

User Access Guide

Alinta Energy

Effective to 30 June 2024

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PURPOSE

This is Alinta Duke Energy WA Power Pty Ltd's ("ADEWAP") User Access Guide prepared in accordance with the Pilbara Network Access Code ("PNAC"), the Pilbara Network Rules ("PNR") and the Harmonised Technical Rules ("HTR"). Section 36 of the PNAC establishes the need for this document as follows:

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 in this publication.

APPLIES TO

Users requesting a new connection, or connection alteration to the ADEWAP network in the Pilbara (as defined by the ADEWAP System Description) under the PNAC ("the applicant").

EFFECTIVE PERIOD

This Policy applies from 1 July 2021.

OTHER RELEVANT POLICIES

The User Access Guide should be read in conjunction with the following:

1. The ADEWAP Queueing Policy;
2. The ADEWAP Contributions Policy;
3. The ADEWAP Planning Standards: and
4. The ADEWAP System Description.

CONFIDENTIALITY

Information exchanged during the connection process will be undertaken electronically by email or through some form of secured electronic depository exchange. ADEWAP notes that it is unable to disclose information or data that contravenes the conditions imposed on it by the Foreign Investment Review Board.

ADEWAP respects the confidentiality associated with prospective network connections in accordance with s 72(5) of the PNAC. A non-disclosure agreement can be arranged if the applicant would seek such an agreement in addition to what is established by the PNAC.

NEGOTIATION

This User Access Guide sets out the process that a party interested in connecting to the ADEWAP 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.

CONNECTION PROCESS OVERVIEW

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 Network[1], including the covered network of ADEWAP. Network augmentation may be required to facilitate such connection depending on the size, scope, timing and location of a new connection.

The ADEWAP Network is a 66kV transmission network. Connection augmentations may be required for one of two reasons, to:

1. 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 ADEWAP network and the likely complexity of access requests associated with connecting to a 66kV network, this User Access Guide details a two-stage connection process:

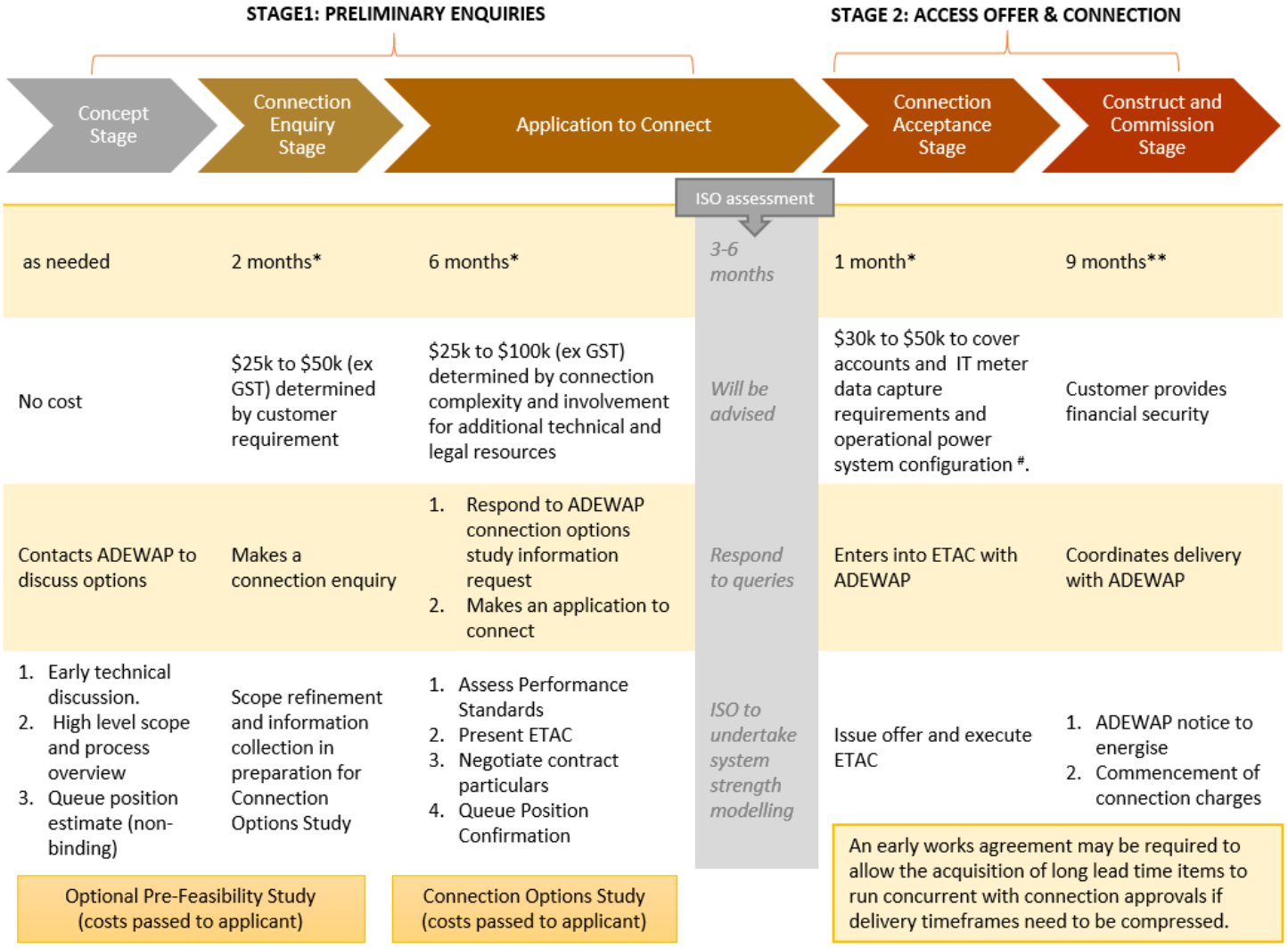
1. Preliminary Enquiries:
    a. Concept Stage
    b. Connection Enquiry stage
    c. Application to connect
2. Access offer and connection:
    a. Making an access offer
    b. Connection Acceptance
    c. Construction and Commissioning

