

Standards Alert

StdsA970



Part of Energy Queensland

Subject:	Joint Supply and Planning Manual V8 – Modification of Brisbane CBD Fringe and CBD Fringe Equivalent for LV Connections	Control Ref No:	StdsA970a
		Date Issued:	14/07/2026
		Last Reviewed:	14/07/2026
		Supersedes:	StdsA970
		Expiry Date:	31/12/2026
Associated Policy / Procedure / Manual		Joint Supply & Planning Manual (STNW3470) - 3056869	
Originating Dept:	☐ Overhead ☐ Line Standards ☐ Substations ☐ Integrated Product Standards ☐ Telecommunications SCADA ☒ Connection Standards ☐ Earthing & Protection ☐ Isolated Networks ☐ Other		
Target Audience	☐ Overhead ☐ Underground ☐ Substations ☐ Secondary Systems ☒ Customer group ☒ Design ☐ Telecommunications SCADA ☐ Public Lighting ☐ Generation		
Target Region	☐ EQL All Regions ☐ Northern /Southern ☒ SouthEast		
Publish Location	☒ Asset Standards SharePoint ☒ Field Force Automation ☒ SWP On-line		

1 Amendment Record

Version	Date	Author	Amendments
Initial	02/06/2026	Glenn Springall	Initial Issue
A	14/07/2026	A. Bletchly	Include green inclusion and red strikethrough in Section 4. Add Appendix A with proposed wording for version 8.

2 Objective

The purpose of this Standards Alert is to update the application and requirements of Brisbane CBD Fringe and CBD Fringe Equivalent in the Joint Supply and Planning Manual Version 8 for LV connected customers (otherwise known as STNW3470, Document ID: 3056869).

Updates include changes to what is considered Brisbane CBD Fringe and CBD Fringe Equivalent and includes references to “StdsA965 – Energex C&I Manual Standards Alert” related to “Energex C&I Substations Manual Updates for Indoor LV Connected Customers”.

3 Scope

After stakeholder and industry feedback, a review of the suburbs considered as part of Brisbane CBD Fringe and CBD Fringe Equivalent has been undertaken. These additional suburbs were added in 2023 in recognition of changes to development areas and performance expectations by customers. These classifications, together with relay operated switchgear requirements, in some cases, were adding more time and cost pressure to projects than expected without delivering a comparable long-term benefit to consumers. This review is seeking to provide improved clarity on mandatory relay operated switchgear requirements while also ensuring optionality, flexibility and reliability for long term customer benefit.

4 Changes proposed to Joint Supply and Planning Manual V8

For avoidance of doubt, all sections of the Joint Supply and Planning Manual that refer to Brisbane CBD (CBD), Brisbane CBD Fringe and CBD Fringe Equivalent have been extracted below. The proposed changes are marked in green for inclusions and red strikethrough for removals.

6.5.3.1 Geographic locations

Brisbane CBD

Brisbane CBD is the area defined in the Brisbane City Council's City Plan 2014 and typically defined as the area represented by the postcode 4000, excluding the suburbs of Spring Hill and Petrie Terrace. **This area is also known as the suburb of "Brisbane City" in the Brisbane City Council City Plan 2014.**

Information on the electrical requirements for the Brisbane CBD can be found in sub-section 9.1: Brisbane CBD.

Brisbane CBD Fringe and CBD Fringe Equivalent areas

With the continuing growth and Development of Queensland, especially in the South-East of the State, to continue the sustained capability of the Energex and Ergon Energy distribution networks, two new categories of planning consideration have been added. They are **Brisbane** CBD Fringe and CBD Fringe Equivalent Areas, and they have similar electrical planning requirements to the Brisbane CBD.

Brisbane CBD Fringe areas

Brisbane CBD Fringe areas have been labelled Emerging CBD in the past. With the significant growth of high density developments including high rise buildings, in accordance with the most recent Brisbane City Council City Plan, ~~the establishment of the Woolloongabba Priority Development Area,~~ and prudent forward planning for the **Brisbane** 2032 Olympics ~~being held in Brisbane,~~ the areas designated requiring distribution networks capable of being **expanded to indoor/chamber substation suitable for housing relay operated and/or remotely operated switchgear** ~~remotely switched and/or operated~~ beyond the Brisbane CBD ~~to include~~ through a new category, called **the Brisbane** CBD Fringe Areas.

For simplicity, these areas are defined by suburbs and are listed in Appendix **CB**. More specific details are listed in sub-sections 9.1 and 9.2.

