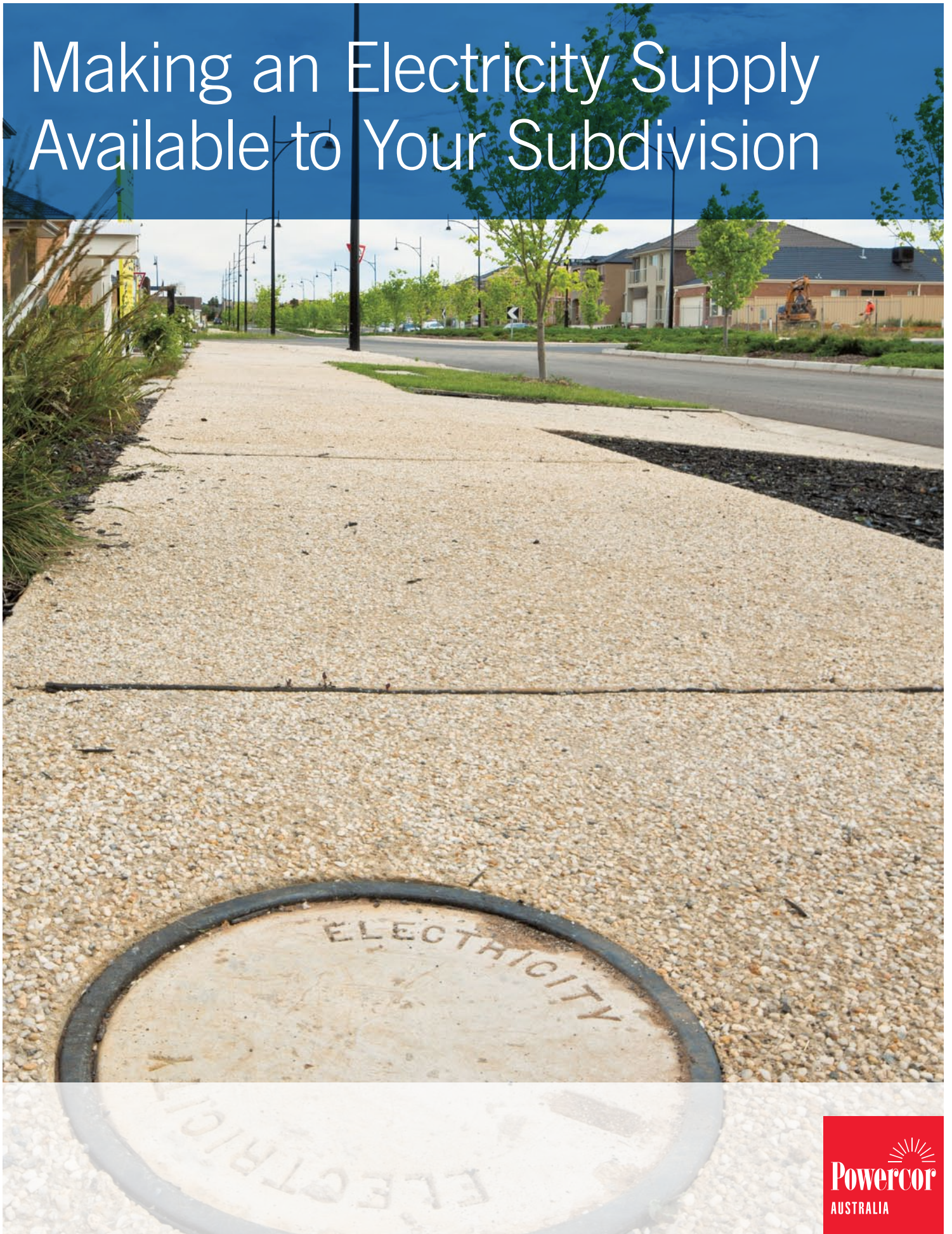


Powercor Guideline for

Making an Electricity Supply Available to Your Subdivision



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1. Keeping you informed

Powercor Australia has a commitment to providing professional advice and service to customers. This Guideline outlines the steps Powercor and you must take to provide electricity supply to your subdivision. It explains the choices you have and your responsibilities.

Your early enquiry with Powercor regarding electricity supply to your subdivision will ensure it is available when you need it.

This Guideline is for information purposes only and is not a legally binding document. The details of your and our legal obligations are detailed in any contract we agree with you and in the relevant regulations and laws covering Victoria's Electricity Industry.

Nothing in this Guideline should be construed as an offer of service nor does it form part of the terms of any agreement with Powercor. Powercor has used its best endeavours to ensure information in this Guideline is correct, but it is subject to change without notice.

