

APA DEWAP Pty Ltd

1 July 2024

User Access Guide



User Access Guide 1 July 2024



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Contact details

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Attention: Head of Commercial

Level 12, 141 St Georges Terrace Perth WA 6000

Further information can be found here:

Webpage: North West Interconnected System (NWIS) | APA Group



1. Introduction

1.1. Purpose

This document is APA DEWAP Pty Ltd's ("ADEWAP") User Access Guide prepared in accordance with the Pilbara Network Rules ("PNR") and the Pilbara Network Access Code ("PNAC") for the APA Network¹ in the Pilbara. This document also sets out information relevant to the Harmonised Technical Rules ("HTR").

ADEWAP Pty Ltd (a subsidiary of APA Group) owns and operates the APA Network. The APA Network is deemed to be covered in the PNAC and subject to light regulation. The APA Network is defined in the ADEWAP 2024 System Description.

ADEWAP² is the network service provider for the APA Network and is responsible for dealing with preliminary enquiries and access applications.

The purpose of this User Access Guide is to set out the procedure for a new connection or change to an existing connection to the APA Network. The User Access Guide is intended to provide information about the process and timelines for the making of an access application, arrangements for further investigations, and the making of an access offer and negotiations.

1.2. Legislative framework

Being subject to light regulation under the PNAC, ADEWAP is required to prepare, publish, and maintain information in accordance with Section 36 of the PNAC as set out in the following:

36. **Obligation to publish information**

- (1) An NSP for a light regulation network must in accordance with this Code prepare, publish and maintain the following instruments in respect of the light regulation network:
 - (a) a system description;
 - (b) a services and pricing policy under section 40;
 - (c) a network development policy; under section 41;
 - (d) a user access guide, under section 42.

Section 42 of the PNAC sets out the requirements to be met by the User Access Guide. These requirements include providing:

(1)...sufficient clarity in terms of process and timelines for the making of an access application, arrangements for further investigations, the making of an access offer and negotiations

And

(2). In particular, a user access guide must

(f) set out a process ("queuing policy") for managing multiple or competing applications in accordance with the Pilbara electricity objective and, if applicable, section 42(11); and

¹ For the purposes of this document, references to "APA Network" have the same meaning as Alinta Port Hedland Network as defined in the PNAC.

² The term "ADEWAP" in this document refers to the Network System Provider (NSP) for the APA Network.



- (g) describe and delineate the roles and responsibilities of the NSP and the ISO regarding the processing and modelling of access applications in accordance with this Code and the Pilbara networks rules: and
- (h) describe the arrangements for undertaking further investigations, including the basis for determining reasonable costs to be paid by the applicant in respect of further investigations; and
- (i) explain how the NSP will deal with and use any confidential information exchanged between the NSP and the applicant...

This User Access Guide has been prepared in accordance with the requirements in section 42 of the PNAC.

The User Access Guide has been prepared in line with the Integrated System Operator ("ISO") Interim Access and Connection Procedure Version 2.0.

1.3. Application

The User Access Guide is relevant for parties seeking access to the APA Network. A connection applicant must make a connection request to ADEWAP for approval for:

- the creation of a new connection point on the APA Network; or
- in respect of an existing connection point any change in the level of permitted injection or withdrawal of electricity, or in the technical characteristics of equipment connected, or to be connected, at the connection point.

1.4. Effective period

This User Access Guide applies from 1 July 2024 until 30 June 2027.

ADEWAP will review the User Access Guide from time to time. As provided for under the PNAC, if ADEWAP becomes aware of facts or circumstances that require material updates to the guide, ADEWAP will publish a revised version of the user access guide as soon as practicable.3

1.5. Negotiation

This User Access Guide sets out the process that a party interested in connecting to the APA Network ("the applicant") must follow. ADEWAP will progress and negotiate an applicant's connection in good faith. Should an access dispute arise, an applicant has the right to refer an access dispute to arbitration in accordance with the processes set out within the PNAC.

1.6. Other relevant information

Other documents prepared in relation to PNAC information requirements and that should be read in conjunction with the User Access Guide include:

- ADEWAP System Description
- **ADEWAP Contributions Policy**
- **ADEWAP Queuing Policy**
- ADEWAP Planning Standard & Criteria

³ PNAC s.42(10).



ADEWAP Services and Pricing Policy.

These documents can be found here North West Interconnected System (NWIS) | APA Group

Applicants are also encouraged to refer to the relevant ISO documents published on the ISO website.



2. Connection process overview

2.1. Roles and responsibilities

The PNR establishes rules for network access and the functions and obligations of the network service provider, connection applicant, and the ISO.

ISO access and connection function

The ISO has the functions of supervising the standards being applied for new connections; and assisting connection applicants and network service providers prepare and process access applications.

ISO provides modelling services for the preparation and processing of access applications, negotiation of access contracts and, if applicable, resolution of access disputes. If requested, the ISO must undertake system modelling to assist ADEWAP and an access seeker in connection with preparation and processing of access applications and negotiation of access contracts.

