

## Appendix F Summary of possible transmission investments by region and zone

*This appendix summarises possible network investments for the 10-year outlook period and also sets out the forecast transmission line intervention outlook for the 10-20 year outlook period.*

### F.1 Possible network investments for the 10-year outlook period

Through the annual planning review, Powerlink has identified that the investments listed in Table F.1 are likely to be required to address the risks arising from network assets reaching end of technical service life and to maintain reliability of supply in the 10-year outlook period. Contingent Project and Actionable Integrated System Plan projects are included for completeness. Potential projects have been grouped by region and zone as described in chapters 6, 7 and 8. Possible network investments do not constitute committed projects, and their scope, timing and implementation remain subject to further assessment and investment decision-making processes.

As required by the Australian Energy Regulator's Transmission Annual Planning Report Guidelines, additional information on potential projects is available in the TAPR Templates which can be accessed through Powerlink's TAPR Portal.

**Table F.1** Possible future network investments in the 10-year outlook period

| Potential project                                                                                                                                        | ID      | Zone         | Category                                      | Outlook          | Region |
|----------------------------------------------------------------------------------------------------------------------------------------------------------|---------|--------------|-----------------------------------------------|------------------|--------|
| Line refit works on the 275kV transmission lines between Ross and Chalumbin substations                                                                  | CQNQ-01 | Far North    | Future investment                             | 5 years          | NQ     |
| Reid River 275kV Network Integration                                                                                                                     | CQNQ-02 | Ross         | Future investment                             | 5 years          | NQ     |
| Stanwell to Broadsound 275kV Second Circuit Stringing                                                                                                    | CQNQ-03 | Central West | AEMO 2026 ISP Actionable Project              | To be determined | NQ     |
| Central Queensland to North Queensland Augmentation                                                                                                      | CQNQ-04 | Central West | Powerlink Revenue Proposal contingent project | To be determined | NQ     |
| Line refit works on the 275kV transmission line between Bouldercombe and Nebo substations                                                                | CQNQ-05 | Central West | Future investment                             | 10 years         | NQ     |
| Line refit works on the 275kV transmission line between Bouldercombe and Broadsound substations                                                          | CQNQ-06 | Central West | Future investment                             | 10 years         | NQ     |
| Line refit works on the 132kV transmission lines between Chalumbin and Turkinje substations and 275kV and 132kV reinvestment at the Chalumbin Substation | FNQ-01  | Far North    | Future investment                             | 5 years          | NQ     |
| Woree PASS M1 replacement                                                                                                                                | FNQ-02  | Far North    | Future investment                             | 5 years          | NQ     |
| Tully 132/22kV transformer replacement                                                                                                                   | FNQ-03  | Far North    | Future investment                             | 5 years          | NQ     |
| Woree 275kV and 132kV secondary systems replacement                                                                                                      | FNQ-04  | Far North    | Future investment                             | 10 years         | NQ     |
| Barron Gorge 132kV secondary systems replacement                                                                                                         | FNQ-05  | Far North    | Future investment                             | 10 years         | NQ     |
| Edmonton 132kV secondary systems replacement                                                                                                             | FNQ-06  | Far North    | Future investment                             | 5 years          | NQ     |
| El Arish 132kV secondary systems replacement                                                                                                             | FNQ-07  | Far North    | Future investment                             | 10 years         | NQ     |
| Line refit works on the 132kV transmission line between Ross and Dan Gleeson substations                                                                 | RZ-01   | Ross         | Future investment                             | 5 years          | NQ     |
| Ross 275kV reactor bushing replacement                                                                                                                   | RZ-02   | Ross         | Future investment                             | 10 years         | NQ     |
| Alan Sherriff 132kV secondary systems replacement                                                                                                        | RZ-03   | Ross         | Future investment                             | 5 years          | NQ     |
| Garbutt 132kV secondary systems replacement                                                                                                              | RZ-04   | Ross         | Future investment                             | 5 years          | NQ     |
| Townsville East 132kV secondary systems replacement                                                                                                      | RZ-05   | Ross         | Future investment                             | 5 years          | NQ     |

