

## Essential Energy - Register of Completed Embedded Generation Projects

Year Completed	Premise Classification	Location	Technology of Generating Unit	Connection Voltage	Generating Unit Make and Model	Per Generation	Protection to Fault	Size and rating of relevant transformer	Efficiency (refer to CEOP)	Communication	Power Factor Control and Reactive Power
2025	Solar PV - Generation + BESS	Parkees	Asynchronous-Solar PV-Single axis tracking Storage - Battery	132kV	22 x 4.4MVA SMA-SC-4400UP 8 x 3.45MVA SMA-SCS-3450UP	80	1.0 kA	1X 100MVA 132/33kV Ynd11 TX	5.4.1	CEOP7994	Voltage Control; +/- 31.6
2025	Solar PV - Generation	Uranquinty	Asynchronous-Solar PV-Single axis tracking	22kV	2 x Sungrow SG2475HV inverters 2 x 2.475MVA Sungrow SG2475HV PV Inverter	4.95	0.171 kA	1 x 4.95 MVA 22/0.55/0.55 kV Dy11y11 Tx	5.4.5	CEOP7995	Power Factor Control; +/- 1
2025	Solar PV - Generation	Tamworth	Asynchronous-Solar PV-Single axis tracking	11kV	2 x 2.475MVA Sungrow SG2475HV PV Inverter	4.85	0.353 kA	1 x 5MVA 11/0.55/0.55kV Dy11y11 TX	5.4.5	CEOP7996	Power Factor Control; +/- 3
2025	Solar PV - Generation + BESS	Narromine	Asynchronous-Solar PV-Single axis tracking Storage - Battery	11kV	2 x 2.475MVA Sungrow SG2475HV PV Inverter	4.76	0.163	1 x 5MVA 11/0.55/0.55kV Dy11y11 TX	5.4.5	CEOP7997	Power Factor Control; +/- 3
2025	Solar PV - Generation + BESS	Glen Innes	Asynchronous-Solar PV-Single axis tracking Storage - Battery	11kV	2 x 2.475MVA Sungrow SG2475HV PV Inverter	4.95	0.338 kA	1 x 5MVA 11/0.55/0.55kV Dy11y11 TX	5.4.5	CEOP7998	Power Factor Control; +/- 3
2025	Solar PV - Generation + BESS	Gilgandra	Asynchronous-Solar PV-Single axis tracking Storage - Battery	11kV	2 x 2.475MVA Sungrow SG2475HV 30 inverters 4x2.752MWh Sungrow ST2752UX	4.95	0.273 kA	1 x 4.950MVA 11/0.55/0.55kV Dy11y11 TX	5.4.5	CEOP7999	Power Factor Control; +/- 3
2025	Solar PV - Generation	Condoblin	Asynchronous-Solar PV-Single axis tracking	22kV	2 x 2.930MVA SMA SC-2930UP inverters	4.99	0.431 kA	1 x 5.86MVA 22/0.655/0.655kV	5.4.5	CEOP8000	Power Factor Control; +/- 3.5
2025	Solar PV - Generation	Burren Junction	Asynchronous-Solar PV-Single axis tracking	22kV	2 x SMA SC2930 UP inverters 2 x 2.66MVA SMA SC2660 inverters	4.05	0.146 kA	2 x 2.93MVA 22/0.660kV Dy11 TX	5.4.5	CEOP8001	Power Factor Control; +/- 2.42
2025	Solar PV - Generation	Moama	Asynchronous-Solar PV-Single axis tracking	22kV	2 x 2.475MVA Sungrow SG2475HV PV Inverter	4.998	0.182 kA	2 x 2.667MVA 22/0.6kV Dy11 TX	5.4.5	CEOP8002	Power Factor Control; + 2.23 /- 0
2025	Solar PV - Generation	Griffith	Asynchronous-Solar PV-Single axis tracking Storage - Battery	33kV	2 x 2.475MVA Sungrow SG2475HV PV Inverter	4.77	0.106 kA	1 x 5MVA 33/0.55/0.55 kV Dy11y11 TX.	5.4.5	CEOP8003	Power Factor Control; +/- 3
2025	Solar PV - Generation + BESS	Mulwala	Asynchronous-Solar PV-Single axis tracking Storage - Battery	22kV	2 x 2.475MVA Sungrow SG2475HV Inverters	4.85	0.182 kA	1 x 4.95MVA 22/0.55/0.55kV Dy11y11 TX.	5.4.5	CEOP8004	Power Factor Control; +/- 2.190
