

Company Procedure

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<i>(Supersedes Branch Procedure (Strategic Asset Management) NCP 2101.am8)</i>		

GAM 0113 DEMAND MANAGEMENT PROGRAM DEVELOPMENT

1.0 PURPOSE

To provide details of the Demand Management (DM) Program Development process, including investigation, development of credible non-network options, evaluation using the process outlined in the Regulatory Investment Test – Distribution (RIT-D) and if cost effective, the implementation of DM programs. This process is in line with the National Electricity Rules (NER) chapter 5, part B, Network Planning and Expansion Framework and implements the Company Policy 9.2.8 – Demand Management.

2.0 SCOPE

This procedure applies to the identification of emerging constraints on the distribution network, the screening for non-network options, the investigation and identification of credible non-network options via a public consultation process and/or in-house investigation, evaluation of options, and the implementation of cost-effective DM programs.

Functions carried out include the following activities:

- public disclosure;
- credible options identification;
- non-network option screening;
- non-network option investigation and consultation;
- submission evaluation;
- DM program development/approval; and
- DM program implementation.

3.0 REFERENCES

Internal

[Board Policy \(Network\) 9.0](#) – Network Asset Management
[Company Policy \(Network\) 9.2.1](#) – Network Planning
[Company Policy \(Network\) 9.2.8](#) – Demand Management
[Company Policy \(Procurement & Logistics\) 12.1](#) – Purchasing
[Company Procedure \(Network\) GAM 0035](#) – Major Project Formulation and Approval
 Annexure A – Demand Management Program Development

External

Electricity Supply Act 1995 (NSW)
 AS Records classification handbook – HB5031 – 2011
 General Retention and Disposal Authority: Network Records GA40
 National Electricity Rules Chapter 5 Part B
 Reliability and Performance Licence Conditions for Electricity Distributors, July 2014

4.0 DEFINITIONS

Area plans

A plan outlining the network need, strategic consideration of options to address the needs, proposed major capital investments, and DM programs for a specific sub-transmission area. This plan covers a specific planning horizon period and is reviewed regularly in accordance with the company planning standards and requirements.

Australian Energy Regulator (AER)

The national body charged with regulating the provision of energy within Australia.

Demand Management (DM)

Any initiative that reduces peak demand drawn from the electricity grid by reducing customer demand (temporarily or permanently) or by incorporating a separate energy source downstream of the network constraint or by providing network energy storage or power factor correction. This is also known as “non-network option”.

Demand side engagement document

A public document produced and published by the company which is a RIT-D requirement and details the process adopted to identify and evaluate non-network options for addressing network limitations and how all proponents are able to submit proposals.

Demand Side Engagement Register

Also known as the Register of Interested Parties and is found on the company’s web site. A facility where any interested party is able to register their details to receive information regarding the companies DM activities and non-network option investigations.

Distribution Annual Planning Review (DAPR)

A publicly disseminated annual report which outlines demand and capacity forecasts for the electricity network. It also described the company’s reliability performance and DM activities for the previous year.

Document control

Employees who work with printed copies of documents must check the BMS regularly to monitor version control. Documents are considered “UNCONTROLLED IF PRINTED”, as indicated in the footer.

Draft Project Assessment Report (DPAR)

Draft project assessment report means the report prepared under clause 5.17.4(i) of the National Electricity Rules.

Executive Leadership Group

Includes Chief Executive Officer, Chief Operating Officers, Group Chief Financial Officer, Group Executive Network Strategy, Group Executive People & Services and Board Secretary.

Executive Leadership Team

Chief Operating Officer, General Manager Health, Safety & Environment, General Manager People & Services, Chief Engineer, General Manager Network Development, General Manager Network Operations, General Manager Finance & Compliance and General Manager Information, Communications & Technology.

Final Project Assessment Report (FPAR)

Final project assessment report means the report prepared under clauses 5.17.4(o) or (p) of the National Electricity Rules.

Recordkeeping

Making and maintaining complete, accurate and reliable evidence of business transactions in the form of recorded information (Source: AS Records classification handbook – HB5031 – 2011).

Regulatory Investment Test – Distribution (RIT-D)

The test developed and published by the AER in accordance with clauses 5.17.1 and 5.17.2, as in force from time to time, and includes amendments made in accordance with clause 5.17.2.

Request for Proposal (RFP)

A public process where all relevant and available information is provided in the public domain for stakeholders and interested parties to analyse and submit non-network options and alternatives that may overcome the network capacity constraint in order to defer or avoid expansion of the distribution network.

Review date

The review date displayed in the header of the document is the future date for review of a document. The default period is three years from the date of approval however a review may be mandated at any time where a need is identified due to changes in legislation, organisational changes, restructures, occurrence of an incident or changes in technology or work practice.