The processes developed by ADEWAP are outlined conceptually in Figure 1, with each stage of the new connection process described within the sections of this User Access Guide that follow.

Where the applicant seeks to access the ADEWAP network but does not require a connection point to be established, and their connection will not affect other users, the same process will be applied and ADEWAP will undertake best endeavours to expedite the process.

[1] 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.

FIGURE 1: ADEWAP CONNECTION PROCESS OVERVIEW



^ Timeframes and costs are likely to be different to those indicated in his table if negotiations or approvals (e.g. land tenure, environmental, native title) are required.
* Timeframes assume that the Applicant has all required information (at hand and available), the performance of power system studies identify no electrical or network issues or complications and that minimal negotiation is required. Timeframes will vary in accordance with the ADEWAP Queueing Policy if multiple applicants are connecting.
** The complexity of connection works, EPC contractor selections and commissioning may result in increases to this timeframe.
# Major expenditure will be captured in early works agreements.

Preliminary Enquiries

An applicant's involvement in Stage 1 of the ADEWAP process is not obligatory, however due to the nature of the ADEWAP network and the likely complexity of access requests associated with connecting to a 66kV (high voltage) network, the two-stage connection process is recommended.

If an applicant chooses to omit Stage 1 of the two-stage connection process, and proceed directly to application, ADEWAP is unable to guarantee the indicative timeframes outlined in this document depending on the complexity of that connection request. An alternate timeframe for the provision of an access offer may need to be negotiated with the applicant in accordance with 71(1) of the PNAC.

The two-stage application process commences with the preliminary enquiry stage, outlined below.

Concept Stage

This initial Concept Stage requires the applicant to make contact via the ADEWAP access enquiries email: NWISnetworkaccessenquiries@alintaenergy.com.au.

The objective is to understand what the applicant is seeking to achieve and to undertake an initial, high-level assessment of feasibility, based on the capacity of the network and other relevant technical parameters (desktop assessment). The proposed connection will be assessed to make an initial "go / no-go" decision using the available technical detail at hand.

The Concept Stage requires an early technical discussion between ADEWAP and the applicant, which will also include ADEWAP providing an overview of the connection process and a non-binding estimate of the applicant's position in the new connections queue (see ADEWAP Queueing Policy). This discussion will assist in determining the cost for progression to the Connection Enquiry Stage.

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.