General information about the rights and responsibilities you have with Powercor, and those we have with you, is contained in our Customer Distribution Charter. This is available at www.powercor.com.au or you can arrange for us to post a copy by calling Powercor General Enquiries on **13 22 06**.

Powercor is committed to safeguarding customers' personal information. Details of Powercor's Privacy Policy are available at www.powercor.com.au or by calling **13 22 06**.

2. Introduction

Powercor as an Electricity Distributor owns and manages a distribution network that carries electricity to an area covering the western part of Victoria.

This Guideline provides information on the arrangements to provide electricity supply from the Powercor distribution system, to all newly created allotments.

The Guideline answers many questions of interest to developers and is intended to help all parties work together to provide electricity supply to new residential subdivisions as economically as possible, taking into account both the technical and environmental factors involved.

The developer must ensure that a Project Manager is appointed, who will facilitate the process on their behalf.

Additional information is available from the following supporting documents:

- Developer Deed – Terms and conditions for Developer Design and Construct (option 2A)
- Project Manager Guidelines – Information to support the Developer's appointed Project Manager



3. Planning permit and subdivision procedures

All planning schemes within Powercor's boundaries have provisions requiring permit applications for subdivisions to be referred to Powercor which may impose conditions on the permit.

The normal conditions required by Powercor as a referral body include the making of electricity supply available to each lot, the provision of easements for the installation of powerlines or reserves, leases for substations on either or both the plan of subdivision and other external properties, and removal of existing private powerlines from the subdivision.

Powercor requires that any designs completed by recognised contractors be submitted to and approved by Powercor. Any easements or reserves resulting from the design must be shown on the plan of subdivision before Powercor can certify the plan.

Early consultation with Powercor will assist in arranging electricity supply and optimise the subdivision layout. Advice on both the current stage and requirements of future stages will enable the most cost effective design and construction of the electrical system at the outset.

4. What is a residential subdivision?

A new subdivision is defined as an area of land to be subdivided into two or more allotments via a Plan of Subdivision sealed via the local municipality. New residential subdivisions are divided into three groups based on the method of distribution to supply the subdivision.

Low Density Subdivisions

Subdivisions of two or more lots with an average density of less than five lots per hectare of the total subdivided area, including roadways, reserves, or any subdivision remote from the urban distribution system, or one using rural distribution methods.

Medium Density Subdivisions

Subdivisions where there are five or more lots per hectare in the total subdivided area, or subdivisions of less than five lots where supply is available but not covered in this Guideline.

High Density Subdivisions

Subdivisions, which include cluster and strata, permanently occupied flats, apartments, villa units etc, with multiple dwellings on each allotment. This Guideline does not normally apply to this type of subdivision.



5. Electricity distribution methods

Low Density Subdivisions

The preferred method of distribution in low-density subdivisions is by high voltage lines along road reserves. These lines are accompanied by multiple low capacity substations located to supply the maximum number of properties, via underground service cable to a service pit, and shared wherever practical by adjoining lots. Where low-density subdivisions are located in areas subject to bushfire mitigation practices, underground private electric lines are mandatory on each lot.

At times the high voltage line may be installed in easements on cleared private property to avoid clearing of trees on road reserves thus preserving the local amenity.

Medium Density Subdivisions

The normal method of supply is to use Underground Residential Distribution (URD). A low voltage supply is made available to each lot in the subdivision from low voltage underground mains. URD normally comprises high voltage underground cables in easements, supplying kiosk or pad mounted substations situated on private land or reserves in public spaces. Underground low voltage cables share trenches with high voltage cables wherever possible, and supply service pits located at each second lot adjoining boundary. Cables to cross under roads via developer-installed conduits servicing pits opposite.

Within URD estates there are options for public lighting. These cover the use of poles and luminaries as standard or approved non standard. The type of luminaries can be selected from a standard range which includes energy efficient options. As councils are responsible for the maintenance of approved non standard materials and also pay the running costs of public lights, any decision made by the developer relating to public lighting must be submitted to the relevant council for approval. This public lighting approval is to be submitted when the developer provided design plan is submitted to Powercor for approval.

6. Using Recognised Contractors

Contractors other than Powercor can complete some tasks required to provide electricity supply to your subdivision. They must be Recognised Contractors. These tasks are called Contestable Services.

Recognised Contractors have demonstrated to Powercor they have the qualifications, training, experience and quality systems of work to complete all Contestable Services.

