

Review of Strategic Options for Environmental Approvals of Transmission Lines

Prepared for Western Power

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July 2003

1. Introduction

This document presents a review of environmental assessment options under the terms of the *Environmental Protection Act 1986* WA (EPAAct) that Western Power (WP) may use for future transmission line projects in Western Australia. The purpose is to outline the various options, and to match the scale and nature of transmission line proposals with the most appropriate assessment option. To this end, examples of previous assessments of a relevant nature are provided.

Typical or expected timescales are indicated for each assessment option for the stages of the process involving government decision-making or deliberation. This includes public review periods as well as steps in the process undertaken by the Environmental Protection Authority (EPA) Services Unit, the EPA and the Minister for the Environment and Heritage (the Minister).

Six assessment options are identified in this paper. Three of these are statutory processes currently established under the EPAAct and accompanying Administrative Procedures which ultimately end with legally binding conditions of approval. One is a voluntary process currently provided for in the EPAAct that results in non-binding strategic advice by the EPA. A new statutory strategic assessment process with legally binding outcomes has been proposed in amendments to the EPAAct that are currently before Parliament. This proposed model is presented here, although there is no guarantee that this process will be instigated in the near future. The final option involves a cooperative approach between the EPA Service Unit and WP based around the formation of a Memorandum of Understanding.

2. Public Environmental Review (PER) and Environmental Review and Management Programme (ERMP)

The PER and ERMP are the two highest levels of assessment in WA. A complete description of both processes can be found in the 2002 Administrative Procedures of the EPAAct¹.

A PER is:

typically applied to proposals of local or regional significance that raise a number of significant environmental factors, some of which are considered complex and require detailed assessment to determine whether, and if so how, they can be managed.²

The PER assessment process is summarised in Figure 1 and comprises the following steps for WP when putting forward a transmission line proposal:

- WP refers transmission line proposal to the EPA;
- WP is advised that the level of assessment has been set at PER;
- two week public appeal period on level of assessment (if an appeal is upheld, the level of assessment can only be increased);
- WP prepares an Environmental Scoping document which identifies significant environmental issues arising from the project, proposed environmental investigations that will be carried out and

¹ Government Gazette (2002). *Environmental Impact Assessment (Part IV Division 1) Administrative Procedures 2002*. Government Gazette, WA, No. 26 special, 8 February 2002, 561-580.

² Government Gazette (2002), *ibid*, p14.

people proposed to peer review these investigations, stakeholder consultation programme, and, proposed timetable for PER preparation and submission;

- EPA advises WP on its acceptance of the Environmental Scoping document;
- WP prepares PER document in accordance with the EPA's generic guidelines for form and content of environmental reviews and the agreed Environmental Scoping document;
- PER released for public review period of between 4 and 8 weeks;
- EPA provides WP with copies of public submissions. WP summarises these issues, responds to them and reports back to the EPA;
- EPA assesses the PER proposal and releases its Report and Recommendations document;
- two week public appeal period on EPA recommendations; and
- Minister for Environment and Heritage decision-making and issue of approval conditions.

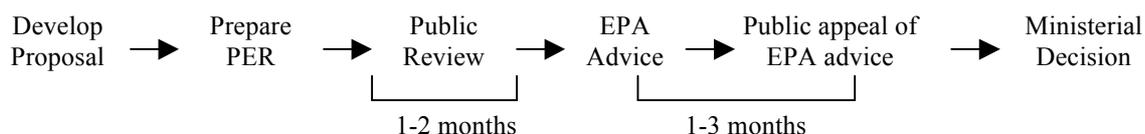


Figure 1 PER assessment process

An ERMP:

will typically be applied to proposals of State interest that raise a number of significant environmental issues, many of which are considered to be complex or of a strategic nature, and require substantial assessment to determine whether, and if so how, they can be managed in an acceptable manner.³

The ERMP process is the same as that of the PER with two points of difference, both of which increase the time taken to reach an approval. Firstly, the EPA may require WP to make the Environmental Scoping document available for public review for at least two weeks and to modify the document based on submissions as appropriate. Secondly, the public review period for the ERMP will normally be between 10 and 12 weeks.