Screening test

A test undertaken by the electricity distributor to determine whether it is reasonable to expect that a non-network option would be technically and economically feasible to address a network need, and therefore whether to initiate a non-network option investigation including public consultation

5.0 ACTIONS

All actions are based on providing a transparent and consistent process across the three Network companies which complies with all regulatory requirements.

The company produces a plan that details the DM activities and non-network option investigations to be conducted in the following five years. This includes DM programs to be implemented, DM programs released for public consultation and where screening for non-network options is to be conducted.

5.1 Public disclosure

The planning process identifies emerging network limitations on an annual basis as per the company's planning processes. Generally network constraints are disclosed through a number of publications which include:

- DAPR – Distribution Annual Planning Review;
- Non-Network Options Report; and
- RFPs (or other formal tender processes).

Copies of these documents are available on company internet websites, and disseminated to interested parties who are registered on the Demand Side Engagement Register.

The purpose of the externally issued documents is to allow external stakeholders and interested parties to submit ideas and proposals for non-network alternatives. This is in accordance with the National Electricity Rules (NER) chapter 5 Part B, Network Planning and Expansion. Each constraint with the most expensive credible network option greater than \$5 million or where work is required to meet individual feeder performance standards for reliability (as per the distributor's license conditions) must be screened for non-network options.

The company may investigate non-network options for projects where the most expensive credible network option is less than \$5 million where it is considered that a non-network option has the potential to cost effectively defer or avoid the network option.

5.2 Credible options identification

The initial planning investigation process verifies and analyses the network limitation to identify operational solutions that are low cost and quick to implement. These may include re-rating of equipment, load transfers or easily replaced equipment that would remove the limitation. When all low cost operational solutions have been exhausted the planning investigation will advance to a more detailed analysis.

The planning process includes a range of pathways by which DM is considered in the network limitation investigation process. The two primary pathways are during development of potential credible options for individually identified network needs, or as part of the integrated consideration of options in Area Plan reviews. In either case, a DM screening test is conducted where a change in demand could have a material impact on the development of least cost solutions to address the network needs.

The planning process captures major investments required in the network at both an area plan and the localised network limitation level. This allows for the planning of non-network options investigations for large geographic areas, considering obligations holistically to capture synergies between project options, and localised constraints that arise from natural customer load growth or area development and re-development. All identified network limitations then proceed to credible options development stage.

Both supply side and DM options are considered equally in developing the optimal solution to address the electricity supply requirements of the community within the planning process.

5.3 Non-network option screening

Every limitation where the most expensive credible option is estimated to be greater than \$5 million, or approved lower limits, will be screened to determine the feasibility of a non-network option. In addition to this, Reliability and Performance Licence Conditions stipulate that certain reliability improvement work required to meet individual feeder standards must also be screened for feasible non-network options where cost effective.

The screening test is to be carried out as early as possible in the planning process to allow sufficient time to investigate and implement any feasible non-network option. This will be at least 18 to 24 months prior to the forecast date that the system support investment decision must be made, with the exception of those projects required to meet individual feeder standards which may be as short as nine months. Larger projects will need a longer development timeframe. The company produces a plan for DM activities which contains the details and timing of projects to be screened.

Non-network option screening involves investigating the following areas:

- customers in the area – load size and type;
- load characteristic of the network;
- demand reduction level and timing required to address network limitation;
- value of deferral (based on preferred network option);
- complexity of demand reduction, ie seasonal issues, growth rate; and
- timing of demand reduction implementation and load growth.

Each screening report is to be placed on the company web site. This is a regulatory requirement to publish a notice setting out the reasons for the determination, including any methodologies and assumptions used in making the determination.

All registered participants on the Demand Side Engagement Register will receive notice of the release of the DM Screening report.

5.4 Non-network option investigation – public consultation

Where a network limitation has been screened and a non-network option is shown to be feasible a detailed investigation will be performed. This involves the production of a Non-Network Options Report which commences the public consultation process. The Non-Network Options Report is to contain sufficient detail to allow a proponent to submit a comprehensive and complete proposal that addresses the network limitation and the peak demand causing the limitation. The Non-Network Options Report must also contain an indication of the value of demand reduction in order for proponents to determine the cost effectiveness of their proposal. The report will also contain:

- technical characteristics of the network;
- details of the network need;
- details of credible options; and
- information on how to submit a proposal.

The company will provide interested parties an opportunity to submit proposals for non-network options via a public consultation process. This may be via a public tender or the DAPR. The public consultation will be open for not less than three months in which interested parties may make submissions for non-network options.

To broaden the reach of public consultation the results of the screening tests may also be listed in the DAPR. Details of the analysis and where non-network options will be further investigated are also detailed in the DAPR.

All registered participants on the Demand Side Engagement Register will receive notice of the release of the Non-Network Options Report or other public tender processes.

5.5 Submission evaluation

The submission received is to contain sufficient information to conduct a thorough evaluation of the proposal. If insufficient detail is provided to perform the evaluation contact will be made with the proponent to request further information as per the Demand Side Engagement Document.

