

ElectraNet Transmission Network Revenue Reset Regulatory Information Notice



**Service Target Performance Incentive Scheme
Network Capability Component:
Network Limits Information**

1 July 2018 to 30 June 2023

March 2017

Version 1



ElectraNet Corporate Headquarters

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Company Information

ElectraNet Pty Ltd (ElectraNet) is the principal electricity transmission network service provider (TNSP) in South Australia.

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Note

This basis of preparation forms part of our Revenue Proposal for the 2018-19 to 2022-23 regulatory control period. It should be read in conjunction with the other parts of the Revenue Proposal.

Our Revenue Proposal comprises the attachments listed below, and the supporting documents that are listed in Attachment 15:

Attachment 1 – Maximum allowed revenue

Attachment 2 – Regulatory asset base

Attachment 3 – Rate of return

Attachment 4 – Value of imputation credits

Attachment 5 – Regulatory depreciation

Attachment 6 – Capital expenditure

Attachment 7 – Operating expenditure

Attachment 8 – Corporate income tax

Attachment 9 – Efficiency benefit sharing scheme

Attachment 10 – Capital expenditure sharing scheme

Attachment 11 – Service target performance incentive scheme

Attachment 12 – Pricing methodology

Attachment 13 – Pass through events

Attachment 14 – Negotiated services

Attachment 15 – List of supporting documents

In addition to the Revenue Proposal and above mentioned documents our Regulatory Information Notice comprises the documents listed below:

PwC Audit and Review Opinions

Statutory Declaration

Basis of Preparation – Historical

Workbook 1 – Regulatory Determination

MIC Data Template 2010

MIC Data Template 2011

MIC Data Template 2012

MIC Data Template 2013

MIC Data Template 2014

MIC Data Template 2015

MIC Data Template 2016

Non – coincident and MVA Maximum Demand Measures Methodology

Map of Transmission System

Corporate Structure

Service Target Performance Incentive Scheme Network Capability Component: Network Limits Information (this document)

ElectraNet Enterprise Agreement 2016

Forecast Expenditure Preparation Overview Assumption Information

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1. Injection points

| Number | Terminal Station (TS) / Power Station (PS) | Transformer | Transformer Primary Voltage (HV) | Transformer Secondary Voltage (MV) | Normal Cyclic Loading (MVA) | Long-time Emergency Cyclic Loading (MVA) | Reason for the Limit |
|--------|--|-------------|----------------------------------|------------------------------------|-----------------------------|--|----------------------|
| 1 | Angas Creek | 1 | 132 | 33 | 28.3 | 31.5 | Transformer |
| 2 | Angas Creek | 2 | 132 | 33 | 28.3 | 31.5 | Transformer |
| 3 | Ardrossan West | 1 | 132 | 33 | 25 | 25 | Transformer |
| 4 | Ardrossan West | 3 | 132 | 33 | 25 | 25 | Transformer |
| 5 | Baroota | 1 | 132 | 33 | 11.8 | 13.2 | Transformer |
| 6 | Berri | 1 | 132 | 66 | 68.9 | 74.8 | Transformer |
| 7 | Berri | 2 | 132 | 66 | 68.9 | 74.8 | Transformer |
| 8 | Blanche | 1 | 132 | 33 | 76.8 | 81.6 | Transformer |
| 9 | Blanche | 2 | 132 | 33 | 58 | 61.5 | Transformer |
| 10 | Brinkworth | 3 | 275 | 132 | 200 | 210.5 | Transformer |
| 11 | Brinkworth | 5 | 132 | 33 | 12.3 | 13.7 | Transformer |
| 12 | Brinkworth | 6 | 132 | 33 | 12.3 | 13.7 | Transformer |
| 13 | Bungama | 2 | 275 | 132 | 200 | 210.5 | Transformer |
| 14 | Bungama | 3 | 132 | 33 | 64 | 70 | Transformer |
| 15 | Bungama | 4 | 132 | 33 | 64 | 70 | Transformer |
| 16 | Cherry Gardens | 1 | 275 | 132 | 160 | 160 | Transformer |
| 17 | City West | 1 | 275 | 66 | 300 | 300 | Transformer |
| 18 | City West | 2 | 275 | 66 | 300 | 300 | Transformer |
| 19 | Clare North | 1 | 132 | 33 | 25 | 25 | Transformer |
| 20 | Clare North | 2 | 132 | 33 | 25 | 25 | Transformer |
| 21 | Cultana | 1 | 275 | 132 | 200 | 200 | Transformer |
| 22 | Cultana | 2 | 275 | 132 | 200 | 200 | Transformer |
| 23 | Dalrymple | 1 | 132 | 33 | 25 | 25 | Transformer |
| 24 | Davenport | 1 | 275 | 132 | 160 | 160 | Transformer |
| 25 | Davenport | 2 | 275 | 132 | 160 | 160 | Transformer |
| 26 | Davenport | 3 | 132 | 33 | 60 | 60 | Transformer |
| 27 | Davenport | 4 | 132 | 33 | 60 | 60 | Transformer |
| 28 | Dorrien | 1 | 132 | 33 | 72 | 78 | Transformer |
| 29 | Dorrien | 2 | 132 | 33 | 72 | 78 | Transformer |
| 30 | Dorrien | 3 | 132 | 33 | 45 | 45 | Flow pump meter |
| 31 | East Terrace | 9 | 275 | 66 | 250 | 270 | Transformer |
| 32 | Happy Valley | 2 | 275 | 66 | 180 | 180 | Transformer |
| 33 | Happy Valley | 3 | 275 | 66 | 180 | 180 | Transformer |
| 34 | Happy Valley | 4 | 275 | 66 | 180 | 180 | Transformer |
| 35 | Hummocks | 1 | 132 | 33 | 17 | 17 | Transformer |
| 36 | Hummocks | 2 | 132 | 33 | 17 | 17 | Transformer |
| 37 | Kadina East | 2 | 132 | 33 | 60 | 60 | Transformer |
| 38 | Kadina East | 3 | 132 | 33 | 40 | 40 | Transformer |

