



Targeted Underground Power Program



Program Guidelines
Version 1.2, 9 April 2026

Document history

Date of next comprehensive review: April 2027				
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1.0	3 April 2024	TUPP Steering Committee	Initial issue	Minister for Energy
1.1	10 September 2024	Energy Policy WA	Appendix A, "Boundary" interaction with other Local Governments, page 19, last sentence deleted. Customer connection (CC) changed to customer mains connection (CMC) throughout.	TUPP Steering Committee
1.2	9 April 2026	Energy Policy WA	Comprehensive review date extended to April 2027. Updated contact details for report enquiries.	Minister for Energy

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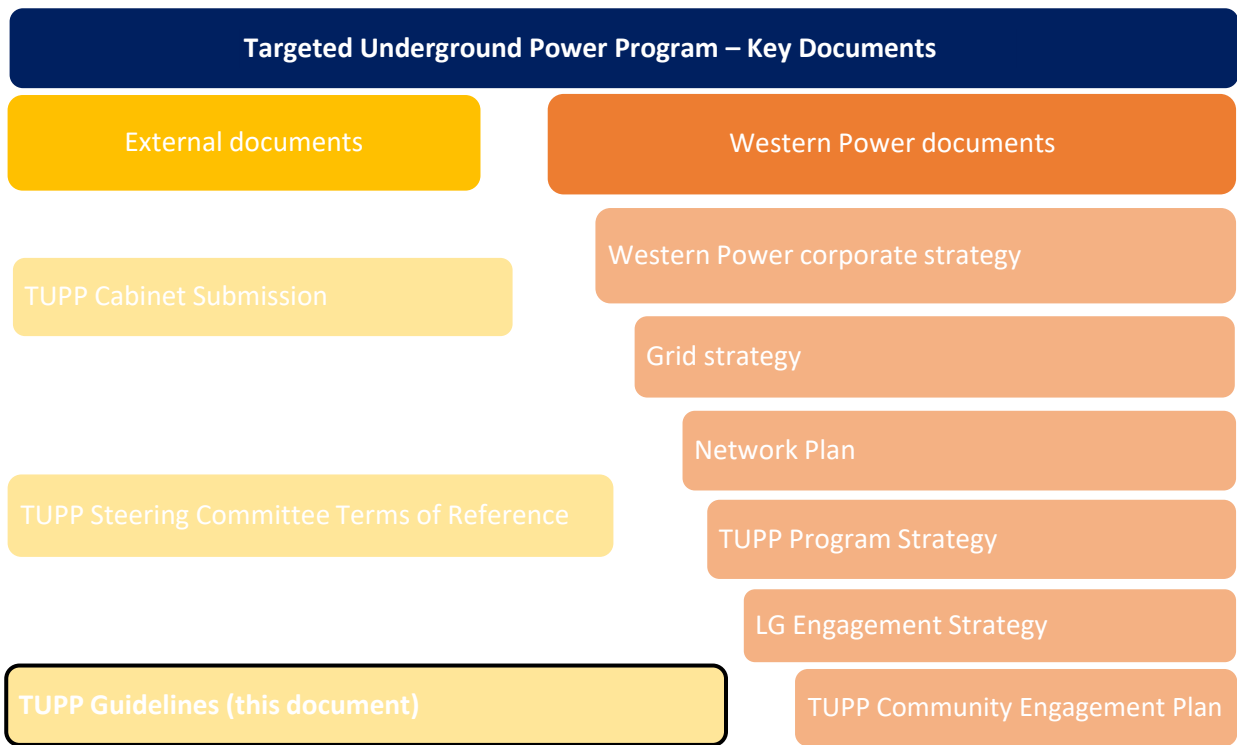


1. Purpose of these Guidelines

On the 27 June 2022, the Government of Western Australia approved the Targeted Underground Power Program (TUPP). The TUPP will be an on-going program of works, commencing on the 1 July 2023. These Guidelines describe the processes, decision making pathways and responsibilities upon which implementation of the TUPP is based, including:

- the project selection process;
- funding and budget management arrangements;
- project phases;
- governance and approval arrangements; and
- property owner, occupier and stakeholder engagement processes.

The Guidelines reflect the priorities of the State Government and experience gained in previous funding rounds of the State Underground Power Program (SUPP).



The Guidelines complement other documents relevant to the TUPP and to Western Power’s corporate strategy, as indicated in the below diagram.

1.1 Approval and review

The Guidelines will be reviewed, and where necessary updated, at least every two years to ensure their relevance and effectiveness. There are three different levels of approval, depending on the type of changes required:

- **Level 1 - Minor Guideline Changes:** The TUPP Steering Committee approves minor changes to these Guidelines. Minor changes are primarily administrative in nature and do not substantively alter the design or delivery of the TUPP.

- **Level 2 - Minor TUPP Design Changes:** In line with the TUPP Cabinet decision, the Minister for Energy approves minor TUPP design changes (i.e. changes that fall within the scope of the Cabinet-approved model) and the resultant amendments to these Guidelines.
- **Level 3 - Significant TUPP Design Changes:** Cabinet approves changes to the TUPP design that fall outside the scope of the Cabinet approved model. These changes are likely to necessitate a substantial review of these Guidelines. Once Cabinet has approved the TUPP design changes, the Minister for Energy is able to approve the revised Guidelines. These changes will be applied to all future projects and possibly grandfathered to current projects, as agreed in consultation with impacted Local Governments.

