



**ABATEMENT CERTIFICATE
PROVIDER
GUIDE TO APPLYING
DEMAND SIDE ABATEMENT
RULE**

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Table of Abbreviations

The following abbreviations are used in this Guide:

ACP	Abatement Certificate Provider (under the NSW Greenhouse Gas Reduction Scheme)
CH₄	Methane
CO₂	Carbon Dioxide
MLF	Marginal Loss Factor (applying to Generating System as defined in the Commonwealth's <i>Renewable Energy (Electricity) Act 2000</i>)
N₂O	Nitrous Oxide
NER	National Electricity Rules (as administered by the Australian Energy Market Commission)
AEMO	Australian Energy Market Operator (formerly NEMMCO)
NGACs	NSW Greenhouse Gas Abatement Certificates
ORER	Office of the Renewable Energy Regulator
PJ	Petajoule (unit of energy) = 1 x 10 ¹⁵ J
PPA	Power Purchase Agreement
REC	Renewable Energy Certificate (under the Commonwealth's <i>Renewable Energy (Electricity) Act 2000</i>)

Section One – Introduction

1.1 Purpose of the Guide

This Guide has been developed to assist people applying to the NSW Greenhouse Gas Scheme Administrator for accreditation as an abatement certificate provider (ACP) under the *Greenhouse gas Benchmark Rule (Demand Side Abatement) No.3 of 2003* as amended on 26 June 2009 (the DSA Rule).

The Guide provides directions and worked examples to assist you to fill out the Application Form – Demand Side Abatement (the Application Form) and required Attachment for your project. Please note that this Guide does not substitute for legal advice.

1.2 Using the Guide

Information found in Section 2 of the Guide relates to filling in the Application Form (comprised of Parts 1 to 5 and Attachment A). A reference in the Guide to “you” means the person completing the Application Form.

1.3 Legislation

The NSW Greenhouse Gas Reduction Scheme (the Scheme) is implemented through Part 8A of the *Electricity Supply Act 1995* (the Act). The Act outlines liability requirements for Benchmark Participants and establishes the classes of activities which are eligible for the creation of abatement certificates (transferable NSW Greenhouse Abatement Certificates (NGACs) and non-transferable Large User Abatement Certificates (LUACs)).

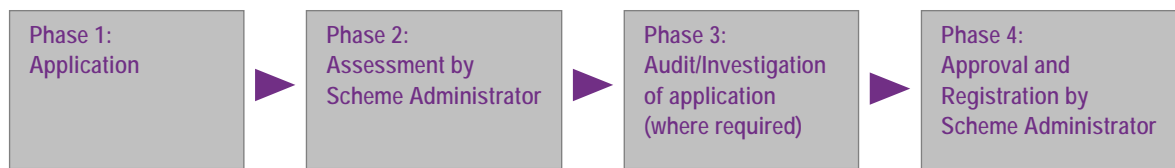
Part 8A and Part 8B of the *Electricity Supply (General) Regulation 2001* (the Regulation) provide further guidance on the implementation and operation of the Scheme.

A series of Greenhouse Gas Benchmark Rules (the Rules) support the legislation and detail how Benchmark Participants will measure their compliance, and how abatement certificates are created. Applicants seeking to become accredited to create NGACs for Demand Side Abatement activities should refer to *Greenhouse gas Benchmark Rule (Demand Side Abatement) No.3 of 2003* as amended on 26 June 2009.

These documents can be downloaded from the Scheme website www.greenhousegas.nsw.gov.au

1.4 Accreditation Process

Figure 1 below shows an overview of the process of becoming an accredited Abatement Certificate Provider. More detailed process maps identifying each of the phases outlined below are provided in Appendix 1 of this Guide.

Figure 1: Accreditation Process**Phase 1: Application**

When applying for accreditation you must ensure that you have completed all relevant forms and attached all supporting documents. Incomplete applications will not be accessed by the Scheme Administrator and may delay your application or result in the rejection of your application.

Every application must be accompanied by a non-refundable application fee of \$500 (**GST exempt**). This fee may be paid either by cheque or, preferably, EFT:

- Cheque payments should be made out to the Independent Pricing and Regulatory Tribunal of NSW.
- EFT payments should be made to:

Westpac Banking Corporation
 BSB: 032 001
 Account No: 205717
 Account Name: IPART

Note: When paying by EFT please ensure that you attach a copy of your remittance advice with your application.

Phase 2: Assessment by Scheme Administrator

The Scheme Administrator will initially review the application for completeness of information and documentation requested in the Application Form and specified in this Guide. Depending on the application's level of completeness, the Scheme Administrator can either refuse the application, or proceed further with assessing the adequacy of the information provided.

Depending on the adequacy of information provided in the application, the Scheme Administrator will then determine whether the project is eligible under the Rule. If the information provided is inadequate to determine whether the project is eligible, the Scheme Administrator will request more information.

Note: The applicant may be required to pay the Scheme Administrator's costs for further investigating an application for accreditation, in addition to the application fee and any subsequent audit costs. However, an applicant may withdraw its application prior to any investigation being undertaken.

If a project is determined to be eligible under the Rule it will then proceed to Phase 3, whereby an audit of the application can be undertaken (where necessary).