**Table F.1** Possible future network investments in the 10-year outlook period (*continued*)

| Potential project                                                                                                                   | ID    | Zone         | Category                                                   | Outlook  | Region |
|-------------------------------------------------------------------------------------------------------------------------------------|-------|--------------|------------------------------------------------------------|----------|--------|
| Townsville South 132kV secondary systems replacement                                                                                | RZ-06 | Ross         | Future investment                                          | 5 years  | NQ     |
| Yabulu South 132kV secondary systems replacement                                                                                    | RZ-07 | Ross         | Future investment                                          | 10 years | NQ     |
| Clare South 132kV secondary systems replacement                                                                                     | RZ-08 | Ross         | Future investment                                          | 10 years | NQ     |
| Line refit works on the 132kV transmission line between Collinsville North, Strathmore and Clare South substations                  | NQ-01 | North        | Future investment                                          | 10 years | NQ     |
| Line refit works on the 132kV transmission line between Collinsville North, Goonyella Riverside and Moranbah substations            | NQ-02 | Central West | Future investment                                          | 10 years | NQ     |
| Line refit works on the 132kV transmission line between Moranbah, Kemmis and Nebo substations                                       | NQ-03 | Central West | Future investment                                          | 10 years | NQ     |
| Northern Bowen Basin reinforcement                                                                                                  | NQ-04 | North        | Powerlink Revenue Proposal contingent project              | 5 years  | NQ     |
| Broadsound 275kV selected primary plant replacement                                                                                 | NQ-05 | Central West | Future investment                                          | 5 years  | NQ     |
| Stanwell selected 275kV primary plant replacement                                                                                   | NQ-06 | Central West | Future investment                                          | 10 years | NQ     |
| Pioneer Valley 132kV primary plant replacement                                                                                      | NQ-07 | North        | Future investment                                          | 10 years | NQ     |
| Alligator Creek 132kV Substation reinvestment                                                                                       | NQ-08 | North        | Future investment                                          | 5 years  | NQ     |
| North Goonyella 132kV secondary systems replacement                                                                                 | NQ-09 | North        | Future investment                                          | 5 years  | NQ     |
| Strathmore 275kV and 132kV secondary systems replacement                                                                            | NQ-10 | North        | Future investment                                          | 10 years | NQ     |
| Strathmore SVC secondary systems replacement                                                                                        | NQ-11 | North        | Future investment                                          | 5 years  | NQ     |
| Lilyvale 132kV secondary systems replacement                                                                                        | NQ-12 | Central West | Future investment                                          | 10 years | NQ     |
| Line refit works on the 275kV transmission line between Calliope River Substation and Wurdong Substation                            | GW-01 | Gladstone    | Future investment (scenario dependent and market benefits) | 10 years | CQ     |
| Rebuild the 275kV transmission line between Calliope River Substation and the Wurdong Tee                                           | GW-02 | Gladstone    | Future investment                                          | 10 years | CQ     |
| Reinvestment into the 132kV transmission line between Gladstone Power Station and Calliope River                                    | GW-03 | Gladstone    | Future investment                                          | 10 years | CQ     |
| Reinvestment into the 132kV transmission line between Gladstone Power Station and Callemondah Substation and QAL 132kV reinvestment | GW-04 | Gladstone    | Scenario dependent                                         | 10 years | CQ     |
| Wurdong 275kV selected primary plant replacement                                                                                    | GW-05 | Gladstone    | Future investment                                          | 10 years | CQ     |
| Pandoin 132kV secondary systems replacement                                                                                         | BR-01 | Central West | Future investment                                          | 10 years | CQ     |
| Calvale 275kV selected primary plant replacement                                                                                    | CW-01 | Central West | Future investment                                          | 10 years | CQ     |
| Moura 132/66kV transformer replacements                                                                                             | CW-02 | Central West | Future investment                                          | 5 years  | CQ     |
| Blackwater 132kV secondary systems replacement                                                                                      | CW-03 | Central West | Future investment                                          | 10 years | CQ     |
| Biloela 132kV secondary systems replacement                                                                                         | CW-04 | Central West | Future investment                                          | 10 years | CQ     |