As indicated in the separate 'Review of Time Required for EIA' prepared by Murdoch Environment for WP previously, a PER assessment may take between 1.5 and 4 years to complete with approximately 2 years being fairly typical. To accommodate the extra steps involved, an ERMP will typically take 6 months longer than a PER.

It seems unlikely that a WP transmission line proposal would trigger the need for an ERMP level of assessment. It is also possible that WP could avoid the need for a PER in many cases, by actively pursuing some of the other available assessment options outlined in this report.

3. Environmental Protection Statement (EPS)

The EPS was introduced in 2000 and is described in detail in the 2002 Administrative Procedures. It is intended for use where:

- proposals are of local interest and can be readily managed;
- legally binding environmental conditions are considered necessary; and
- a formal public review period may be unnecessary because the proponent has adequately consulted with stakeholders.

The EPS process is summarised in Figure 2. Following referral of a transmission line proposal by WP, the EPA determines that the proposal may appropriately be assessed through the EPS process. The Chairman of the EPA will meet with WP to discuss the subsequent assessment process. The EPA provides guidance,

³ Government Gazette (2002), p14.

where appropriate, on the further information required in an EPS document and suggestions about the people or groups that WP should consult with. At this point, the EPA advertises its *intention* to set an EPS level of assessment. There is no public appeal right at this stage as the EPA has not formally set the level of assessment.

WP prepares the EPS document in consultation with stakeholders and other interested parties, then submits this to the EPA. The EPA then sets the level of assessment as EPS and releases its Report and Recommendation document which contains proposed conditions of approval. WP makes its EPS document available for public inspection at the same time that the EPA report is released. The level of assessment as well as the EPA advice is subject to public appeal.

For this level of assessment to be set, the EPS document prepared by WP will need to demonstrate that the community and key stakeholders have been adequately consulted and their views taken into account in addition to the usual contents of an environmental review document.

Once engaged in the EPS process, WP has the right to withdraw from it at any time to engage in an alternative (i.e. higher) level of assessment. The public have the opportunity to appeal the level of assessment at the point when the EPA and WP documents are made public. If such an appeal is upheld by the Minister, then the level of assessment would be raised (eg. to a PER). Clearly, the onus is on WP to adequately consult with stakeholders and to address their concerns in order to prevent this situation from arising.

A number of benefits of the EPS level of assessment have been identified by public and private proponents who have experienced it⁴. The attractions that have been documented include:

- proponents know where they stand earlier in the process because they have much greater responsibility in setting the agenda for the assessment than with a PER;
- proponents are able to 'grow' the proposal alongside public consultation and can anticipate public response at an early stage;
- proponents foresee a quicker resolution to their submission for assessment;
- proponents see their own pro-activeness being rewarded. The EPS is a mechanism by which the proponent's demonstrated track record and experience in environmental issues are taken into account;
- the outcomes are likely to be more satisfactory because the EPS process generates a closer and longer-lived collaboration between the proponent, the EPA Services Unit and the public than does a PER; and
- time savings can be made, particularly at the public consultation phase of assessment because this is carried out by the proponent and commences at the outset of the process.