Phase 3: Audit where required

Prior to conducting an audit you will be advised of the related work scope required and the anticipated costs. While the Scheme Administrator appoints the auditor, you will bear the costs of the audit which must be paid before the audit is undertaken. An applicant may withdraw its application prior to an audit being undertaken.

An audit will be undertaken in accordance with the scope determined by the Scheme Administrator. Generic audit scopes are available on the Scheme website as a guide. However, audits may also include additional scopes items specific to each project. You must facilitate the efficient and effective performance of such activity. Investigations or audits may review, among other things:

- eligibility for accreditation
- calculations made to determine total Greenhouse gas emissions or baselines
- calculations or estimations of output levels, and
- the appropriateness of selected calculation methods.

The auditor will be engaged by the Scheme Administrator from the Scheme's Audit and Technical Services Panel.

The case studies on the Scheme website provide examples of audit scopes and approximate audit costs.

Phase 4: Approval and Registration

Based upon its review of the available information and the results of any investigation and/or audit, the Scheme Administrator will determine if the applicant should be accredited.

If successful, you will be notified by the Scheme Administrator advising you of your conditions of accreditation and you will be listed on the Scheme Registry as an accredited ACP. Unsuccessful applicants will be informed in writing of the reasons for refusal of their application.

Timing of Audit

A risk-based approach is used by the Scheme Administrator to determine the scope of ongoing audits of abatement activity and whether these should be conducted before or after the registration of abatement certificates. The initial audit requirements for each ACP would be determined at the point of accreditation as an ACP. However, an ACP's risk rating and hence audit requirements may be varied through time to reflect changes in the risk profile of the abatement activity. Risk rating will be determined based upon such factors as the complexity of the abatement activity, the estimated number of certificates to be created and the applicant's compliance history (if any) as an ACP.

Section Two – Application Form

The following section provides a step-by-step guide to completing each part of the Application Form.

Cover page

The Application Form cover page has two fields which you are required to complete. You are required to insert:

- The legal name (not merely the business name) of the applicant (or all of them, if the applicant is comprised of more than one person/entity).
- The name of the project. Please note the project name must be:
 - a descriptive name, not an alphanumeric code. e.g. “Sunnyside Cogeneration Facility”, not “SCF1”. If your application is successful the name of the project will be placed on the Scheme Registry. As this information will be publicly available, you should take care to choose a name that you are happy to have the public use to identify you and your project.
 - less than 50 characters.

Part One – Applicant’s Details

Part One asks you to provide a summary of the details of the applicant, the people the Scheme Administrator should contact regarding the application, and whether you are applying for the project as either the *Original* Abator or *Nominated* Abator.

1(a) Who is the applicant?

When completing this question, please state:

- the full legal name (not merely the business name) of the applicant (or all of them, if the application is from more than one person/entity),
- the Australian Business Number (ABN), and Australian Company Number (ACN) if this is also available, and
- the type of entity must also be provided (eg is the applicant an individual, company, partnership, incorporated association, government department, statutory corporation, etc).

Note: For the purposes of this Guide any reference to “you” is equivalent to “applicant”.

1(b) Who are the contact people for the application?

This question identifies the key individuals involved with the application for accreditation.

Contact Person 1 must be a person responsible for the activities leading to the creation of NGACs. This person is likely to be the author of the Application Form. This person will be the

primary contact person for all communications with the Scheme Administrator, as well as the 'Key User' for registering NGACs (see below). **This contact person must be an employee of the applicant and not an external consultant.**

The Scheme Administrator will designate Contact Person 1 as the 'Key User' of the Scheme Registry for this accreditation unless otherwise advised. Guidance Point 1 contains a brief introduction to the Scheme Registry and the role of the Key User. For further information, please refer to the Scheme website at www.greenhousegas.nsw.gov.au or Scheme Registry at www.ggas-registry.nsw.gov.au.

Guidance Point 1: The Scheme Registry

The Act requires that the Scheme Administrator keep a Register of:

- accredited abatement certificate providers, and
- Greenhouse gas abatement certificates.

This Registry is a web based database application that ACPs use to register and transfer abatement certificates.

The Key User is the primary user of the Registry for each ACP. The Scheme Administrator may allocate, if necessary, a separate Key User for each project for which the ACP is accredited. The Key User is able to create accounts for other users to access the Registry. In creating these accounts for these additional users, the Key User is able to control the level of access of each user (such as whether the user can create, transfer or surrender abatement certificates), determine which Registry generated emails the user will receive, add/ disable user accounts and change passwords of those users.

The system is designed to be intuitive and user friendly. Please refer to the Registry's on-line assistance for further information.

Contact Person 2. This person should have operational or technical involvement with the abatement activity for which you are applying, e.g. a project engineer or technical consultant. The Scheme Administrator may contact this person about technical elements of the application.

1(c) What type of Abator is the applicant?

This question asks you to state the type of Abator that you are applying as for accreditation. You must demonstrate that you are the Abator to demonstrate that you are eligible for accreditation to create NGACs.

The DSA Rule allows for two categories of Abator that you may apply as, namely, the *Original* Abator or *Nominated* Abator. The sections below provide guidance on each of these types of Abator.

Original Abator

There are two categories of an *Original Abator* under the Rule. These are:

In respect of a Demand Side Abatement Project implemented prior to 1 July 2002, for which a Retail Supplier previously claimed Electricity Sales Foregone, that Retail Supplier.