2. Targeted Underground Power Program (TUPP)

2.1 Program objectives

When compared with overhead supply, underground power has been shown to have many benefits. To realise these benefits, the objectives of the TUPP are to:

- improve reliability and security of electricity supply;
- enhance streetscapes and visual amenity;
- enable increased tree canopy and reduce street tree maintenance costs;
- improve street lighting and community safety;
- facilitate accommodating more distributed energy resources; and
- reduce maintenance costs for Western Power.

The TUPP has been designed to address limitations identified in previous electricity distribution infrastructure undergrounding programs. The TUPP has been designed to:

- achieve sustainable and affordable costs to residential property owners;
- identify opportunities to maximise network benefits;
- ensure transparent selection processes;
- reduce administrative costs; and
- ensure fairness and equity, while continuing to deliver the benefits of underground power to electricity consumers, Local Governments and Western Power.

2.2 Key Program features

The TUPP is a collaboration between the State Government, Western Power and Local Governments. It has the following key features:

- a network-driven approach, whereby Western Power targets areas of the residential network where assets are due or are becoming due for replacement;
- tiered State Government contributions targeted towards lower socio-economic project areas; and
- streamlined governance and approvals processes.

These features are described in more detail within this document.

3. Project Selection Process

3.1 Network-driven approach

Western Power is continually renewing and upgrading the distribution overhead network when assets are coming to the end of their service life. Traditionally, the work involves like-for-like replacement of these assets, however when identified as beneficial to the community and cost effective to do so, Western Power is installing distribution infrastructure below ground to improve safety and reduce the likelihood of outages.

Under the network-driven approach, Western Power actively targets residential locations across the South West Interconnected System (SWIS) where there are a high proportion of mature assets, identifying the ideal window for undergrounding each section of the network in order to maintain safety and reliability of supply (network risk) which has the incidental benefit of also minimising the cost to transition to underground technology.

Through this approach, Western Power is able to maximise its contribution to project costs whilst conforming to the regulatory framework and the New Facilities Investment Test (NFIT). This, in turn, is likely to result in lower conversion costs to customers compared to the SUPP approach. For example, under the TUPP it is estimated that Western Power will contribute an average of 57% of total project costs – double its average contribution of 29% across the 16 projects in Round Six of the SUPP.

As a result of this increased Western Power contribution, in combination with the tiered State Government contribution, the average Local Government contribution has decreased - from the minimum requirement of 50% under SUPP to an estimated average of 36% during the first four years of TUPP.

To maximise the continued efficiency of this approach, Western Power has developed a pipeline of over 300 potential project areas based on its avoided costs.

3.2 Priority order

Projects are completed in priority order based on network performance and risk; however, this order may change year on year due to various reasons such as:

- adjustments to Western Power's overhead maintenance strategy;
- market conditions (for example, the cost of undergrounding in a particular area will influence project viability. This might defer its place in the priority list so it can be packaged with another section of network to produce a viable project. The cost of overhead networks will also influence how much work Western Power is able to prioritise in a certain period); and
- adjustments to Western Power's underground selection methodology which can alter the size/shape of proposed project areas and the overhead network included.

Once a memorandum of understanding (MOU) has been signed by a Local Government, its position in the Program is secured.

3.2.1 Local Governments declining an offer

If a Local Government declines a TUPP offer for any reason, defers their decision or requests a specific part of the project area to be excluded, Western Power will record this outcome in its TUPP project management system.

Should it become clear that a Local Government does not intend to accept its undergrounding offer but does not formally inform Western Power of this intention, then Western Power is to write to the Local Government with a final date for decision. If the Local Government does not accept its offer by the specified date, which must be at least three months from the date of the letter, the offer will be withdrawn. This should only occur after multiple discussions and negotiations between the Local

Government and Western Power. Western Power must inform the TUPP Steering Committee of its intention to send the final decision letter and will record the action and its outcome in its TUPP project management system.

If a Local Government declines an offer, or has their offer withdrawn, Western Power will make an offer to the next Local Government on the priority list.

It should be noted that if a Local Government declines an offer to be undergrounded, or has their offer withdrawn, Western Power is still required to proceed with works to maintain or renew the area's overhead assets to ensure ongoing safety and reliability. After completing these works, Western Power's potential cost contribution to undergrounding this area would decrease significantly and become a cost for the Local Government, and therefore property owners, to absorb should undergrounding be pursued outside of the TUPP.

Local Governments who wish to be reinstated into the TUPP are to write to Western Power with the request. Western Power will consider the request against the NFIT criteria and the requirements of these Guidelines.

3.3 Commercial areas

TUPP project areas are determined based on the network need of residential properties. A TUPP project area may include a small proportion of commercial properties, as long as:

- they are located within the geographical area of the residential properties meeting network need;
- their inclusion does not increase costs to residential property owners; and
- their exclusion would impede undergrounding efforts and create unnecessary difficulties.

