



United Energy & Local Government Strategic Planning Workshop Outputs

MARCH 2015

Summary

This report summarises the outputs of the United Energy & Local Government Strategic Planning Workshop held on 28th January 2015.

Data collected through the workshop has informed the development of the first interactive mapping resource tailored for the local government and energy distribution sectors. For the first time, stakeholders will be able to overlay the distribution network area over municipal boundaries and examine the precise location of major, moderate and minor networks constraints. This will enable both sectors to collaboratively identify and develop sustainable energy solutions and facilitate better energy planning for new developments.

The map files are available on the [EAGA website](#) in Google Earth (.kmz) and other GIS software (.shp and .tab) formats to ensure compatibility with the variety of mapping applications in use across both sectors.

The following pages contain snap shots of each municipality within the UE region, together with succinct (non-exhaustive) summary of non-network solutions and/or cross sector planning opportunities requiring further investigation or development.



There are five major constraints on the network, shared by eight municipalities



There are 11 moderate constraints



There are 301 street-level constraints where only premises in the immediate vicinity are subject to the constraint




United Energy distribution area


Bayside City Council



Key:

 Major constraints / planning opportunity

 Moderate constraints

 Street-level constraints where only premises in the immediate vicinity are subject to the constraint

Comments

Constraints:

1. North Brighton (NB23, NB12, NB14) feeders overload
2. Distribution substations overload

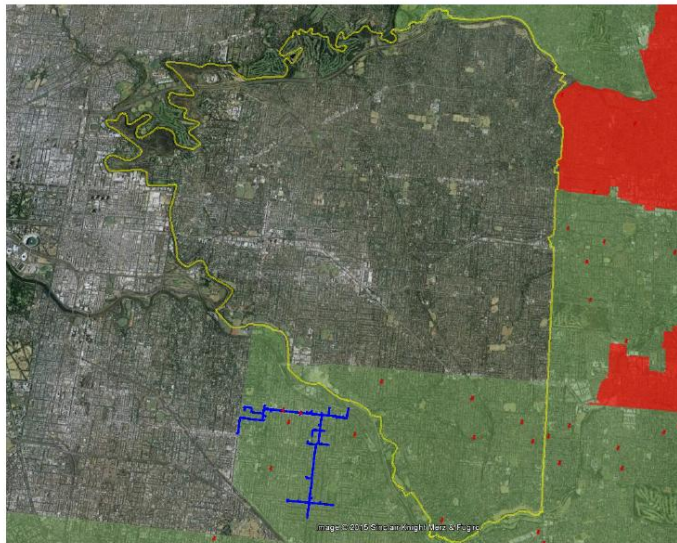
Network Solutions:

1. Establishing a new feeder from Elwood zone substation will alleviate constraints on the North Brighton feeders which supply the Brighton area – customers in this area will be transferred from the existing North Brighton zone substation to the Elwood zone substation.
2. Annual distribution substation augmentation program will alleviate the distribution substation (street-level) constraints.

Non-network solutions and/or cross sector initiatives for further investigation


1. Extension and promotion of the 'Summer Saver' demand management trials to address street level constraints.
2. Develop subdivision profiles for golf courses flagged for redevelopment to evaluate opportunities
3. Collaboratively scope potential business demand management programs within activity centres within moderate constraints areas (eg. Bay Street)


City of Boroondara




Key:

 Major constraints / planning opportunity

 Moderate constraints

 Street-level constraints where only premises in the immediate vicinity are subject to the constraint

 United Energy distribution area

Comments

Constraints:

1. Distribution substations overload

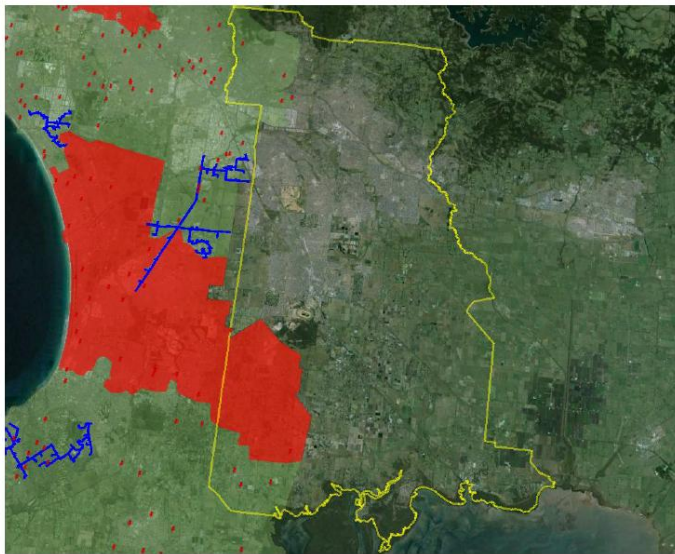
Network Solutions:

1. Annual distribution substation augmentation program will alleviate the distribution substation (street-level) constraints.