In plain terms, this means that if an electricity retail supplier claimed the project as Electricity Sales Foregone under the previous voluntary NSW greenhouse gas benchmarks scheme, they may seek accreditation with respect to that project.

In respect of a Demand Side Abatement Project that is a Generating System which has an Implementation Date prior to 1 January 2002 (other than those for which a retail supplier previously claimed Electricity Sales Foregone), the "Generator" as defined under the Generation Rule with respect to that Generating System (as if that definition formed part of this Rule).

In plain terms the Generator, as defined in Clause 6.2 of the Generation Rule, is either the person registered with the AEMO (formerly NEMMCO) in respect of the Generating System or the owner of the Generating System. A person may also be nominated to be the Generator, in writing, by either of these two aforementioned persons.

Nominated Abator

A *Nominated Abator* is defined under the Rule as *a person nominated, to the satisfaction of the Scheme Administrator to be the Abator in respect of the Demand Side Abatement by written agreement with:*

- the *Original Abator*; or
- a person previously nominated to be the Abator.

For example, XYZ Pty Ltd is the owner of a generating system that is exempted from registration with AEMO (formerly NEMMCO). XYZ Pty Ltd is affiliated with another separate company (Alfabet Pty Ltd), and XYZ Pty Ltd is of the view that Alfabet Pty Ltd would better placed to manage its on-going accreditation and compliance related records. As XYZ Pty Ltd is the owner/generator, they are the *Original Abator*. However, XYZ Pty Ltd may nominate Alfabet Pty Ltd as the *Nominated Abator*. Alfabet Pty Ltd is then eligible to seek accreditation as an ACP for the generating system. The *Nominated Abator* will be responsible to the Scheme Administrator for the creation of NGACs in an appropriate manner and the collection and maintenance of all Scheme related records. The *Nominated Abator* must also ensure adequate information is available to facilitate any audit requirements of the Scheme Administrator.

Supporting evidence for Nomination by *Original Abator*

If applying as the *Nominated Abator* you must provide written evidence that the *Original Abator* (or a person subsequently nominated) has nominated you as the *Nominated Abator*. In assessing applications where the applicant has been nominated by the *Original Abator*, the

Scheme Administrator will not consider as complete, and may reject, any application submitted without satisfactory proof of nomination.

Guidance Point 2 (below) contains suggested wording to assist applicants in obtaining a satisfactory nomination by the *Original Abator*. If you wish to use wording other than the recommended wording, you will be required to submit the proposed wording to the Scheme Administrator for approval. You will also be required to meet the Scheme Administrator's costs of assessing this wording. To date, the average cost of this assessment has been between \$200 and \$500.

Note: The nomination letter must be printed on the *Original Abator's* letterhead.

Guidance Point 2: Suggested wording for the Nomination of an Abator

Standard wording which could be used to provide evidence that a nomination of an Abator has been made is provided below (subject to the accompanying Notes – overleaf - which define [A], [B], [X] and [Y]):

"For the purpose of the *Greenhouse gas Benchmark Rule (Demand Side Abatement) No 3 of 2003* (NSW) ("Rule"):

- [A] nominates [B] as the "Abator" in respect of [X] ("Demand Side Abatement Project").
- This nomination is effective to entitle [B] to create and own all "Abatement Certificates" in respect of the Demand Side Abatement Project, [regardless of when the Demand Side Abatement occurs] or [insofar as the Demand Side Abatement takes place after [Y]].
- [A] declares that it is entitled to make this nomination, because [please select one of the following]
 - (a) [A] is registered with AEMO as the Generator or Intermediary (as defined under the National Electricity Code) with respect to the Generating System; or
 - (b) no person is registered with AEMO as the Generator or Intermediary (as defined under the National Electricity Rules) with respect to the Generating System, and [A] is the owner of the Generating System; or
 - (c) [A] was previously validly nominated to be the "Generator" in respect of the Generating System (and that nomination is still effective).
- [A] declares that [A] has not made another nomination under the Rule in respect of the Generating System that is still effective.

[signature]

[print name]

[date]

If you, the signatory, are not [A] or are only one of the persons comprising [A] (for example, if you are signing on behalf of a company), you declare that you have authority to sign this form on behalf of [A]. Please also complete the following:

[position within [A] / relationship to or authority on behalf of [A]]"

Notes for use of standard wording:

- Replace "[A]" with the name of the person(s) making the nomination. This could be a term that is defined elsewhere in the document, such as "Company".
- Replace "[B]" with the name of the person being nominated as the Abator. Again this may be a term that is defined elsewhere.
- Replace the first "[X]" with a detailed description of the Generating System project which constitutes

the Demand Side Abatement Project, followed by its shortened name. For example; the Sunnyside Cogeneration Plant Project (11MW capacity) located at Sunnyvale NSW (“Sunnyside Cogeneration”). For other instances of [X], the shortened defined term (ie ‘Sunnyside Cogeneration’) will be sufficient.