**Table F.1** Possible future network investments in the 10-year outlook period (*continued*)

| Potential project                                                                             | ID       | Zone       | Category                                      | Outlook          | Region |
|-----------------------------------------------------------------------------------------------|----------|------------|-----------------------------------------------|------------------|--------|
| CQ-SQ Wide Area Monitoring Protection and Control Stage 2                                     | CQSQ-01  | Wide Bay   | Future investment                             | 5 years          | SQ     |
| Line refit works on the 275kV transmission line between Woolooga and Teebar Creek substations | CQSQ-02  | Wide Bay   | Future investment                             | 10 years         | SQ     |
| Line refit works on the 275kV transmission line between Woolooga and South Pine substations   | CQSQ-03  | Wide Bay   | Future investment                             | 5 years          | SQ     |
| South West Queensland Augmentation                                                            | SWSEQ-01 | South West | Powerlink Revenue Proposal contingent project | To be determined | SQ     |
| Surat Basin Area Network Development                                                          | SWSEQ-02 | Surat      | Powerlink Revenue Proposal contingent project | To be determined | SQ     |
| Woolooga 275kV and 132kV selected primary plant replacement                                   | WB-01    | Wide Bay   | Future investment                             | 5 years          | SQ     |
| Teebar Creek 275kV and 132kV secondary systems replacement                                    | WB-02    | Wide Bay   | Future investment                             | 10 years         | SQ     |
| Woolooga 275kV and 132kV secondary systems replacement                                        | WB-03    | Wide Bay   | Future investment                             | 10 years         | SQ     |
| Middle Ridge 110kV primary plant replacement                                                  | SWQ-01   | South West | Future investment                             | 5 years          | SQ     |
| Middle Ridge 275/110kV transformers life extension                                            | SWQ-02   | South West | Future investment                             | 5 years          | SQ     |
| Braemar 330kV secondary systems replacement non-iPASS                                         | SWQ-03   | Bulli      | Future investment                             | 10 years         | SQ     |
| Millmerran 330kV AIS secondary systems replacement                                            | SWQ-04   | Bulli      | Future investment                             | 10 years         | SQ     |
| Middle Ridge 275kV and 110kV secondary systems replacement                                    | SWQ-05   | South West | Future investment                             | 5 years          | SQ     |
| Columboola 132kV secondary systems replacement                                                | SWQ-06   | Surat      | Future investment                             | 10 years         | SQ     |
| Brisbane Area 275kV reinforcement                                                             | MZ-01    | Moreton    | AEMO 2026 ISP Actionable Project              | To be determined | SQ     |
| North Brisbane Area Network Development                                                       | MZ-02    | Moreton    | Powerlink Revenue Proposal contingent project | To be determined | SQ     |
| Goodna 110/33kV transformer augmentation                                                      | MZ-03    | Moreton    | Future investment                             | 5 years          | SQ     |
| Replacement of the 110kV underground cable between Upper Kedron and Ashgrove West substations | MZ-04    | Moreton    | Future investment                             | 10 years         | SQ     |
| Palmwoods 275kV and 132kV selected primary plant replacement                                  | MZ-05    | Wide Bay   | Future investment                             | 10 years         | SQ     |
| South Pine 275/110kV transformer replacement                                                  | MZ-06    | Moreton    | Future investment                             | 5 years          | SQ     |
| South Pine 275kV secondary systems replacement                                                | MZ-07    | Moreton    | Future investment                             | 5 years          | SQ     |
| Abermain 275kV and 110kV secondary systems replacement                                        | MZ-08    | Moreton    | Future investment                             | 10 years         | SQ     |
| Goodna 275kV and 110kV secondary systems replacement                                          | MZ-09    | Moreton    | Future investment                             | 5 years          | SQ     |
| Belmont 110kV and 275kV secondary systems replacement                                         | MZ-10    | Moreton    | Future investment                             | 10 years         | SQ     |

**Table F.1** Possible future network investments in the 10-year outlook period (*continued*)

| Potential project                                                                           | ID     | Zone       | Category          | Outlook  | Region |
|---------------------------------------------------------------------------------------------|--------|------------|-------------------|----------|--------|
| Loganlea 275kV secondary systems replacement                                                | MZ-11  | Moreton    | Future investment | 10 years | SQ     |
| Greenbank 275kV secondary systems replacement                                               | MZ-12  | Moreton    | Future investment | 10 years | SQ     |
| South Pine 110kV secondary systems replacement                                              | MZ-13  | Moreton    | Future investment | 5 years  | SQ     |
| Ashgrove West 110kV secondary systems replacement                                           | MZ-14  | Moreton    | Future investment | 5 years  | SQ     |
| Bundamba 110kV secondary systems replacement                                                | MZ-15  | Moreton    | Future investment | 10 years | SQ     |
| West Darra 110kV secondary systems replacement                                              | MZ-16  | Moreton    | Future investment | 5 years  | SQ     |
| Algerger 110kV secondary systems replacement                                                | MZ-17  | Moreton    | Future investment | 10 years | SQ     |
| Murarrie 110kV secondary systems replacement                                                | MZ-18  | Moreton    | Future investment | 5 years  | SQ     |
| Line refit works on the 110kV transmission line between Mudgeeraba Substation and Terranora | GCZ-01 | Gold Coast | Future investment | 5 years  | SQ     |
| Mudgeeraba 275/110kV transformer augmentation                                               | GCZ-02 | Gold Coast | Future investment | 10 years | SQ     |
| Mudgeeraba 275/110kV primary plant and 110kV secondary systems replacement.                 | GCZ-03 | Gold Coast | Future investment | 10 years | SQ     |
| Molendinar 275kV secondary systems replacement                                              | GCZ-04 | Gold Coast | Future investment | 5 years  | SQ     |