Non-network solutions and/or cross sector initiatives for further investigation

1. Extension and promotion of the 'Summer Saver' demand management trials to address street level constraints.

City of Casey



Key:

-  Major constraints / planning opportunity
-  Moderate constraints
-  Street-level constraints where only premises in the immediate vicinity are subject to the constraint
-  United Energy distribution area

Comments

Constraints:

1. Langwarrin / Cranbourne South area sub-transmission power lines overloaded
2. Distribution substations overload

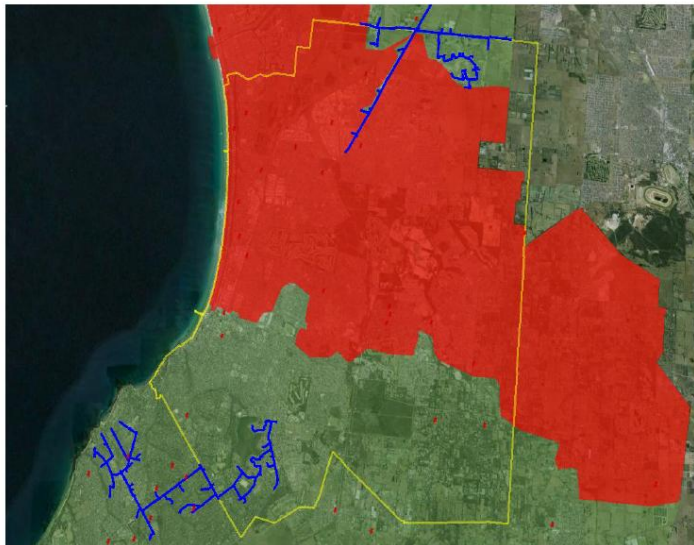
Network Solutions:

1. Developing a new zone substation in Skye or Carrum Downs will alleviate constraints. Customers in this area will be transferred to the new zone substation.
2. Annual distribution substation augmentation program will alleviate the distribution substation (street-level) constraints.

Non-network solutions and/or cross sector initiatives for further investigation

1. Extension and promotion of the 'Summer Saver' demand management trials to address street level constraints.

Frankston City Council



Key:

- Major constraints / planning opportunity
- └─┘ Moderate constraints
- Street-level constraints where only premises in the immediate vicinity are subject to the constraint
- United Energy distribution area

Comments

Constraints:

1. Carrum, Frankston Langwarrin sub-transmission power lines and zone substations overload
2. Dandenong Valley (DVG24) feeder overload
3. Frankston South (FSH33) feeder overload
4. Distribution substations overload

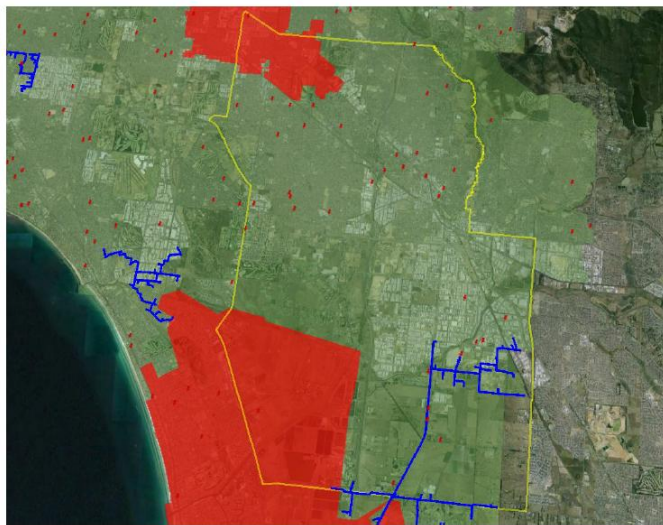
Network Solutions:

1. Developing a new zone substation in Skye or Carrum Downs will alleviate constraints in the network supplying Bangholme, Carrum, Carrum Downs, Chelsea, Patterson Lakes, Skye and Sandhurst areas – customers in these areas will be transferred from existing zone substations to the new zone substation.
2. Establishing a new feeder from Dandenong Valley zone substation will alleviate constraint on the DVG24 feeder which supplies the Dandenong South and Lyndhurst areas – customers in these areas will be transferred to the new feeder.
3. Establishing a new feeder from Frankston South zone substation will alleviate constraint on the FSH33 feeder which supplies Mount Eliza – customers in this area will be transferred to the new feeder.
4. Annual distribution substation augmentation program will alleviate the distribution substation (street-level) constraints.