- In the second paragraph, with regard to the two options provided, use one option only (and remove the square brackets) – refer below
 - The first option ("regardless of when the benefit of the Demand Side Abatement occurs") is likely to be used in the majority of cases. This should be used where the person making the nomination has never created, and will never create, any Abatement Certificates in respect of the project. (This wording clarifies that the nomination applies to abatement both before and after the date the nomination is signed.)
 - The second option ("insofar as the benefit of the Demand Side Abatement takes place after [Y]") should only be used where the person making the nomination has created or will create some Abatement Certificates in respect of the project, and the person being nominated will create the rest of them. If this option is used, replace "[Y]" with the appropriate date.
- In the third paragraph, where options are given in square brackets, use one option only (and remove the square brackets).

Do not use headings or other language that refers to "assignment of NGACs" or similar. An effective nomination to become an Abator will only give you the right (once you are accredited) to create NGACs. The nomination itself does not assign any NGACs.

Applicants must note that the onus of obtaining an effective nomination lies with the applicant, even if the processes in this guidance point are followed correctly. The applicant bears any risk that the person signing this form does not have authority to do so on behalf of the nominator, and the applicant may need to make further enquiries to ensure that this is the case.

Warning: there are some circumstances where the above wording may not be appropriate and you will need to modify the form accordingly. In these circumstances the Scheme Administrator will seek legal advice.

Part Two – Project Details

This part of the Application Form requires you to provide summary details of the project, which are central to the establishment of eligibility under the DSA Rule.

2(a) Is the project located in NSW?

Clause 7.3 of the DSA Rule states that a Demand Side Abatement Project must be located within an End-User Complex in NSW. That is, electricity from the generating system must be supplied to end-user equipment within the same end-user complex as the generating system, rather than being exported 'off-site' to the NSW Electricity Network.

If the project you are applying for is not located in NSW, then you are not eligible to apply for accreditation.

2(b) Where in NSW is the project located?

Please provide full details on the name and location of the End-User Complex at which the Demand Side Abatement Project occurs. For an example, refer below:

Name of End User Complex:	Brobdignalian Colliery
Number and street:	321-521 New England Highway
Town state, and postcode:	Sunnyside NSW 2011

2(c) What type of Demand Side Abatement Project is the project?

This question requires you to indicate from the list provided which Demand Side Abatement Project type describes your project.

Clause 7.3 of the Rule allows for three types of Demand Side Abatement Project from which an Abator can create NGACs. That is, it may be:

1. A project implemented on, or after, 1 January 1997 in respect of an activity validly claimed as Electricity Sales Foregone under the Emissions Workbook. If this is the case, please attach confirmatory evidence, or
2. A project implemented on or after 1 January 1997 in respect of a Generating System that generates electricity using Renewable Energy Sources, or

3. A project implemented on or after 1 July 1997 in respect of a Generating System that generates electricity using Fossils Fuels.

Common to all of the above project types is the additional requirement that the Demand Side Abatement Project must result in reduced greenhouse gas emissions by:

- Substituting electricity from a Generating System (that supplies End-User Equipment within the same Site as the Generating System) for electricity from another source.

Please indicate which of the three Demand Side Abatement Project types above describes your project, and additionally, confirm whether the common requirement (above) is also applicable to your project.

2(d) What is the date of project implementation and anticipated life of the project?

With respect to your response in 2(c) above, this question asks you to state the date of project implementation and the anticipated lifetime of the project. Please note the following:

Projects claimed as Electricity Sales Foregone

Projects that were validly claimed as Electricity Sales Foregone under the Emissions Workbook must have an Implementation Date after 1 January 1997.

On-Site Electricity Generation

To be eligible for accreditation your Generating System must have commenced generating electricity after:

- 1 January 1997 in respect of a Generating System that generates electricity using Renewable Energy Sources; or
- 1 July 1997 in respect of a Generating System having a nameplate rating of 30MW or less that generates electricity using Fossil Fuels;

If your Generating System does not meet any these criteria then you are not eligible to apply for accreditation under the DSA Rule. You may seek accreditation under the Generation Rule if your Generating System meets the eligibility criteria of that Rule.

Supporting evidence

Where implementation has occurred you must provide the date at which it occurred, as well as sufficient evidence to satisfy the Scheme Administrator that commissioning has occurred. For example, evidence may include acceptance testing reports & metered generation data, or other documents demonstrating that commissioning has occurred.

2(e) Project description.

The objective of this question is to provide the Scheme Administrator with a clear understanding of what your project is, how it will deliver greenhouse gas emissions abatement and why you may be entitled to create NGACs from the project under the Rule. Your answer should include:

- a brief description of the End-User Complex (site) at which the generating system is located,
- a brief description of the generating system (including its capacity and configuration) and its location in relation to the End-User Complex (site), and
- an explanation of how the generating system will result in the reduction of greenhouse gas emissions.

2(f) Does the project involve any of the following activities?

The DSA Rule (clause 7.5) lists specific activities which do not constitute Demand Side Abatement projects and from which NGACs must not be created. Demand Side Abatement Projects do not include the following activities:

- **Abatement derived from the purchase of Green Power or similar products**
If the reduction of greenhouse gas emissions being claimed by your project is derived from the purchasing of electricity on the basis that it represents a reduction in greenhouse gas emissions your project is not eligible to create NGACs under the DSA Rule.
- **The reduction of losses from the distribution or transmission network within the NSW Electricity Network**
Currently no rules covering reduced losses in the NSW Electricity Network from activities within the NSW Electricity Network are being developed. However, reduced losses from Demand Side Abatement by improving the power factor of a Site may be claimed under clauses 6.5(c) and 9.6 of the Energy Saving Scheme Rule of 2009 (see <http://www.ess.nsw.gov.au>).
- **Installing solar hot water heating systems that are eligible to create RECs**
- **The reduction of electricity consumption by reducing the scope or quantity of production or service derived from the use of that electricity**

Please note that reduced energy consumption not due to specific actions to improve efficiency or other eligible activities do not qualify as a Demand Side Abatement Project. Mild weather, lower production, closing down part of a Site, or reducing the quality or quantity of service derived from the use of that electricity do not qualify as Demand Side Abatement Projects.