For safety reasons Powercor does not permit Recognised Contractors to work on our existing lines. These tasks form part of the Network Connection Services which only Powercor can complete.

Contestable Services can include the following activities limited to the customer extension works:

- Project Management
- Design, including surveying and drafting services, and
- Construction, which includes the provision of all materials and as-constructed plans.

A final network compliance audit must be completed for the Customer Extension Works to ensure compliance with Powercor's construction standards prior to electricity being connected. This inspection is necessary because Powercor is responsible for the safety and future maintenance of the electrical work after connection occurs.

An Audit Fee is payable by you for this inspection and any subsequent inspections.

When you choose a Recognised Contractor to perform Contestable Services, Powercor requests that you provide a warranty to cover any cost associated with fixing faults or defects that may arise from the contractor's work.



7. Developer's Project Manager

Every project must have a Project Manager who is appointed by the customer at the initial request to Powercor for an offer of supply. The Project Manager can be the customer, electrical contractor, principle contractor, civil consultant or any other party that has been assessed and accredited by Powercor as competent to perform the Project Manager role.

The customer is to engage a Project Manager and notify Powercor of their selection either when submitting the Developer Agreement required for developer design and construct (Option 2), or on the contractor notification form for when you request Powercor to provide the design and construct (Option 1).

The Developer Agreement is available on the Powercor internet site at **www.powercor.com.au**

The Project Manager is responsible for the overall project management and is required to document, implement and maintain a Quality System that provides effective control of all project activities. For major developments an overall project management plan is required, incorporating the installation and coordination of all utility and infrastructure requirements. The electrical reticulation infrastructure requirements must be incorporated within this plan and be managed by the recognised Project Manager.

A Project Manager guideline is available which outlines the role of the Project Manager and the process required for connection of the subdivision to Powercor's distribution assets.



8. Choosing who does the work (Contestability)

The tasks involved in making electricity available to a subdivision can be divided into Contestable Services and Non Contestable Services.

Contestable Services

These are the tasks that can be completed by Powercor or any Powercor approved Recognised Contractor. Generally the tasks involve:

- Project Management
- Designs for Underground Residential Subdivisions
- The construction of new assets which includes the provision of materials and as built plans

Non Contestable Services

Only Powercor can complete Non Contestable Services:

- System design and planning requirements
- Electrical design plan approval
- Updating Powercor records
- Augmentation works on Powercor's existing distribution system to provide the contracted electricity supply to each lot
- Works that need to be completed on Powercor's existing powerlines
- Tie-In of Contestable Work to Powercor's distribution system

For those tasks identified by Powercor as Contestable Services, we will ask you to choose if you wish for Powercor or a Recognised Contractor to complete these tasks.

A request for a firm offer should be accompanied with an Option selection form indicating who you wish to complete the contestable work. After the design plan is approved, Powercor will provide you with an offer for Network Connection Services.

The available options are detailed below and are shown in the flowchart.

Option 1

You want the Powercor Offer for both the Contestable and Non Contestable services. This is a turnkey option.

Option 2B

You want Powercor to run a tender for the Contestable Services. You then select and contract with the Recognised Contractor for these services. Powercor will provide an offer to you for the Non Contestable Services. A fee will apply for Powercor to run the tender.