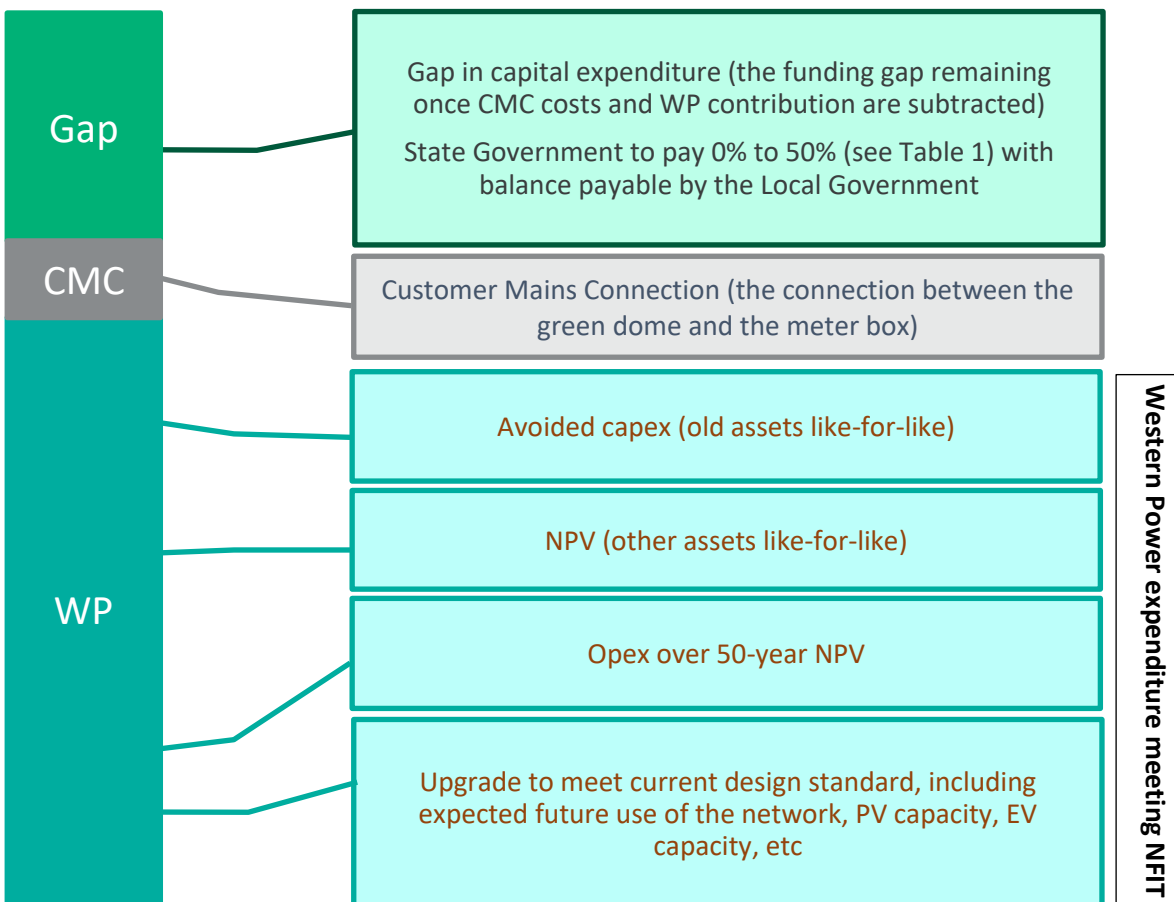
The TUPP has been designed to decrease the cost of undergrounding for residential property owners, with the State Government contribution specifically aimed at reducing costs for those in lower socio-economic areas. As the inclusion of large areas of commercial properties usually increases costs to residential property owners, they are out of scope for the TUPP.

Local Governments seeking to underground large commercial areas should discuss alternative options with Western Power, such as the Retrospective Undergrounding Project (RUP).

4. Funding Arrangements

The underground power cost stack is shown in Diagram 1 to illustrate funding arrangements.

Diagram 1: Underground Power Cost Stack



4.1 Western Power

Western Power contributes the avoided capital costs (capex) of replacing the existing overhead distribution network with overhead assets (i.e. like-for-like replacement). It fully funds assets which have reached maturity, and provides discounted funding for assets which still have remaining usable life based on their net present value (NPV).

As underground power is less expensive to operate and maintain, Western Power contributes its operating cost (opex) savings, on a discounted basis over 50 years. Finally, Western Power contributes cost savings from avoided future upgrades that would otherwise be needed to make the overhead network equivalent to one underground.

Western Power is required to produce a business case for each project for ERA review, in line with its internal investment governance requirements. The projects will only proceed with an undergrounding solution if they are considered efficient and meet the parameters of the New Facilities Investment Test (NFIT)¹.

¹ Section 6.52 of the *Electricity Networks Access Code 2004* stipulates the requirements of the NFIT test for investment in new facilities to be added to capital base.

4.2 State Government

The State Government's contribution is applied to the 'gap' in capital expenditure which remains once Western Power's contribution and the cost of the customer mains connection are accounted for. It is targeted towards lower socio-economic project areas, which have historically been unable to compete under the selection criteria of the most recent SUPP round. This increases the likelihood that more Local Governments can accept the undergrounding offer and therefore maximises the benefits to the wider community.