| Number | Terminal Station (TS) / Power Station (PS) | Transformer | Transformer Primary Voltage (HV) | Transformer Secondary Voltage (MV) | Normal Cyclic Loading (MVA) | Long-time Emergency Cyclic Loading (MVA) | Reason for the Limit |
|--------|--|-------------|----------------------------------|------------------------------------|-----------------------------|--|----------------------|
| 40 | Keith | 1 | 132 | 33 | 32.8 | 37 | Transformer |
| 41 | Keith | 2 | 132 | 33 | 34.3 | 37.5 | Transformer |
| 42 | Kilburn | 5 | 275 | 66 | 225 | 238 | Transformer |
| 43 | Kincraig | 1 | 132 | 33 | 28.8 | 32.3 | Transformer |
| 44 | Kincraig | 2 | 132 | 33 | 27.3 | 30.5 | Transformer |
| 45 | Le Fevre | 4 | 275 | 66 | 180 | 180 | Transformer |
| 46 | Le Fevre | 5 | 275 | 66 | 180 | 180 | Transformer |
| 51 | Magill | 1 | 275 | 66 | 225 | 225 | Transformer |
| 52 | Magill | 2 | 275 | 66 | 225 | 225 | Transformer |
| 53 | Magill | 3 | 275 | 66 | 225 | 225 | Transformer |
| 54 | Mannum | 1 | 132 | 33 | 20 | 21 | Transformer |
| 55 | Mannum | 2 | 132 | 33 | 20 | 21 | Transformer |
| | | | | | | | |
| 62 | Mayurra | 1 | 132 | 33 | 145 | 145 | Transformer |
| 63 | Mayurra | 2 | 132 | 33 | 145 | 145 | Transformer |
| | | | | | | | |
| 67 | Mobilong | 1 | 132 | 33 | 75.6 | 82.8 | Transformer |
| 68 | Mobilong | 2 | 132 | 33 | 75.6 | 82.8 | Transformer |
| 69 | Monash | 4 | 132 | 66 | 62.3 | 66.5 | Transformer |
| | | | | | | | |
| 78 | Morphett Vale East | 3 | 275 | 66 | 258.8 | 258.8 | Transformer |
| 79 | Morphett Vale East | 4 | 275 | 66 | 258.8 | 258.8 | Transformer |
| 80 | Mt Barker South | 2 | 275 | 66 | 225 | 225 | Transformer |

| Number | Terminal Station (TS) / Power Station (PS) | Transformer | Transformer Primary Voltage (HV) | Transformer Secondary Voltage (MV) | Normal Cyclic Loading (MVA) | Long-time Emergency Cyclic Loading (MVA) | Reason for the Limit |
|--------|--|-------------|----------------------------------|------------------------------------|-----------------------------|--|----------------------|
| 81 | Mt Barker | 1 | 132 | 66 | 71.4 | 78 | Transformer |
| 82 | Mt Barker | 2 | 132 | 66 | 71.4 | 78 | Transformer |
| 83 | Mt Gambier | 1 | 132 | 33 | 58 | 61.5 | Transformer |
| 84 | Mt Gambier | 2 | 132 | 33 | 30 | 32.5 | Transformer |
| 85 | Mt Gunson | 1 | 132 | 33 | 5 | 5 | Transformer |
| | | | | | | | |
| 93 | Neuroodla | 1 | 132 | 33 | 5 | 5 | Transformer |
| 94 | Northfield | 7 | 275 | 66 | 225 | 225 | Transformer |
| 95 | Northfield | 8 | 275 | 66 | 225 | 225 | Transformer |
| 96 | Northfield | 9 | 275 | 66 | 225 | 225 | Transformer |
| 97 | North West Bend | 1 | 132 | 66 | 24.4 | 27.8 | Transformer |
| 98 | North West Bend | 2 | 132 | 66 | 24.4 | 27.8 | Transformer |
| 99 | North West Bend | 3 | 132 | 66 | 25 | 27.8 | Transformer |
| | | | | | | | |
| 103 | Para | 1 | 275 | 66 | 144 | 144 | Transformer |
| 104 | Para | 2 | 275 | 66 | 144 | 144 | Transformer |
| 105 | Para | 8 | 275 | 132 | 160 | 160 | Transformer |
| 106 | Parafield Gardens West | 1 | 275 | 66 | 225 | 225 | Transformer |
| 107 | Parafield Gardens West | 2 | 275 | 66 | 180 | 180 | Transformer |
| 108 | Playford | North | 275 | 132 | 160 | 160 | Transformer |
| 109 | Playford | South | 275 | 132 | 160 | 160 | Transformer |
| 110 | Playford | 1 | 132 | 33 | 26.3 | 31 | Transformer |
| 111 | Playford | 2 | 132 | 33 | 26.3 | 31 | Transformer |
| | | | | | | | |
| 115 | Pt Pirie | 2 | 132 | 33 | 64 | 70 | Transformer |
| 116 | Robertstown | 1 | 275 | 132 | 160 | 160 | Transformer |
| 117 | Robertstown | 2 | 275 | 132 | 160 | 160 | Transformer |