Should ADEWAP deem the proposed connection to be feasible, the applicant's indicative queue position (should they proceed) and the fee required to commence the Connection Enquiry Stage will be advised in writing. The information provided in writing by ADEWAP to the applicant will remain valid for a period of 3 months. While ADEWAP performs all works on a full cost recovery basis, it is estimated that the fee to progress to the Connection Enquiry Stage will range between $25,000 and $50,000 (ex GST) given the nature of our network and the likely applications that we may receive. This will depend on the complexity of the proposed connection and any foreseeable impacts on the ADEWAP network. It is not envisaged that the Concept Stage timeframes will be lengthy on the part of ADEWAP, 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.[2]

Optional Pre-Feasibility Study

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

[2] This feedback loop and the Optional Pre-Feasibility Study constitute further investigations by the applicant under PNAC s.69 (2).

An Optional Pre-Feasibility Study is most likely to 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 either the voltage or frequency of the ADEWAP network.

The Optional Pre-Feasibility Study will be undertaken at the cost of the applicant and is intended to be an inexpensive way of addressing scope issues prior to the applicant paying to have the (non-optional) Connection Options Study undertaken.

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

The Optional Pre-Feasibility Study will be undertaken by an independent, third party modelling provider. This is described in the modelling discussion of the Connection Options Study section below, along with further detail in relation to the types of modelling that may be required.

Connection Enquiry Stage

The applicant progresses to the Connection Enquiry Stage following completion of the Concept Stage by confirming in writing its:

- decision to proceed to the Connection Enquiry Stage; and
- acceptance of the Connection Enquiry Stage fee that is advised during the Concept Stage.

ADEWAP then provides the applicant with an invoice for the Connection Enquiry Stage fee amount, where payment of the ADEWAP invoice will constitute commencement of the Connection Enquiry Stage.

The Connection Enquiry Stage provides further scope refinement and information collection in preparation for the Connection Options Study.

ADEWAP may send an information request to the applicant. ADEWAP may also 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. The extent to which ADEWAP will require information from the applicant will be influenced somewhat by whether the Optional Pre-Feasibility Study was undertaken.

The applicant will be advised at the completion of the Connection Enquiry Stage.

Application to Connect

The Application to Connect Stage commences when ADEWAP receives from the applicant an ADEWAP Connection Application form (see Schedule 1: ADEWAP Connection Application). ADEWAP will advise the applicant in writing of their place in the queue on receipt of a completed ADEWAP Connection Application form.[3]

The Application to Connect Stage of the connection process incorporates the Connection Options Study.

Assessment of the applicant's proposed connection against the HTR and ADEWAP Planning Standards is completed through the Connection Options Study. This also provides ADEWAP with the information required to insert any specific terms or conditions arising from the Connection Options Study into the Electricity Transfer

[3] Refer to the ADEWAP Queueing Policy for a sample of the queue advisory letter.

Access Contract (ETAC) that ADEWAP will offer to the applicant. These terms or conditions may include (but are not limited to):

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

ETAC terms and conditions will be negotiated between ADEWAP and the applicant where a proposed connection does not meet the requirements of the ADEWAP Reference Service.

Indicative costs for this stage of the connection process will vary between applicants based on the complexity of the proposed connection and the extent of associated costs such as, for example, vegetation clearing, land tenure or legal costs.

At completion if this stage the applicant will have a draft ETAC, subject to the completion of any ISO assessment (if required).

CONNECTION OPTIONS STUDY

The Connection Options Study commences during the Application to Connect Stage.

The Connection Options Study includes:

- a detailed assessment to confirm the technical elements of the network connection; and
- examination of compliance with the HTR (which includes power system modelling to assess network fault levels, frequency, harmonics and voltage stability thresholds).[4]

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 ADEWAP network will at least require completion of the following:

- load flow study;
- harmonics study;
- credible contingency modelling; and
- fault level assessments.

An independent third party currently holds an interconnected power system model for the NWIS on behalf of the independent Network Service Providers. This model that incorporates network data and information for the ADEWAP, Horizon Power and Rio Tinto networks, and as such requires consent from all independent Network Service Providers prior to its use.

This third party provides power system modelling of the interconnected NWIS networks on a fee-for-services basis. 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 $50,000-$100,000 (ex. GST), albeit this is entirely dependent on the power system modelling confirming compliance with the HTR.[5] This cost sits separate to the ADEWAP Connection Enquiry Stage fee and is payable by the applicant.