In line with the TUPP Cabinet Decision, economic status is determined by comparing the median house price² (MHP) of the suburbs within a TUPP project area with the Perth MHP. The appropriateness of this metric will be reviewed as the TUPP progresses and other data (for example, the Australian Bureau of Statistic's SEIFA) becomes available.

There are four bands of State Government funding, illustrated in Table 1 below.

Table 1: State Government contribution (%) towards the 'gap' in capital expenditure

TUPP suburb MHP compared to the Perth MHP	State Government contribution to the 'gap'
Band 1: Greater than 150%	0%
Band 2: Greater than 120% and less than or equal to 150%	10%
Band 3: Greater than 80% and less than or equal to 120%	25%
Band 4: Less than or equal to 80%	50%

The funding contribution bands have been designed to ensure that most State Government funding is provided to areas where the MHP is less than the Perth average. To ensure fairness and equity, the bands provide a glide path of reducing contributions once the MHP for a TUPP suburb exceeds the Perth average. The bands were determined by modelling scenarios that prioritised State Government funding for lower socio-economic areas, while ensuring that total State Government funding was reasonable and sustainable.

As the MHP is updated constantly, the MHP used for a project will either be the MHP at the time of signing the MoU or the MHP at the time of signing the Co-Funding Agreement, whichever is most favourable to the Local Government.

MHP is calculated by the Real Estate Institute of WA (REIWA) at the suburb level. While individual TUPP projects are likely to include multiple suburbs, the State Government contribution will be applied at the suburb level, in line with each suburb's MHP, ensuring that home-owners receive their full State Government funding allocation.

Western Power is responsible for applying the State Government funding contribution to each suburb within a project area, in accordance with the above methodology, and Local Governments are responsible for appropriately passing on the State contribution to their participating homeowners.

² Median House Price (MHP) is obtained from REIWA.com.au.

4.3 Local Government

Participating Local Governments agree to cover the gap in capital costs (that being, the difference between overhead renewal and underground network construction costs) that remain after the State Government's and Western Power's contributions have been applied.

The Local Governments are also responsible for payment of the customer mains connection (CMC) charges, which is the network connection (i.e. cable) between the green dome on the edge of a property and the customer's meter box. This does not form part of Western Power's network and the costs of undergrounding are the responsibility of the customer, who will then own the cable.

In addition to the above, a Local Government is also likely to incur its own costs as a result of participating in the TUPP, such as its own project management costs and costs associated with community consultation. These will vary depending on each Local Government's situation and experience with undergrounding power. Local Governments may wish to consider sharing project resources with other participating Local Governments to minimise these costs.

Each Local Government is responsible for determining how to meet its undergrounding costs. In the majority of cases Local Governments pass these costs on to the owners of the properties receiving underground power, particularly the capital gap and customer mains connection costs. Factors typically considered when developing a cost recovery model are set out in Appendix A.

5. Project Phases

Once Western Power has established a list of priority undergrounding projects based on network need, it contacts the relevant Local Governments regarding their possible involvement in the TUPP, in line with the following four phases.

Western Power will provide prospective Local Governments with as much time as possible to consider and prepare for a formal undergrounding offer. This advance notice is to enable Local Governments to initiate community consultation and engagement if an undergrounding position is not already established, and to consider its possible funding options.

The *Community Engagement for Underground Projects: A guide for Local Governments* has been developed by Western Power to support Local Governments in their community engagement activities. It is a suite of core communication and engagement materials that Local Governments can use and tailor to their particular requirements. It contains templates which can be updated to reflect community priorities and issues for each stage of project delivery, as well as information to support Council engagement.

5.1 Phase 1: Initiation

The initiation phase typically occurs over a 1-month period.

During this phase, Western Power engages with the relevant Local Governments to establish their interest in participating in the TUPP. For each Local Government, Western Power will provide a high-level introductory presentation, with information regarding the key benefits of underground power, the potential projects in their area, initial project boundaries and the funding model (based on a +/-50% cost estimate).

Western Power will also discuss the importance of community engagement, the support it can provide to the Local Government and the timeframes for this with each Local Government. The timeframes required are likely to vary depending on each Local Government's history with undergrounding and Western Power's assessment of the optimum time for a project to proceed.

Local Governments who express an interest in being involved will progress to Phase 2.

5.2 Phase 2: Scoping

Western Power's scoping phase typically occurs over a 3-month period.

During this phase, Western Power prepares a non-binding Memorandum of Understanding (MoU). The MoU is based on a +/-30% estimate and outlines the project's key terms and conditions, the proposed project boundary and the community engagement roles and responsibilities of both parties.

Once the MOU is signed by both Western Power and the participating Local Government, the project can progress through the Scoping phase where a Works Planning Report is issued with revised boundaries and project timeframes.

Western Power will also update its *Community Engagement for Underground Projects: A guide for Local Governments* with project specific information, key messages, FAQs, etc. Local Governments who do not already have community support for undergrounding power should commence community consultation and engagement at the earliest possible opportunity.

NOTE: Section 6.4 includes information on Council endorsement that is particularly relevant to this phase.

5.3 Phase 3: Planning

Western Power's planning phase typically occurs over a 12-month period and involves the following stages:

5.3.1 Detailed design

This stage involves Western Power and the participating Local Government undertaking detailed design and cost analysis (the E10 estimate) to finalise the project boundaries, budget and technical elements. A detailed design is developed for each project area and will be incorporated into the final Co-Funding Agreement.