| Number | Terminal Station (TS) / Power Station (PS) | Transformer | Transformer Primary Voltage (HV) | Transformer Secondary Voltage (MV) | Normal Cyclic Loading (MVA) | Long-time Emergency Cyclic Loading (MVA) | Reason for the Limit |
|--------|--|-------------|----------------------------------|------------------------------------|-----------------------------|--|----------------------|
| 123 | Snowtown | 1 | 132 | 33 | 125 | 125 | Transformer |
| 124 | Snuggery Rural | 1 | 132 | 33 | 28.8 | 30 | Transformer |
| 128 | South East | 1 | 275 | 132 | 160 | 160 | Transformer |
| 129 | South East | 2 | 275 | 132 | 160 | 160 | Transformer |
| 132 | Tailem Bend | 4 | 275 | 132 | 200 | 200 | Transformer |
| 133 | Tailem Bend | 1 | 132 | 33 | 30 | 32.5 | Transformer |
| 134 | Tailem Bend | 2 | 132 | 33 | 30 | 32.5 | Transformer |
| 135 | Templers | 1 | 132 | 33 | 73.8 | 79.8 | Transformer |
| 136 | Templers | 2 | 132 | 33 | 73.8 | 79.8 | Transformer |
| 137 | Templers West | 2 | 275 | 132 | 160 | 160 | Transformer |
| 138 | Torrens Island | East | 275 | 66 | 150 | 150 | Transformer |
| 139 | Torrens Island | West | 275 | 66 | 150 | 150 | Transformer |
| 140 | Waterloo | TF1 + Reg1 | 132 | 33 | 25 | 25 | Transformer |
| 141 | Waterloo | TF2 + Reg2 | 132 | 33 | 25 | 25 | Transformer |
| 142 | Whyalla Central | 1 | 132 | 33 | 75 | 75 | Transformer |
| 143 | Whyalla Central | 2 | 132 | 33 | 75 | 75 | Transformer |
| 146 | Whyalla Terminal (LMF) | 4 | 132 | 33 | 60.5 | 66.5 | Transformer |
| 149 | Wudinna | 1 | 132 | 66 | 33.3 | 36.5 | Transformer |
| 150 | Wudinna | 2 | 132 | 66 | 25 | 25 | Transformer |
| 151 | Yadnarie | 1 | 132 | 66 | 23.2 | 27.4 | Transformer |
| 152 | Yadnarie | 2 | 132 | 66 | 23.2 | 27.4 | Transformer |

2. Line rating

| No. | Transmission Circuit | Design Ratings | | ElectraNet Operational Rating | | | | | | | |
|-----|---------------------------------------|--------------------------|--------------------------|-------------------------------|--------------|--------------|--------------|----------------------------------|------------------------------------|--------------------|--------------------------|
| | | Summer Line Rating (MVA) | Winter Line Rating (MVA) | SUMMER (MVA) | WINTER (MVA) | Summer (MVA) | Winter (MVA) | Next Limiting Plant Rating (MVA) | Description of Limiting Plant | Limiting? | Commentary |
| 1 | Brinkworth - Templers West | 453 | 565 | | | 453 | 565 | 685 | Design | Forecast - thermal | |
| 2 | Templers West - Para | 453 | 565 | | | 453 | 565 | 685 | Design | Forecast - thermal | |
| 3 | Bungama - Blyth West | 451 | 564 | 451 | 564 | 451 | 564 | | Design | | |
| 4 | Blyth West - Munno Para | 451 | 564 | 451 | 564 | 451 | 564 | | Design | | |
| 5 | Munno Para - Para | 451 | 564 | 451 | 564 | 451 | 564 | | Design | | |
| 6 | Mt Lock - Canowie | 591 | 675 | 591 | 675 | 591 | 675 | | Design | Forecast - thermal | |
| 7 | Canowie - Robertstown | 591 | 675 | 429 | 429 | 429 | 429 | 476 | 2x Line Traps | Forecast - thermal | |
| 7 | Canowie - Robertstown | 591 | 675 | | | 476 | 476 | 511 | CT Ratio | Forecast - thermal | |
| 7 | Canowie - Robertstown | 591 | 675 | | | 511 | 511 | 572 | Set 2 relay | Forecast - thermal | |
| 7 | Canowie - Robertstown | 591 | 675 | | | 572 | 572 | 595 | Set 1 relay | Forecast - thermal | |
| 7 | Canowie - Robertstown | 591 | 675 | | | 591 | 595 | | 2x Line Traps | Forecast - thermal | |