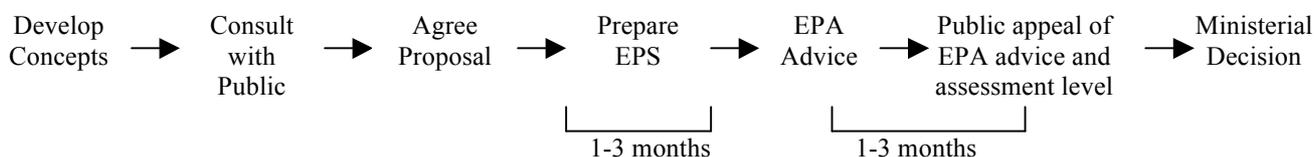


Figure 2 EPS assessment process

With respect to timing, an EPS assessment generally takes 9-12 months from the time of referral. There is some uncertainty at the front end of the process with respect to consultation with stakeholders. It will clearly work best for non-controversial projects. We suggest that actively seeking EPS assessment would be advantageous to WP for relatively small or localised transmission line projects. However, even for larger projects, such as the Cataby to Eneabba transmission line, it may be feasible to use an EPS

⁴ reported in Lindsay D. 2001. *Environmental Impact Assessment: A Brief Review of the Process and Suggestions for its Amendment*. Unpublished report to the EPA.

assessment, especially where the stakeholders to be consulted are well known and in manageable numbers.

4. Planning Scheme Assessment

Changes made to the EPAct in 1996 permit the environmental assessment of planning schemes submitted by a Responsible Authority. The Responsible Authority for regional planning schemes and amendments is the Western Australian Planning Commission, while relevant local governments are responsible for town planning schemes and amendments.

Planning schemes, particularly regional planning schemes, are an attempt to provide for residential, commercial and industrial development in a relatively proactive and strategic manner. They are intended to guide subdivision and development over a five year period. They are formulated on the basis of predicted population growth and other social and economic factors. Currently a regional scheme only exists for the Perth metropolitan area (i.e. Metropolitan Region Scheme). Another one for the Mandurah area (i.e. Peel Region Scheme) has been finalised and preparation of another for the Bunbury region is well advanced. However, regional schemes may subsequently be developed for other regional and fast growing centres in WA (eg. Karratha, Geraldton, Albany). As new regional schemes are developed, it would be advantageous to WP to secure the necessary easements and corridors for future transmission line development.

Once a regional scheme has been amended, individual town planning schemes within the affected area, must be made consistent with the region scheme. If the environmental aspects of region schemes have been assessed by the EPA, there is no need for further assessment at the town planning scheme amendment or development stage providing that the transmission line development is in accordance with what was originally assessed and there are no new environmental factors to be assessed.

From a WP perspective, the aim would be to incorporate appropriate corridors for transmission lines into planning schemes. It is possible for WP to initiate a scheme assessment for this purpose. However, WP can also take advantage of planning scheme implementation, review or amendment initiated by others. It is clear that long transmission lines may require lots of small amendments to town planning schemes. Additionally over the longer term strategic perspective of regional planning scheme development and amendment, there may be multiple transmission lines projects envisaged. Rather than engage in assessment of each individual scheme amendment, provision exists for multiple amendments to occur at the same time. For example, each year there is an omnibus amendment of the Metropolitan Region Scheme in which numerous small amendments within the scheme area are processed. It should be noted though, that difficult or controversial projects can hold this assessment process up.

The process for the environmental assessment of planning schemes has been described by the EPA⁵. It is depicted in Figure 3 can be summarised as follows:

- Responsible Authorities are required to refer all statutory planning schemes and their amendments to the EPA for assessment when they resolve to initiate them;
- the EPA determines whether the scheme needs to be assessed within 28 days of referral and while this decision is announced in the weekly newspaper advertisement of the EPA, there are no rights of public appeal concerning the assessment decision;
- for schemes that require assessment, the EPA provides instructions to the Responsible Authority within 60 days of the date of referral, which they are required to follow in preparing it's environmental review document;

⁵ Environmental Protection Authority 1998. *Guide to Environmental Impact Assessment in Western Australia*. Draft, EPA, Perth, 17pp + appendices.