CBD Fringe Equivalent areas

In addition to the growth in and around central Brisbane, there is also continuing growth in regional areas. ~~Growth remains strong on both the Gold Coast and Sunshine Coast.~~

For simplicity, these areas are defined by suburbs and are listed in Appendix ~~CB~~. More specific details are listed in sub-sections 9.1 and 9.2.

8.7 Brisbane CBD, Brisbane CBD Fringe areas, and CBD Fringe Equivalent areas

As mentioned in section 6.5.3.1: Geographic locations, substations on customer premises in these locations ~~may~~ require an indoor/chamber substation suitable for housing relay operated ~~and/or~~ remotely operated switchgear. ~~From a size perspective,~~ These substations have a larger footprint than other types of indoor/chamber substations. Specific requirements are (but not limited to):

- Sufficient space to house all the necessary equipment for remote operated switchgear
- Increased earthing requirements (greater fault withstand capability)
- Increased number of conduits
- Communications infrastructure

Refer Appendix B for a list of suburbs where this requirement prevails.

9.2 Brisbane CBD Fringe areas and CBD Fringe Equivalent areas

Both Energex and Ergon Energy ~~are looking to ensure~~ ~~aim to ensure~~ the safety, reliability, and integrity of the electricity network in developing or growing areas over the life of the infrastructure. The following arrangements are applicable to geographic areas designated as ~~Brisbane~~ CBD Fringe or CBD Fringe Equivalent areas. It should be noted that such areas may be extended over time. Refer Appendix B for a list of suburbs where the following requirements prevail. ~~The Queensland Government Department of State Development and Infrastructure defines development zones for land development. Zoning can be classified by purpose or location.~~

~~Zoning purpose includes (but is not limited to):~~

- ~~• Residential~~
- ~~• Centre~~
- ~~• Industrial~~
- ~~• recreational and~~
- ~~• special districts.~~

~~Zoning by locale includes (but is not limited to):~~

- ~~• Principal centre zone~~
- ~~• Major centre zone~~
- ~~• Centre zone~~
- ~~• Local centre zone~~
- ~~• Neighbourhood centre zone.~~

~~Refer to the Queensland Government website www.statedevelopment.qld.gov.au for additional information.~~

Specifically, for the purposes of ~~Brisbane~~ CBD Fringe and CBD Fringe Equivalent areas, the ~~following zoning information, along with the~~ load/generation size, is used to determine the most appropriate electrical infrastructure for the development/s in question.

9.2.1 ~~Planning zones and Larger~~ Developments in Brisbane CBD Fringe areas and CBD Fringe Equivalent areas

The following transitional arrangements apply to Brisbane CBD Fringe areas and CBD Fringe Equivalent areas:

- ~~a) Principal centre zones, major centre zones and district centre zones~~
- ~~b) Centre zones, local centre zone and neighbourhood centre zones~~
- ~~c) larger commercial / industrial developments~~

~~within the nominated CBD Fringe and CBD Fringe Equivalent areas.~~

~~Note 1: Where the zone may not be defined, but the development of the area in questions is consistent with such areas, then they are considered as fitting into that zone classification.~~

~~Note 2: Commercial developments include medium rise and high rise residential developments.~~

~~Should there be any doubt, then Distribution Planning are the sole determinant for electricity system development requirements.~~

~~For areas designated in sub-section 9.2.1 a) above:~~

- ~~1. Requiring two (2) or more transformers, or requiring a connection (load or generation) > 800kVA, a C & I substation housing relay operated switchgear~~ LV Connected Non-Relay Operated with Provision for Future Relay Upgrade C & I substation is required.
- ~~2. Requiring a connection (load or generation) > 500kVA and ≤ 800~~1000kVA, (one transformer only), a padmount substation (with appropriate substation site sizing, communications conduits etc.) ~~capable of housing remote operated switchgear~~ is acceptable.
- ~~3. Requiring a connection (load or generation) ≤ 500kVA, (one transformer only) a padmount substation is acceptable.~~

~~For areas designated in sub-section 9.2.1 b) above:~~

- ~~4. Requiring two (2) or more transformers, or~~
- ~~5. Requiring a connection (load or generation) > 1,000kVA a C & I substation housing relay operated switchgear is required.~~
- ~~6. Requiring a connection (load or generation > 500kVA and ≤ 1,000 (one transformer only) a padmount substation (with appropriate substation site sizing, communications cables etc.) capable of housing remote operated switchgear is required~~
- ~~7. Requiring a connection (load or generation) ≤ 500kVA, a padmount substation is acceptable.~~