Non-network solutions and/or cross sector initiatives for further investigation

1. Extension and promotion of the 'Summer Saver' demand management trials to address street level constraints.
2. Develop subdivision profiles to evaluate opportunities
3. Collaboratively scope potential for wide-scale demand management programs
4. Explore opportunities for embedded generation or district energy services

City of Greater Dandenong



Key:

- Major constraints / planning opportunity
- └─┘ Moderate constraints
- Street-level constraints where only premises in the immediate vicinity are subject to the constraint
- United Energy distribution area

Comments

Constraints:

1. Carrum zone substation overload
2. Springvale zone substation overload
3. Dandenong Valley (DVY24) feeder overload
4. Distribution substations overload

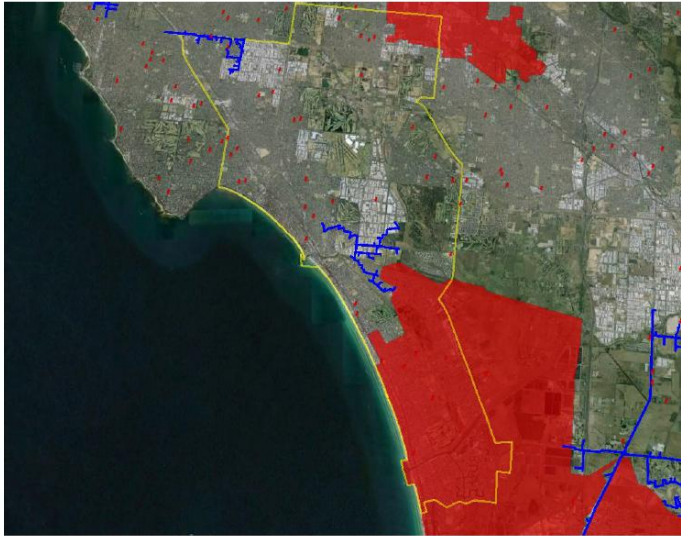
Network Solutions:

1. Developing a new zone substation in Skye or Carrum Downs will alleviate constraints at Carrum zone substation which supplies the Chelsea Heights area – customers in these areas will be transferred to the new zone substation.
2. Upgrading Notting Hill zone substation will alleviate constraints at Notting Hill and Springvale zone substations supplying the Notting Hill, North Clayton, Springvale areas – customers in these areas will be transferred to the upgraded Notting Hill zone substation.
3. Establishing of a new feeder from Dandenong Valley zone substation will alleviate constraint on the DVY24 feeder which supplies the Dandenong South and Lyndhurst areas – customers in these areas will be transferred to the new feeder.
4. Annual distribution substation augmentation program will alleviate the distribution substation (street-level) constraints.

Non-network solutions and/or cross sector initiatives for further investigation


1. Extension and promotion of the 'Summer Saver' demand management trials to address street level constraints.
2. Develop subdivision profiles to evaluate opportunities
3. Collaboratively scope potential business demand management programs within business parks within moderate constraints areas


City of Kingston



Key:

 Major constraints / planning opportunity

 Moderate constraints

 Street-level constraints where only premises in the immediate vicinity are subject to the constraint

Comments

Constraints:

1. Carrum zone substation overload
2. Moorabbin (MR15) feeder overload
3. Mordialloc (MC07) feeder overload
4. Distribution substations overload