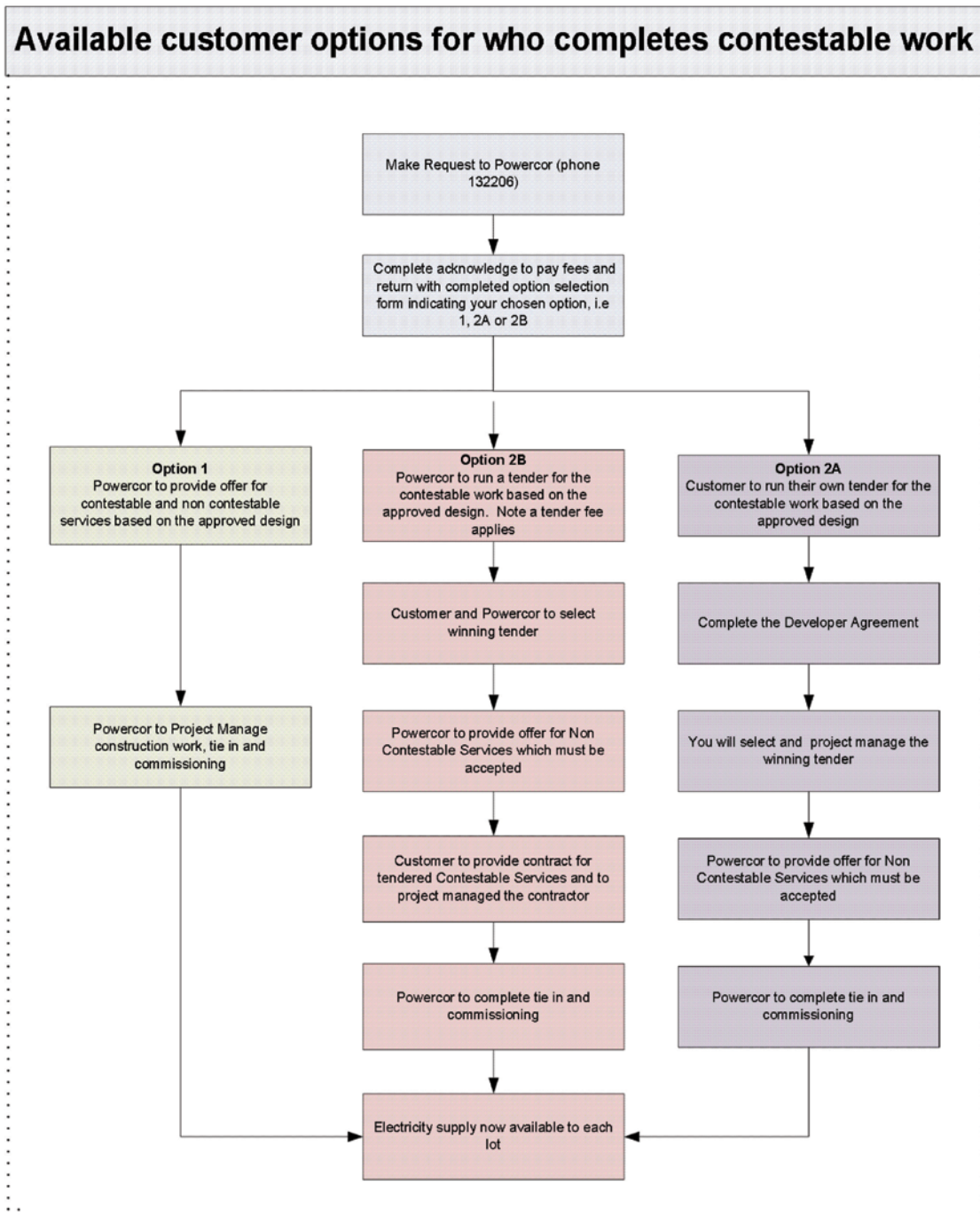
Option 2A

You run your own tender process to select a Recognised Contractor for the Contestable Services. You will need to enter into a contract with the Recognised Contractor and provide the project management of your project. Powercor will provide you with an offer for, and complete the Non Contestable Services.

Powercor will complete:

- Any Network Connection Services, such as system augmentation and
- All the necessary Network Connection Services such as design approval, final connection of supply, updating drawings, and contract preparation.

8. Choosing who does the work (Contestability) – continued



9. Commercial Terms and Conditions

Financial arrangements

The developer meets the cost of all work inside the subdivision and any work outside the development that is required to bring electricity supply to the subdivision boundary.

Powercor may provide a Network Contribution toward the cost of installing both high voltage and low voltage assets within the subdivision. Full details of these financial arrangements are available from Powercor. The following is a summary of the treatment of each type of subdivision.

Medium Density Residential Subdivision

Within continuous Medium Density residential subdivisions Powercor may provide a High Voltage Rebate toward the cost of high voltage assets and may provide a Network Contribution toward the cost of low voltage assets, excluding all civil works, bedding sand and public lighting.

Network Contribution

Powercor follows the approach advocated by Victoria's Essential Services Commission when calculating the Customer Contribution. The Customer Contribution is charged for connecting to the network only when it is expected the customer will contribute less in distribution tariffs than the cost of providing supply. The total cost that you will be charged will be the Customer Contribution plus the Connection Services Charges.

High Voltage Rebate

Within continuous Medium Density residential subdivisions (>5 lots per hectare) Powercor will fund an amount toward the high voltage assets required to make supply available, excluding bedding sand and all civil works. This averages costs between developments for the provision of high voltage infrastructure and eliminates inequities that may otherwise occur between neighbouring developments where the high voltage infrastructure is required. It will also assist the orderly development and minimise the long-term cost of providing significant infrastructure.

The High Voltage Rebate will be applied at different stages of the project depending on the option you select for the Contestable Services component of your subdivision. More information is available from your Powercor office.