~~For areas outside those listed in sub-section 9.2.1, but within CBD Fringe and CBD Fringe equivalent areas:~~

- ~~8. >1,600 kVA, a C & I substation housing relay operated switchgear is required~~
- ~~9. Requiring a connection (load or generation) > 800kVA and ≤ 1,600kVA, a dual padmount arrangement is acceptable. Alternately, a C & I substation housing manually operated switchgear may be provided~~
- ~~10. Requiring a connection (load or generation) < 800kVA, a padmount substation is acceptable.~~

9.2.3 Civil works and cable / conduit requirements

Where clause 9.2.1 applies ~~and irrespective of load requirements of 9.2.1 a) or 9.2.1 b)~~

- all areas ~~within in the mapping zone~~ shall require concrete cable pits and duct network installed ~~will be considered "pit and duct" with respect to civil works~~
- ~~CBD &~~ Brisbane CBD Fringe areas - UDCM CBD cross-sections to be applied to all development frontages. The number of conduits will be determined by the DNSP.
- CBD Fringe Equivalent areas - UDCM Shopping Centre cross-sections to be applied to all development frontages. The number of conduits will be determined by the DNSP.
- All ~~CBD~~ areas - total / spare conduit requirements above shall be applied to new HV cable routes regardless of existing conduits (existing ceramic ducts and Asbestos Cement pipes to be replaced with 125mm PVC conduits where practical and achievable)

NOTE: Where existing asbestos cement conduits or pipes are identified, any assessment, disturbance, removal or replacement must be managed in accordance with applicable WHS legislation, asbestos management requirements and approved codes of practice.

9.2.3.1 Feeder cable requirements for ~~CBD and~~ Brisbane CBD Fringe areas

As the Brisbane CBD fringe is designed for future three feeder mesh and/or may be limited by 100mm conduits, these areas shall use 300mm² Cu PLY 11kV cables within road reserve and 400mm² Al Triplex 11kV cables within private property in/out of C&I Substations CMEN LV ties shall be via ~~1x 300 Cu 4C LV cable minimum, 2x cables preferred~~ 1 x 240 Al 4C LV cable minimum, 2 cables preferred.

9.2.3.2 Feeder cable requirements for CBD Fringe Equivalent areas

CBD Fringe Equivalent areas are designed for remote operated switchgear with reduced feeder requirements compared to Brisbane CBD areas designed for future three feeder mesh and/or limited by 100mm conduits, these areas shall use standard building block feeder cables unless otherwise specified by a Distribution Planning Report CMEN LV ties shall be via 1x 240 Al 4C LV cable minimum, 2x cables preferred.

9.2.4 Substation switchgear and spatial requirements

~~Where clause 9.2.1 a) (1) (2) and 9.2.1 b) (5) (6) and item (9) applies:~~

1. ~~CBD & CBD Fringe~~ Areas:
 - a) Substation Rooms shall be designed for relay operated switchgear requirements
 - b) Switchgear installed in permanent substations to supply a Customer Connection shall be Relay Operated
2. Brisbane CBD Fringe and CBD Fringe Equivalent Areas (where required):
 - a) Substation Rooms shall be designed for ~~future relay operated switchgear requirements~~ LV Connected Non-Relay Operated with Provision for Future Relay Upgrade C & I substation
 - i. ~~This may be achieved via installation of manually operated switchgear connection + additional spatial requirements for Relay Operated Switchgear to be installed in addition to the RMU + N-1 Transformers (for LV Connections); or~~
 - ii. ~~This installation of Relay Operated Switchgear as part of the initial connection~~

- ~~b) Minimum switchgear requirements are manually operated switchgear only, subject to network and protection requirements detailed in the Distribution Planning Report~~

Appendix B **Brisbane** CBD, **Brisbane** CBD Fringe and CBD Fringe Equivalent areas

(Normative)

~~The following postcodes require indoor / chamber substation on Customer premises to be capable of housing relay operated (remotely operated) switchgear.~~

Brisbane CBD

~~The current CBD designated area is the Brisbane CBD area designated with postcode 4000.~~ Brisbane CBD is the area defined in the Brisbane City Council's City Plan 2014, and typically defined as the area represented by the postcode 4000, excluding the suburbs of Spring Hill and Petrie Terrace. This area is also known as the suburb of "Brisbane City" in the Brisbane City Council City Plan 2014.

