



DEPARTMENT OF  
THE ENVIRONMENT,  
CLIMATE CHANGE,  
ENERGY AND WATER



**Questions and Answers #2**  
**Call for EOIs to Construct, Own and Operate a Solar Power Facility in the ACT**  
**T09321**  
**Issued May 2009**

**Q1.**

**5.1.1** - It is stated that this call of EOI is the first step of a two stage process.

Stage 1: anticipating shortlisting by experienced respondent

Stage 2: submission of detailed proposal

Given that a proponent's suitable expertise in both Solar Thermal and Solar PV technology, can both technologies be offered at the EOI stage to later be defined in more detail during stage 2?

**A1.**

Respondents may propose more than one technology, however they must submit a complete Expression of Interest for each technical solution that they propose by addressing the evaluation criteria and the EOI Requirements in section 5.4. The Evaluation Team will assess and rate each EOI against the evaluation criteria. It is expected that Respondents would only propose the technical solution that best meets the capabilities required for the ACT Solar Power Facility.

**Q2.**

**5.2.1 (2)** – It is stated that the power plant must be capable of providing power to at least 10,000 homes and it is then estimated that this is equivalent to about 86 GWh/annum. Is this the expected average of the system's lifetime, or the average over the first 5 years of production?

**A2.**

In this answer "system" is taken to mean the "ACT Solar Power Facility". 86 GWh/annum is the minimum output required per annum for the life of the solar power facility and should be used to calculate the required minimum annual output of the solar power facility in MWh.

**Q3.**

**5.2.1 (4)** – It is stated that the EOI plant should demonstrate an ability to operate within the NEM. Can you please confirm that the planned Solar Farm is NOT required to be a Scheduled Market Generator on the NEM, or otherwise further clarify this criteria?

**A3.**

In this answer "EOI plant and Solar Farm" are taken to mean "the ACT Solar Power Facility". Whilst the initial requirement is to provide sufficient electricity to power at

least 10,000 ACT homes there was also the requirement that the facility meets the scheduled generator requirements under the National Electricity Market and therefore requires an aggregate nameplate rating of at least 30MW. This was to allow the connection of the facility to the National Grid. Discussions with the National Electricity Market Management Company (NEMMCO) have ascertained that facilities with a lesser nameplate rating can be connected to the grid however they will only receive the spot market price. An addendum to this requirement in the EOI has been issued to relax the 30MW nameplate requirement but still require registration with NEMMCO. This is to meet the requirement in Section 5.2.1 (6) that the ACT Solar Power Facility must be connected to the National Grid. It should be noted that the requirements detailed in the EOI are the minimum requirements and Respondents may submit proposals that exceed them.

**Q4.**

**5.2.1 (7)** – Can you please confirm that this criteria means only that the generator must have a nameplate rating of 30 MW or greater, and confirm that it does NOT mean that the generator has to be registered as a “Scheduled Generator” under the NEMMCO rules.

**A4.**

An addendum has been issued that states “The generator MUST meet the registration requirements of the National Electricity Market Management Company (NEMMCO) for either a generating system comprised of generating units with a nameplate rating of 30MW or more or a generating system comprised of generating units with a nameplate rating of less than 30MW”. This is to meet the requirement that it “must be connected to the National Grid.”

**Q5.**

**5.2.1 (5)** – It is stated that the facility must cover any shortfalls in output by using renewable energy. ‘Shortfall’ however, is not defined. Is it, for example, the shortfall over the annual reporting period (eg. anything less than 86 GWh/annum generated)? Can shortfalls be covered by purchase of renewable energy from other sources or by purchase of additional RECs from the REC market?

**A5.**

“Shortfall” is defined as the difference between generation and storage for when the sun is not shining and the required daily output. This is to ensure that a proponent who becomes the contracted party actually delivers the amount of renewable energy negotiated. The period of any shortfall will be settled in final negotiations and any shortfall within defined periods will need to be made up by supply of renewable energy from other sources other than fossil fuel based electricity.

**Q6.**

**5.4.2 (8)** – Can you please confirm that the requirement for the inclusion of an indicative cost for a 30MW capacity facility is referring to nameplate capacity only and is independent of the facilities annual generation output?

**A6.**

An addendum to this requirement in the EOI has been issued to relax the 30MW nameplate requirement but still require registration with NEMMCO. It should be

noted that the requirements detailed in the EOI are the minimum requirements and Respondents may submit proposals that exceed them.

This paragraph is now reworded to read:

“estimate the cost of designing and constructing the solar power facility, with the indicative cost for an 86,000 MWh per annum facility for those that propose a greater capacity facility, as well as the level and form of indirect or direct Territory assistance or contribution, if any, that may be required;”

#### **Q7**

**Sites** – Can you please provide any additional information on the two sites proposed by the ACT Government in the Call for EOIs? Can you please make available the detailed technical assessments of the sites that are referred to in 3.1.1 and 3.1.3?

#### **A7**

The Technical assessment undertaken by PricewaterhouseCoopers on behalf of the ACT Government is at Annex A. It should be noted that the Territory does NOT warrant that the sites will be suitable for the purpose of the facility or will meet the planning, use or other regulatory requirements.