Low Density Subdivision

A Network Contribution may apply towards the cost of installing both high and low voltage assets to provide electricity supply to the subdivision.

Contractual Arrangements

There are different contractual arrangements depending on the option chosen. With Option 1 there is a contractual arrangement between the developer and Powercor for the turnkey option where you want Powercor to complete both the Contestable and Non Contestable services. This is covered by an Augmentation Agreement defining the work to be completed and the customer's payment of costs.

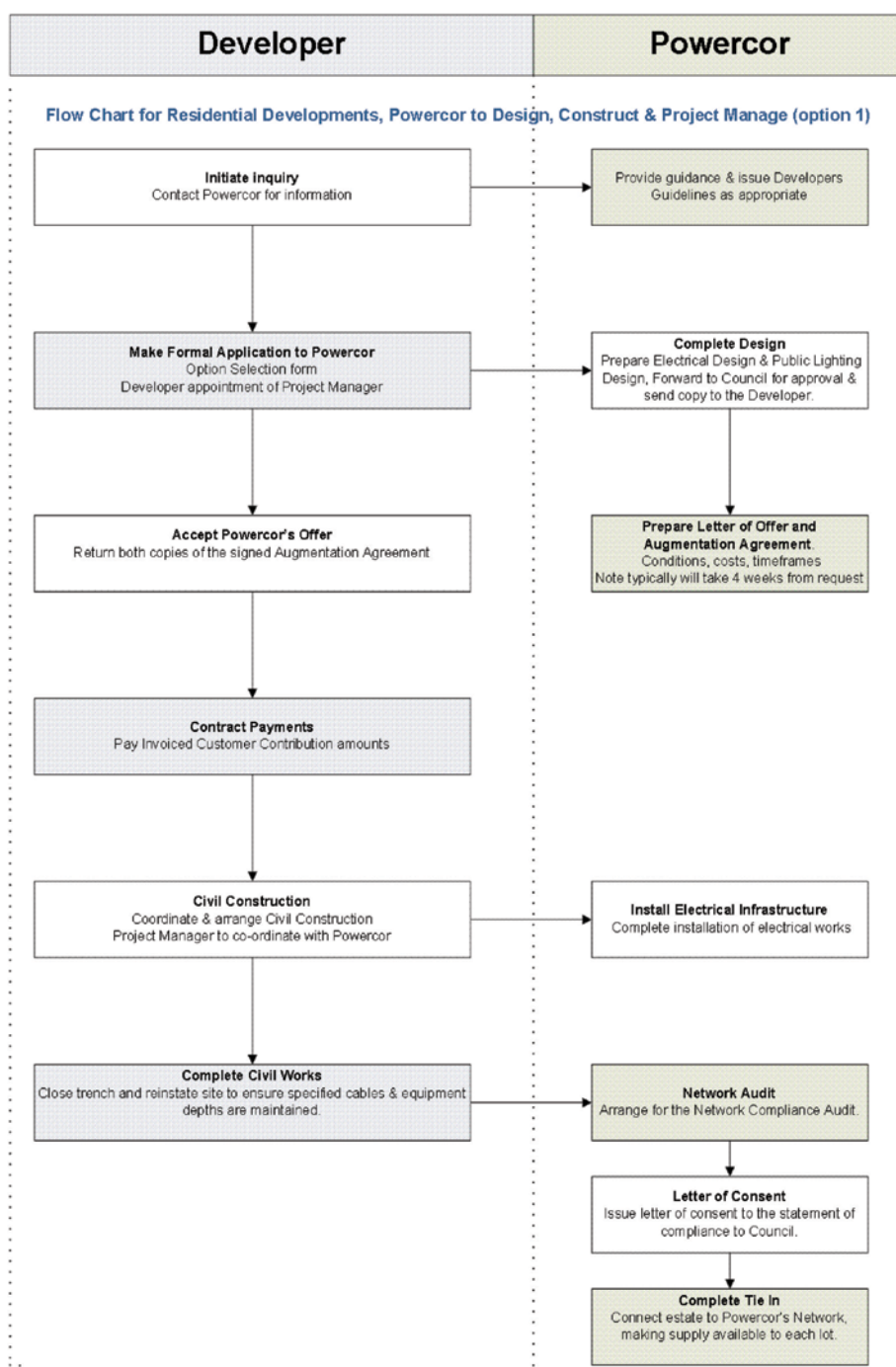
Under Option 2, there are two agreements between the developer and Powercor. The first being the Developer Agreement where the developer chooses to design and construct the electrical infrastructure. On completion and acceptance of the works by Powercor, Powercor will tie in these works and they will form part of Powercor's electrical distribution network. The second agreement covers the Non Contestable work only of the Augmentation Agreement in Option 1. This will always consist of the tie in works and may also include augmentation of the distribution system to enable the tie in and the contracted amount of electricity supply to be made available to each lot.