Further information on the detailed design stage requirements is provided in Appendix A.

5.3.2 Community engagement

Community engagement is led by the participating Local Government with support from Western Power. Some Local Governments may have already commenced these activities, which may include:

- communications announcing the potential project;
- community consultation with supporting information such as project boundaries, timing, costings and stages, to gauge interest and support for the project (co-hosted);
- other mechanisms for community members to provide feedback, such as a Local Government hosted email or hotline;
- media materials;
- regular project updates via website, newsletters, letters, etc; and
- community information sessions or other engagement opportunities (co-hosted).

NOTE: Further information on community engagement can be found in sections 6.4 and 7.1 below.

5.3.3 Construction estimate

Western Power undertakes a commercial process to establish an estimate for project construction.

5.3.4 Co-Funding Agreement

When the above stages are complete, and the Council's elected members have passed a resolution providing approval (see section 6.4), Western Power develops a Co-Funding Agreement. The agreement is based on a +/- 10% cost estimate and formalises the project scope of works, the overall project budget breakdown, funding commitments and responsibilities for the parties, and the general terms and conditions of the agreement.

The Co-Funding Agreement is signed by both Western Power and the participating Local Government. Once this occurs, the project becomes an approved TUPP project and funding is allocated. A payment schedule is included in the Funding Agreement. The Local Government payments are generally divided across 4-6 payments, which are payable during the Execution phase. The payments are often every 2 months, unless otherwise stated in the Funding Agreement (see also Appendix B).

5.3.5 Construction contract

Once the Co-Funding Agreement is signed by both parties, Western Power awards a construction contract to the preferred vendor.

5.4 Phase 4: Execution

The project's execution phase typically occurs over 15 to 18 months.

During this phase, Western Power manages the construction activities and establishes regular project update meetings with the participating Local Government.

Community engagement materials are updated by Western Power as required with timing/stages, progress to date, maps, key messages, FAQs. The appointed contractor also has responsibilities to engage the community as part of project construction.

A practical completion certificate is issued to Western Power by the contractor when the works are complete. A copy of the practical completion certificate will be provided by Western Power to the Local Government upon request.

5.5 Important information for Local Governments

It is important that all Local Governments understand and agree to the conditions and requirements below, prior to accepting a project Co-Funding Agreement:

- The Program is a collaboration between Local Governments, the State Government and Western Power. Local Governments are represented on the TUPP Steering Committee by the Western Australian Local Government Association.
- Projects that are approved for implementation are centrally managed by the Western Power Underground Power Projects Area Team on behalf of the Steering Committee.
- Each Local Government is responsible for payment of their undergrounding costs, as specified in these Guidelines (in particular, refer to section 4.3 and Appendix B).
- Local Governments wishing to proceed with an undergrounding project are required to enter into a binding Co-Funding Agreement with Western Power (refer to section 5.3.4).
- Participating Local Governments must comply with all project planning, scheduling and management requirements as agreed between them and Western Power in the Co-Funding Agreement and as specified in these Guidelines.
- The State Government will only contribute funding towards the conversion of distribution lines to underground power supply. Undergrounding of transmission lines is not eligible for TUPP funding (Appendix C).
- Local Governments wishing to incorporate improvements outside the basic scope of undergrounding projects, such as enhanced street lighting, will bear the full additional cost of those improvements. Similarly, Western Power will bear the full additional cost of any electricity network upgrades that are outside the scope of the project.
- Local Governments must advise property owners during the project that customer mains connections installed as part of the project become the responsibility of the relevant property owner and are not the property of Western Power (Appendix D).
- During installation of the customer mains connections, Western Power and its contractor will endeavour to minimise any impacts to private and public property. A photographic record of all street verges is taken prior to any work commencing. The project contractor will repair any damage caused by the works and reinstate areas to their previous condition once the work is complete.

6. Governance

The TUPP governance model limits administrative burden and costs, while ensuring appropriate levels of accountability. It includes:

- implementation oversight provided by the TUPP Steering Committee;
- funding subject to the annual State Budget process and administered by the Department of Treasury;
- processes for managing Program design changes;
- Cabinet update provided every five years; and
- requirements for formal Local Government Council endorsement.

These are described in more detail below.

6.1 TUPP Steering Committee

The TUPP Steering Committee is responsible for overseeing implementation of the TUPP and for reporting on its progress to the Minister for Energy and Cabinet.

Membership is comprised of nominated representatives from Energy Policy WA (Chair), the Department of Treasury, Western Power and the WA Local Government Association (WALGA) as the representative for Local Governments. Its conduct is directed by a separate Terms of Reference, which has been approved by the Minister for Energy.

6.2 Funding

Western Power is responsible for seeking approval of program funding through the State Budget process, in line with the TUPP Cabinet Decision. Western Power will also seek adjustments to the TUPP forecast as part of the annual State Budget and Mid-year review processes, as required.

TUPP State Government funding is held and administered by the Department of Treasury. The Department of Treasury works with Western Power to ensure appropriate management of State Government funding, and program funding more broadly.