The component of your project which includes one of the above activities, is not eligible. You should reconsider the boundaries of your project prior to submitting an application for accreditation.

Part Three – Record Keeping Arrangements

The Regulation (Clause 73GB(1)(b)) states that a person is eligible for accreditation as an ACP with respect to Demand Side Abatement activities if, among other things, they have record keeping arrangements which are approved by the Scheme Administrator.

Please refer to the *Guide to Record Keeping for Abatement Certificate Providers*, available from the GGAS website at <http://www.greenhousegas.nsw.gov.au/documents/syn3.asp> when answering Part 3 of the Application Form.

Part Four – Eligible Calculation Methods

This question asks you to confirm that the Generation Emissions Method (Clause 9) is the calculation method that you are proposing to use.

■ Generation Emissions Method (Clause 9)

To apply this method the project must involve a Generating System that supplies electricity to End-User Equipment within the same Site as the Generating System.

In general, this means that if the Generating System also supplies (ie exports) electricity to a registered network you may also be eligible to apply for accreditation under the Scheme's Generation Rule.

To use the Generation Emissions Method you must download and complete Attachment A.

Please note the Scheme Administrator will refuse applications which are submitted without a completed Attachment A.

Part Five – Declaration

All applicants, or a person authorised by all applicants, must sign the Application Form. If the signatory is not the applicant, the signatory must provide evidence that the applicant has authorised the signatory to sign the Application Form on the applicant's behalf. The tick boxes in this section of the Application Form are a prompt to remind you of this requirement.

You must also download the '*Undertaking regarding benefits under other mandatory Greenhouse Gas schemes*' form from the Scheme website. This form should be printed on the applicant's letterhead and be signed by the same person who signed the Application Form.

If you have previously submitted this undertaking with respect to another application for accreditation, a copy of this is satisfactory to meet the Scheme Administrator's requirements.

Note: Before signing and submitting the application form, please ensure that the Application Form fully addresses each question in accordance with the Guide. Only a suitably complete application will be accepted by the Scheme Administrator for further assessment. An incomplete application may be refused by the Scheme Administrator.

Attachment A – Generation Emissions Method

A(i) Is the project eligible to apply the Generation Emissions Method?

In order to apply the Generation Emissions Method your project must:

- ▶ involve the generation of electricity, and
- ▶ supply it to End-User Equipment within the same End-User Complex as your Generating System.

If your project does not meet these requirements you are ineligible to apply this method.

A(ii) Does the Generating System supply to a registered network?

This question asks you to provide details of whether your Generating System is exporting any electricity to a Distribution System or Transmission System, as those terms are defined in the National Electricity Rules (NER), for which a person is registered with AEMO (formerly NEMMCO) as a Network Service Provider.

If your Generating System exports any electricity, either directly or indirectly, to such a registered network then you may wish to separately apply for accreditation under the Generation Rule. Please consult the *Guide to Applying – Generation Rule* for further guidance.

Only electricity that is supplied to, and consumed by, End User Equipment within the same End-User Complex as the Generating System, is eligible for accreditation under the DSA Rule.

A(iii) Self Generated Site Use

This question asks you to state the amount of electricity (generated by your Generating System) that is consumed within the same End-User Complex as your Generating System.

The DSA Rule defines Self Generated Site Use as:

“the portion of electricity generated by the Generating System that is consumed [by] End- User Equipment within the Site of which the Generating System forms a part, determined by the metered electricity generated by the Generating System where this is available”.

A(iv) Sent Out Generation

This question asks you to state the amount of Sent Out Generation from your Generating System. The Sent Out Generation is derived from the total (gross) generation of the system less any Auxiliary Electricity used by the Generating System. These must both be measured over the same time period as the Total Greenhouse Gas Emissions.

In calculating these figures you should use the metered electricity generated by the Generating System or, if this is not available, an independent engineering assessment to calculate the reduction in electricity supplied by the NSW Electricity Network.

A(v) What are the details of the Generating System?

This question asks you to initially provide a description of the operational characteristics of the Generating System. For example, the Generating System is comprised of three gas-fired reciprocating engine units, totalling 3MW, located at the Massive Manufacturing Factory Complex. The Generating System supplies 100% of its generation to the on-site assembly lines and offices, and is in operation 24hours a day, seven days a week, all year.

This question also requires that you provide further details on each generating units that comprises your Generating System. These details should include:

- Fuel – energy type used to generate electricity e.g. natural gas, landfill gas, biomass, etc,
- Fuel source – the origin of the fuel e.g. the Eastern Gas pipeline,
- Nameplate rating for each unit – eg 1050 kW (1.05MW), and
- Date first commercial operation commenced – eg 1 July 2007

You are also asked to provide the quantities of each fuel used in the most recent calendar year for the Generating System. If the most recent year's information is unavailable, please provide the next most recently available information.