ADEWAP responsibility for connection standards

ADEWAP is responsible for ensuring compliance with connection standards by the new connection. ADEWAP must not permit a new connection to be energised unless:

- all facilities connected, or to be connected, at the new connection comply with the PNR and HTR; and
- the requirements in the PNR and HTR regarding the approval and connection process for a new connection have been complied with; and
- if necessary, determined and updated the limit advice; and
- · if necessary, consulted with the ISO regarding any new or revised constraint rules; and
- any requests by the connection applicant for one or more exemptions have been managed and assessed in accordance with the PNR.

To meet these obligations, ADEWAP requires applicants to provide sufficient information to ensure that the connection complies with the PNR and HTR; and that the approval and connection requirements in the PNR and HTR have been complied with.

2.2. ADEWAP's connection process

The PNAC, PNR and HTR establish the procedures and technical requirements for connection to and operation of the covered networks that make up the whole of the Pilbara Network⁴, including the APA Network. Network augmentation may be required to facilitate such connection depending on the size, scope, timing, and location of a new connection.

The APA Network is a 66kV transmission network. Connection augmentations may be required to:

- ensure that a new connection complies with the specified access standards for connection to the network under the HTR; or
- 2) provide sufficient power transfer capability to meet a new connection's requirements.

This User Access Guide sets out the processes that ADEWAP and applicant must follow when a new connection, or modification of an existing connection, is sought. Due to the nature of the APA

⁴ Pilbara network is a term defined within the PNAC and includes the covered network of ADEWAP's 66kV transmission network located in Port Hedland, as defined within the ADEWAP System Description.



Network and the likely complexity of access requests associated with connecting to a 66kV network, this User Access Guide details the staged connection process:

Stage 1: Preliminary enquiries & concept:

Stage 2: Feasibility Assessment **Stage 3**: Application Assessment

Stage 4: Connection assessment, construction & commissioning.

At any point through the connection process, where the applicant or ADEWAP determines an applicant's proposed connection assets are technically non-compliant with the HTR the applicant and ADEWAP may follow the connection point compliance (CPC) process outlined in Appendix A of this User Access Guide, as an alternative to a derogation under rule 64 of the PNR.

The access and connection processes developed by ADEWAP are outlined conceptually in Figure 1 of this User Access Guide and mapped against the ISO's Access and Connection Procedure.

Each stage of the network connection process is described within the following sections of this User Access Guide.

2.3. Contributions policy

ADEWAP will undertake and fund any required work subject to the ADEWAP Contributions Policy.

2.4. Timeframes

Indicative timeframes are set out in this User Access Guide. ADWEAP and the applicant can agree an alternate timeframe. The period for making an access offer may be extended in circumstances set out in the PNR.⁵

Where targeted timelines cannot be met, ADEWAP will inform the applicant about reasons for the delay, new timelines or targeted timelines, and measures to avoid further delay.

2.5. Confidential information

Information exchanged between the connection application, the ISO and ADEWAP during the connection process will be treated in accordance with the confidentiality requirements in the PNR and PNAC.⁶

This includes confidential information in modelling provided to the ISO. The recipient of confidential information may use confidential Information:

- a) for the purposes of performing a function under the Pilbara Regime, and
- b) as required or permitted by these Rules or the Pilbara Regime.

A recipient must not use confidential information for any other purpose, without the information owner's written consent.

A recipient must not disclose confidential information except as permitted by the Rules.

⁵ PNR Rule 71(2).

⁶ PNR Subchapter 11.2 and PNAC section 156.



More details about the PNR and PNAC confidential information regime is provided in the ISOs Guide to confidentiality - Access and connection.⁷

Information exchanged during the connection process will be undertaken electronically by email or through some form of secured electronic depository exchange.

A non-disclosure agreement with ADEWAP can be arranged if the applicant would seek such an agreement in addition to what is established by the PNR and PNAC.

⁷ Refer to <u>Guide-to-confidentiality-access-and-connection-3.pdf</u> (pilbaraisoco.com.au)



Figure 1: ADEWAP connection process overview

	Stage 1: Preliminary Enquiries and Concept	Stage 2: Connection Enquiry Request	Stage 3: Application to Connect	Stage 4: Connection Assessment, Construction and Commissioning
ADEWAP Indicative timeframes	As needed	2 – 6 months	6 – 12 months	1 – 24 months
ISO Indicative timeframes	n/a	20 business days	20 business days	20 business days
Indicative ADEWAP fees to customer	No cost	Up to \$200k (ex GST) determined by customer requirement	\$25k to \$100k (ex-GST) determined by connection complexity and involvement for additional technical and legal resources	\$30k to \$50k for meter data capture and PS configuration Customer provides financial security
Anticipated Customer actions & outcomes (or as otherwise agreed)	Submits preliminary enquiry, discusses connection requirements with ADEWAP.	Submit a connection enquiry. Provides information for feasibility study scope, assessment and report.	Submits connection application. Provides information for application assessment.	Provides information for design access studies & test plans & validations reports & models. Enters into ETAC with ADEWAP.
Anticipated ADEWAP actions & outcomes (or as otherwise agreed)	 Preliminary enquiry by applicant Early technical discussion Pre-feasibility (optional) Queue position estimate (non-binding) 	 Connection enquiry request Preparation of feasibility study scope Preparation of feasibility assessment Preparation of feasibility assessment report ADEWAP review and endorsement Provision of information to ISO Due diligence by ISO 	 Applicant submits application Preparation of preliminary access study scope Application assessment Preparation of updated network model Preparation of preliminary access studies report ADEWAP review and endorsement Provision of information to ISO Due diligence by ISO 	 Connection offer & acceptance Detailed design access studies report & test plan ISO due diligence Connection testing & validation reports ISO due diligence & certification Authorisation to energise Applicant construction and commissioning.