For Contestable Services, the commercial and contractual terms between the Developer and their appointed Recognised Contractors are the responsibility of the parties involved.

10. Requesting an offer and Augmentation Agreement

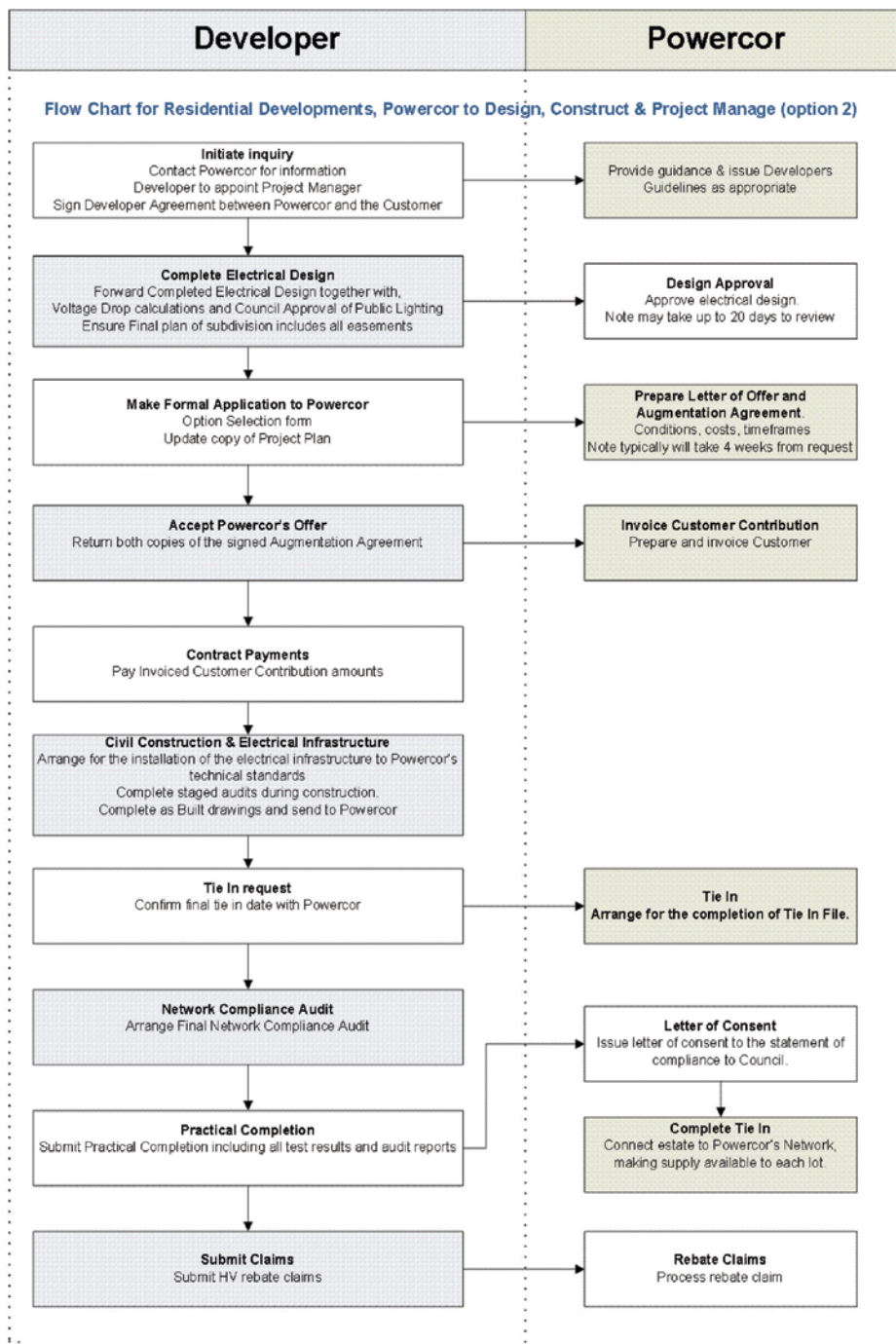
So that electricity supply is provided in an efficient manner, you should discuss your preliminary plans for subdivision with Powercor before detailed planning commences. This will enable Powercor to develop a coordinated plan for the connection of stage 1 of the subdivision and any subsequent stages.