A(vi) How is fuel use and electricity metered for the project?

This question asks you to provide details of the metering arrangements for the Generating System. Please provide the following information (with supporting documents attached):

- Metering installation type, metering serial numbers and National Meter Identifiers (if appropriate),
- An up-to-date single line diagram showing the location of all metering installations,
- Accuracy classes of tariff/export/import/auxiliary meters, voltage transformers (VT's) and current transformers (CT's), as well as evidence in support of their nominated accuracy classes, eg copies of metering schedules, or an up-to-date single line diagram with respective accuracy classes marked etc,
- Who the responsible party is for the reading of meters and testing of metering equipment,
- Schedules for testing of metering equipment and the techniques used to calibrate or monitor the accuracy of metering equipment,
- Processes for ensuring the security of metering equipment, and
- Whether AEMO (formerly NEMMCO) or other relevant parties have conducted any recent audits of metering equipment, and the results (if applicable).

A(vii) Is the Generating System an accredited power station under the *Renewable Energy (Electricity) Act 2000*?

This question asks you to provide details of whether your Generating System is accredited with the Commonwealth Office of the Renewable Energy Regulator (ORER) as a power station using renewable fuels. If you are not accredited, you are not required to provide any further information, please proceed to question *A(viii)*.

If you are accredited with ORER please provide details of the REC Baseline and Marginal Loss Factor (MLF) assigned to your Generating System and the number of RECs created in each calendar year since ORER accreditation of the Generating System was received.

Supporting Documents

Supporting documentation attached should include the notice of accreditation from ORER stating the Generating System's REC Baseline. As the Scheme Administrator may contact ORER to confirm this information, please download and sign the '*Consent for the NSW Greenhouse gas Scheme Administrator to contact the Office of the Renewable Energy Regulator*' form. This form must be completed on your company's letterhead.

A(viii) Which type of fuel does the Generating System use?

This question asks you to confirm the fuel(s) used for generation of electricity by your Generating System.

If you have indicated that your Generating System uses a fuel such as landfill gas, sewage gas, manufactured methane, waste coal mine gas, or oxidation of Qualifying Putrescible Waste, then you may be eligible to claim additional NGACs in recognition of waste methane emissions avoided through the capture and combustion of these waste methane fuels.

In this case you are further required to indicate the calculation method under the Generation Rule, by which you intend to calculate the energy content of the waste methane fuel used.

Under the Generation Rule, the energy content of waste methane fuel used for generation may be calculated on the basis of:

- ▶ the actual energy content of the waste methane fuel, or

Note: If this is your intended approach please refer to the Scheme's Methane Energy Uncertainty Methodology (available at <http://www.greenhousegas.nsw.gov.au/Documents/syn111>). The Methane Energy Uncertainty Methodology (MEUM) provides applicants and ACPs with a mechanism to determine the uncertainty associated with the measurement of actual energy content for the purposes of Equations 13, 16, or Method 5 of the Generation Rule.

- ▶ a value determined in accordance with an estimation methodology approved by the Scheme Administrator, or

Note: If this is your intended approach please contact the Scheme Administrator beforehand to discuss.

- ▶ the 36% (engine efficiency) default factor prescribed in Equations 13, 16 and Method 5 of the Generation Rule. This assumes that Sent Out Generation represents 36% of the total energy content of all fuels used.

If another fuel other than those identified above is used, then please indicate the 'Other' box and identify the type of fuel(s) used. For example, natural gas, coal seam methane, biomass etc.

A(ix) Does the Generating System use Fossil Fuels?

This question asks you to provide further details on the fuel used by your Generating System. If your Generating Systems uses fossil fuels, you are required to identify the fossil fuel type and to calculate the emissions from use of this fuel using the energy content of the fuel (calculated via your chosen approach in A(viii)) and Equations 7 to 13 of the Generation Rule (as appropriate for your fuel type - refer to clause 10.1 of the Generation Rule for further information).

If your Generating System uses more than one type of fossil fuel you should repeat the process for each fuel type and attach as a referred appendix.

In your calculations you should clearly identify the amount (in PJ) of each type of fossil fuel used by your Generating System.

A(x) Does the Generating System use Renewable Fuels?

This question asks you to provide details of the fuel used by your Generating System. If your Generating Systems uses renewable fuels, you are required to calculate the emissions for the use of this fuel using equations 14, 15 and 16 or Method 5 of the Generation Rule.

If your Generating System uses more than one type of renewable fuel you should repeat the process for each fuel type and attach as a referred appendix.

In your calculations you should clearly identify the amount (in PJ) of each type of renewable fuel used by your Generating System.

A(xi) Is the Generating System a cogeneration plant?

This question asks you to provide details of your Generating System if it produces both electricity and useful heat. If your Generating System is a cogeneration plant you may adjust the Emissions Intensity of your generation by the notional amount of emissions avoided from the use of heat from the system.

To calculate the notional amount of emissions from the fuel avoided you must first identify the amount of heat (in PJ) used by the cogeneration facility using Method 4 Step 1 of the Generation Rule. If the actual amount is unknown then you may use 70% of the Energy Content of the fuel, less the Energy Content of the Gross Generation.