3. Stage 1: Preliminary enquiry & concept

Due to the nature of the APA Network and the likely complexity of access requests associated with connecting to a 66kV network, the ADEWAP connection process commences with a preliminary enquiries stage. The objective of the preliminary enquiry stage is to provide the prospective applicant an opportunity to conceptualise the connection requirements and seek early feedback from ADEWAP on feasibility before commencing a more technical connection enquiry stage.

The key steps include:

- 1) Preliminary enquiry by applicant
- 2) Early technical discussion
- 3) Pre-feasibility (optional)
- 4) Queue position estimate (non-binding)

3.1. Preliminary enquiry

ADEWAP requires prospective applicants to the APA Network to contact ADEWAP with preliminary enquiries before making a connection enquiry request.

The objective is to understand what the prospective applicant is seeking to achieve and to undertake an initial, high-level feasibility assessment, based on the capacity of the network and other relevant technical parameters.

The preliminary enquiry step provides opportunity for informal discussions about the prospective applicant's connection requirements, potential options and technical requirements including HTR requirements.

ADEWAP will provide early guidance to the applicant about the connection application process, indicative costs to the access seeker for undertaking assessments, likely timing, and if there are any other connection applications on a queue waiting for connection. ADEWAP will discuss the queue and queuing policy with the applicant.

The contact details for preliminary enquiries are set out in the following table.

Contact details

For preliminary enquiries, please send an email to the ADEWAP access enquiries email: nwisnetworkaccesseng@apa.com.au.

Attention: Head of Commercial

3.2. Early technical discussion

If the prospective application wishes to continue, ADEWAP requires an early technical discussion between ADEWAP and the applicant. The purpose of this step is to allow ADEWAP to consider technical issues, undertake desktop assessment, and provide early feedback to prospective applicants about the feasibility of the prospective connection.

ADEWAP will advise the applicant in writing whether the proposed connection is deemed feasible or not. If the proposed connection is not deemed feasible, the applicant will also be advised whether there are other options to achieve a network connection.



3.3. Optional pre-feasibility study

Based on the findings of the desktop assessment ADEWAP may recommend that the applicant undertake an Optional Pre-Feasibility Study.

An Optional Pre-Feasibility Study will most likely be recommended where there is complexity to the applicant's proposed connection, or where the applicant's usage / generation pattern may have adverse impacts on the voltage or frequency of the APA Network.

The Optional Pre-Feasibility Study will be undertaken by the applicant and its own cost. The benefit of undertaking the Optional Pre-Feasibility Study is that it can assist identifying technical issues early on. It intended to be an inexpensive way of addressing scope issues prior to the applicant paying to have the (non-optional) Connection Feasibility Assessment undertaken.

In general, work undertaken to refine the technical scope of the applicant's connection in the Optional Pre-Feasibility Study will be used for Stage 2 Connection enquiry request. An Optional Pre-Feasibility Study may be undertaken at any time during the Concept Stage or early in the Connection Enquiry Stage.

The prospective applicant will be required to undertake modelling to consider technical issues raised by ADEWAP during the early technical discussions. Depending on the technical issues, the modelling could be stand-alone engineering modelling or use a version of the ISO model. The intent is that learnings from this preliminary modelling exercise can be taken through to the full modelling, either as a finalisation of technical scope or as scenarios for use by ISO.

This is described in the modelling discussion of the following section

3.4. Queue position and indicative cost estimates

The Preliminary Enquiry and Concept Stage is not envisaged to be a lengthy part of ADEWAP connection process. However, the feedback loop between ADEWAP and the applicant will be critical to establish the high-level scope of activities that are to be progressed should the connection process continue.

In some instances, the applicant may need to reassess their electrical and infrastructure requirements and, as such, ADEWAP does not wish to impose a timeframe on this stage of the connection process.⁸

Should ADEWAP deem the proposed connection to be feasible, ADEWAP will provide an overview of the connection process and advise the prospective applicant in writing of the applicant's:

- a) non-binding position in the new connections queue (see ADEWAP Queuing Policy)
- b) Feasibility Assessment fee required to commence Stage 2.

The information provided in writing by ADEWAP to the applicant will remain valid for a period of three months.

While ADEWAP performs all works on a full cost recovery basis, it is estimated that the fee to undertake the Feasibility Assessment may be up to \$200,000 (ex GST). This will depend on the complexity of the proposed connection and any foreseeable impacts on the APA Network.

⁸ This feedback loop and the Optional Pre-Feasibility Study constitute further investigations by the applicant under section 69(2) of the PNAC.



4. Stage 2: Connection Enquiry & feasibility assessment

This stage involves the prospective applicant formally submitting a connection enquiry request to ADEWAP.⁹ The objective of the Feasibility Stage is to refine the scope of the proposed connection and set out information requirements in preparation for the Application Assessment (Stage 3).

Key steps include:

- 1. Connection enquiry request by applicant
- 2. Preparation of feasibility study scope
- 3. Preparation of feasibility assessment
- 4. Preparation of feasibility assessment report
- 5. ADEWAP review and endorsement of applicant information
- 6. Provision of information to ISO
- 7. Due diligence by ISO.