- following closure of the public review period for the environmental review document, the Responsible Authority has 42 days in which to submit its response to the public submissions received;
- the EPA then prepares its report and recommendations document and must do so within 72 days of the close of the public review period or within 30 days of receiving the response to submissions, whichever is the longer. Any exceedance of these time periods requires Ministerial approval;
- people have two weeks in which to appeal to the Minister against the content of the EPA report or its recommendations; and
- any environmental conditions for schemes and scheme amendments are negotiated between the Minister for Environment and Heritage and the Minister responsible for the scheme or scheme amendment, generally the Minister for Planning, and they must be capable of being incorporated into the scheme text.

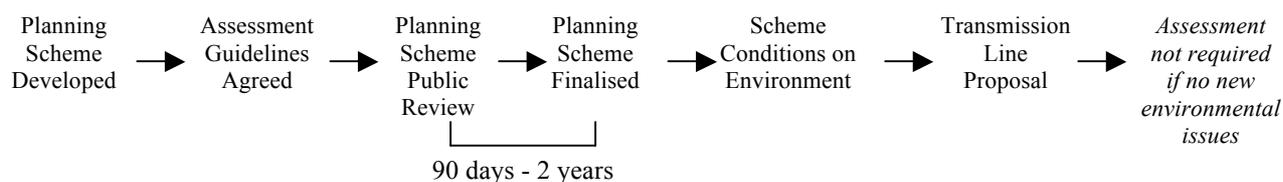


Figure 3 Environmental Assessment of Planning Schemes

The environmental planning route would provide a relatively high degree of outcome certainty for Western Power in that the planning schemes are amended to show the intended future development of transmission line infrastructure. Future land use is designated well in advance. Detailed urban planning at the local government level can be undertaken with the knowledge of the likely location of future transmission lines and substations. This increases the opportunities to ensure that compatible land uses result on adjoining land parcels to proposed transmission infrastructure. It also increases community support for the infrastructure when proposals for construction are advanced. For example, the recent extensions to the Kwinana freeway which have been embedded in planning schemes since the 1960s and 70s were not subject to separate environmental assessment, although some scheme amendment was required to accommodate marginal changes in the boundaries of the freeway corridor. More recently, road and rail alignments have been included in the Peel Region Scheme as part of the planning process; it is likely that assessment at this level will avoid the need for further environmental assessment when individual segments of the transport network are implemented.

One drawback of pursuing amendments to region planning schemes is that the timeframe for the process is highly variable but likely to take a long time. Although some scheme amendments occur as quickly as 1 year, a period of 3-5 years is not uncommon. For example, development of the new Peel Region Scheme has been in progress for several years now and has only just been finalised. Most amendments to existing schemes though would not take as long as this.

For WP purposes, where there is sufficient advance notice of a known corridor requirement, we would recommend the use of planning schemes.

5. Informal Strategic Assessment

Provision exists under section 16 of the EPAct for the EPA to provide advice to the Minister for the Environment and Heritage on environmental matters generally including environmental protection aspects 'of any proposal or scheme' (s16(e)) or 'to publish reports on environmental matters generally' (s16(j)). The EPA has used this ability in recent years to conduct strategic assessments of various

proposals. Some examples of a similar nature to WP transmission lines include the Oakajee gas pipeline corridor⁶ and the Dampier to Bunbury natural gas pipeline expansion project⁷ using s16(e) and evaluating the environmental values associated with the proposed alignment of the Roe Highway⁸ using s16(j). The assessment process is summarised in Figure 4.



Figure 4 Informal Strategic Assessment Process Using s16 of EPAct 1986

Although this assessment process involves a public review period and EPA assessment of the proposal, the outcomes are not legally binding. The EPA's recommendations to the Minister are advisory only and they cannot be appealed.

Recently WP has had direct experience with s16 assessment for strategic planning for future power generation in the Kwinana to Collie region⁹. The purpose of this assessment was to obtain early advice on any constraints which may be 'fatal flaws' from an environmental impact perspective for a number of sites where future power generation facilities could be installed. In this instance WP noted that their intent was to have an array of sites on which power providers could propose new power stations. It was also intended that any future proposal for a specific site would be subject to detailed assessment under s38 of the EPAct (i.e. as a PER or EPS).