Option 1



The detailed steps for underground residential distribution are shown in the following flow chart. It details the steps involved in both Option1 (where Powercor completes all work) and Option 2 (where Contestable Services are completed by a Recognised Contractor). The process for Option 2 requires the developer to manage the Recognised Contractor. Powercor has developed a number of documents to facilitate communication and coordination between your Project Manager and Powercor. Copies of all forms are available at www.powercor.com.au or from your nearest Powercor office.

Option 2



11. Developer responsibilities

As a developer you are responsible to arrange a number of activities in providing electricity supply to your subdivision.

The following list contains the main activities that the developer is responsible for and should be completed by the Project Manager on the developer's behalf.

Initial enquiry

- Appoint Project Manager from list of recognised Project Managers
- Selection of who completes the Contestable Services i.e. Option 1 or 2
- Sign the Developers Agreement if Option 2 is selected.

Prior to design

- Arranges for the insertion of easements and substation reserves onto the Plan of Subdivision and any external properties that do not form part of the Plan of Subdivision.
- Requests in writing to Powercor, a firm offer for the subdivision or the current stage, indicating who will complete the contestable work.
- Provides two copies of the detailed plans of the subdivision stage in electronic form. Where appropriate, two copies of the proposed staged subdivision construction program are provided together with an overall layout plan, if not previously provided.
- Preparation of services layout plan as approved by the municipality.
- Provide Powercor with a full set of road construction plans for Option 1.

Prior to Tie-In

Where the developer is responsible for the civil works required for the installation of electrical infrastructure, please note the following requirements:

- Only use accredited Civil Contractors to complete civil works that will be used in conjunction with the installation of the electrical distribution assets that will be owned by Powercor. Accredited Civil Contractors can be selected from the VESI web site.
- Excavation of trenching for the laying of cables
- Supply and installation of all conduits required for road crossings and in easements for cable laying
- Installation of service pits to final levels
- Preparation of substation sites, as required to the Powercor technical specifications and standards
- Establishment of final levels and cable offsets
- Installation of survey pegs with lot numbers to enable correct positioning of cables
- Provision and installation of bedding sand in trenches
- Installing cable cover slabs and backfilling of trenches, including installation of warning tape
- Management of the Recognised Contractor where you have chosen them to complete the Contestable Services.

12. Technical standards



Powercor requires the design and/or construction activities associated with the installation of the electrical infrastructure to supply the subdivision to be in accordance with Powercor's technical standards. If no Powercor Technical Standards exist, the relevant Victorian Electricity Supply Industry standard is to be used.

All Powercor Technical Standards are available to Powercor Recognised Contractors via the Powercor internet site at **www.powercor.com.au**. These standards are updated periodically.

All materials and equipment used must meet the current Powercor purchasing specifications and permitted products list. Designers and constructors must make themselves aware of these requirements. Material that has not been previously reviewed and permitted for use by Powercor must not be used under any circumstance.

Any design completed by a Recognised Contractor must be approved by Powercor before construction and must demonstrate compliance with the above technical standards and the overall system planning requirements.

13. Compliance audit

Prior to Tie-In Powercor requires that an independent final network compliance audit is carried out for the Contestable Services where these works are completed by your recognised contractor. This audit allows for any corrective action to be taken and confirms that all works are safe for connection. This audit is to be undertaken after the as build plan is approved and prior to the Certificate of Practical Completion being submitted. The audit must show no critical or major non-conformances before it will be accepted by Powercor. You will be advised of the results of the compliance audit as part of the process.

One audit is provided for within the Customer Contribution costs for a project. If additional audits are required, Powercor will recover the cost from the developer.

Powercor recommends staged audits be carried out at critical project milestones. This will help to ensure a satisfactory outcome at the final network compliance audit and reduce non-conformance costs.



14. Tie-In and Letter of Consent for Statement of Compliance

As part of the planning permit and subdivision procedures Powercor may impose conditions on the permit in its role as a referral body.

Powercor is required to issue a letter of consent to the relevant municipality before a statement of compliance can be issued. Before the letter of consent is issued by Powercor, the following conditions must be satisfied:

The project must meet Powercor's requirements for Tie-In. This requires:

- Obtaining a final Network Compliance Audit and forwarding a copy to Powercor
- Forwarding to Powercor the Certificate of Practical Completion and all the supporting information as detailed on the Certificate

Once Powercor have received these documents we will issue the letter of consent.

We require a minimum notice of 15 working days to arrange Tie-In.