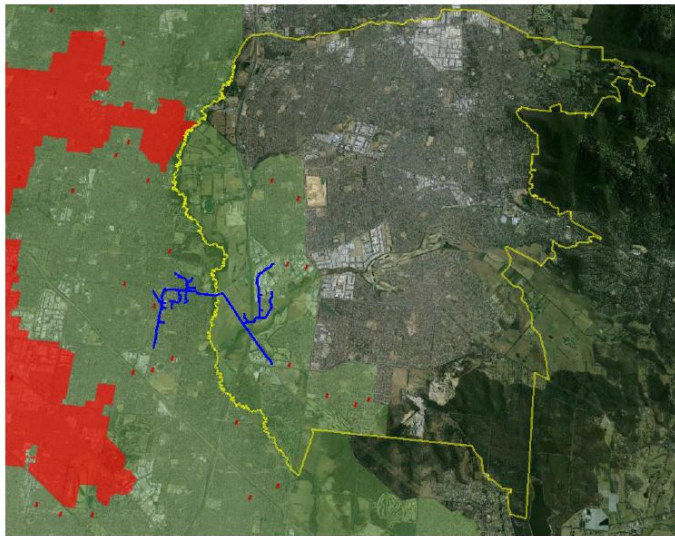
Network Solutions:

1. Developing a new zone substation in Skye or Carrum Downs will alleviate constraints at Carrum zone substation which supplies Carrum / Carrum Downs areas – customers in these areas will be transferred to the new zone substation.
2. Establishing of a new feeder from Moorabbin zone substation will alleviate constraint on the MR15 feeder which supplies the Moorabbin area – customers in this area will be transferred to the new feeder.
3. Upgrading the Mordialloc (MC07) feeder will alleviate constraint on the feeder.
4. Annual distribution substation augmentation program will alleviate the distribution substation (street-level) constraints.





Non-network solutions and/or cross sector initiatives for further investigation

1. Extension and promotion of the 'Summer Saver' demand management trials to address street level constraints.
2. Develop subdivision profiles for golf courses flagged for redevelopment to evaluate opportunities
3. Collaboratively scope potential business demand management programs within activity centres within moderate constraints areas
4. Collaboratively scope potential for wide-scale demand management programs

City of Knox



Key:

-  Major constraints / planning opportunity
-  Moderate constraints
-  Street-level constraints where only premises in the immediate vicinity are subject to the constraint
-  United Energy distribution area

Comments

Constraints:

1. Mulgrave (MGE12) feeder overload
2. Distribution substations overload

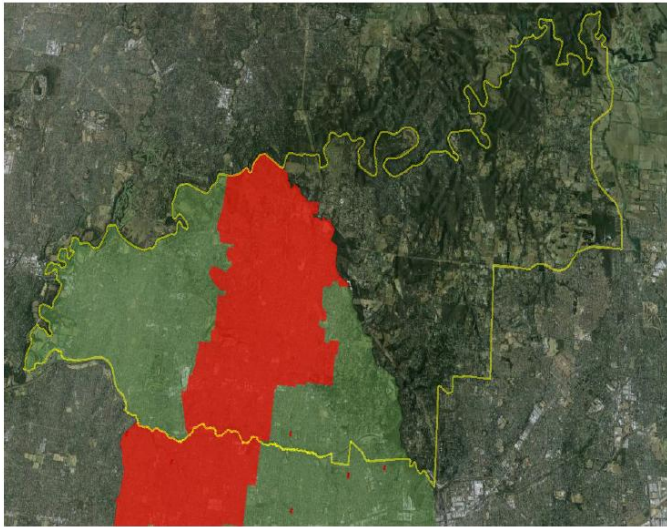
Network Solutions:

1. Establishing a new from Mulgrave (MGE) zone substation will alleviate constraint on the MGE 12 feeder which presently supplies the Scoresby and Wheelers Hill areas – customers in these areas will be transferred to the new feeder.
2. Annual distribution substation augmentation program will alleviate the distribution substation (street-level) constraints.





Non-network solutions and/or cross sector initiatives for further investigation

1. Extension and promotion of the 'Summer Saver' demand management trials to address street level constraints.
2. Collaboratively scope potential business demand management programs within business parks within moderate constraints areas

City of Manningham



Key:

-  Major constraints / planning opportunity
-  Moderate constraints
-  Street-level constraints where only premises in the immediate vicinity are subject to the constraint
-  United Energy distribution area

Comments

Constraints:

1. Doncaster zone substation overload
2. Distribution substations overload

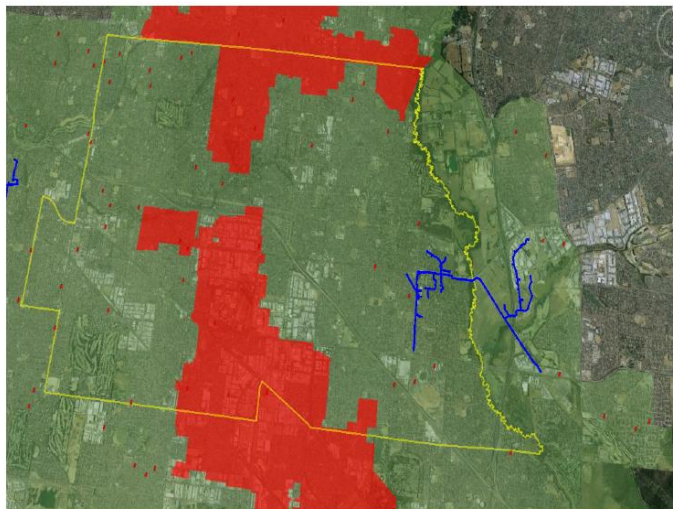
Network Solutions:

1. Upgrading the Doncaster zone substation will alleviate constraints at the zone substation which presently supplies the Doncaster, Doncaster East and Templestowe areas.
2. Annual distribution substation augmentation program will alleviate the distribution substation (street-level) constraints.

Non-network solutions and/or cross sector initiatives for further investigation

1. Extension and promotion of the 'Summer Saver' demand management trials to address street level constraints.
2. Develop subdivision profiles for golf courses flagged for redevelopment to evaluate opportunities
3. Collaboratively scope potential for wide-scale demand management programs
4. Explore opportunities for embedded generation or district energy services (eg. Doncaster Hill)

City of Monash



Key:

- Major constraints / planning opportunity
- └─┘ Moderate constraints
- Street-level constraints where only premises in the immediate vicinity are subject to the constraint
- United Energy distribution area

Comments

Constraints:

1. East Burwood sub-transmission line supply constraint
2. Notting Hill zone substation overload
3. Mulgrave (MGE12) feeder overload
4. Distribution substations overload

Network Solutions:

1. Upgrading East Burwood sub-transmission line will alleviate the supply constraints to East Burwood zone substation which supplies the Burwood East and Forrest Hill areas.
2. Upgrading Notting Hill zone substation will alleviate constraints at the zone substation which supplies the Notting Hill, North Clayton areas.
3. Establishing a new feeder from Mulgrave (MGE) zone substation will alleviate constraint on the MGE12 feeder which presently supplies the Scoresby and Wheelers Hill areas – customers in these areas will be transferred to the new feeder.
4. Annual distribution substation augmentation program will alleviate the distribution substation (street-level) constraints.

Non-network solutions and/or cross sector initiatives for further investigation

1. Extension and promotion of the 'Summer Saver' demand management trials to address street level constraints.
2. Collaboratively scope potential for wide-scale demand management programs
3. Explore opportunities for embedded generation or district energy services
4. Collaboratively scope potential business demand management programs within business parks within moderate constraints areas

Mornington Peninsula Shire



Key:

- Major constraints / planning opportunity
- └┐ Moderate constraints
- Street-level constraints where only premises in the immediate vicinity are subject to the constraint
- United Energy distribution area

Comments

Constraints:

1. Dromana, Rosebud and Sorrento zone substation supplies constraint
2. Frankston South (FSH33) feeder overload
3. Distribution substations overload

Network Solutions:

1. Establishing a new a new sub-transmission line from Hastings to Rosebud will alleviate the supply constraints to the lower Mornington Peninsula.
2. Establishing a new feeder from Frankston South zone substation will alleviate constraints on FSH33 feeder which supplies the Mount Eliza area – customers in this area will be transferred to the new feeder.
3. Annual distribution substation augmentation program will alleviate the distribution substation (street-level) constraints.

Non-network solutions and/or cross sector initiatives for further investigation


1. Extension and promotion of the 'Summer Saver' demand management trials to address street level constraints.
2. Collaboratively scope potential for wide-scale demand management programs
3. Explore opportunities for embedded generation


City of Port Phillip



Key:

 Major constraints / planning opportunity

 Moderate constraints

 Street-level constraints where only premises in the immediate vicinity are subject to the constraint