| 7 | Canowie - Robertstown | 591 | 675 | | | 591 | 675 | | Design | Forecast - thermal | |
| 8 | Davenport - Brinkworth (East Circuit) | 453 | 565 | | | 453 | 565 | 572 | Design | Forecast - thermal | |
| 9 | Davenport - Bungama | 451 | 564 | 429 | 429 | 429 | 429 | 572 | 2x Line Traps | Forecast - thermal | |
| 9 | Davenport - Bungama | 451 | 564 | | | 451 | 564 | | Design | Forecast - thermal | |
| 10 | Davenport - Mt Lock | 591 | 675 | 476 | 476 | 476 | 476 | 670 | CT Ratio | Forecast - thermal | |
| 10 | Davenport - Mt Lock | 591 | 675 | | | 591 | 670 | | Strung bus connected to Isol A6867 | Forecast - thermal | |
| 10 | Davenport - Mt Lock | 591 | 675 | | | 591 | 675 | | Design | Forecast - thermal | |
| 11 | Davenport - Cultana 1 | 591 | 675 | 457 | 457 | 457 | 457 | 670 | CT Ratios | | |
| 11 | Davenport - Cultana 1 | 591 | 675 | | | 591 | 670 | | Isol A6794 Dropper | | |
| 11 | Davenport - Cultana 1 | 591 | 675 | | | 591 | 675 | - | Design | | |
| 12 | Davenport - Cultana 2 | 591 | 675 | 457 | 457 | 457 | 457 | 657 | CT Ratio | | |
| 12 | Davenport - Cultana 2 | 591 | 675 | | | 591 | 657 | 670 | CB6615 dropper | | |
| 12 | Davenport - Cultana 2 | 591 | 675 | | | 591 | 670 | | Isol A80031 Dropper | | |
| 12 | Davenport - Cultana 2 | 591 | 675 | | | 591 | 675 | | Design | | |
| 13 | Davenport - Playford | 591 | 675 | 238 | 238 | 238 | 238 | 399 | CT rating | | Decommissioning expected |
| 13 | Davenport - Playford | 591 | 675 | | | 399 | 399 | 476 | Isol A6627 Dropper | | Decommissioning expected |
| 13 | Davenport - Playford | 591 | 675 | | | 476 | 476 | - | CT ratios | | Decommissioning expected |
| 14 | Davenport - Belalie | 591 | 675 | 591 | 675 | 591 | 675 | | Design | Forecast - thermal | |
| 15 | Belalie - Mokota | 591 | 675 | 591 | 675 | 591 | 675 | | Design | Forecast - thermal | |
| 16 | Mokota - Robertstown | 591 | 675 | 429 | 429 | 429 | 429 | 476 | 2x Line Traps | Forecast - thermal | |
| 16 | Mokota - Robertstown | 591 | 675 | | | 476 | 476 | 572 | Metering CT | Forecast - thermal | |
| 16 | Mokota - Robertstown | 591 | 675 | | | 572 | 572 | 778 | CT Ratio | Forecast - thermal | |
| 16 | Mokota - Robertstown | 591 | 675 | | | 591 | 675 | | Design | Forecast - thermal | |
| 17 | Northern Power Station 1 - Davenport | 448 | 560 | 286 | 286 | 286 | 286 | 429 | 1916 NPS1 CTVT rating | | Decommissioning expected |
| 17 | Northern Power Station 1 - Davenport | 448 | 560 | | | 429 | 429 | 476 | Relay Set 1 relay capacity | | Decommissioning expected |
| 17 | Northern Power Station 1 - Davenport | 448 | 560 | | | 448 | 476 | - | CTVT dropper | | Decommissioning expected |
| 18 | Northern Power Station 2 - Davenport | 448 | 560 | 286 | 286 | 286 | 286 | 476 | 1917 NPS2 CTVT rating | | Decommissioning expected |
| 18 | Northern Power Station 2 - Davenport | 448 | 560 | | | 448 | 476 | 476 | CT Ratio | | Decommissioning expected |
| 18 | Northern Power Station 2 - Davenport | 448 | 560 | | | 448 | 476 | - | Set 1 relay capacity | | Decommissioning expected |
| 19 | Robertstown - Tungkillo | 591 | 675 | 572 | 572 | 572 | 572 | 762 | Transformer protection CT ratio | Forecast - thermal | |
| 19 | Robertstown - Tungkillo | 591 | 675 | | | 591 | 675 | | Design | Forecast - thermal | |
| 20 | Robertstown - Para | 451 | 564 | 451 | 564 | 451 | 564 | | Design | Forecast - thermal | |