All submissions will be reviewed equally and ranked in accordance with the following criteria:

- demand reduction potential (kVA);
- cost of proposal (NPV and \$/kVA);
- time of day/seasonality of the demand reduction available;
- time frame for implementation; and
- reliability of demand reduction (risk of non-delivery or non-performance).

The economic evaluation is performed using the company's approved methodology, standards and financial criteria to determine the present value of costs and benefits. The evaluation will determine the option or combination of network and non-network options that provide the best net economic value and achieves the desired outcome.

5.6 DM program development/approval

On completion of this stage of the economic evaluation of submissions under the RIT-D process, a preferred option will be identified. If the preferred option is a non-network option or includes a non-network component the process is to issue a DPAR regardless of the cost of the preferred option. The report will be produced in accordance with the RIT-D process (refer Annexure A – Demand Management Program Development). Once the DPAR consultation period is complete all submission will be addressed and if appropriate the preferred option will be amended.

A FPAR will be published if the preferred option is greater than \$20 million. The FPAR will be included in the next issue of the Distribution Annual Planning Report if below \$20 million. All responses will be addressed and disputes referred to the Australian Energy Regulator (AER). On completion of the DPAR and FPAR processes and after addressing all stakeholder issues the preferred option will be submitted for company approval. The preferred option will then be submitted to the appropriate approving authority within the organisation and/or NSW to approve implementation (refer Annexure A – Demand Management Program Development).

5.7 DM program implementation

Upon approval to implement the DM program the implementation phase will commence which will involve negotiating an agreement with the preferred proponents(s) and/or service provider.

Proponents will include a range of services which will involve different types of agreements to be developed. The Network Demand Manager is responsible for the negotiation and the development of formal agreements and to conduct the appropriate legal review. Formal agreements will need to cover the following areas:

- demand reduction targets;
- timeframes for implementation;
- milestones;
- remuneration, timing and method; and
- metering and verification.

The legal review will also need to address all terms and conditions, risks, liabilities, confidentiality and other legal obligations. The agreement/contract will be developed to comply with Company Policy 12.1 – Purchasing, to address the proper processes, probity and guidelines. The ongoing management of agreements and targets is the responsibility of the Network Demand Manager. Reporting of all DM program to internal and external stakeholders is also the responsibility of the Network Demand Manager.

6.0 RECORDKEEPING

The table below identifies the types of records relating to the process, their storage location and retention period.

Type of Record	Storage Location	Retention Period*
Demand Side Engagement Register	Endeavour Energy web site	Required as State Archives – as determined by GA40 section 6.1
Screening Tests	Endeavour Energy web site Asset & Network Planning Branch Recordkeeping system	Required as State Archives – as determined by GA40 section 6.1
Demand Management Agreements	Endeavour Energy web site Asset & Network Planning Branch Recordkeeping system	Required as State Archives – as determined by GA40 section 6.1

Type of Record	Storage Location	Retention Period*
Draft Project Assessment Reports	Endeavour Energy web site Asset & Network Planning Branch Recordkeeping system	7 years after action completed, then destroy – as determined by GA40 section 6.2
Final Project Assessment Reports	Endeavour Energy web site Asset & Network Planning Branch Record keeping system	Required as State Archives – as determined by GA40 section 6.1
Distribution Annual Planning Reviews	Endeavour Energy web site Asset & Network Planning Branch	Required as State Archives – as determined by GA40 section 6.1
Non-network Options Reports	Endeavour Energy web site Asset & Network Planning Branch Recordkeeping system	Required as State Archives – as determined by GA40 section 6.1

* The following retention periods are subject to change, eg if the records are required for legal matters or legislative changes. Before disposal, retention periods must be checked and authorised by the Records Manager.

7.0 AUTHORITIES AND RESPONSIBILITIES

Chief Executive Officer has the authority and responsibility for approving those project proposals which are within their delegated authority.

Chief Operating Officer has the authority and responsibility for:

- approving this procedure;
- approving those project proposals which are within their delegated authority; and
- endorsing the submission of major project proposals to the Investment Governance Committee.

Chief Engineer has the authority and responsibility for:

- endorsing this procedure; and
- endorsing the preferred non-network option resulting from the analysis covered in this procedure.

Manager Asset & Network Planning has the authority and responsibility for:

- endorsing this procedure;
- managing the selection of the appropriate DM solutions; and
- managing the effective and timely deployment of DM solutions.

Network Demand Manager has the authority and responsibility for:

- deploying of this procedure;
- developing and implementing of DM programs to address identified network constraints;
- producing the plan detailing the DM activities and non-network option investigations;
- managing the selection of the appropriate DM solutions;
- negotiating contracts and agreements associated with the enactment of DM solutions; and
- managing the effective and timely deployment of DM solutions.

8.0 DOCUMENT CONTROL

Content Coordinator : Network Demand Manager

Distribution Coordinator : GRC Process Coordinator

Annexure A – Demand Management Program Development