4.1. Connection enquiry

The applicant progresses to the Feasibility Assessment stage following completion of the Preliminary Enquiry and Concept stage by confirming in writing that it has:

- a) decided to proceed to the Feasibility Assessment Stage, and
- b) acceptance of the Feasibility Assessment fee that is advised during the Preliminary Enquiry.

The contact details for a connection enquiry request are set out in the following table.

Contact details

The connection enquiry request, please send an email to the ADEWAP access enquiries email: nwisnetworkaccesseng@apa.com.au.

Attention: Head of Commercial

4.1.1. ADEWAP response to connection enquiry

Following receipt of the applicant's connection enquiry, ADEWAP will provide the applicant with an invoice for the Feasibility Assessment fee.

Payment of the ADEWAP invoice will constitute commencement of the ADEWAP Access and Connection process, and a formal consideration of the applicant's request.

At the commencement of the connection enquiry, ADEWAP may send an information request to the applicant.

4.2. Access study scope, feasibility assessment and report

Over the course of Feasibility Assessment stage, ADEWAP may require the applicant to at their own cost:

- a) Prepare a feasibility study scope
- b) Undertake and provide further information during feasibility assessment

⁹ Stage 2 in this document aligns with Stage 1 Feasibility Assessment of the ISO Interim Procedures v.2.



c) Prepare a feasibility assessment report.

If an Optional Pre-Feasibility Study was prepared by the applicant as requested by ADEWAP, this will be input material for above information. During the review of applicant's documents, ADEWAP may require the applicant to respond to further technical queries and additional information requests to resolve technical matters.

It is recommended that a professional electrical engineer is engaged by the applicant to compile and complete the information request process.

4.3. ADEWAP review and endorsement of feasibility information

ADEWAP will use the information provided by the applicant to review the proposed connection. The applicant's proposed connection will be assessed against the PNR, HTR and ADEWAP Planning Standards and Criteria.

ADEWAP's review will include:

- a) a detailed assessment to confirm the technical elements of the network connection; and
- b) examination of compliance with the HTR (which includes power system modelling to assess network fault levels, frequency, harmonics and voltage stability thresholds).

The power system modelling required to assess HTR compliance will be advised by ADEWAP to the prospective connection applicant. ADEWAP encourages the applicant to engage third party modelling expertise to conduct the required modelling.

As an indication of possible requirements, the connection of dispatchable generation wishing to connect to the APA Network will at least require completion of the following:

- a) load flow study;
- b) harmonics study;
- c) credible contingency modelling; and
- d) fault level assessments.

The information provided by the applicant must be sufficient to allow ADEWAP to review and endorse the feasibility study scope, assessment and report and provide them to ISO.

Any feedback received from ISO will be passed back to the applicant and may require the applicant to resubmit part of the required information.

4.3.1. ETAC

The Feasibility Assessment stage provides ADEWAP with the information required to insert any specific terms or conditions into the Electricity Transfer Access Contract (ETAC) that ADEWAP will offer to the applicant.

These terms or conditions may include (but are not limited to):

- a) connection kVA and MW limits;
- b) priority right and curtailment conditions;
- c) conditions which ensure compliance with the HTR;
- d) generator performance settings; and
- e) terms relating to any required network devices or electrical equipment.



4.3.2. Multiple connection applicants

It may be more efficient to conduct one full assessment for multiple connections, provided that there is agreement between the affected applicants. The ADEWAP Queuing Policy addresses circumstances where there is more than one applicant in the same area proceeding through the connection process at a similar time.

4.4. Provision of information to ISO

4.4.1. Feasibility study scope

Following review and endorsement of the feasibility study scope, ADEWAP will provide the feasibility study scope to ISO for review. ISO is required to provide feedback to ADEWAP on whether it agrees with the access scope document and/ or provide feedback on the document.

4.4.2. Feasibility assessment

When the feasibility study scope is agreed by ISO, ISO will issue the current NWIS power system model capable of access and connection studies to ADEWAP. ADEWAP will discuss ISO findings with the applicant and provide ISO's NWIS power system model to the applicant, to enable the applicant to undertake a feasibility assessment.

4.4.3. Feasibility assessment report

Following ADEWAP's review and endorsement of the feasibility assessment report prepared by the applicant, ADEWAP may provide ISO with a copy of the feasibility assessment report and may request ISO to review and undertake due diligence.

ADEWAP may request, ISO review the feasibility assessment report provided and issue a letter detailing its due diligence findings on documents.

4.5. Timing and cost

This timeline for this stage will depend on the complexity of the connection enquiry request but is estimated to be 2-6 months.

The cost to the applicant for ADEWAP assessment in the Feasibility Assessment stage will depend on the complexity of the proposed connection. Indicative costs for Stage 2 are estimated to be up to \$200,000 (ex-GST).

ADEWAP's indicative fee does not include the cost of any power system modelling expertise commissioned by the applicant.

ADEWAP estimates that modelling of a connection scenario plus two sensitivities would take the independent third party approximately four months at an estimated cost of \$100,000-\$150,000 (ex-GST), albeit this is entirely dependent on the power system modelling confirming compliance with the HTR ¹⁰

This cost is separate to the ADEWAP Feasibility Assessment stage fee and is payable by the applicant.