| No. | Transmission Circuit | Design Ratings | | Electranet Operational Rating | | | | | | | |
|-----|--|--------------------------|--------------------------|-------------------------------|--------------|--------------|--------------|----------------------------------|-------------------------------|--|------------|
| | | Summer Line Rating (MVA) | Winter Line Rating (MVA) | SUMMER (MVA) | WINTER (MVA) | Summer (MVA) | Winter (MVA) | Next Limiting Plant Rating (MVA) | Description of Limiting Plant | Limiting? | Commentary |
| 21 | Happy Valley - Cherry Gardens | 597 | 677 | 701 | 768 | 597 | 677 | | Design (15 min emergency) | | |
| 22 | Happy Valley - Morphett Vale East | 451 | 564 | 451 | 476 | 451 | 476 | 714 | CT Ratio | | |
| 22 | Happy Valley - Morphett Vale East | 451 | 564 | | | 451 | 564 | | Design | | |
| 23 | Kilburn - Northfield | 597 | 677 | 476 | 476 | 476 | 476 | 476 | CT Ratios | | |
| 23 | Kilburn - Northfield | 597 | 677 | | | 476 | 476 | 762 | Set 2 relay capacity | | |
| 23 | Kilburn - Northfield | 597 | 677 | | | 597 | 677 | | Design | | |
| 24 | Lefevre - Torrens | 1182 | 1350 | 1143 | 1143 | 1143 | 1143 | 1143 | CB6570 CT rating | | |
| 24 | Lefevre - Torrens | 1182 | 1350 | | | 1143 | 1143 | 1191 | CB6578 CT rating | | |
| 24 | Lefevre - Torrens | 1182 | 1350 | | | 1182 | 1191 | 1340 | ISOL A6780 rating | | |
| 24 | Lefevre - Torrens | 1182 | 1350 | | | 1182 | 1340 | - | ISOL A6787 Dropper | | |
| 25 | Magill - East Terrace (U/G Cable) | 450 | 450 | 286 | 286 | 286 | 286 | 762 | CT Ratio | | |
| 25 | Magill - East Terrace (U/G Cable) | 450 | 450 | | | 450 | 450 | | Design | | |
| 26 | Magill - Happy Valley | 902 | 1128 | 902 | 905 | 902 | 905 | 1143 | CT Ratio | | |
| 26 | Magill - Happy Valley | 902 | 1128 | | | 902 | 1128 | | Design | | |
| 27 | Morphett Vale East - Cherry Gardens | 597 | 677 | 597 | 677 | 597 | 677 | 714 | Design | | |
| 28 | Para - Magill | 595 | 680 | 595 | 667 | 595 | 667 | 914 | CT Ratio | | |
| 28 | Para - Magill | 595 | 680 | | | 595 | 680 | | Design | | |
| 29 | Para - Parafield Gardens West | 902 | 1128 | 714 | 714 | 714 | 714 | 1143 | CT Ratio | | |
| 29 | Para - Parafield Gardens West | 902 | 1128 | | | 902 | 1128 | | Design | | |
| 30 | Para - Tungkillo | 896 | 1120 | 896 | 1120 | 896 | 1120 | | Design | | |
| 31 | Tungkillo - Tailem Bend | 603 | 684 | 653 | 684 | 603 | 684 | 686 | Design (15 min emergency) | Forecast - thermal, voltage, oscillatory | |
| 32 | Para - Torrens 4 | 902 | 1128 | 857 | 857 | 857 | 857 | 1143 | CT Ratio | | |
| 32 | Para - Torrens 4 | 902 | 1128 | | | 902 | 1128 | | Design | | |
| 33 | Parafield Gardens West - Pelican Point | 902 | 1128 | 902 | 968 | 902 | 968 | 1135 | Set 1 relay capacity | | |
| 33 | Parafield Gardens West - Pelican Point | 902 | 1128 | | | 902 | 1128 | | Design | | |
| 34 | Pelican Point - Lefevre | 1182 | 1350 | 1143 | 1143 | 1143 | 1143 | 1143 | CB6729 CT rating | | |
| 34 | Pelican Point - Lefevre | 1182 | 1350 | | | 1143 | 1143 | 1143 | CB6728 CT rating | | |
| 34 | Pelican Point - Lefevre | 1182 | 1350 | | | 1143 | 1143 | 1143 | CB6576 CT rating | | |
| 34 | Pelican Point - Lefevre | 1182 | 1350 | | | 1143 | 1143 | 1191 | CB6577 CT rating | | |
| 34 | Pelican Point - Lefevre | 1182 | 1350 | | | 1182 | 1191 | | multiple isolators | | |
| 35 | Torrens - Cherry Gardens | 896 | 1120 | 857 | 857 | 857 | 857 | 1143 | CT Ratio | | |
| 35 | Torrens - Cherry Gardens | 896 | 1120 | | | 896 | 1120 | | Design | | |
| 36 | Torrens - Kilburn | 597 | 677 | 597 | 677 | 597 | 677 | | Design | | |
| 37 | Torrens - Magill | 595 | 680 | 595 | 680 | 595 | 680 | | Design | | |
| 38 | Torrens - Northfield | 597 | 677 | 597 | 677 | 597 | 677 | | Design | | |
| 39 | Torrens - City West | 750 | 750 | 750 | 750 | 750 | 750 | | Design | | |
| 40 | Tungkillo - Mt Barker South | 1182 | 1350 | 1182 | 1350 | 1182 | 1350 | | Design | | |
| 41 | Mt Barker South - Cherry Gardens | 1182 | 1350 | 1182 | 1350 | 1182 | 1350 | | Design | | |
| 42 | Tailem Bend - Cherry Gardens | 597 | 677 | 663 | 675 | 597 | 677 | 686 | Design (15 min emergency) | Forecast - thermal | |
| 43 | South East - Heywood 1 | 597 | 677 | 701 | 766 | 597 | 677 | | Design (15 min emergency) | Forecast - thermal, voltage, oscillatory | |
| 44 | South East - Heywood 2 | 597 | 677 | 701 | 766 | 597 | 677 | | Design (15 min emergency) | Forecast - thermal, voltage, oscillatory | |
| 45 | Tailem Bend - South East 1 | 597 | 677 | 701 | 766 | 597 | 677 | | Design (15 min emergency) | Forecast - thermal, voltage, oscillatory | |
| 46 | Tailem Bend - South East 2 | 597 | 677 | 701 | 766 | 597 | 677 | | Design (15 min emergency) | Forecast - thermal, voltage, oscillatory | |
| 47 | Clare North - Mintaro | 183 | 207 | 183 | 207 | 183 | 207 | | Design | | |