Please enter the figure for total amount of heat from the cogeneration plant (in PJ per annum) in the space provided in **Part (a)**.

Once you have measured or calculated the amount of heat you must then identify the appropriate type of fuel used to calculate the notional greenhouse gas emissions avoided using Method 4 Step 2 of the Generation Rule.

- If the Cogeneration Plant uses Fossil Fuel, the type of fuel for the notional emissions avoided is:
 - (i) if the Cogeneration Plant replaces an existing boiler or there is another boiler also supplying heat to the user of the cogenerated heat, the notional fuel avoided is the actual fuel for that boiler; or
 - (ii) in other cases, the notional fuel avoided is the main fuel used in the Cogeneration Plant

- If the Cogeneration Plant uses a Renewable Energy Source, the type of fuel for the notional avoided is:
 - (i) if there was a pre-existing boiler using Fossil Fuel or Fuels, the notional fuel avoided is the pre-existing fuel or a combination of fuels used by the previous boiler; or
 - (ii) if there was no pre-existing boiler using Fossil Fuel but natural gas is available at the Site the notional fuel avoided is natural gas; or
 - (iii) in other cases, the notional fuel avoided is the Renewable Energy Source.

Once you have calculated the type of notional fuel avoided, Method 4 Step 3 of the Generation Rule requires you to calculate the amount of fuel avoided (in PJ).

If the notional fuel avoided is a Renewable Fuel then the amount of notional fuel avoided is zero and you can not adjust the Emissions Intensity of your generation.

If the notional fuel avoided is a fossil fuel then you must divide the amount of heat identified in Method 4 Step 1 of the Generation Rule by:

- (i) if the fuel for the notional greenhouse gas emissions avoided is natural gas, 0.80;
- (ii) if the fuel for the notional greenhouse gas emissions avoided is coal, 0.70;
- (iii) or otherwise, 0.75

This will result in a total amount of notional fuel avoided (in PJ). Please enter the type and amount (in PJ per annum) of notional fuel avoided in the spaces provided in **Part (b)**.

Based on the energy content of the notional fuel avoided (above), you are then required to calculate the total greenhouse gas emissions (in tCO₂-e) avoided using Equations 7 to 13 of the Generation Rule. You should insert this figure into the space provided in **Part (c)**.

A(xii) What are the Total Greenhouse Gas Emissions from the Generating System?

This question asks you to bring together your responses from questions *A(ix) Does the Generating System use Fossil Fuels?*, *A(x) Does the Generating System use Renewable Fuels?* and *A(xi) Is the Generating System a cogeneration plant?*

To calculate the Total Greenhouse Gas Emissions from your Generating System you should sum the greenhouse gas emissions from fossil fuels (your answer to question A(ix)) and the greenhouse gas emissions from renewable fuels (your answer to question A(x)). From this figure you should subtract the greenhouse gas emissions avoided from cogeneration (your answer to question A(xi)).

A(xiii) What is the Emissions Intensity of the Generating System?

The Emissions Intensity for your Generating System is the result of the *Total Greenhouse Gas Emissions* (your answer to question A(xii)) divided by *Sent Out Generation* from the Generating System (your answer to question A(iv)), calculated in accordance with Equation 3 of the Rule:

Emissions Intensity	=	Total Greenhouse Gas Emissions
		Sent Out Generation

A(xiv) Which Emissions Intensity Adjustment Factor is appropriate for the End-User Complex?

This question asks you to provide details of the appropriate Emissions Intensity Adjustment Factor stated in Table 9 of Schedule A to the Generation Rule for the End-User Complex.

You are required to select the appropriate Emissions Intensity Adjustment Factor as listed in the question. If you select a Site Specific Distribution Factor you should attach supporting documentation this figure, such as your electricity invoices.

A(xv) Which calculation method(s) do you intend to used in calculating NGACs?

This question asks you to indicate which calculation method(s) you intend to use to calculate your entitlement to create NGACs by ticking the relevant box(es).

■ Equations 1 & 2 of the DSA Rule

These Equations of the Rule are used when the generation from your Generating System is of a lower greenhouse intensity than the NSW Pool Coefficient and most importantly, when a REC

has not and will not be created in respect of this generation. Both Renewable (if not creating RECs) and Fossil Fuels may be eligible to apply this NGAC calculation method.

If you intend to use this method please complete **Part A1** of this attachment.

■ **Additional NGACs from RECs using Equation 6 of the Generation Rule**

You can use this calculation method when the electricity generated by your Generating System is from landfill gas or sewage gas or manufactured methane or oxidation of Qualifying Putrescible Waste where this generation has been used to create a REC. This method allows you to create additional NGACs for each REC that has been registered with ORER in recognition of the additional greenhouse benefits from these activities. The number of NGACs that you will be able to create is calculated by using Equation 6 of the Generation Rule.

If you intend to use this method please complete **Part A2** of this attachment.

Note: You may be able to use both of these calculation methods in circumstances where part of the generation from your Generating System is used to create RECs and part of your generation does not create RECs.

For example, if your generating system uses both landfill gas and natural gas as fuel, you may create NGACs from the RECs created from the use of landfill gas using Equation 6 of the Generation Rule and you may create NGACs from the natural gas using Equations 1 & 2 of the DSA Rule.

A1 – Calculation of NGACS from Eligible Generation

A1(i) What is the Eligible Generation from the Generation System?