This does not always need to be the case with a s16 strategic assessment. For proposals with well defined impacts and mitigation measures, such as transmission infrastructure, the need for statutory assessment at the detailed proposal stage may be avoided altogether by having previously addressed the major environmental concerns at the strategic level. If this is not feasible, then the lowest form of formal assessment: Assessment on Referral Information (ARI); could be anticipated. In the ARI process, assessment is based solely on the proponent's proposal referral documentation but legally binding approval conditions are attached¹⁰. This would avoid the need for the time delays associated with the PER level of assessment.

⁶ Environmental Protection Authority 2001. *Allocation of Oakajee Gas Pipeline Corridor: Gas Pipeline Sale Steering Committee, Advice of the Environmental Protection Authority to the Minister under S16(e) of the Environmental Protection Act 1986*. Bulletin 1020, EPA, WA.

⁷ Environmental Protection Authority 2001. *Dampier to Bunbury Natural Gas Pipeline Corridor Expansion Project: Gas Pipeline Steering Committee, Advice of the Environmental Protection Authority to the Minister under S16(e) of the Environmental Protection Act 1986*. Bulletin 1019, EPA, WA.

⁸ Environmental Protection Authority 2003. *Environmental Values Associated with the Alignment of Roe Highway (Stage 8): A Report by the Environmental Protection Authority under Section 16(j) of the Environmental Protection Act 1986*. Bulletin 1088, EPA, WA.

⁹ Environmental Protection Authority 2002. *Strategic Planning for Future Power Generation, Pinjar Power Station Expansion, Kwinana/East Rockingham Power Station, Kemerton Power Station, New Bunbury Power Station, Collie Power Station Expansion: Western Power Corporation, Report and Recommendations of the Environmental Protection Authority under S16(e) of the Environmental Protection Act*. Bulletin 1067, EPA, WA.

¹⁰ Government Gazette (2002). *Environmental Impact Assessment (Part IV Division 1) Administrative Procedures 2002*. Government Gazette, WA, No. 26 special, 8 February 2002, p11.

Another potential benefit of conducting a s16(e) voluntary strategic assessment is to identify sites required for future transmission infrastructure needs and to subsequently secure those sites. This approach was used for the Maitland¹¹ and Boodarie¹² industrial estates in Karratha and Port Hedland respectively. In these assessments consideration was given to locating suitable sites for industrial development, designating buffer zones around these sites and determining infrastructure need (ports, road and rail transportation, water supply, gas supply, basic raw materials supply and power generation and transmission requirements) including corridors from source to the industrial sites. On the basis of the assessment process, LandCorp subsequently purchased the land to be set aside as buffer zones around the future industrial sites.

These examples highlight the proactive advantages of following a voluntary strategic assessment process which would be driven by WP, and can be undertaken some time in advance of specific proposals for transmission infrastructure development.

With respect to timing, the informal strategic assessment process is quicker than a PER or other formal assessment processes because it avoids the Ministerial decision-making and condition setting stage (which can save 4-6 months). Typical timeframes for this assessment process are 12-15 months.

6. Strategic Assessments: Amendments to EAct

The current strategic assessment process enabled by powers provided for in s16 of the EAct is non-statutory one. In light of its proven benefits, the EPA has moved to establish a formal process for strategic assessments in proposed amendments to the EAct which are currently being considered by Government. Details on the proposed new process is outlined in the Environmental Protection Amendment Bill 2000¹³ and accompanying explanatory notes¹⁴.