| No. | Transmission Circuit | Design Ratings | | Electranet Operational Rating | | | | | | | |
|-----|---|--------------------------|--------------------------|-------------------------------|--------------|--------------|--------------|----------------------------------|-----------------------------------|-----------------------------|--------------------------|
| | | Summer Line Rating (MVA) | Winter Line Rating (MVA) | SUMMER (MVA) | WINTER (MVA) | Summer (MVA) | Winter (MVA) | Next Limiting Plant Rating (MVA) | Description of Limiting Plant | Limiting? | Commentary |
| 48 | Brinkworth - Clare North | 183 | 207 | 180 | 180 | 180 | 180 | 229 | 1x Line trap | Outage - thermal | |
| 48 | Brinkworth - Clare North | 183 | 207 | | | 183 | 207 | | Design | | |
| 49 | Bungama - Baroota | 10 | 77 | 10 | 77 | 10 | 77 | | Design | | |
| 50 | Bungama - Redhill Tee | 141 | 173 | 141 | 173 | 141 | 173 | | Design | | |
| 51 | Redhill Tee - Brinkworth | 141 | 173 | 141 | 173 | 141 | 173 | | Design | | |
| 52 | Bungama - Snowtown Tee | 105 | 126 | 105 | 126 | 105 | 126 | 183 | Design - Dynamic ratings applied | Outage - thermal | |
| 53 | Snowtown Tee - Hummocks | 105 | 126 | 105 | 126 | 105 | 126 | 183 | Design - Dynamic ratings applied | Outage - thermal | |
| 54 | Bungama - Pt Pirie | 110 | 132 | 110 | 132 | 110 | 132 | | Design | | |
| 55 | Cultana - Stony Point | 144 | 176 | 43 | 43 | 43 | 43 | 43 | Set 1 relay capacity | | |
| 55 | Cultana - Stony Point | 144 | 176 | | | 43 | 43 | 229 | Set 2 relay capacity | | |
| 55 | Cultana - Stony Point | 144 | 176 | | | 144 | 176 | | Design | | |
| 58 | Middleback - Yadnarie | 73 | 126 | 73 | 126 | 73 | 126 | 143 | Design - Dynamic ratings applied | System Normal - Thermal | |
| 59 | Mintaro - Waterloo | 183 | 207 | 183 | 207 | 183 | 207 | | Design | System Normal - Thermal | |
| 60 | Monash - Berri 1 | 179 | 221 | 107 | 107 | 107 | 107 | 107 | Set 1 relay capacity | | |
| 60 | Monash - Berri 1 | 179 | 221 | | | 107 | 107 | 137 | Set 2 relay capacity | | |
| 60 | Monash - Berri 1 | 179 | 221 | | | 137 | 137 | 183 | Metering CT | | |
| 60 | Monash - Berri 1 | 179 | 221 | | | 179 | 183 | 229 | Isolator rating | | |
| 60 | Monash - Berri 1 | 179 | 221 | | | 179 | 221 | | Design | | |
| 61 | Monash - Berri 2 | 110 | 132 | 107 | 107 | 107 | 107 | 107 | REL561C rating limit (Set 1) | | |
| 61 | Monash - Berri 2 | 110 | 132 | | | 107 | 107 | 137 | REL316 relay rating limit (Set 2) | | |
| 61 | Monash - Berri 2 | 110 | 132 | | | 110 | 132 | | Design | | |
| 62 | Morgan Whyalla Pipeline 1 - North West Bend | 183 | 205 | | | 183 | 205 | | Design | System normal - thermal | |
| 63 | Morgan Whyalla Pipeline 2 - Morgan Whyalla Pipeline 1 | 183 | 205 | | | 183 | 205 | | Design | System normal - thermal | |
| 64 | Morgan Whyalla Pipeline 3 - Morgan Whyalla Pipeline 2 | 183 | 205 | | | 183 | 205 | | Design | System normal - thermal | |
| 65 | Morgan Whyalla Pipeline 4 - Waterloo East | 183 | 205 | | | 183 | 205 | | Design | Outage - thermal | |
| 66 | Mt Gunson (Playford) - Pimba | 76 | 107 | 76 | 82 | 76 | 79 | 79 | Set 1 relay capacity | | |
| 66 | Mt Gunson (Playford) - Pimba | 76 | 107 | | | 76 | 79 | 183 | Set 2 relay capacity | | |
| 66 | Mt Gunson (Playford) - Pimba | 76 | 107 | | | 76 | 107 | | Design | | |
| 68 | North West Bend - Monash1 | 179 | 221 | 165 | 165 | 165 | 165 | 184 | CT ratio and relay settings | Forecast - thermal, voltage | |
| 68 | North West Bend - Monash1 | 179 | 221 | | | 179 | 184 | 229 | CB6225 droppers | Forecast - thermal, voltage | |
| 68 | North West Bend - Monash1 | 179 | 221 | | | 179 | 221 | | Design | Forecast - thermal, voltage | |
| 69 | North West Bend - Monash2 | 141 | 158 | | | 141 | 158 | 165 | Design | Forecast - thermal, voltage | |
| 71 | Pimba - Woomera | 76 | 107 | 57 | 57 | 57 | 57 | 57 | Set 1 relay capacity | | |
| 71 | Pimba - Woomera | 76 | 107 | | | 57 | 57 | 91 | Set 2 relay capacity | | |
| 71 | Pimba - Woomera | 76 | 107 | | | 76 | 91 | - | CT Ratio | | |
| 72 | Davenport - Playford A | 219 | 219 | 183 | 183 | 183 | 183 | | Disconnectors ABTE and ABTW | | Decommissioning expected |
| 73 | Davenport - Mt Gunson (Pimba) | 76 | 107 | 76 | 80 | 76 | 79 | 79 | Set 1 relay capacity | | |
| 73 | Davenport - Mt Gunson (Pimba) | 76 | 107 | | | 76 | 79 | 183 | Set 2 relay capacity | | |
| 73 | Davenport - Mt Gunson (Pimba) | 76 | 107 | | | 76 | 107 | | Design | | |
| 78 | Pt Lincoln - Sleaford | 105 | 126 | 91 | 91 | 91 | 91 | 116 | Set 2 relay capacity | | |
| 78 | Pt Lincoln - Sleaford | 105 | 126 | | | 105 | 116 | 183 | Set 1 relay capacity | | |