 United Energy distribution area

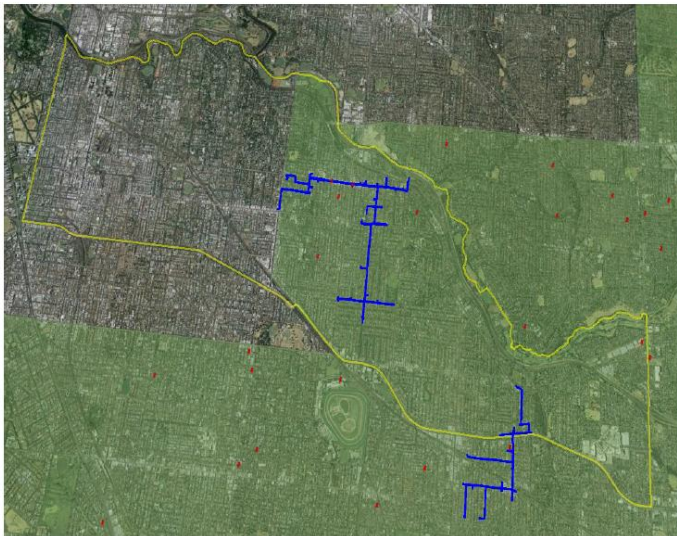
Comments

Elwood substation upgrade will alleviate constraints further south in North Brighton - customers will be transferred from North Brighton substation to Elwood substation





Network solutions:

1. Elwood substation upgrade will alleviate constraints further south in North Brighton - customers will be transferred from North Brighton substation to Elwood substation

City of Stonnington



Key:

-  Major constraints / planning opportunity
-  Moderate constraints
-  Street-level constraints where only premises in the immediate vicinity are subject to the constraint
-  United Energy distribution area

Comments

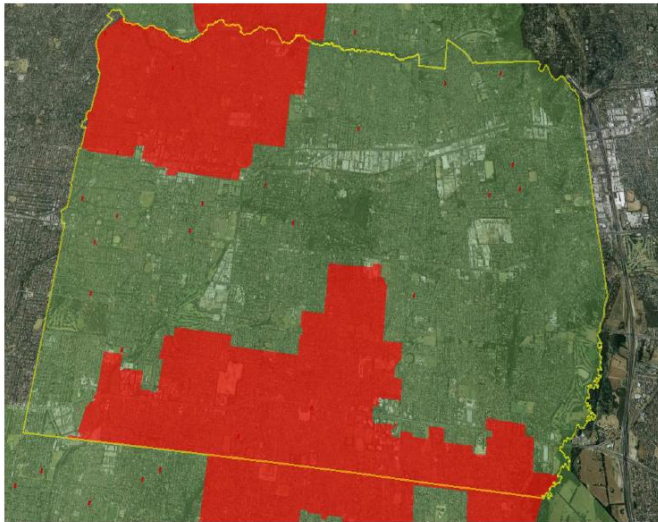
Constraints:

2. Gardiner (K10 and K12) feeder overload
3. East Malvern (EM10) feeder overload
4. Distribution substations overload
1. Network Solutions Establishing a new feeder from Caulfield (CFD) zone substation will alleviate constraint on the Gardiner feeders which presently supplies the Armadale, Malvern and Gardiner areas – customers in these areas will be transferred to the new feeder.
2. Upgrading the East Malvern (EM10) feeder will alleviate constraint on the feeder.
3. Annual distribution substation augmentation program will alleviate the distribution substation (street-level) constraints.

Non-network solutions and/or cross sector initiatives for further investigation


1. Extension and promotion of the 'Summer Saver' demand management trials to address street level constraints.
2. Collaboratively scope potential business demand management programs within moderate constraints areas


City of Whitehorse




Key:

 Major constraints / planning opportunity

 Moderate constraints

 Street-level constraints where only premises in the immediate vicinity are subject to the constraint

 United Energy distribution area

Comments

Constraints:

1. Doncaster zone substation overload
2. East Burwood sub-transmission line supply constraint
3. Distribution substations overload

Network Solutions:

1. Upgrading the Doncaster zone substation will alleviate constraints at the zone substation which presently supplies the Doncaster, Doncaster East and Templestowe areas.
2. Upgrading the East Burwood sub-transmission line will alleviate the supply constraints to East Burwood zone substation which supplies the Burwood East and Forrest Hill areas.
3. Annual distribution substation augmentation program will alleviate the distribution substation (street-level) constraints.

Non-network solutions and/or cross sector initiatives for further investigation

1. Extension and promotion of the 'Summer Saver' demand management trials to address street level constraints.
2. Collaboratively scope potential for wide-scale demand management programs
3. Explore opportunities for embedded generation or district energy services
4. Collaboratively scope potential business demand management programs within activity centres (i.e Box Hill)