The proposed amendments to the EAct will define a 'strategic proposal' as a proposal that identifies one or more future proposals likely, if implemented, to have a significant impact on the environment. The future proposals may be significant individually or in combination, enabling class assessment of smaller proposals and the assessment of policies. Using strategic assessment, it is intended that the EPA can assess a strategic proposal and recommend the conditions that should be applied to the future proposals that it identifies (eg. future transmission lines). When a future proposal is brought forward, the EPA can decide that it is a 'derived proposal' (i.e. derived from the assessed strategic proposal) which does not require further assessment. Instead the Minister applies the conditions recommended by the EPA when it assessed the original strategic proposal. If a future proposal is different to what was anticipated in the strategic assessment, or raises new issues not addressed in the strategic assessment, the EPA will assess

¹¹ Environmental Protection Authority 1997. *Maitland Heavy Industrial Estate, Karratha: LandCorp/Department of Resources Development. Advice to the Minister for the Environmental from the Environmental Protection Authority under Section 16(e) of the Environmental Protection Act 1986.* Bulletin 855, EPA, WA.

¹² Environmental Protection Authority 1997. *Boodarie Resource Processing Estate, Port Hedland: LandCorp/Department of Resources Development. Advice to the Minister for the Environmental from the Environmental Protection Authority under Section 16(e) of the Environmental Protection Act 1986.* Bulletin 855, EPA, WA.

¹³ *Environmental Protection Amendment Bill 2002*, Available at: [http://www.parliament.wa.gov.au/parliament/bills.nsf/91FE5B9DE49BF32848256C0E001492D8/\\$File/Bill+131-2.pdf](http://www.parliament.wa.gov.au/parliament/bills.nsf/91FE5B9DE49BF32848256C0E001492D8/$File/Bill+131-2.pdf) (accessed 7 February 2003)

¹⁴ *Environmental Protection Amendment Bill 2002 Explanatory Clause Notes, Environmental Protection Amendment Bill 2002 Explanatory Memorandum*, Available at: [http://www.parliament.wa.gov.au/parliament/bills.nsf/91FE5B9DE49BF32848256C0E001492D8/\\$File/EM-Bill+131.pdf](http://www.parliament.wa.gov.au/parliament/bills.nsf/91FE5B9DE49BF32848256C0E001492D8/$File/EM-Bill+131.pdf) (accessed 7 February 2003)

the new or different matters but need not re-assess those matters adequately considered in the strategic assessment.

Like the s16 process, strategic assessment will be a voluntary process. A strategic proposal will only be referred to the EPA for assessment by the proponent. The assessment process is outlined in Figure 5. A key advantage of this new approach to strategic assessment will be the relative certainty provided by the Minister's decision on the strategic assessment. This will enable WP to get easements in place prior to developing specific transmission line proposals. Providing the proposals comply with the original strategic assessment conditions, no further environmental assessment will be required. Ultimately, this process should greatly reduce the time that it currently takes to implement transmission line construction following the WP load forecasting and planning activities.

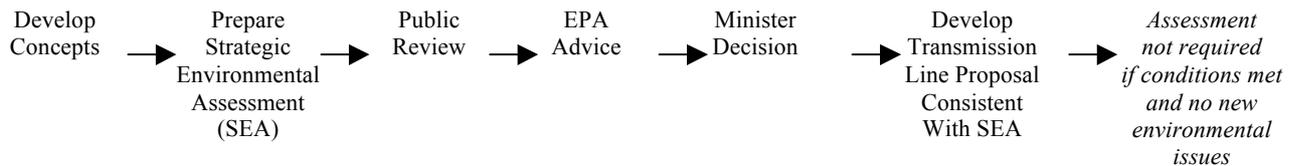


Figure 5 Strategic Assessment Process in Proposed Amendments to EPAct

It is not possible at this stage to know how long the formal strategic assessment process will take. However, we anticipate that it would take approximately 2 years (i.e. similar to the PER process or the informal strategic assessment process with the Ministerial condition setting stage added).