| No. | Transmission Circuit | Design Ratings | | Electranet Operational Rating | | | | | | | |
|-----|---|--------------------------|--------------------------|-------------------------------|--------------|--------------|--------------|----------------------------------|-------------------------------------|-------------------------|------------|
| | | Summer Line Rating (MVA) | Winter Line Rating (MVA) | SUMMER (MVA) | WINTER (MVA) | Summer (MVA) | Winter (MVA) | Next Limiting Plant Rating (MVA) | Description of Limiting Plant | Limiting? | Commentary |
| 78 | Pt Lincoln - Sleaford | 105 | 126 | | | 105 | 126 | - | Design | | |
| 79 | Robertstown - Morgan Whyalla Pipeline 3 (NWB#2) | 183 | 205 | | | 183 | 205 | | Design | System normal - thermal | |
| 80 | Robertstown - Morgan Whyalla Pipeline 4 (W/loo) | 183 | 205 | | | 183 | 205 | | Design | Outage - thermal | |
| 81 | Robertstown - North West Bend 1 | 141 | 158 | 141 | 158 | 141 | 158 | 162 | Design | System normal - thermal | |
| 82 | Waterloo East - Waterloo | 183 | 205 | | | 183 | 205 | | Design | | |
| 83 | Cultana - Middleback | 96 | 139 | 96 | 139 | 96 | 139 | 162 | Design | | |
| 84 | Yadnarie - Mt Millar | 105 | 126 | 75 | 75 | 75 | 75 | 114 | Transformer rating | | |
| 84 | Yadnarie - Mt Millar | 105 | 126 | | | 105 | 114 | 145 | Metering CT rating limit | | |
| 84 | Yadnarie - Mt Millar | 105 | 126 | | | 105 | 126 | | Design | | |
| 85 | Yadnarie - Pt Lincoln | 73 | 126 | 73 | 91 | 73 | 91 | 143 | 1811 Pt Lincoln 1x Line trap rating | System Normal - Thermal | |
| 85 | Yadnarie - Pt Lincoln | 73 | 126 | | | 73 | 126 | | Design - Dynamic ratings applied | | |
| 86 | Yadnarie - Wudinna | 144 | 176 | 91 | 91 | 91 | 91 | 91 | Set 1 relay capacity | | |
| 86 | Yadnarie - Wudinna | 144 | 176 | | | 91 | 91 | 228 | Set 2 relay capacity | | |
| 86 | Yadnarie - Wudinna | 144 | 176 | | | 144 | 176 | - | Design | | |
| 89 | Angas Creek - MAP No 3 Pump | 141 | 173 | 137 | 137 | 137 | 137 | 164 | 1832 Mannum 1x Line trap rating | Outage - thermal | |
| 89 | Angas Creek - MAP No 3 Pump | 141 | 173 | | | 141 | 164 | 164 | Set 2 relay capacity | Outage - thermal | |
| 89 | Angas Creek - MAP No 3 Pump | 141 | 173 | | | 141 | 164 | - | Set 1 relay capacity | Outage - thermal | |
| 90 | Ardrossan West - Dalrymple | 105 | 126 | 105 | 126 | 105 | 126 | | Design | | |
| 91 | Cherry Gardens - Mt Barker | 178 | 221 | 178 | 183 | 178 | 183 | 274 | 1825 1x line trap | | |
| 91 | Cherry Gardens - Mt Barker | 178 | 221 | | | 178 | 221 | | Design | | |
| 93 | Templers West - Dorrien | 131 | 159 | 131 | 159 | 131 | 159 | | Design | | |
| 95 | Hummocks - Ardrossan West | 110 | 132 | 110 | 132 | 110 | 132 | | Design | | |
| 96 | Hummocks - Kadina East | 144 | 176 | 144 | 176 | 144 | 176 | | Design | | |
| 97 | Hummocks - Waterloo | 105 | 126 | 105 | 126 | 105 | 126 | | Design | | |
| 98 | Kanmantoo Mine - MHP No 3 Pump | 81 | 97 | 69 | 69 | 69 | 69 | 105 | CT Ratio | | |
| 98 | Kanmantoo Mine - MHP No 3 Pump | 81 | 97 | | | 81 | 97 | | Design | | |
| 99 | Mannum - MAP No 1 Pump | 20 | 64 | 20 | 64 | 20 | 64 | | Design | | |
| 100 | Mannum - Mobilong | 141 | 173 | 141 | 160 | 141 | 160 | 164 | 1834 Mannum 1x line trap | | |
| 100 | Mannum - Mobilong | 141 | 173 | | | 141 | 164 | 164 | Set 1 relay capacity | | |
| 100 | Mannum - Mobilong | 141 | 173 | | | 141 | 164 | - | Set 2 relay capacity | | |
| 101 | MAP No 2 Pump - Mannum | 141 | 173 | 141 | 164 | 141 | 164 | 164 | Set 2 relay capacity | | |
| 101 | MAP No 2 Pump - Mannum | 141 | 173 | | | 141 | 164 | | Set 1 relay capacity | | |
| 101 | MAP No 2 Pump - Mannum | 141 | 173 | | | 141 | 173 | | Design | | |
| 102 | MAP No 3 Pump - MAP No 2 Pump | 141 | 173 | 141 | 173 | 141 | 173 | | Design | | |
| 103 | Millbrook Tee - Angas Creek | 141 | 173 | 141 | 173 | 141 | 173 | | Design | | |
| 105 | Mobilong - MHP No1 Pump | 98 | 118 | 91 | 91 | 91 | 91 | 183 | A6173 CT rating | | |
| 105 | Mobilong - MHP No1 Pump | 98 | 118 | | | 98 | 118 | | Design | | |
| 106 | Mobilong - MHP No2 Pump (Mt Barker) | 178 | 221 | 178 | 183 | 178 | 183 | 183 | CT Ratio | | |
| 106 | Mobilong - MHP No2 Pump (Mt Barker) | 178 | 221 | | | 178 | 183 | 198 | Set 2 relay capacity | | |
| 106 | Mobilong - MHP No2 Pump (Mt Barker) | 178 | 221 | | | 178 | 198 | - | Set 1 relay capacity | | |
| 107 | Mobilong - Tailern Bend | 184 | 207 | | | 184 | 207 | | Design | System Normal - thermal | |
| 108 | Mt Barker - MHP No 3 Pump (Mobilong) | 178 | 221 | 178 | 183 | 178 | 183 | - | set 1 and set 2 relays. | | |
| 108 | Mt Barker - MHP No 3 Pump (Mobilong) | 178 | 221 | | | 178 | 221 | - | Design | | |
| 109 | Para - Millbrook Tee | 141 | 173 | 141 | 176 | 141 | 173 | 183 | CT Ratio | | |
| 109 | Para - Millbrook Tee | 141 | 173 | | | 141 | 173 | 183 | Set 1 relay capacity | | |
| 109 | Para - Millbrook Tee | 141 | 173 | | | 141 | 173 | - | Set 2 relay capacity | | |
| 110 | Roseworthy - Para | 141 | 173 | 141 | 176 | 141 | 173 | 183 | Design | | |