2025	Solar PV - Generation	Hay	Asynchronous-Solar PV-Single axis tracking	33kV	2 x 2.66MVA SMA MVPS2660-S2 inverters	4.99	0.11 kA	2 x 2.66MVA 33/0.6 Dy11 TX	5.4.5	CEOP8005	Power Factor Control; + 0.71 /- 0
2025	Solar PV - Generation	Ashley	Asynchronous-Solar PV-Single axis tracking	22kV	2 x 2.8MVA SMA SC2800UP inverters	4.99	0.187 kA	2 x 2.75MVA 22/0.600 Dy11 TX	5.4.5	CEOP8006	Power Factor Control; +/- 2.42
2025	Solar PV - Generation	Hay	Asynchronous-Solar PV-Single axis tracking	33kV	2 x 2.5MVA SMA SC-2500EV inverters	4.99	0.107 kA	1x 5MVA 33/0.55/0.55kV Dy11y11 TX	5.4.5	CEOP8007	Power Factor Control; + 0.71 /- 0
2025	Solar PV - Generation	Murrumbidgee	Asynchronous-Solar PV-Single axis tracking	22kV	2 x 2.475MVA Sungrow SG2475HV PV Inverters	4.95	0.18 kA	1 x 5 MVA 22/0.55/0.55kV Dy11y11 TX.	5.4.5	CEOP8008	Power Factor Control; + 0.705 /- 0
2025	Solar PV - Generation	Gunnedah	Asynchronous-Solar PV-Single axis tracking	22kV	2 x 3.436MVA Sungrow SG3400HV-MV-30 inverters	4.99	0.169 kA	1x 22.0/0.6/0.6 kV Dy11y11 TX	5.4.5	CEOP8009	Power Factor Control; +/- 0.81
2025	Solar PV - Generation	Moama	Asynchronous-Solar PV-Single axis tracking	22kV	2 x 2.475MVA Sungrow SG2475HV PV Inverters	4.95	0.182 kA	1 x 4.95MVA 22/0.55/0.55kV Dy11y11 TX	5.4.5	CEOP8010	Power Factor Control; +/- 1.2
2025	Solar PV - Generation	Temora	Asynchronous-Solar PV-Single axis tracking	11kV	2 x 3.436MVA Sungrow SG3400HV-MV-30 inverters	4.998	0.335 kA	1x 11.0/0.6/0.6 kV Dy11y11 TX	5.4.5	CEOP8011	Power Factor Control; +/- 0.80
2024	Solar PV - Generation	Narromine	Asynchronous-Solar PV-Single axis tracking	22kV	2 x 3MVA SMA SC-3000EV inverters	4.99	0.17 kA	1x 6MVA 22/0.655/0.655kV Dy11y11 Tx	5.4.5	CEOP8012	Power Factor Control; +/- 2.198
2024	Solar PV - Generation	Werris Creek	Asynchronous-Solar PV-Single axis tracking	11kV	27 x 185 kVA Huawei SUN2000-185KTL-H1 inverters	4.99	0.343 kA	2 x 3.15 MVA (6.3 MVA) 11/0.8 Dy11 TX	5.4.5	CEOP8012	Power Factor Control; +/- 3
2024	Solar PV - Generation	Grong Grong	Asynchronous-Solar PV-Single axis tracking	11kV	1 x 1818kVA PVS980-58-1818kVA inverter	1.48	0.115 kA	1 x 2MVA 0.6/11kV Dy11 TX	5.4.5	CEOP8012	Power Factor Control; +/- 1.5
2024	Solar PV - Generation + BESS	Cootamundra	Asynchronous-Solar PV-Single axis tracking	11kV	1 x SMA SC 4600 UP Inverter	4.6	0.241 kA	1 x 4.14MVA 11/0.69kV Dy11 Tx	5.4.5	CEOP8012	Power Factor Control; +2.5 /- 3
2023	Solar PV - Generation	Narrandera	Asynchronous-Solar PV-Single axis tracking	11kV	2 x 2.475MVA Sungrow SG2475HV PV Inverters	4.76	0.337 kA	1 x 5MVA 11/0.55/0.55kV Dy11y11 TX	5.4.5	CEOP8012	Power Factor Control; +/- 2
2023	Solar PV - Generation	Nyngan	Asynchronous-Solar PV-Single axis tracking	22kV	2 x 3MVA SMA SC-3000EV inverters	4.99	0.193kA	2 x 3MVA 22/0.655kV	5.4.5	CEOP8012	Power Factor Control; +/- 3
2023	Solar PV - Generation	Coleambally	Asynchronous-Solar PV-Single axis tracking	11kV	2.475MVA Sungrow SG2475HV PV inverters	4.55	0.37kA	1 x 5MVA 11/0.55/0.55kV Dy11y11 TX	5.4.5	CEOP8012	Power Factor Control; +/- 2.2
2023	Solar PV - Generation	Dubbo	Asynchronous-Solar PV-Single axis tracking	11kV	2 x 2.475MVA Sungrow SG2475HV PV Inverters	4.61	0.37kA	1 x 5MVA 11/0.55/0.55 kV	5.4.5	CEOP8012	Power Factor Control; +/- 2