This question asks to bring together your answers for the first part of this attachment to calculate the Eligible Generation from your Generating System in accordance with Equation 5 of the DSA Rule as set out below:

Eligible Generation	=	Self Generated Site Use [from A(iii)]	-	RECs Created from [A(vii)]	/	MLF [from A(vii)]	x (Self Generated Site Use [from A(iii)]	x	Sent Out Generation [from A(iv)])
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A1(ii) How many NGACs will the project create?

This question asks you to provide details of the number of NGACs that your project will create. The number of NGACs is calculated using Equation 4 of the DSA Rule in accordance with the following equation:

$$\text{Number of NGACs} = \text{Eligible Generation} \times (\text{NSW Pool Coefficient} \times \text{Emissions Intensity Adjustment Factor} - \text{Emissions Intensity})$$

You must attach to the application (at a minimum):

- A spreadsheet of the calculations (a soft copy on a floppy disk should also be provided). All formula used should be clearly stated and referenced (from either the Rule or other relevant source allowable under the Rule). Values which are default, calculated and estimated, should be differentiated and identified. All input data should be labeled.
- Methodology. This should be detailed and explanatory. Please note that:
 - (i) All information should be fully referenced
 - (ii) Assumptions, estimates and/ or extrapolation of data should be identified, explained and justified
 - (iii) Testing and measurement procedures must be outlined, including details of:
 - instruments used and details of their calibration
 - any standard procedures used
 - number of tests, timing of tests and repeatability
 - person(s) performing the tests and their qualifications.
- All calculations must be supported by relevant documentation. For example:

- (i) energy bills
- (ii) contractor invoices
- (iii) weighbridge dockets
- (iv) calibration certificates

A1(iii) Estimated number of NGACs to be created in future years

This question requires you to complete the table by entering the estimated number of NGACs the on-site generation project is likely to produce over the first three (3) calendar years of its accreditation, with a detailed spreadsheet (hardcopy and softcopy) of the methodology, assumptions and data used to derive these indicative NGAC estimates.

A1(iv) Timing of NGAC registration

This question asks you to indicate how often you intend to register NGACs from your project. For example, you may wish to register your NGACs on a monthly, quarterly or annual basis. The second part of the question asks for how many NGACs you intend to register on each occasion.

Please note that NGACs may be created immediately after the activity in respect of which it was created takes place and may be registered at any time up to six months after the end of the year in which the abatement took place.

A2 – Calculation of additional NGACs from RECs

A2(i) How many NGACs will the project create?

This question asks you to provide details of the number of NGACs that your project will create in its first compliance calendar year. The number of NGACs is calculated using Equation 6 of the Generation Rule in accordance with the following equation:

$$\text{Number of NGACs} = \frac{\text{RECs Created [from A(vii)]}}{\text{MLF [from A(vii)]}} \times \left(\frac{\text{NSW Pool Coefficient [from GGAS website]}}{\text{Emissions Intensity Adjustment Factor [from A(xiv)]}} \times \left(\frac{\text{NSW Pool Coefficient [from GGAS website]}}{\text{Emissions Intensity [from A(xiii)]}} \right) \right)$$

In this question the number of RECs created should be the actual number of RECs created during the time period for which the Emissions Intensity was calculated, or the number you estimate will be created during this time period.

In support of this calculation you must attach to the application (at a minimum):

- A spreadsheet of the calculations (a soft copy on a floppy disk should also be provided). All formula used should be clearly stated and referenced (from either the Rule or other relevant source allowable under the Rule). Values which are default, calculated and estimated, should be differentiated and identified. All input data should be labeled.
- Methodology. This should be detailed and explanatory. Please note that:
 - (iv) All information should be fully referenced
 - (v) Assumptions, estimates and/ or extrapolation of data should be identified, explained and justified
 - (vi) Testing and measurement procedures must be outlined, including details of:
 - instruments used and details of their calibration
 - any standard procedures used
 - number of tests, timing of tests and repeatability
 - person(s) performing the tests and their qualifications.
- All calculations must be supported by relevant documentation. For example:
 - (v) energy bills
 - (vi) contractor invoices
 - (vii) weighbridge dockets
 - (viii) calibration certificates

A2(ii) Estimated number of NGACs to be created in future years

This question requires you to complete the table by entering the estimated number of NGACs the on-site generation project is likely to produce over the first three (3) calendar years of its accreditation, with a detailed spreadsheet (hardcopy and softcopy) of the methodology, assumptions and data used to derive these indicative NGAC estimates.

A2(iii) Timing of NGAC registration

This question asks you to indicate how often you intend to register NGACs from your project. For example, you may wish to register your NGACs on a monthly, quarterly or annual basis. The second part of the question asks for how many NGACs you intend to register on each occasion.

Please note that NGACs may be created immediately after the activity in respect of which it was created takes place and may be registered at any time up to six months after the end of the year in which the abatement took place.

Section Three - Contact Details

Please direct any enquiries regarding accreditation as an ACP to:

Greenhouse Gas Reduction Scheme Administrator

Phone Number:

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Fax Number:

02 9290 2063

Street Address:

Level 8
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SYDNEY NSW 2000

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Greenhouse Gas Reduction Scheme Administrator
PO Box Q290
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Appendix 1 – Accreditation Process Maps