¹⁰ This is an ADEWAP estimate only. All costs from external modelling providers will be quoted by that party on request of ADEWAP.



5. Stage 3: Application to connection & assessment

The Application Assessment stage involves the applicant submitting a formal application to connect to the APA Network.¹¹ This stage involves preparation of the preliminary access study report and updated network model.

Key steps include:

- 1. Applicant submits application to connect
- 2. Preparation of preliminary access study scope
- 3. Undertaking of application assessment
- 4. Preparation of updated network model
- 5. Preparation of preliminary access studies report
- 6. ADEWAP review and endorsement applicant information
- 7. Provision of information to ISO
- 8. Due diligence by ISO

At completion of this stage the applicant will have a draft ETAC from ADEWAP and a letter of approval from ISO.

5.1. Applicant submits application to connect

The Application Assessment stage commences when ADEWAP sends the applicant an ADEWAP Connection Application Form (see Schedule 2). The minimum information requirement is set out in Schedule 1.

Following receipt of the applicant's completed Connection Application Form, ADEWAP will advise the connection applicant in writing that the application has been received and whether there is a queue and their place in the queue as soon as reasonably practicable.¹²

ADEWAP may send an information request to the applicant.

5.2. Access studies report, application assessment and modelling

ADEWAP may require the applicant to prepare at their own cost:

- a) Preliminary access study scope;
- b) Provide further information during application assessment; and
- c) Preparation of updated network model.

The preliminary access study scope will use preliminary design data in line with the HTR and Good Electricity Industry Practice (GEIP). The scope of work is expected to include:¹³

- a) connection details;
- b) design parameters; and
- c) network model.

¹¹ Stage 3 in this document aligns with Stage 2 Application Assessment of the ISO Interim Procedures v.2.

¹² Refer to the ADEWAP Queuing Policy for a sample of the queue advisory letter.

¹³ Paragraph 3.3.2 ISO Interim Procedures v.2.



The power system modelling required to assess HTR compliance will be advised by ADEWAP. As an indication of possible requirements, the connection of dispatchable generation wishing to connect to the APA Network will at least require completion of the following:

- a) load flow study;
- b) harmonics study;
- c) credible contingency modelling; and
- d) fault level assessments.

These requirements will be discussed with the applicant.

ADEWAP will assess the information:

- a) a detailed assessment to confirm the technical elements of the network connection; and
- b) examination of compliance with the HTR (which includes power system modelling to assess network fault levels, frequency, harmonics and voltage stability thresholds).¹⁴

5.3. ADEWAP provides information to the ISO

5.3.1. Preliminary access study scope

ADEWAP will provide the ISO with the preliminary access studies and project specific network model. ¹⁵ The scope of work is to include connection details, design parameters, and network model.

ISO is required to review the information and provide ADEWAP with any:16

- a) observations including additional study scenarios;
- b) constraints;
- c) committed projects of interest; and
- d) to the extent the ISO is aware, the names of proponents of other non-committed projects where ADEWAP or Connection Applicant may choose to engage.

When the preliminary access scope is agreed by ISO, ISO must provide ADEWP with the current NWIS power system model capable of access and connection studies.¹⁷

5.3.2. Preliminary access studies report

A final version of the preliminary access studies report and associated project network model will be provided by ADEWAP to ISO. The final version of the preliminary access studies report will reflect when ADEWAP is ready to make an access offer to the connection applicant.

ADEWAP will prepare a draft ETAC for the applicant.

5.4. ISO due diligence

After receiving the preliminary access studies report and associated model, ISO will undertake due diligence. ISO will issue a letter to ADEWAP detailing its findings including if the preliminary access studies report is approved or not approved.

¹⁴ The ADEWAP Planning Standards provide details of the required criteria to achieve and maintain security and reliability on the network.

¹⁵ Paragraph 3.3.5 ISO Interim Access and Connection Procedure v.2

¹⁶ Paragraph 3.3.3 ISO Interim Access and Connection Procedure v.2

¹⁷ Paragraph 3.3.4 ISO Interim Access and Connection Procedure v.2



ADEWAP aims to ensure that the preliminary access studies report and associated modelling undertaken during this stage will provide sufficient information to meet ISO due diligence requirements.

It is envisaged that any ISO modelling will focus on the APA Network limits and the constraint formulation at network balancing points (i.e., the APA Network entry/exit points). ADEWAP estimates that such modelling could take between 3 and 6 months to complete. This will depend on the nature and technical complexity of an applicant's proposed connection and the impact that this has on network balancing points.

If ISO approves the preliminary access studies report, the project will be included in the NWIS power system model in accordance with the Interim Power System Modelling Procedure. ISO will update the model as more approved studies and information becomes available.

5.5. Timing and costs

The timeline for Stage 3 will depend on the complexity of the connection enquiry request but is estimated to be 6-12 months.

Indicative ADEWAP fees to the application for Stage 3 range from \$25,000 to \$100,000 (ex-GST) but may be higher depending on the complexity of the connection.

Note that the applicant will be liable for ISO costs related with the application including modelling and certification costs.



6. Stage 4: Connection assessment, construction & commissioning

Stage 4¹⁸ involves ADEWAP making a connection to the applicant following the acceptance of the preliminary access studies report by ISO is the preceding stage 3. This stage also involves the applicant and ADEWAP providing detailed design information to ISO.

