

## EGI SEA: Eskom Substations Proposed for Unlocking- New & Existing

The following substations are represented spatially on the EGI Corridors\_20km Grid Map (KMZ file)

Substation Site	Tx Project Phase	Duration for Project Development	Unlocking (MW)	Province	Generation IPP Programme	Network Strengthening
Vuyani	1	2 years	600	Eastern Cape	Renewable	None
Harvard	1	2 years	475	Free State	Renewable	None
Mookodi	1	2 years	271	North West	Renewable	None
Hermes	1	2 years	306	North West	Renewable	None
Proteus	1	2 years	442	Western Cape	Renewable	None
Helios	2	3-4 years	307	Northern Cape	Renewable	1x500MVA 400/132kV
Kronos	2	3-4 years	878	Northern Cape	Renewable	3x500MVA 400/132kV, Replace 250MVA with a 500MVA
Aries	2	3-4 years	270	Northern Cape	Renewable	New 132kV S/S, 2x250MVA 400/132kV
Aggeneis	2	3-4 years	220	Northern Cape	Renewable	New 132kV S/S, 2x250MVA 400/132kV
Juno	2	3-4 years	602	Western Cape	Renewable	Replace 125MVA 400/132kV with 500MVA
Droeriver	2	3-4 years	137	Western Cape	Renewable	500MVA 400/132kV
Lambda	2	3-4 years	121.2	Mpumalanga	Renewable	New 88kV S/S, 2x315MVA 400/88kV

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Upington Solar Park	3	4-5 years	1000	Northern Cape	Renewable	3x500MVA 400/132kV, 2x150km Upington-Aries 1 and 2 plus 200km Upington -Ferrum 400kV line
Gamma	3	4-5 years	974	Northern Cape	Renewable	400kV S/S, 3x500MVA 400/132kV , 2x4km Hydra-Droeriver 2 400kV loopin
Nama	3	4-5 years	263	Northern Cape	Renewable	2x250 220/132kV
Sterrekus	3	4-5 years	400	Western Cape	Renewable	132kV S/S, 2x500MVA 400/132kV
Koruson (Kappa )	3	4-5 years	276	Western Cape	Renewable	132kV S/S, 2x250MVA 400/132kV
Vryheid	3	4-5 years	220	Western Cape	Renewable	400kV S/S, 2x250MVA 400/132kV, Loopin of Proteus - Bacchus 400kV Line
Droeriver B	3	4-5 years	1100	Western Cape	Renewable	New 400kV S/S, 500MVA 400/132kV, 2x10km Hydra - Droeriver 3 400kV loopin
Garona	3	4-5 years	624	Northern Cape	Renewable	400kV S/S, 2x500MVA 400/132kV, 2x5km Ferrum-Nieuwehoop 400kV line loopin
Delphi B	4	6-8 years	780	Eastern Cape	Renewable	New 400kV S/S, 3x500MVA 400/132kV, 2x50km Poseidon - Delphi 400kV line loopin
Thyspunt	4	6-8 years	230	Eastern Cape	Renewable	New 400kV S/S, 2x250MVA 400/132kV, 2x90km Thyspunt - Dedisa 400kV line
Pembroke B	4	6-8 years	575	Eastern Cape	Renewable	New 400kV S/S, 3x500MVA 400/132kV, 150km Poseidon- Pembroke B 400kV line and 150km Pembroke B - Neptune 400kV line
Posiedon B	4	6-8 years	883	Eastern Cape	Renewable	New 400kV S/S, 3x500MVA 400/132kV, 2x1.5km Poseidon-Dedisa 400kV line
Posiedon C	4	6-8 years	1000	Eastern Cape	Renewable	New 400kV S/S, 3x500MVA 400/132kV, 2x60km Poseidon-Poseidon C 400kV line
Makalu B	4	6-8 years	140	Free State	Renewable	2x315MVA 275/88kV and 2x10km 275kV Lethabo - Makalu line loopin

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Sorata	4	6-8 years	307	Free State	Renewable	400kV S/S, 2x500MVA 400/132kV, 2x 70km Sorata - Ingula 400kV line
Hotazel	4	6-8 years	200	North West	Renewable	2x500MVA 400/132kV, 100km Ferrum Hotazel 400kV line, 125km Hotazel - Mookodi, Mookodi - Hermes 190km 400kV line
Hydra B	4	6-8 years	1355	Northern Cape	Renewable	400kV S/S, 4x 500MVA 400/132kV, 2x10km 400kV Hyrda - Poseidon line loopin
Hydra C	4	6-8 years	990	Northern Cape	Renewable	400kV S/S, 4x 500MVA 400/132kV, 2x10km 400kV Hyrda - Persues 1 line loopin
Hydra D	4	6-8 years	780	Northern Cape	Renewable	400kV S/S, 4x400/132kV 500MVA, 2x10km 400kV Hyrda - Persues 1 line loopin
Paulputs	4	6-8 years	250	Northern Cape	Renewable	400kV S/S, Replace 220/132kV 125MVA with 250MVA 400/132kV and 100km 400kV line
Boundary	4	6-8 years	690	Northern Cape	Renewable	New Ulco S/S, 2x500MVA 400/132kV, 170km Beta - Ulco 400kV line
Gromis	4	6-8 years	440	Northern Cape	Renewable	new 400kV busbar,2x500MVA 400/132kV, 2x400MVA 400/220kV, 260km 400kV line and 130km 400kV line
Olien	4	6-8 years	1100	Northern Cape	Renewable	400kV S/S, 3x500MVA 400/132kV, 70km Olien - Ulco 400kV line, 107km Ferrum - Olien 400kV line
Oranjemond B	4	6-8 years	150	Northern Cape	Renewable	220kV S/S, 250MVA 220/132kV and 5km Orjanemond-Gromis 220kV loopin
Victoria B	4	6-8 years	750	Northern Cape	Renewable	400kV S/S, 3x500MVA 400/132kV , 2x50km Hydra-Droeriver 3 400kV loopin, , Victoria series cap de-rating
Komsberg B	4	6-8 years	1300	Western Cape	Renewable	4x400/132kV 500MVA, 2x10km Droeriver- Bacchus 400kV line Loopin, Komsberg series cap de-rating
Blouwater / Aurora B	4	6-8 years	1325	Western Cape	Renewable	New 400kV S/S, 4x500MVA 400/132kV, 2x30km Aurora-Blouwater 400kV line
Houhoek	4	6-8 years	189.22	Western Cape	Renewable	New 400kV S/S , 2x500MVA 400/132kV, Loopin of the Bacchus- Palmiet 400kV line

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Matimba B	4	6-8 years	600	Limpopo	Coal Base load	400kV S/S, 3x500MVA 400/132kV and 2x10km Matimba - Witkop 400kV line loopin
Lephalale Coal	5	8-10 years	2000	Limpopo	Coal Base load	HVDC to Gauteng