Western Power will manage the TUPP projects in line with its Investment Governance Framework, with each project having a separate account structure within Western Power's accounting system. The Investment Governance Framework, and investments and projects governed by it, are subject to review by the Economic Regulatory Authority, internal and external audit and by Western Power's Regulatory Compliance team. Western Power will provide a budget update paper for each TUPP Steering Committee meeting.

Western Power and the participating Local Government are responsible for negotiating and agreeing the terms of each undergrounding project, in line with the requirements of these Guidelines. Western Power will prepare a Co-Funding Agreement for the project based on these negotiations, including the project's budget breakdown and funding arrangements. The Co-Funding Agreement is binding and is signed by Western Power and the participating Local Government.

The Department of Treasury releases the required State Government funds to Western Power upon receipt of an invoice and signed Co-Funding Agreement from Western Power.

Participating Local Governments are responsible for managing project funding and their associated project costs in line with these Guidelines and their internal governance principles.

6.3 Program design changes and updates

Program design changes will be considered by the TUPP Steering Committee and escalated for approval to either the Minister for Energy or Cabinet. The Minister for Energy is authorised to approve minor

Program design changes, provided they do not deviate from the Cabinet-approved model. Changes outside the model will need approval from Cabinet.

A Cabinet update on the TUPP is required at the close of every five-year period. A review of the Program, including any recommended changes, will be completed to meet this requirement.

6.4 Property owner consultation and Council endorsement

Under the TUPP, Local Government staff and elected members share information and seek property owner input through their own systems and approaches. Given the financial impact of an undergrounding project on property owners it is important that Local Governments obtain property owner and occupier support for their involvement. A project will only be able to proceed if the elected members of the relevant Council pass a resolution providing approval.

NOTE: Further information on community engagement is provided in section 7 below.

7. Community Engagement Process

Western Power, Local Governments and undergrounding contractors all have a role in engaging property owners and occupiers impacted by underground power activities to ensure they have a clear understanding of the project and the decision-making process.

There are two main phases of community engagement. The first is the community consultation phase, which occurs prior to a Co-Funding Agreement is signed. During this time, residents and occupiers are introduced to the idea of undergrounding power, informed about what is involved and their views are sought. The second phase occurs once the Co-Funding Agreement is signed and primarily focuses on issues related to project implementation, such as timing of works, location of equipment and other impacts to the community.

Local Governments are responsible for leading community communication and engagement activities for the projects in their area. This is undertaken in collaboration with Western Power, who provides support and advice, addresses any technical issues and liaises with the undergrounding contractor.

7.1 Local Government responsibilities

The Local Government is responsible for engaging with stakeholders and the community on the following:

- the intention of the Local Government to collaborate with Western Power to underground assets in the area;
- the proposed design of the underground distribution network and associated infrastructure, including street lighting (see Appendix A) and transmission infrastructure (see Appendix C);
- the funding model that will be adopted by the Local Government, including the likely cost to individual property owners, the amounts being contributed by each party to the project (Local Government, Western Power and State Government), and any additional internal costs that the Local Government is seeking to recoup from property owners; and
- the likely impacts of the undergrounding works.

Given the impact of undergrounding, it is important that the Local Government seeks comment and/or approval from property owners and occupiers in the proposed project area, and from landowners impacted by primary equipment sites. This could be through the Local Government's own community engagement policy or framework, a survey, community forums or other activities as appropriate to the Local Government.

The Local Government is responsible for ongoing engagement throughout the project to address enquiries or any issues raised by the community, working with Western Power and the contractor to resolve these issues as far as is practicable.

7.2 Western Power responsibilities

Western Power is responsible for the following:

- providing technical information, maps, images and messaging to support community engagement activities;
- providing the Local Government with the *Community Engagement for Underground Projects: A guide for Local Governments*, tailored to the Local Government's specific requirements;
- supporting the Local Government during its engagement activities, including the provision of technical advice, communications messaging and issues management support;

- managing the contractor's engagement with stakeholders and the community during the construction phase of the project;
- ensuring the appointed contractor provides impacted property owners and occupiers with advance notice of key activities throughout the construction phase of the project; and
- communicating known power outages to impacted Western Power customers.

7.3 Contractor responsibilities

The contractor is responsible for engaging with property owners and occupiers during the construction phase of the project, ensuring they have advance notice of construction timeframes and key activities that may impact them directly, including neighbouring properties.

8. Cost Escalation

During the first three phases of project development (initiation, scoping and planning), project cost estimates may change for various reasons, including scope change requests from the Local Government.

Western Power will manage any scope change requests, which are assessed based on the following criteria:

- suitability/practicality;
- impact to the network;
- cost and regrettable spend³ impact; and
- cost to the property owner, State Government and Western Power.

8.1 Cost escalations after signing the final Co-Funding Agreement

The Co-Funding Agreement formalises the final scope of works, including funding commitments based on a +/- 10% cost estimate. This agreement is signed by both Western Power and the Local Government.