The key steps include:

- 1. Connection offer & acceptance
- 2. Detailed design access studies report & test plan
- 3. ISO due diligence
- 4. Connection testing & validation reports
- 5. ISO due diligence & certification
- 6. Authorisation to energise
- 7. Applicant construction and commissioning.

6.1. Connection offer and acceptance

The Connection Acceptance Stage commences when the form and content of a draft, unexecuted ETAC has been agreed and modelling by the ISO is complete and approved. ADEWAP will issue an access offer within 1-2 months of completion of the Application to Connect in Stage 3. The form and content of the access offer will be the ETAC.

This process includes agreement between ADEWAP and the applicant of any early works and / or works required that would be subject to the ADEWAP Contributions Policy, which are likely to be documented under a separate early works agreement and included as conditions precedents to the ETAC.

The Connection Acceptance Stage involves the formal issue of the ETAC by ADEWAP to the applicant. Both parties then commence execution. The form and content of ADEWAP's standard ETAC is provided on the ADEWAP website¹⁹ under separate cover.

Acceptance of the offer occurs when the ETAC has been executed by both the applicant and ADEWAP and ADEWAP receives any financial security as required under the ETAC.

A cost estimated to fall within the range of \$30,000-\$50,000 (ex GST) is payable by the applicant to ADEWAP to finalise connection acceptance. This fee is charged to recover costs associated with account and invoicing setup, IT meter data capture and operational power station configuration, noting that any major cost items associated with connection works will be captured by the ADEWAP Contributions Policy or included within an early works agreement.

6.1.1. Early works agreements

An early works agreement may be entered into at any stage during the connection process if both ADEWAP and the applicant agree that the acquisition of long lead items or other works is required. Gas insulated switchgear and voltage transformers are typical examples of long lead items that may take around 18 months to be delivered from the time of placing an order.

¹⁸ Stage 4 in this document aligns with Stage 3 Connection Assessment of the ISO Interim Procedures v.2.

¹⁹ North West Interconnected System (NWIS) | APA Group



6.1.2. Access offer not made

However, in accordance with s.71(4) of the PNAC ADEWAP is not required to make an access offer:

- a) if the access application has been withdrawn;
- if ADEWAP has concluded that it is not technically feasible or consistent with the safe and reliable operation of the ADEWAP Port Hedland network to provide the service requested by the applicant, having made all reasonable efforts to accommodate the applicant's requirements including in relation to any required work;
- c) if the provision of the covered service requested by the applicant would require the extension of the ADEWAP Port Hedland network and that extension is not an augmentation covered by section 4 of the PNAC; or
- d) in the case of a new connection point, until the Pilbara ISO has provided a certification²⁰ that the new connection may proceed in accordance with the PNR.

The period for making an Access Offer may be extended in the circumstances outlined in section 71(2) of the PNAC:

- a) the applicant fails to pay any reasonable costs associated with progressing the application;
- the applicant fails to accept ADEWAP's reasonable proposal for conducting further investigations;
- the applicant fails to take actions in a timely manner which are reasonably required by us to progress the application; or
- d) there is another reason, beyond ADEWAP's reasonable control which directly affects the progress of the application and prevents us from progressing the application within that period.

6.1.3. Connection works

It is likely that an EPC contract will be entered into for completion of the connection works. Timeframes for these works will depend on the complexity and scale of the connection. Estimated timeframes for appointment of a contractor, commencement of works and the scheduled completion will be established. Deviation from these timeframes by either party should be communicated to ensure a timely connection.

6.2. Detailed design access studies report & test plan

ADEWAP may require the connection applicant to prepare at their own cost the ISO required detailed design access studies report and the test plan.²¹ These are required to be prepared in accordance with the HTR and GEIP. ISO requires the test plan to include performance tests required to validate the plant performance and the updated network model of the facility. Further guidance is provided in HTR 4.2.4.

ADEWAP will review the detailed design access studies report and the test plan in accordance with the HTR and GEIP to ensure that they meet ISO requirements. When satisfied that the access studies report and the test plan meet requirements, ADEWAP will endorse the applicant's access studies report and the test plan for submission to ADEWAP.

²⁰ PNR Rule 270

²¹ ISO Interim Procedure para.3.4.2



6.3. ISO due diligence

ADEWAP must provide the ISO with the detailed design access studies report and the test plan in accordance with the HTR and GEIP. The test plan is expected to include performance tests required to validate the plant performance and the updated network model of the facility. The test plan must also consider the impact of commissioning or testing on the system. The impact is a notifiable event under Rule 166 of the PNR.²²

When the ISO receives the detailed design access studies report and the test plan, the ISO must undertake due diligence and issue a letter detailing its findings including if the detailed design access studies report and test plan are approved.²³

If test plan is approved, the ISO must issue a notice to ADEWAP approving energisation for the purpose of testing and commissioning only. If the detailed design access studies report or test plan are not approved by the ISO, the ISO must provide reasons and consult on what further studies or information is required.

6.4. Connection tests and validation reports

ADEWAP has responsibility for ensuring a new connection complies with PNR, HTR and must provide ISO with a notice that certifies that the NSP has complied with PNR rule 269.