## F.2 Forecast line intervention outlook for the 10-20 year outlook period

The asset intervention outlook for the 10 to 20-year period (June 2036 to June 2046) identifies transmission lines that may require future intervention or investment responses beyond the TAPR 10-year outlook period. The assets listed in tables F.2 to F.4 are included to provide visibility of potential longer-term network investment and asset management requirements.

Future intervention or investment responses remain subject to ongoing assessment and will be informed by evolving asset condition, network requirements and broader investment drivers.

The information presented is provided in good faith as a planning snapshot based on the best information available at the time of TAPR publication. Inclusion in either outlook should not be interpreted as a committed investment decision or final investment outcome.

Proponents wishing to connect to Powerlink's transmission network are encouraged to contact [connections@powerlink.com.au](mailto:connections@powerlink.com.au) in the first instance.

Potential condition-based programs of work are listed in Table 5.2.

**Table F.2** Northern region transmission lines approaching end of technical service: 10–20 year outlook

| Zone      | Feeder         | Voltage | General location                                                      |
|-----------|----------------|---------|-----------------------------------------------------------------------|
| Far North | 876            | 275kV   | Between Chalumbin and Walkamin substations                            |
| Far North | 8905/2         | 275kV   | Between Ross and Woree Tee Tully South substations                    |
| Far North | 8932           | 275kV   | Between Chalumbin and Tumoulin substations                            |
| Far North | 7139           | 132kV   | Between Edmonton and Innisfail substations                            |
| Far North | 7206           | 132kV   | Between Woree and Cairns City substations                             |
| Far North | 7225, 7226     | 132kV   | Between Woree and Cairns substations                                  |
| Far North | 7227/1, 7227/2 | 132kV   | Between Woree and Cairns City Tee Cairns substations                  |
| Far North | 7301           | 132kV   | Between Woree and Tully substations                                   |
| Ross      | 879, 879R      | 275kV   | Between Strathmore and Haughton River substations                     |
| Ross      | 8857, 8858     | 275kV   | Between Strathmore and Ross substations                               |
| Ross      | 8911, 8911R    | 275kV   | Between Haughton River and Ross substations                           |
| Ross      | 7130/1, 7130/2 | 132kV   | Between Clare South and Townsville South Tee Invicta Mill substations |
| Ross      | 7131           | 132kV   | Between Clare South and Townsville South substations                  |
| Ross      | 7182           | 132kV   | Between Ross and Millchester By-Pass substations                      |
| Ross      | 7239, 7240     | 132kV   | Between Garbutt and Alan Sherriff substations                         |
| North     | 822, 822L      | 275kV   | Between Nebo and Strathmore substations                               |
| North     | 833            | 275kV   | Between Broadsound and Lilyvale substations                           |
| North     | 834            | 275kV   | Between Broadsound and Nebo substations                               |
| North     | 856            | 275kV   | Between Stanwell and Broadsound substations                           |
| North     | 7117/1, 7117/2 | 132kV   | Between Kemmis and Moranbah Tee Burton Downs/Greenland substations    |
| North     | 7118/1, 7118/2 | 132kV   | Between Nebo and Wotonga Tee Coppabella substations                   |
| North     | 7121           | 132kV   | Between Collinsville North and Newlands substations                   |
| North     | 7122           | 132kV   | Between Stony Creek and Goonyella Riverside substations               |
| North     | 7124/1, 7124/2 | 132kV   | Between Moranbah and Dysart Tee Peak Downs substations                |
| North     | 7125, 7126     | 132kV   | Between Collinsville North and Proserpine substations                 |
| North     | 7150/1         | 132kV   | Between Lilyvale and Dysart Tee Norwich Park/Bundoora substations     |
| North     | 7155           | 132kV   | Between Newlands and Goonyella Riverside substations                  |
| North     | 7175           | 132kV   | Between Alligator Creek and Oonooie substations                       |
| North     | 7176           | 132kV   | Between Nebo and Wandoo substations                                   |
| North     | 7252           | 132kV   | Between Nebo and Kemmis substations                                   |
| North     | 7306           | 132kV   | Between Collinsville North and Stony Creek substations                |
| North     | 7382           | 132kV   | Between Moranbah and Eagle Downs substations                          |
| North     | 7383           | 132kV   | Between Eagle Downs and Dysart substations                            |
| North     | 7413           | 132kV   | Between Moranbah and Wotonga substations                              |
| North     | 7470           | 132kV   | Between Strathmore and Collinsville North substations                 |