2023	Solar PV - Generation	Griffith	Asynchronous-Solar PV-Single axis tracking	33kV	2 x 2.475MVA Sungrow SG2475HV PV Inverters	4.8	0.37kA	1 x 5MVA 33/0.55/0.55 kV Dy11y11 TX	5.4.5	CEOP8012	Power Factor Control; +/- 3
2023	Solar PV - Generation	Armidale	Asynchronous-Solar PV-Single axis tracking	11kV	2 x 3MVA SMA SC-3000EV inverters	4.99	0.279 kA;	1 x 6MVA 11/0.655/0.655kV Dy11y11 TX	5.4.5	CEOP8012	Power Factor Control; +/- 3
2023	Solar PV - Generation	Albury	Asynchronous-Solar PV-Single axis tracking	22kV	2 x 3MVA SMA SC-3000EV inverters	4.99	0.193kA	2 x 3MVA 22/0.655kV Dy11 TX	5.4.5	CEOP8012	Power Factor Control; +/- 3

2023	Wind - Generation	Orange	Asynchronous-Wind Turbine-Onshore	132kV	38 x GE137- 3.83 MW Wind Turbine Generators (DFIG)	154.54	1.273 kA	1 x 175MVA 132/33 kV YNyn11D11	5.4.1	CEOP8012	Voltage Control; +/- 55.3
2023	Cogen - Generation	Moree	Asynchronous-Solar PV-Single axis tracking Storage - Battery	22kV	2 x 2.475MVA Sungrow SG2475 inverters 4 x Sungrow ST2752-UX storage units, 1 x Sungrow SG4950 HV-MV, Converter unit	3.325	0.182 kA;	1 x 4.95MVA 22/0.55/.55 Dy11y11	5.4.5	CEOP8012	Power Factor Control; +1.09/-0.68
2023	Solar PV - Generation	Wagga Wagga	Asynchronous-Solar PV-Single axis tracking	132kV	38 x 1.637MVA Ingeteam 1640TL B630 inverters	53	0.328 kA	1 x 93MVA 132/33kV YNd11	5.4.1	CEOP8012	Power Factor Control; +/- 20.93
2022	Solar PV - Generation	Temora	Asynchronous-Solar PV-Single axis tracking	132kV	29 x 3630 kW Power Electronics Inverters HEMK 3630	90	0.602kA	1 x 132/33kV 100MVA	5.4.1	CEOP8012	Voltage Control; +23/-35
2022	Solar PV - Generation	Goondiwindi	Asynchronous-Solar PV Single axis tracking Storage - Battery	22kV	2 x 2.499 SMA SCS2530 UP-XT Inverters ; 4x Sungrow ST2752	4.99	0.204kA	2 x 22/0.660kV 3MVA	5.4.5	CEOP8012	Voltage Control; +/-2.24
2021	Solar PV - Generation	Griffith	Asynchronous-Solar PV-Single axis tracking	132kV	40 x 2.75MVA SMA Sunny Central 2750-EV Inverters	85	0.41kA	1 x 132/33kV 60/100MVA	5.4.1	CEOP8012	Voltage Control; +/- 33.57
2021	Solar PV - Generation	Wagga Wagga	Asynchronous-Solar PV-Single axis tracking	132kV	40 x SMA Sunny Central 2750-EV inverters	90	0.7kA	1 x 132/33kV 120MVA	5.4.1	CEOP8012	Voltage Control; +10/-35.55
2021	Solar PV - Generation	Temora	Asynchronous-Solar PV-Single axis tracking	66kV	22 x 1.640MVA [OEM] Ingeteam 1640TL B630 Inverters	30	0.347kA	1 x 66/22kV 24/40MVA	5.4.4	CEOP8012	Voltage Control; +/- 11.9
2021	Solar PV - Generation	Leeton	Asynchronous-Solar PV-Single axis tracking	33kV	49 x Huawei SUN2000-90KTL-HW Inverters	4.9	0.087kA	1 x 33/0.8 kV 6MVA	5.4.5	CEOP8012	Power Factor Control; +/- 2.45
2021	Solar PV - Generation	Albury	Asynchronous-Solar PV-Single axis tracking	22kV	2 x 1.637 MVA INGECON SUN PowerMax 1640TL B630 inverters	30	1.230kA	8 x 22/0.63kV 5MVA	5.4.4	CEOP8012	Voltage Control; +/- 11.96
2021	Solar PV - Generation	Leeton	Asynchronous-Solar PV-Single axis tracking	33kV	49 x Huawei SUN2000-90KTL-HW Inverters	4.99	0.087kA	1 x 33/0.8 kV 6MVA	5.4.5	CEOP8012	Power Factor Control; +/- 2.45