To meet this requirement, ADEWAP will require the connection applicant to provide assurance that the applicant meets their requirements under the rules and HTR. This will be required before energisation can occur.

Following performance testing, ADEWAP must provide the ISO with:

- network model validation report
- · validated network model of ADEWAP's network which includes the project; and
- a notice under Rule 270(1) of the Rules confirming:
 - all facilities connected, or to be connected, at the new connection comply with the PNR and HTR;
 - all requirements in the Rules and HTR regarding the approval and connection process for a new connection have been complied with;
 - determined and updated limit advice;
 - the Host NSP has consulted with the ISO on any new or revised constraint Rules;
 - any requests for exemption by the Connection Applicant have been managed and assessed in accordance with the Rules; and
 - o compliance with this Procedure.

6.5. ISO due diligence & certification

Upon receipt of the network model validation report (including the project model) and a notice under Rule 270(1) of the Rules, the ISO must undertake due diligence and advise ADEWAP of the outcome in writing and certify that the new connection may proceed or provide notification that the new connection cannot proceed.

²² ISO Interim Procedure paras.4.2 and 3.4.3

²³ ISO Interim Procedure para 3.4.4



If the ISO determines the new connection may proceed, the ISO will issue a notice of final approval for energisation (including commercialisation) of the equipment.

6.6. Authorisation to energise

At the completion of this stage ADEWAP will receive from the ISO an authorisation to energise. This is a confirmation that the works meet all the agreed requirements, and that an electrical connection can occur.

This confirmation is achieved through completion of testing and commissioning processes which will depend on the type of connection. The testing and commissioning processes followed by ADEWAP are set out within the document published by Energy Safety WA, titled "Guidelines for the Safe Management of High Voltage Electrical Installations".

6.7. Applicant construction and commissioning

The Applicant may only take electricity from the new connection point once the Applicant has provided ADEWAP confirmation that the works meet all the agreed requirements, and that energisation of the applicants facilities can occur.

This confirmation is achieved through completion of testing and commissioning processes which will depend on the type of connection. The testing and commissioning processes to be followed by Applicant are set out within the PNAC, PNR and HTR.



7. Access application delays and termination

ADEWAP will notify the applicant if its targeted timeframes cannot be met, including the reasons for delay, updated timeframes, along with the measures that can be implemented to reduce the likelihood of further delay.

ADEWAP will terminate an access application where after a three-year period, the applicant has not satisfactorily progressed the application. The applicant will be advised in writing that their application is terminated.

If an applicant has not progressed and is not in the queue, and in the intervening period another application has progressed such that the ADEWAP modelled network conditions will significantly change, the applicant will be advised in writing that their application is terminated and that it will need to recommence the process.

Where the applicant is in the queue, the ADEWAP Queuing Policy will apply.



Appendix A Connection Point Compliance applications

In December 2023, the ISO made changes to the PNAC (subchapter 9.2) to introduce requirements for host networks to consider connection applications from prospective customers where that customer's equipment to be connected is non-compliant with the PNR or HTR (Connection Point Compliance). The ISO has updated its Interim Access and Connection Procedure accordingly. This section seeks to align with the ISO Interim Access and Connection Procedure (v2.0).

The purpose of this Connection Point Compliance (CPC) process is to provide an alternate pathway for an applicant with assets that are non-compliant with the HTR and/or PNR (see rule 274A(3)) to connect those assets in a manner that does not compromise the safety, reliability or critical operation of the network should this be possible, without the need for an exemption under rule 64. For example, the use of an operational procedure in certain circumstances to avoid costly deep network augmentation.

This CPC process is designed to provide a framework to facilitate a relatively informal investigation of technical options between the applicant and ADEWAP. The process includes the following steps:

- 1. Preliminary assessment
- 2. Formal assessment
- 3. Determination
- 4. Notification

At any point through the connection process, where the applicant or ADEWAP determines an applicant's assets are non-compliant with the HTR or PNR, the standard application process ceases, and the applicant and ADEWAP will follow this CPC process.

A.1 Preliminary assessment

This process is designed to be undertaken in a collaborative manner and therefore relies heavily on this initial options assessment stage providing the necessary information for ADEWAP to:

- understand the potential impact of the non-compliant assets on the network; and
- consider all reasonable potential options (CPC Measures) that would mitigate all or part of any identified credible risk.

Where an applicant intends to connect non-compliant assets, the applicant must notify ADEWAP in writing, by email providing, at minimum, the following information should it not already be available to ADEWAP:

- details of the connection assets and the eligibility of the connection application under this CPC process in accordance with rule 274A(3) or 274A(4) of the PNR;
- details of the identified non-compliance, including a copy of the studies which identified the non-compliance where this was not undertaken by ADEWAP and reasons for not seeking to become compliant;
- details of the necessary equipment to be purchased, or activities required to make the assets compliant considered by the applicant, including where multiple options exist, and comparison of the relative merits and costs;



- options considered by the applicant as appropriate CPC Measures and any associated impacts (safety, Power System Security, Reliability, operational, environmental and financial) on any other party including ADEWAP; and
- a request for a preliminary meeting.

ADEWAP will schedule a preliminary meeting with the applicant to understand the project, and request any further information required to be provided to ADEWAP to facilitate its options assessment. The applicant and ADEWAP will:

- discuss the potential connection and possible CPC Measures;
- agree for both parties, where relevant to provide any outstanding required information; and
- agree next steps.