Cost changes that occur after a Co-Funding Agreement has been signed will be managed in the following ways:

- If cost changes are driven by a party, that party will be responsible for funding the cost escalations.
- If cost changes occur due to an externally driven source that is uncontrollable, Western Power will consider whether the cost is recoverable under its regulatory framework, determine whether any additional State Government contribution could be sought and engage with the Local Government accordingly about additional contributions as required.
- The Steering Committee will be notified when cost escalations occur and will be engaged to resolve any cost escalation issues on an as-needs basis. Consideration will be given to varying the scope of the project, terminating the project, seeking further funds or other appropriate measures. Further detail will be included in the final Co-Funding Agreements.

³ Regrettable spend is when an overhead asset has had to be replaced with another overhead asset to maintain safety and reliability of power supply, even though that asset will not be required for its full lifetime due to transformation (in this case, conversion to underground). Such assets will eventually be written off with 'value' still left in them.

9. Managing Disputes

9.1 Responding to community concerns

Concerns regarding the project may be raised with Western Power, the Local Government or the contractor.

The Local Government is responsible for responding to queries regarding funding, cost to property owners as it relates to the project and the decision to support undergrounding in the area.

Western Power (or its contractor) will respond to queries on construction or technical issues including construction timeframes, reinstatement and construction impacts.

More information about Western Power's complaints handling process is available at <https://westernpower.com.au/faqs/complaints>.

Complaints concerning Program design or administration are to be submitted to the TUPP Steering Committee for consideration.

9.2 Dispute resolution

The Co-Funding Agreement contains the processes for dispute resolution between the parties to the agreement.

Appendix A. Detailed Design Stage Requirements

The detailed design stage includes the following requirements:

- The project design and boundaries must be finalised, and there must be funding available to cover the project budget.
 - This includes liaison with Local Governments regarding positioning of equipment, project design and cost of street lighting.
 - Agreement must be reached regarding the treatment of any direct costs to the Local Government or Western Power for any parts of the project that are considered additional to replacing the original electricity supply and street lighting.
- All matters related to boundaries shared with other Local Governments must be resolved by Western Power and the boundaries must be accurately mapped to enable property owners and occupiers to identify if their properties are included in the project.
- The relevant Local Government will be required to provide the best available information on all underground services infrastructure in the project area to Western Power to ensure these services are accounted for during the detailed design phase. This will include plans for water and storm water drains, and gas and telecommunication services.
- The participating Local Government must provide Western Power with a written overview of its approach for fulfilling its budget obligations over the life of the project.
- The participating Local Government must provide evidence to Western Power that it has strategies in place to maintain community support for the life of the project.
- There must be an agreement between all parties on the process for cash calls and other matters relating to account management. This will be captured in the Co-Funding Agreement.

Further information on these points is provided below.

Final project boundaries

In the detailed design stage, project boundaries will be finalised, and a detailed design and cost estimate prepared. This information will form part of the final Co-Funding Agreement.

Local Governments are responsible for consulting with affected property owners regarding the final project boundaries.

Equivalence policy

The Program has an “equivalence” policy. This means that projects replace an overhead distribution service with an equivalent underground service of standard design. Projects will include reasonable enhancements considering the condition and adequacy of the existing electricity system, current technical requirements and reasonably anticipated growth. Projects will not include other distribution network upgrades or transmission system undergrounding, reinforcement or redesign. Appendix C provides further details.

Each party shall be responsible for the costs of their agreed extra project requirements that are not standard equivalent design. For example, decorative streetlight columns or Western Power network reinforcement.

Streetlight design and cost

Street lighting arrangements will be finalised during the detailed design stage. Local Governments may elect to have Western Power street lighting or private street lighting installed.

Western Power streetlights

Streetlights funded as part of the project will use Western Power standard powder coated poles and luminaires that provide lighting levels to current Australian Standards. Enhanced street lighting, such as the use of decorative poles/luminaires, or increasing the light levels to a higher Australian Standard category, may be installed at an additional cost to the Local Government (Smart Streetlights will be a product offering from Quarter 2 2023). Note: Increasing light levels will incur greater tariff charges for street lighting, and decorative lighting will require a separate contract prior to the Co-Funding Agreement being signed.

“Boundary” interaction with other Local Governments

The design of the existing electricity distribution network means that in some cases it is preferable to include one or more areas contiguous to the project boundary that are in an adjacent Local Government area. This is subject to the TUPP Steering Committee being satisfied that suitable arrangements are in place between the Local Government that is a party to the main underground power Co-Funding Agreement and the adjacent Local Government.

Evidence of consultation with affected property owners and a separate, signed Co-Funding Agreement with the adjacent Local Government is required prior to project implementation.

The Local Governments involved, along with Western Power, are to make suitable arrangements between themselves for communicating with impacted owners and occupiers.

Community support for equipment sites

Primary equipment sites include electrical infrastructure such as ground mounted transformers and other equipment for distributing electricity to customers via the underground network.

Participating Local Governments will have primary responsibility for consulting with property owners and occupiers throughout the detailed design stage, supported by Western Power. Western Power will provide a documented process for identifying primary equipment sites, and alternative sites if required.

The Local Government is responsible for consultation with property owners and occupiers regarding the proposed location of equipment (including transformers, switchgear and streetlights). Where issues are identified, the Local Government will raise them with Western Power, who will work with the Local Government and impacted residents to determine the best solution for all parties involved. Once consultation is complete, the Local Government is responsible for signing off the equipment location as acceptable.