7. Memorandum of Understanding

In 2000, the Department of Environmental Protection (now EPA Services Unit) and Main Roads WA (now Dept. of Planning and Infrastructure) developed a Memorandum of Understanding for the purpose of facilitating effective and efficient assessment of State roads projects. The MOU does not change the statutory responsibilities of each agency but contains nine schedules which define how the DEP and Main Roads propose to work together. The schedules address:

- referral options;
- identification of key environmental issues;
- the information required and when to consult to get EPA advice at alignment selection stage;
- timing of referrals under s38 of the EPAct;
- management of referrals under s48A of EPAct for road and road reserve proposals that are part of planning schemes or planning scheme amendments;
- development and implementation of policies for specific issues;
- management of environmental impacts due to standard construction practices;
- format and content of referral documentation; and
- management of Commonwealth involvement in environmental assessments.

The adoption of the MOU is designed to streamline administrative procedures, encourage communication between DEP and MRWA and provide clear guidance for the identification and management of environmental issues. The MOU between DEP/MRWA was initiated to overcome delays in assessment, particularly with respect to road impacts on wetlands. This led to the development of the recent environmental protection policy on 'wetland banking' to offset circumstances where, after minimising potential impacts, there was still a residual impact on wetlands.

The MOU sets out clearly the procedural steps in assessment in relation to the planning, design and construction process for roads. Its use led to a better understanding internally within MRWA of the EIA process and much smoother internal processing. In addition, for projects like Tonkin Highway Stage 7,

the existence of the MOU has led to more efficient project management of the assessment process with regular meetings following the steps identified in the MOU. It has been estimated that time savings of approximately 3 months in the environmental assessment process have been achieved by MRWA since the MOU was implemented.

The benefits of developing a MOU between WP and the EPA Services Unit would be to improve efficiency in the environmental assessment process. This would occur by establishing standard operating procedures and getting this knowledge to relevant staff in WP so they clearly understand what their responsibilities are (i.e. it reduces novelty and uncertainty factors for staff).

The only cost is that of the time needed for preparation and endorsement of a MOU. The process with MRWA took approximately 1 year.

The development of a MOU between WP and the EPA Services Unit to streamline procedures is worth considering. In addition the adoption of 'vegetation banking' to provide offsets to residual vegetation loss would expedite assessment processes.

8. Conclusion

This paper has provided a number of environmental assessment options that could avoid the lengthy assessment process that was associated with the recent Pinjar to Cataby transmission line. In short, the various assessment options and their applicability to WP transmission line proposals can be summarised as follows:

- PER and ERMP: these are generally a lengthy assessment process and may be able to be avoided by WP actively pursuing the alternative assessment options. A separate report addresses the timing and assessment of the Pinjar to Cataby transmission line PER;
- EPS: by engaging in early and proactive community consultation, a PER or ERMP need not be required and this expedited assessment process can be utilised, saving several months in time relative to the PER or ERMP process. This level of assessment particularly applies for smaller projects with well known or localised impacts only;
- Planning scheme assessments provide great certainty for future proposals by incorporating forecast transmission infrastructure into planning documents. Planning schemes are time consuming and require a long-term strategic approach. They are well suited to major or multiple minor development proposals at a regional scale;
- Voluntary Strategic Assessment under s16 of the EPAct: this provides the opportunity to address environmental issues early at a strategic level and thereby avoid or reduce the need for individual assessment later on. They are suitable for medium to long-term regional transmission infrastructure proposals. Individual environmental assessment of specific transmission proposals may not be required if the issues have been addressed at the strategic level;
- Formal Strategic Assessments: provided the proposed amendments to the EPAct eventuate, this assessment option will increase certainty by establishing approval conditions at the strategic level and avoiding the need for individual assessment of proposals; and
- MOU with the EPA Services Unit: there are potential advantages for WP to enter into a MOU with the EPA Services Unit to streamline administrative procedures and enhance environmental management of transmission lines.

There is no single environmental assessment option that will meet WP requirements every time. We suggest that WP use all of the options depending upon the particular circumstances.