ADEWAP will work with the applicant to refine the information and documentation and agree what information will be contained within the Notice of Intent for CPC and associated CPC Application in addition to the elements required under paragraph 4.4.1 of the Interim Access and Connection Procedure.

A.2 Formal assessment

An applicant must only lodge a Notice of Intent for CPC once a preliminary assessment has been undertaken. This is to ensure there is sufficient time for ADEWAP to undertake any necessary review and assessment of all relevant information within the 20 business day timeframe set out in paragraph 4.5.3 of the Interim Access and Connection Procedure.

An applicant must lodge a Notice of Intent for CPC by email.

Where ADEWAP receives a Notice of Intent for CPC, it must acknowledge receipt by email within 2 business days and commence its review of the information provided. ADEWAP will endeavour to assess the proposal as soon as practicable.

At any point the applicant may withdraw, or revise an application by notifying ADEWAP by email.

In determining whether the proposed CPC Measures are acceptable, ADEWAP will consider:

- consistency of the proposal with the Pilbara Electricity Objective;
- reasons for the applicant not seeking to make the assets compliant;
- GEIP in the context of the proposal;
- the risks to the network, ADEWAP and other parties associated with the connection of the non-compliant assets;
- the adequacy of the proposed CPC measures in ameliorating or mitigating the identified risks;
- any costs and disadvantages associated with the connection of the non-compliant assets;
- any advantages of the connection of the non-compliant assets; and
- any other relevant information.



A.3 Determination

ADEWAP will accept the proposed CPC Measures and endorse the CPC Application, where ADEWAP reasonably considers:

- it would be unreasonable for any reason to require the applicant's assets to become compliant; or
- it would adversely impact Power System Security, Reliability or the Pilbara Electricity Objective should the applicant's assets become compliant; or
- the advantages of connecting the applicant's non-compliant assets are likely to outweigh the disadvantages considering all affected parties, and
- the proposed CPC Measures adequately ameliorate or mitigate any identified risk to Power System Security, Reliability or the Pilbara Electricity Objective.

Where ADEWAP considers one or more alternative CPC Measures would better address the impact of the non-compliance, ADEWAP may accept the proposal in a modified form. ADEWAP will provide adequate information on the reason for the modifications and engage with the applicant to agree a suitable alternative solution that ADEWAP will endorse in CPC Application.

ADEWAP will reject the proposal and will not endorse the CPC Measures, where the applicant is unable to provide sufficient information to satisfy ADEWAP the connection of the assets (with CPC measures in place, including in any modified form):

- would not impact Power System Security, Reliability or the Pilbara Electricity Objective; or
- is likely to, on balance be advantageous considering all affected parties,

Where, for any reason, ADEWAP is unable to adequately assess an applicant's proposal, it will reject the application with reasons.

A.4 Notification

ADEWAP will endeavour to notify the applicant of its decision, with reasons, by email within the prescribed within 20 business days.

Where ADEWAP accepts the proposed CPC Measures, including in a modified form, it will provide a signed statement stating:

- the studies performed are consistent with the connection standards; and
- ADEWAP endorses the CPC Application.

In accordance with paragraph 4.4.1(g) of the Interim Access and Connection Procedure, the applicant must include this statement in the CPC Application.

ADEWAP will engage with the applicant and ISO through the CPC Application process as outlined in section 4 of the Interim Access and Connection Procedure.



Schedule 1: ADEWAP Connection Application

In addition to completing the ADEWAP Connection Application form (provided below), the applicant will also need to provide the following information (if not already provided):

- CAD plan;
- site photos;
- single line diagram;
- all relevant load details;
- Statement of Compliance to AS/NZS 61000.3.11 and SA-SNZ TR IEC 61000.3.14; and
- all relevant environmental approvals and easements.



Schedule 2: Application to connection form

Section 1: Connection Applicant Details

Company Name:				
Registered Office Address:				ABN
			Street Address	Apartment / Unit #
	City		State	Post Code
Principal Contact Details:				
Name:				
		First	Last	M.I.
Phone:				
Email:				
Section 2: Service Selec	ction			
Connection Service (please	e select all tha	t are applicable)		
Generation connec	tion	New load connecti	on Alterat	ion to existing ction
Embedded Gene	eration		Other:	
				Please describe
X				
Section 3: Site Details				
Site Address				
Lot no.	Unit no	Street No		Street
Suburb				NMI (if applicable)
Section 4: Connection N	lominations			
Load Connection nomin	nated CMD			
Generation Connection C	apacity			



Section 5: Application Attach	nments			
Please tick all that apply				
CAD Plan	Disturbing Loads			
Site Photos	Statement of Compliance			
Single Line Diagram	Easement Agreements			
Load Breakdown	Other			
Other, Please specify:				
Section 6: Declaration of Co	nnection Applicant			
for the installation of the reques	knowledge and understand this application does not in any way provide approval sted connection to the APA network. I understand that this application is a step in ess as outlined in the ADEWAP User Access Guide.			
Additional information and requ	irements are applicable and required prior to the ETAC being finalised.			
I certify that the data provided is	s true and complete to the best of my knowledge.			
Name				
Position				
Signature	Date			