Western Power’s Project Manager can be contacted for assistance with this process, with more information contained in the *Community Engagement for Underground Projects: A guide for Local Governments* developed for each Local Government.

Local Government project costs

It is the responsibility of each Local Government to determine its financial arrangements for projects and to respond to any associated community enquiries.

Based on previous undergrounding experience, Local Governments might want to consider raising part of its contribution from the general rate base in recognition of reduced tree pruning costs and general improvement to amenity of the Local Government area.

Where funding is to be raised from property owners in the project area:

- Local Governments can consider avoided costs where the electricity supply connection is already underground;

- Local Governments can consider providing rebates to pensioners and concession card holders in accordance with the Pensioners and Seniors Rebate Scheme:
 - Local Governments must consult with the Office of State Revenue to ensure arrangements are made in accordance with the *Rates and Charges (Rebates and Deferments) Act 1992*.
- measures may be offered to assist affordability of underground power charges, such as offering extended payment plans to property owners;
- lower contributions to street service costs may be offered to owners of properties adjacent to transmission lines (33,000 volts or more) that will not be placed underground (State Government and Western Power funding will only apply in relation to undergrounding local distribution lines as outlined in Appendix C);
- lower contributions to street service costs may be offered to owners of properties that do not receive the full amenity benefit from the project, such as where a transformer, switchgear or an interface with the overhead network is located on the front verge; and
- special consideration may be given to owners of commercial properties, non-ratable properties and where there are multiple connections on one allotment.

The Western Australian Treasury Corporation can provide loans to assist with project funding. The Local Government Borrowing Kit provides more information. Enquiries can be directed to the Corporation's Client Services Team at csoperations@watc.wa.gov.au.

The arrangement of a loan, payment of interest and repayment of the principal is the responsibility of the Local Government.

Appendix B. Project Payments

Project payments

The parties to each Co-Funding Agreement will contribute their respective share of costs in cash in accordance with an agreed “cash call” schedule.

Local Governments should note that the Western Power Program Manager shall (based on approved budgets and anticipated expenditure) make cash calls in respect of each project every two months or as agreed by the parties to the Co-Funding Agreement.

Each party shall contribute its share of a cash call within 14 days and all such monies received shall be held by Western Power for and on behalf of the parties to the project.

Further information

If any further information is required, please contact undergroundpower@westernpower.com.au.

Appendix C. Replacing Transmission Infrastructure

The TUPP has an 'equivalence' requirement to underground the distribution system only. Additional transmission system work outside this distribution system equivalence policy is not funded by the TUPP.

The three main transmission system areas affected are:

- transmission overhead lines;
- transmission lines stayed on distribution poles; and
- overhead transmission pilot cables.

Transmission overhead lines

Transmission overhead lines are at or above 33,000 volts and form the interconnections between zone substations and terminal stations. In some cases, parts of the transmission and distribution systems share structural features.

Undergrounding of transmission lines

Although it would be preferable to underground transmission lines in a project area, prohibitive costs exclude this from the TUPP scope of work. The Local Government concerned may provide at its discretion adjustments to the contribution to street services costs from property owners affected by overhead transmission lines remaining after the completion of the project.

Re-spacing transmission poles

Transmission overhead lines have in some instances had the bay distance reduced to facilitate hosting the distribution network on a common pole. This has resulted in a substantial number of additional poles being installed.

Once the overhead distribution network is removed, Local Governments may wish to remove intermediate poles and/or re-space pole bays to improve the aesthetic appearance of the areas concerned. However, similar to undergrounding of transmission lines, the removal and re-spacing of transmission pole bays is outside of the TUPP project scope.

In both cases, the Local Government is directed to Western Power for direct negotiations to establish costs and timing. The Local Government concerned will need to take the additional costs into account when explaining the project to stakeholders and determining charges to property owners.

Transmission line pole staying

Once the underground system is operational, all of the redundant overhead distribution system is removed. Where this removal creates a structural problem with the transmission system (for example pole staying), the TUPP funds all remedial work, which may include:

- retaining existing distribution poles for support; or
- establishing alternate staying arrangements.

The Local Government, with technical support from Western Power, must engage with affected property owners/occupiers regarding supporting transmission poles before a distribution system will be removed.

Overhead transmission pilot cables

Transmission pilot cables are part of the transmission control system. Pilot cables are often reticulated overhead and share overhead distribution assets.

Replacement of overhead transmission pilot cables with equivalent underground pilot cables is included in the standard Co-Funding Agreement and is fully funded by the TUPP.

Appendix D. Customer Mains Connection

It is acknowledged that at some premises in the project area a connection pillar (typically covered with a green plastic dome) and a customer mains connection (typically an underground cable connecting the premise's meter box to the connection pillar) may already be installed.

The Western Power Program Manager will take into account a pre-existing connection pillar and underground customer mains connection for any premises in the project area in the design of the project and the project budget, if those pre-existing works meet current electrical standards and requirements.

The Local Government should recognise any savings to the project and costs as a result of an applicable premise, by not applying charges for changes to the customer mains connection where this is not required. In each case, the amount of the discount will be determined by the Local Government in consultation with Western Power.

Local Governments must also advise property owners during the project that the customer mains connection installed as part of the project become the responsibility of the relevant property owners and are not the property of Western Power.