15. How to Contact Powercor Australia Ltd

How to contact Powercor

**Powercor's Customer Contact Centre:
Phone 132 206**

Facsimile: (03) 5440 5798

Email inquiry: info@powercor.com.au

If you require assistance to complete any forms, call Powercor's Customer Contact Centre on **132 206** or contact your nearest Powercor Office.

Alternately, visit our internet site at **www.powercor.com.au** and select the "Connect to the Network" option.

Powercor Australia Office Locations

	Postal Address	Office Location
Ardeer	Locked Bag 6, Sunshine 3020 Email Address: customerprojectsardeer@powercor.com.au	740-742 Ballarat Road, Ardeer Telephone: (03) 8363 8285 Fax: (03) 8363 8314
Ballarat	PO Box 572, Ballarat 3353 Email Address: customerprojectsballarat@powercor.com.au	Norman Street, Wendouree Telephone: (03) 5327 2454 Fax: (03) 5331 9139
Bendigo	Private Bag 8004, Bendigo 3550 Email Address: customerprojectsbendigo@powercor.com.au	601-611 Napier Street, Epsom Telephone: (03) 5440 5804 Fax: (03) 5440 5795
Geelong	PO Box 185, Geelong 3220 Email Address: customerprojectsgeelong@powercor.com.au	Roseneath Street, North Geelong Telephone: (03) 5240 7511 Fax: (03) 5240 7751
Mildura	PO Box 544, Mildura 3502 Email Address: customerprojectsmildura@powercor.com.au	Eleventh Street, Mildura Telephone: (03) 5022 5902 Fax: (03) 5022 5991
Shepparton	PO Box 6141, Shepparton 3632 Email Address: customerprojectsshepparton@powercor.com.au	8-10 Wheeler Street, Shepparton Telephone: (03) 5820 2601 Fax: (03) 5820 2695

Explanation of terms

These explanations of various terms used in these guidelines are intended to assist those without experience in arranging an electricity supply. These are not definitions and may vary from description in the text.

1. Certificate of Practical Completion

Certificate between the developer and Powercor used for the formal handover to Powercor of the developer-constructed electrical assets.

2. Contestable Services

Those activities that can be performed by a Recognised Contractor.

3. Developer

Person or other legal entity engaged in arrangements to subdivide land subject to title in accordance with relevant acts of the Victorian Government.

4. Distribution System

The assets owned and operated by Powercor used to distribute electricity within its geographic area.

5. Easement

Shown on the Plan of Subdivision and required wherever electrical assets are not installed on road reserves.

6. High Voltage Assets

Includes cables, switches and substations operating at 22,000 Volts and installed within the estate.

7. High Voltage (HV) Rebate

Where Powercor funds an amount toward the high voltage assets within the subdivision, that are required to make electricity supply available.

8. Letter of Consent

The letter from Powercor to the appropriate municipality consenting to them issuing a statement of compliance for the subdivision.

9. Low Density

Subdivisions of two or more lots with an average density of less than five lots per hectare of the total subdivided area.

10. Low Voltage Assets

Underground cables operating at 240/415Vvolts from which supply is provided to customers via the point of supply.

11. Medium Density

Subdivisions where there are five or more lots per hectare in the total subdivided area.

12. Network Compliance Audit

A compulsory independent audit required before tie-in can occur to the distribution system.

13. Network Compliance Audit Charge

The cost charged to the developer for one network compliance audit of the Contestable Services works.

14. Network Connection Services

The activities completed by Powercor such as design approval, final connection of supply, updating drawings and contract preparation.

15. Network Contribution

Powercor's contribution to the capital cost of connecting customers to the distribution network.

16. Non Contestable Services

The activities associated with a customer-initiated augmentation that can only be performed by Powercor.

17. Point of Supply

The point where Powercor's line connects to each lot.

18. Project Manager

The person appointed by the developer who is responsible for the overall project management of their development.

19. Recognised Contractors

Contractors approved by Powercor who can undertake Contestable Services on behalf of customers.

20. Refundable Guarantee

An amount of five per cent of the cost of the Contestable Service activities provided by the developer in the form of a guarantee.

21. Reserve

An area shown on the Plan of Subdivision for the installation of kiosk substations.

22. Substation

The electrical installation incorporating a transformer to convert high voltage electricity supply to low voltage.

23. Supply Contribution

The total amount required to be paid by the developer to Powercor.

24. Technical Standards

A set of distribution, construction and design standards for use within Powercor's network.

25. Tie-In

The physical connecting of the Contestable Services electrical infrastructure assets to the Powercor distribution system.

04-20-B0008 March 2011