Brisbane CBD Fringe areas

CBD Fringe Areas include the suburbs of:

- ~~• Milton (postcode 4064)~~
- Spring Hill (postcode 4000)
- ~~• Petrie Terrace (postcode 4000)~~
- Fortitude Valley (postcode 4006)
- Bowen Hills (postcode 4006)
- Herston (postcode 4006)
- Newstead (postcode 4005)
- ~~• Teneriffe (postcode 4005)~~
- ~~• New Farm (postcode 4005)~~
- South Brisbane (postcode 4101)
- ~~• West End (postcode 4101)~~
- ~~• Woolloongabba (postcode 4102)~~
- ~~• East Brisbane* (postcode 4169)~~
- ~~• Kangaroo Point (postcode 4169)~~

~~Note*: For the suburb of East Brisbane, it is the area specifically included in the expanded Woolloongabba Priority Development Area.~~

CBD Fringe Equivalent areas

CBD Fringe Equivalent areas include the suburbs of:

- ~~• Southport (postcode 4215)~~
- ~~• Surfers Paradise (postcode 4217)~~
- ~~• Broadbeach (postcode 4218)~~
- ~~• Maroochydore (postcode 4558)~~

No suburbs are listed as CBD Fringe Equivalent at this time.

5 Implementation

This Standards Alert is proposed to apply to all new enquiries from release. Existing projects in the connection process will be evaluated on a case-by-case basis for most appropriate consideration.

6 Update to Joint Supply and Planning Manual

A holistic review of the Joint Supply and Planning manual is underway and will include these proposed changes. A specific timeline is not yet confirmed and stakeholder and industry engagement will occur at a future time.

7 Further Information

For further information, please contact:

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Adam Bletchly email (adam.bletchly@energyq.com.au)

Appendix A Supplementary Information: Updated Joint Supply and Planning Manual V8 – Modification of Brisbane CBD Fringe and CBD Fringe Equivalent for LV Connections inclusion

The following is the proposed final wording for the Joint Supply and Planning Manual V8 for the relevant sections.

6.5.3.1 Geographic locations

Brisbane CBD

Brisbane CBD is the area defined in the Brisbane City Council's City Plan 2014, and typically defined as the area represented by the postcode 4000, excluding the suburbs of Spring Hill and Petrie Terrace. This area is also known as the suburb of "Brisbane City" in the Brisbane City Council City Plan 2014.

Information on the electrical requirements for the Brisbane CBD can be found in sub-section 9.1: Brisbane CBD.

Brisbane CBD Fringe and CBD Fringe Equivalent areas

With the continuing growth and Development of Queensland, especially in the South-East of the State, to continue the sustained capability of the Energex and Ergon Energy distribution networks, two new categories of planning consideration have been added. They are Brisbane CBD Fringe and CBD Fringe Equivalent Areas, and they have similar electrical planning requirements to the Brisbane CBD.

Brisbane CBD Fringe areas

Brisbane CBD Fringe areas have been labelled Emerging CBD in the past. With the significant growth of high density developments including high rise buildings, in accordance with the most recent Brisbane City Council City Plan, and prudent forward planning for the Brisbane 2032 Olympics, the areas designated requiring distribution networks capable of being expanded to indoor/chamber substation suitable for housing relay operated and/or remotely operated switchgear beyond the Brisbane CBD through a new category, called Brisbane CBD Fringe Areas.

For simplicity, these areas are defined by suburbs and are listed in Appendix B. More specific details are listed in sub-sections 9.1 and 9.2.

CBD Fringe Equivalent areas

In addition to the growth in and around central Brisbane, there is also continuing growth in regional areas.

For simplicity, these areas are defined by suburbs and are listed in Appendix B. More specific details are listed in sub-sections 9.1 and 9.2.

8.7 Brisbane CBD, Brisbane CBD Fringe areas, and CBD Fringe Equivalent areas

As mentioned in section 6.5.3.1: Geographic locations, substations on customer premises in these locations may require an indoor/chamber substation suitable for housing relay operated and/or remotely operated switchgear. These substations have a larger footprint than other types of indoor/chamber substations. Specific requirements are (but not limited to):

- Sufficient space to house all the necessary equipment for remote operated switchgear
- Increased earthing requirements (greater fault withstand capability)
- Increased number of conduits
- Communications infrastructure

Refer Appendix B for a list of suburbs where this requirement prevails.