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

[5] This is an ADEWAP estimate only. All costs from external modelling providers will be quoted by that party and advised to the applicant when such a request is made to ADEWAP.

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

Completion of the Connection Options Study provides input to any ISO system strength assessment activities, and it is the final element of the Application to Connect Stage.

ISO Assessment and Modelling

The ISO may undertake power system modelling to confirm compliance of the applicant's proposed connection with the HTR.

ADEWAP aims to ensure that modelling undertaken though its Connection Options Study will provide sufficient information to meet any ISO modelling requirements, albeit this cannot be guaranteed.

It is envisaged that any ISO modelling will focus on the ADEWAP network limits and the constraint formulation at network balancing points (i.e. the ADEWAP 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.

It is expected that the ISO will utilise the services of an independent, third party provider of power system modelling services, and consequently will be subject to timeframes and costs put forward by the third-party provider (which will be passed through to the applicant). ADEWAP will endeavour to ensure that the applicant is advised of an estimate of these costs to be incurred by the ISO prior to ISO undertaking the modelling.

ACCESS OFFER

We will issue you with an Access Offer within 1 month of completion of the preliminary enquiry stage of the ADEWAP two-stage connection process.

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

- if you have withdrawn the application;
- if we have concluded that it is not technically feasible or consistent with the safe and reliable operation of the ADEWAP network to provide the service requested by you, having used all reasonable efforts to accommodate your requirements including in relation to required works;
- if the provision of the covered service requested by you would require the extension of ADEWAP network and that extension is not an 'augmentation' as covered by section 4 of the Code; or
- in the case of a new connection point, until the Pilbara ISO has provided a certification 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 s.71(2) of the PNAC:

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

Connection Acceptance

The Connection Acceptance Stage commences when the form and content of a draft, unexecuted ETAC has been agreed and (if required) modelling by the ISO is complete and approved. 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. Schedule 2 provides the form and content of ADEWAP's standard ETAC for a reference service.

A cost estimated to fall within the range of $30,000-$50,000 (ex GST) is payable by the applicant 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.

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.

Construct and Commission

This stage commences when the ETAC has been executed by both the applicant and ADEWAP, and ADEWAP receives any financial security as required under the ETAC.

Construction

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.

Commissioning

At the completion of this stage the Applicant will receive from ADEWAP 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*".

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 3-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 Queueing Policy will apply.

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.

ADEWAP Connection Application

Section 1: Connection Applicant Details

Company Name: _____

ABN

Registered Office Address: _____

Street Address *Apartment/Unit #*

_____

City *State* *Post Code*

Principal Contact Details:

Name: _____

Last *First* *M.I.*

Phone: _____ Email _____

Section 2: Service Selection

Connection Service (*please select all that are applicable)*

☐ Generation connection ☐ New load connection ☐ Alteration to existing connection

☐ Embedded Generation ☐ Other

Section 3: Site Details

Site Address

_____ _____ _____ _____

Lot no. *Unit no* *Street No* *Street*

_____ _____

Suburb *NMI (if applicable)*

Section 4: Connection Nominations

Load Connection nominated CMD

Generation Connection capacity

Section 4: Application Attachments

Please tick all that apply

- ☐ CAD Plan
- ☐ Site Photos
- ☐ Single Line Diagram
- ☐ Load Breakdown
- ☐ Disturbing Loads
- ☐ Statement of Compliance
- ☐ Easement Agreements
- ☐ Other

Please specify:

_____

_____

_____

_____

_____

_____

Section 5: Declaration of connection applicant

By signing this application, I acknowledge and understand this application does not in any way provide approval for the installation of the requested connection to the ADEWAP network. I understand that this application is a step in the connection application process as outlined in the ADEWAP User Access Guide.

Additional Information and requirements such as the Connection Agreement and technical data are applicable and required prior to the connection agreement being finalized.

I certify that the data provided is true and complete to the best of my knowledge.

Name: _____

Position _____

Signature: _____ Date: _____

SCHEDULE 2: SAMPLE ENERGY TRANSFER ACCESS CONTRACT ("ETAC")

Refer to separate attachment