Farm (MP05_0179)	81 km southwest  Bungendore, Queanbeyan-Palerang Regional Council LGA	<ul style="list-style-type: none"> <li>46 MW Wind Farm</li> <li>CIV = \$220 Million</li> <li>Approximate disturbance area unknown. Minimal clearing required due to age of project.</li> <li>It is unknown what the operational traffic movements are, however, they're expected to be minimal</li> </ul>												
Blind Creek Solar Farm (previously Capital Solar Farm) (MP10_0121)	85 km southwest  Bungendore, Queanbeyan-Palerang Regional Council LGA	<ul style="list-style-type: none"> <li>30 MW Solar Farm</li> <li>CIV = \$150 Million</li> <li>Approximate disturbance area = 100 ha of largely cleared of vegetation and clearing limited to dying or dead pine trees planted for wind break.</li> <li>It is unknown what the operational traffic movements are, however, they're expected to be minimal</li> </ul>												
Renewable projects – Approved / Construction not commenced														

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Crookwell Wind Farm 3 (SSD-6695)	32 km west  Crookwell, Upper Lachlan Shire LGA	<ul style="list-style-type: none"> <li>58 MW wind farm</li> <li>CIV = \$120 million</li> <li>Approximate disturbance area = 60 ha of largely cleared pastures but including 2.4 ha of native vegetation</li> <li>Construction 18 months, expected to commence in July 2021 and completed December 2022</li> <li>Approximately 40 full time jobs during construction and 6 permanent jobs during the operational phase</li> <li>Typical daily traffic volume of 238 vehicle movements (return trips), with a peak construction vehicle activity resulting in up to 342 vehicle movements (return trips) per day on the surrounding road network.</li> <li>Access to Crookwell 3 South is via Crookwell Road, and access to Crookwell 3 East is via Woodhouselee Road, and through an ungazetted Greywood Siding Road as one of the access options. Picton Road and Hume Highway/Motorway will be the primary road used to access the site</li> </ul>											
Renewable Projects – Proposed / under assessment or in planning and design phase													

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Wattle Creek BESS (SSD-63345458)	<p>Within Project Area</p> <p>Big Hill, Upper Lachlan Shire LGA</p>	<ul style="list-style-type: none"> <li>• 350 MW / 1400 MWh BESS</li> <li>• CIV = \$402 Million</li> <li>• Approximate disturbance area = 75 ha including 28.84 ha of native vegetation</li> <li>• Construction timing expected to commence end of 2016 and anticipated to be 13 months duration.</li> <li>• Peak onsite employment during construction estimated to be 73 Full Time Equivalent (FTE) employees and 15 FTE employees during operations.</li> <li>• An average of 39 trucks per day will transfer construction material to the site via Motorway/Highway including the Hume Highway, and Red Hill Road, Ambrose Road, Brayton Road to Canyonleigh Road, and access the Project via the central access point off Canyonleigh Road.</li> <li>• Construction expected to begin in concurrently with Project which will cause overlap with the Project.</li> <li>• Overlap for construction workforce requirements, consultation fatigue, construction noise, vehicle construction traffic along Canyonleigh Road and Hume Highway.</li> </ul>												

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Marulan Gas Fired Power Station (MP07_0175)	<p>Adjacent to Project Area</p> <p>Big Hill, Upper Lachlan Shire LGA</p>	<ul style="list-style-type: none"> <li>800 MW Gas Fired Power Station</li> <li>CIV = \$809 Million</li> <li>Approximate disturbance area = 34.2 ha of native vegetation</li> <li>Construction timing and commencement unknown.</li> <li>Average onsite employment during construction estimated to be 60 FTE employees and 20 FTE employees during operations.</li> <li>The average trucks per day required for construction is unknown. However, it is expected materials will be transferred to the site via Motorway/Highway including the Hume Highway, and Red Hill Road, Ambrose Road, Brayton Road to Canyonleigh Road, and access the Project via the central access point off Canyonleigh Road.</li> <li>Construction is not expected to begin in concurrently with Project however, if that does occur, it will cause overlap with the Project.</li> <li>Overlap for construction workforce requirements, consultation fatigue, construction noise, vehicle construction traffic along Canyonleigh Road and Hume Highway, will be experienced if construction commences concurrently with Project.</li> </ul>												