#### **Q8.**

**Land Costs** – Can you please inform us of the ACT Government’s intentions with regard to the two proposed sites: will they be sold, transferred or leased to the Solar Farm operator? Can you provide an indicative lease cost (per hectare) or land valuation (per hectare) that the ACT Government anticipates for the two sites proposed in the EOI?

#### **A8.**

It is up to the Respondents to stipulate the level and form of indirect or direct Territory assistance or contribution, if any, that may be required. This assistance may include land to be made available for a proponent at a value to be negotiated after advice from the Australian Valuation office.

#### **Q9.**

Feed-in Tariff for large systems – Minister Simon Corbell stated in February this year that the Government will outline its Feed-in Tariffs for large scale generators by the middle of the year. Can you please give us a progress update?

#### **A9.**

The Government is conducting a review to examine if, and on what basis, access to the ACT Electricity Feed-in Tariff Scheme by large generators is appropriate. The Government aims to make an announcement on Stage 2 of the Feed-in Tariff Scheme in December 2009. The potential inclusion of the solar power facility will be one of the options considered by Government. The Government will release a Discussion Paper on Stage 2 in July/August 2009 and will welcome feedback and comments from proponents through this process.

#### **Q10.**

Can you please advise contact details for the appropriate area within ActewAGL for discussing:

1. obtaining network information (eg. with respect to line voltages, etc), and obtaining advice regarding the process for connection into the ActewAGL network, and
2. discussing PPAs.

**A10.**

It is suggested that you contact:

Mr Janis Worony

Manager, Strategy and Regulatory

ActewAGL

Telephone: 02 6293 5871

Email: [janis.worony@actewagl.com.au](mailto:janis.worony@actewagl.com.au)

**Annex A to**  
**Call for EOI**  
**Questions and Answers #2**

**ACT Solar Site Technical Requirements**

<b>Land Requirements</b>	<b>Kowen</b>	<b>Ingledene</b>
<p><b>1. Layout</b> – Generally required to be cleared with little shading from vegetation, structures or hills. The land should be leveled with only a slight gradient, preferably north facing.</p>	<p>Much of the Kowen site is quite hilly and significant earthworks will need to be undertaken. A quantity surveyor or earthworks estimates expert would be required to uncover the cost impost of potential ‘cut to fill’ requirements for the Kowen site.</p>	<p>Ingledene would require significant earthworks for various forms of solar technology. Though much of the land runs with a slight north-facing slope, there is still a great deal of undulation and slope along the E-W axis. A quantity surveyor or earthworks estimates expert would be required to uncover the cost impost of potential land works to the Project. There will be some minimal shading from Mt Tennent to the west of Ingledene, but the energy effect would be negligible as it would be late afternoon during winter</p>
<p><b>2. Grid</b> – The site should be located as near as possible to a grid connection point for electricity to travel through ActewAGL Distribution’s high voltage transmission network</p>	<p>A transmission line runs along the eastern side of Sutton Rd, i.e. the western edge of Kowen Forest. A transmission expert would need to be consulted on the potential cost of the grid connection and the issue of generation transients.</p>	<p>The grid is quite close (approximately 1km), however a transmission expert would need to be consulted on the potential cost of the grid connection and the issue of generation transients.</p>
<p><b>3. Infrastructure</b> – The site will require suitability for access roads for vehicular access to the solar reflectors and associated facilities. Public dirt roads can be a source of dust on the collectors. Strict speed limits are to be imposed on dirt roads within the site to reduce dust.</p>	<p>The Kowen area is covered in pine plantation but the pines in these blocks are, according to the Ranger, ready for harvesting. The pines will impose a cost to the project in clearance for relevant infrastructure.</p>	<p>Some roads would need to be relocated around the site to make proper use of the required site.</p>
<p><b>4. Water</b> – The preferred site would require access to a water supply and waste water disposal. A typical solar thermal power station will require water for three processes – cooling, demineralised water makeup and mirror cleaning</p>	<p>There are numerous small water courses throughout Kowen and a number of small dams, but from visual inspection there would be insufficient water to service the needs of a wet cooled power station. There are, according to the ranger, a few bores near Area 1, but the quality and quantity of water is unknown and will need further examination</p>	<p>Water availability out of the Murrumbidgee River would need to be assessed. The greatest cooling water requirement would be in summer when presumably the river was likely to be driest.</p>
<p><b>5. Environment</b> – The site would require appropriate zoning and environmental considerations</p>	<p>Kowen is the site of the Rally Car event in Canberra and may pose somewhat of a problem in terms of the potential obtrusiveness of a solar plant. There are also heritage considerations for the Kowen block which will require further investigation.</p>	<p>The Ingledene site did not have any evident zoning or heritage related issues, however this will need to be considered more carefully with a full due diligence being carried out.</p>

**Note:** Issues such as optical annoyance (separation from domestic residences and noise and visual impact sensitive areas), comprehensive environmental, zoning and heritage considerations are not considered as technical related site requirements and have not been included in the above assessment.