**Table F.3** Central region transmission lines approaching end of technical service: 10–20 year outlook

| Zone         | Feeder         | Voltage | General location                                         |
|--------------|----------------|---------|----------------------------------------------------------|
| Central West | 848, 849       | 275kV   | Between Stanwell and Bouldercombe substations            |
| Central West | 855            | 275kV   | Between Calvale and Stanwell substations                 |
| Central West | 789            | 132kV   | Between Lilyvale and Blackwater substations              |
| Central West | 7107           | 132kV   | Between Bouldercombe and Rockhampton substations         |
| Central West | 7108           | 132kV   | Between Bouldercombe and Rockhampton substations         |
| Central West | 7111           | 132kV   | Between Callide A and Baralaba substations               |
| Central West | 7113           | 132kV   | Between Baralaba and Blackwater substations              |
| Central West | 7114/1, 7114/2 | 132kV   | Between Baralaba and Blackwater Tee Duaringa substations |
| Central West | 7167           | 132kV   | Between Bouldercombe and Stanwell substations            |
| Central West | 7185           | 132kV   | Between Stanwell and Grantleigh substations              |
| Central West | 7310           | 132kV   | Between Lilyvale and Blackwater substations              |
| Gladstone    | 865            | 275kV   | Between Wurdong and Boyne Island substation              |
| Gladstone    | 871            | 275kV   | Between Calvale and Wurdong substations                  |
| Gladstone    | 7194, 7195     | 132kV   | Between Calliope River and Gladstone North substations   |

**Table F.4** Southern region transmission lines approaching end of technical service: 10–20 year outlook

| Zone       | Feeder         | Voltage | General location                                         |
|------------|----------------|---------|----------------------------------------------------------|
| Wide Bay   | 8850           | 275kV   | Between Woolooga and Teebar Creek substations            |
| South West | 827            | 275kV   | Between Tarong and Blackwall substations                 |
| South West | 831            | 275kV   | Between Tarong and Middle Ridge substations              |
| South West | 832            | 275kV   | Between Tarong and South Pine substations                |
| South West | 875            | 275kV   | Between Tarong and Blackwall substations                 |
| South West | 8812           | 275kV   | Between Tarong and Mt England substations                |
| Surat      | 7349           | 110kV   | Between Chinchilla and Columboola substations            |
| Surat      | 7350           | 110kV   | Between Chinchilla and Columboola Tee Cameby substations |
| Moreton    | 802            | 275kV   | Between Mt. England and Blackwall substations            |
| Moreton    | 805            | 275kV   | Between Swanbank E and Greenbank substations             |
| Moreton    | 817            | 275kV   | Between Blackwall and Belmont substations                |
| Moreton    | 825            | 275kV   | Between Mt. England and South Pine substations           |
| Moreton    | 829            | 275kV   | Between Loganlea and Belmont substations                 |
| Moreton    | 8818           | 275kV   | Between Blackwall and Rocklea substations                |
| Moreton    | 8822           | 275kV   | Between Greenbank and Belmont substations                |
| Moreton    | 8823           | 275kV   | Between Mt England and Abermain substations              |
| Moreton    | 8826           | 275kV   | Between Swanbank E PS and Blackstone substation          |
| Moreton    | 707            | 110kV   | Between West Darra and Richlands substations             |
| Moreton    | 749            | 110kV   | Between Belmont and Algester substations                 |
| Moreton    | 762            | 110kV   | Between Belmont and Runcorn substations                  |
| Moreton    | 791            | 110kV   | Between West Darra and Goodna substations                |
| Moreton    | 7196, 7197     | 110kV   | Between Rocklea and Tennyson substations                 |
| Moreton    | 7287/2, 7288/2 | 110kV   | Between Belmont and Murarrie Tee Sswrd substations       |
| Moreton    | 7292           | 110kV   | Between Sumner and Rocklea substations                   |
| Moreton    | 7293           | 110kV   | Between Algester and Runcorn substations                 |
| Moreton    | 7295           | 110kV   | Between Goodna and West Darra substations                |
| Moreton    | 7296           | 110kV   | Between Goodna and Redbank Plains substations            |