| No. | Transmission Circuit | Design Ratings | | Electranet Operational Rating | | | | | | | |
|-----|-------------------------------|--------------------------|--------------------------|-------------------------------|--------------|--------------|--------------|----------------------------------|--|-------------------------|------------|
| | | Summer Line Rating (MVA) | Winter Line Rating (MVA) | SUMMER (MVA) | WINTER (MVA) | Summer (MVA) | Winter (MVA) | Next Limiting Plant Rating (MVA) | Description of Limiting Plant | Limiting? | Commentary |
| 112 | Tailem Bend - Keith No 2 | 178 | 221 | | | 178 | 221 | | Design | System Normal - thermal | |
| 113 | Templers - Dorrien | 131 | 159 | 131 | 137 | 131 | 137 | 171 | Isol A80076 dropper, Templers 132 kV bus | | |
| 113 | Templers - Dorrien | 131 | 159 | | | 131 | 159 | 183 | Design | | |
| 114 | Waterloo - Templers | 141 | 173 | | | 141 | 173 | - | Design | System normal - thermal | |
| 115 | Templers - Roseworthy | 141 | 173 | | | 141 | 173 | | Design | | |
| 118 | MHP No2 Pump - MHP No 3 Pump | 178 | 221 | 178 | 183 | 178 | 183 | 276 | Multiple isolators | | |
| 118 | MHP No2 Pump - MHP No 3 Pump | 178 | 221 | | | 178 | 221 | | Design | | |
| 119 | Blanche - Snuggery | 105 | 126 | 105 | 126 | 105 | 126 | 137 | Design | Forecast - thermal | |
| 120 | Keith - Kincaig | 178 | 221 | 183 | 183 | 178 | 221 | | Protection settings | | |
| 120 | Keith - Kincaig | 178 | 221 | | | 178 | 221 | | Design | | |
| 122 | Mt Gambier - Blanche | 105 | 126 | 118 | 126 | 105 | 126 | | Design | | |
| 123 | Penola West - Kincaig | 178 | 221 | | | 178 | 221 | | Design | | |
| 125 | Snuggery - Mayurra | 251 | 315 | 251 | 274 | 251 | 274 | 274 | CB6028 CT, CB6131 CT ratings and isols | | |
| 125 | Snuggery - Mayurra | 251 | 315 | | | 251 | 274 | | Set 1 and 2 relay capacity | | |
| 126 | South East - Snuggery/Mayurra | 251 | 315 | 251 | 274 | 251 | 274 | 274 | CB6160 CT, CB6162 CT ratings | Forecast - thermal | |
| 126 | South East - Snuggery/Mayurra | 251 | 315 | | | 251 | 274 | | Set 1 and 2 relay capacity | | |
| 127 | South East - Mt Gambier | 178 | 221 | 178 | 183 | 178 | 183 | 229 | CT Ratios | Forecast - thermal | |
| 127 | South East - Mt Gambier | 178 | 221 | | | 178 | 221 | | Design | | |
| 128 | South East - Penola West | 178 | 221 | 178 | 183 | 178 | 183 | 228 | CT Ratios | Forecast - thermal | |
| 128 | South East - Penola West | 178 | 221 | | | 178 | 221 | | Design | | |
| 129 | LeFevre - New Osborne 1 | 108 | 135 | 108 | 135 | 108 | 135 | | Design | | |
| 130 | LeFevre - New Osborne 2 | 108 | 135 | 108 | 135 | 108 | 135 | | Design | | |
| 131 | Monash - Berri | 108 | 135 | 91 | 91 | 91 | 91 | 91 | CT Ratio | | |
| 131 | Monash - Berri | 108 | 135 | | | 91 | 91 | 91 | Set 1 relay capacity | | |
| 131 | Monash - Berri | 108 | 135 | | | 91 | 91 | - | Set 2 relay capacity | | |
| 132 | New Osborne - OCPL 1 | 142 | 162 | 142 | 151 | 142 | 151 | 229 | Set 2 relay capacity | | |
| 132 | New Osborne - OCPL 1 | 142 | 162 | | | 142 | 162 | | Design | | |
| 133 | New Osborne - OCPL 2 | 142 | 162 | 142 | 151 | 142 | 151 | 229 | Set 2 relay capacity | | |
| 133 | New Osborne - OCPL 2 | 142 | 162 | | | 142 | 162 | | Design | | |
| 134 | Torrens - New Osborne 3 | 148 | 168 | 137 | 137 | 137 | 137 | 183 | Metering CT | System Normal | |
| 134 | Torrens - New Osborne 3 | 148 | 168 | | | 148 | 168 | | Design | | |
| 135 | Torrens - New Osborne 4 | 123 | 148 | 123 | 148 | 123 | 148 | 183 | Design | System Normal | |
| 136 | Torrens - TINS 1 | 151 | 151 | 151 | 151 | 151 | 151 | | Design | | |
| 137 | Torrens - TINS 2 | 108 | 128 | 108 | 128 | 108 | 128 | | Design | | |