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Marulan Solar Farm (SSD-13137914)	16 km south  Marulan, Goulburn Mulwaree LGA	<ul style="list-style-type: none"> <li>152 MW solar farm</li> <li>CIV = &gt; \$30 million</li> <li>Approximate disturbance area = 26.8 ha of native vegetation within 330 ha development footprint</li> <li>RU1 primary production, land use is agriculture</li> <li>Construction commence early 2023 and take 18 months, exclusive of 3 months for mobilising/demobilising at the beginning and end of the project.</li> <li>Likely to employ approximately 300 people during the peak of construction, around five (5) full time equivalent operational workers and has the potential to employ up to 50 casual workers during maintenance periods.</li> <li>Approximately 13 heavy vehicle trips per day (maximum 28 trips per day) and 100 light vehicle trips per day (maximum 160 trips per day). Hume Highway and Munro Road will be the primary access roads to the site.</li> </ul>											
Hume Link (SSI-36656827)	32 km south  Wagga Wagga, Bannaby And Maragle, Wagga Wagga City LGA	<ul style="list-style-type: none"> <li>360-kilometre 500 kilovolt (kV) high-voltage transmission Line. Includes construction and modifications of substations along alignment.</li> <li>CIV = \$4.5 Billion</li> <li>Approximate disturbance area = 670 ha of native vegetation within the indicative disturbance area</li> <li>Construction is expected to commence in 2024 and take about 2.5 years to complete. The project is expected to be fully operational by the end of 2026.</li> <li>During peak construction activities, the project is expected to employ up to 1,200 full-time equivalent workers across multiple work fronts.</li> <li>Project likely to overlap with the construction timeframe of Project. However, impacts will be dependent on the location of where works are occurring at any particular time. Impacts will be high on construction services, labour and accommodation in LGA of Upper Lachlan Shire.</li> </ul>											





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Woodlawn Advanced Energy Recovery Centre (SSD-21184278)	66km south  Tarago, Goulburn Mulwaree LGA	<ul style="list-style-type: none"> <li>240,000 MW Energy Recovery and Power Plant</li> <li>CIV unknown.</li> <li>Approximate disturbance area = 38 ha including 1.7 ha of native or exotic vegetation.</li> <li>Construction expected to take approximately 3 years however, timing of commencement expected to be late 2024.</li> <li>Approximately 603 direct and indirect FTE employees during construction.</li> <li>Typical daily traffic volume of 70 inbound light vehicles and 20 inbound truck movements will be required during construction. Access to the site will be off Collector Road and will be serviced by the Hume Highway, Kings Highway, and Braidwood Road.</li> <li>Timing likely to overlap with the Project. However, given its distance from the Project Site and proximity to the ACT and Queanbeyan, competition impacts for construction services, labour and accommodation likely to be less significant.</li> </ul>											
Other projects – Proposed / Approved, not yet constructed													
Marulan Quarry (SSD-65146459)	30 km southwest  Marulan, Goulburn Mulwaree LGA	<ul style="list-style-type: none"> <li>0.5 Mtpa Quarry Operations</li> <li>CIV unknown.</li> <li>Approximate disturbance area of vegetation unknown however 7.9 ha of land currently identified for disturbance in footprint.</li> <li>Construction timeline estimated to be 6 months, however, timing of commencement unknown.</li> <li>Peak workforce during construction would be around 30 employees.</li> <li>Truck movements limited to 50 outbound daily movements. There is potential for minor cumulative construction and operational impacts. The transport route along the Hume Highway has been considered in the EIS.</li> </ul>											



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Berrima Coal Mine (MP10_0172)	12 km northeast  Berrima, Wingecarribee Shire LGA	<ul style="list-style-type: none"> <li>0.46 Mtpa Coal Mine</li> <li>CIV = \$3.8 Million</li> <li>Approximate disturbance area = 3.6 ha of native vegetation within Pit Top Area and excluding underground mining areas</li> <li>Truck movements limited to 68 outbound daily movements. There is potential for minor cumulative operational impacts and the transport route along Hume Highway with the proposed Project has been considered in the EIS</li> </ul>												
Lynwood Quarry (DA128-5-2005)	16 km south  Marulan, Goulburn Mulwaree LGA	<ul style="list-style-type: none"> <li>5 Mtpa Quarry Operations</li> <li>CIV = \$195 Million</li> <li>Approximate disturbance area = 103 ha of native vegetation within unknown total development footprint</li> <li>Truck movements limited to 162 outbound daily movements. There is potential for minor cumulative operational impacts. The transport route along the Hume Highway has been considered in the EIS.</li> </ul>												
Marulan South Limestone Mine Continued Operations Project (SSD-7009)	16 km south  Marulan, Goulburn Mulwaree LGA	<ul style="list-style-type: none"> <li>4 Mtpa Quarry Operations</li> <li>CIV = \$111 Million</li> <li>Approximate disturbance area = 182 ha of native vegetation with 598 ha disturbance area</li> <li>Truck movements limited to 133 outbound daily movements. There is potential for minor cumulative operational impacts. The transport route along Marulan South Road and the Hume Highway has been considered in the EIS.</li> </ul>												
Peppertree Quarry (MP06_0074)	16 km south  Marulan, Goulburn Mulwaree LGA	<ul style="list-style-type: none"> <li>3.5 Mtpa Quarry Operations</li> <li>CIV = \$150 Million</li> <li>Approximate disturbance area = 90 ha of pasture and grassland within 104 ha disturbance area</li> <li>All products transported by rail. There is low potential for cumulative operational impacts.</li> </ul>												