9.2 Brisbane CBD Fringe areas and CBD Fringe Equivalent areas

Both Energex and Ergon Energy aim to ensure the safety, reliability, and integrity of the electricity network in developing or growing areas over the life of the infrastructure. The following arrangements are applicable to geographic areas designated as Brisbane CBD Fringe or CBD Fringe Equivalent areas. It should be noted that such areas may be extended over time. Refer Appendix B for a list of suburbs where the following requirements prevail.

Specifically, for the purposes of Brisbane CBD Fringe and CBD Fringe Equivalent areas, the load/generation size, is used to determine the most appropriate electrical infrastructure for the development/s in question.

9.2.1 Developments in Brisbane CBD Fringe areas and CBD Fringe Equivalent areas

The following transitional arrangements apply to Brisbane CBD Fringe areas and CBD Fringe Equivalent areas:

1. Requiring two (2) or more transformers, or requiring a connection (load or generation) > 800kVA, a LV Connected Non-Relay Operated with Provision for Future Relay Upgrade C & I substation is required.
2. Requiring a connection (load or generation) ≤ 1000kVA, (one transformer only), a padmount substation (with appropriate substation site sizing, communications conduits etc.) is acceptable.

9.2.3 Civil works and cable / conduit requirements

Where clause 9.2.1 applies

- all areas shall require concrete cable pits and duct network installed
- Brisbane CBD Fringe areas - UDCM CBD cross-sections to be applied to all development frontages. The number of conduits will be determined by the DNSP.
- CBD Fringe Equivalent areas - UDCM Shopping Centre cross-sections to be applied to all development frontages. The number of conduits will be determined by the DNSP.
- All areas - total / spare conduit requirements above shall be applied to new HV cable routes regardless of existing conduits (existing ceramic ducts and Asbestos Cement pipes to be replaced with 125mm PVC conduits where practical and achievable)

NOTE: Where existing asbestos cement conduits or pipes are identified, any assessment, disturbance, removal or replacement must be managed in accordance with applicable WHS legislation, asbestos management requirements and approved codes of practice.

9.2.3.1 Feeder cable requirements for Brisbane CBD Fringe areas

As the Brisbane CBD fringe is designed for future three feeder mesh and/or may be limited by 100mm conduits, these areas shall use 300mm² Cu PLY 11kV cables within road reserve and 400mm² Al Triplex 11kV cables within private property in/out of C&I Substations CMEN LV ties shall be via 1 x 240 Al 4C LV cable minimum, 2 cables preferred.

9.2.3.2 Feeder cable requirements for CBD Fringe Equivalent areas

CBD Fringe Equivalent areas are designed for remote operated switchgear with reduced feeder requirements compared to Brisbane CBD areas designed for future three feeder mesh and/or limited by 100mm conduits, these areas shall use standard building block feeder cables unless otherwise specified by a Distribution Planning Report CMEN LV ties shall be via 1x 240 Al 4C LV cable minimum, 2x cables preferred.

9.2.4 Substation switchgear and spatial requirements

1. CBD Areas:
 - a) Substation Rooms shall be designed for relay operated switchgear requirements
 - b) Switchgear installed in permanent substations to supply a Customer Connection shall be Relay Operated
2. Brisbane CBD Fringe and CBD Fringe Equivalent Areas (where required):
 - a) Substation Rooms shall be designed for LV Connected Non-Relay Operated with Provision for Future Relay Upgrade C & I substation

Appendix B Brisbane CBD, Brisbane CBD Fringe and CBD Fringe Equivalent areas

(Normative)

Brisbane CBD

Brisbane CBD is the area defined in the Brisbane City Council's City Plan 2014, and typically defined as the area represented by the postcode 4000, excluding the suburbs of Spring Hill and Petrie Terrace. This area is also known as the suburb of "Brisbane City" in the Brisbane City Council City Plan 2014.

Brisbane CBD Fringe areas

CBD Fringe Areas include the suburbs of:

- Spring Hill (postcode 4000)
- Fortitude Valley (postcode 4006)
- Bowen Hills (postcode 4006)
- Herston (postcode 4006)
- Newstead (postcode 4005)
- South Brisbane (postcode 4101)

CBD Fringe Equivalent areas

CBD Fringe Equivalent areas include the suburbs of:

No suburbs are listed as CBD Fringe Equivalent at this time.