



Project:	Broken Hill Solar Plant
Meeting No:	BH-CCC-01
Date:	Thursday 1 May 2014
Venue and Time:	Broken Hill Centre for Community
Document:	Meeting notes and actions
Chair/Facilitator:	John Murray (JM), Integrated Analysis
Minutes:	Rosa Han (RH), AGL
AGL representatives:	Adam Mackett (AGM) Manager, Power Development Doug Landfear (DL) Manager, Power Development Helena Orel (HO) Community Engagement Manager
First Solar representatives:	Jeff McAuliffe (JM), Project Manager Robert Bartrop (RB), Director Business Development & Sales
Attendees:	9

- > Being Australia's largest private owner and operator of renewable energy assets
- > Gaining accreditation under the National GreenPower Accreditation Program for AGL Green Energy®, AGL Green Living® and AGL Green Spirit
- > Being selected as a constituent of the FTSE4Good Index Series



Meeting Minutes

Item	Action
<p>1. Welcome and introductions</p> <p>John Murray (JM, facilitator) welcomed the CCC members and observers in attendance and made an acknowledgement of Country.</p> <p>JM discussed the housekeeping rules for the Centre for Community. He ran through the meeting agenda for the inaugural meeting and introduced himself to the committee. JM is a Director of Integrated Analysis, which has over 20 years of experience in infrastructure development and has been a community advocate for various projects for clients including RMS, Transport for NSW and Sydney Water.</p> <p>The CCC attendees and the AGL and First Solar project team gave a brief introduction and provided a brief summary of what they wanted to get out of the CCC.</p> <p>Key points from the community included:</p> <ul style="list-style-type: none">• Would like to see a strong partnership between the community and AGL.• AGL to benefit the community by supporting local businesses.• Update the community with reliable information.• Interested on the project's impact on the environment. <p>Key points from the project team included:</p> <ul style="list-style-type: none">• Ensure the community is well informed about the project with reliable information.• Receive feedback from the CCC and see what areas can be improved.• Minimise negative impacts to the community.	

2. Proposed framework and objectives for the CCC, Helena Orel (HO)

Helena Orel (HO) commented that the Broken Hill CCC has not yet been established as there seemed to be limited interest from the public to be a committee member, with AGL only having received a small number of nomination forms.

JM noted that if any attendees were interested to participate in the CCC, they can nominate themselves by submitting a form to the AGL Community Engagement team, Helena and Rosa.

HO noted that to be on the CCC, members have certain responsibilities which includes sharing information to the wider community and bringing any concerns or questions the community may have back to the CCC.

HO also noted that the CCC meetings were open to the public. Observers are able to ask questions if time permits however they will not be able to participate in active discussion or vote.

It was noted by attendees that more interest could be generated by advertising in the BKM, Southern Cross TV and Facebook.

An overview of the Broken Hill CCC draft Terms of Reference (TOR) was provided.

AGM noted that the CCC may not be the best forum to communicate with the community if there is not enough interest to form the committee. He noted that AGL will consider other ways to keep the lines of communication open with the community if the CCCs are not continued.

The Southern Cross TV asked the group for permission to take footage of the meeting without sound. Permission was granted by all attendees.

3. Overview of Project Status

AGL update, Adam Mackett (AGM) and Doug Landfear (DL)

Adam Mackett (AGM) and Doug Landfear (DL) provided AGL's overview of the project status.

Please see presentation slides 8 to 12.

DL provided a brief history of the project. He noted that the Broken Hill site was selected along with the Nyngan site for the 'Solar Flagships Project' for the following reasons:

- High level of solar radiation
- Relatively flat land which is easy to construct on
- Unlikely to flood
- No endangered species on the site
- Land that is close to the electricity grid
- High local electrical demand

First Solar update, Jeff McAuliffe (JMc) and Rob Bartrop (RB)

See presentation slide 13.

Rob Bartrop (RB) provided a brief overview of First Solar and his involvement with the project from the development stage.

Jeff McAuliffe (JMc) introduced himself and provided an overview of the project. Key points include:

- First Solar due to mobilise to site on 15 July 2014
- Manufacturing of components in Adelaide and overseas
- Traffic impacts on the Barrier Highway will be managed in accordance with the Traffic Management Plan (TMP). The TMP has been submitted to Roads and Maritime Services (RMS) and is awaiting approval.

Jobs and subcontracts:

- Procurement for the civil tender package is currently underway and First Solar has received tenders from two local companies and other companies based in South Australia and Western Australia.
- The successful contractor will be looking to hire smaller contractors for the work.
- There is a long list of services required from the local area for the project (please see separate list).
- First Solar is currently looking to hire management positions for the Broken Hill Solar Plant. Enquiries related to these positions can be directed to:
 - **Jeff McAuliffe:** Jeff.McAuliffe@firstsolar.com
 - **Paul Harris:** Hays Recruiting, 02 9249 2299 or email at Paul.Harris@hays.com.au

Questions:

Q1. When did construction on the Nyngan Solar Plant start?

A1. Construction started in January 2014.

Q2. Will the contractor used for the Nyngan plant be used for the Broken Hill plant?

A2. The successful contractor for the Nyngan plant is also tendering for the Broken Hill plant. However, there is a larger pool of potential contractors in Broken Hill compared to Nyngan, so local contractors may have an advantage. JMc also noted that there will be other packages out for tender in the near future.

HO asked the attendees how they would like to see information about the project, jobs and employment opportunities communicated to the broader community.

Advertising in the Barrier Daily Truth (in the classifieds section), radio and Facebook were suggested.

Q2. How many truck movements will there be on the Barrier Highway?

A2. AGM to take this question on notice.

Post meeting note

On average there will be an additional 2-3 vehicles per day for materials.

An attendee noted that he sits on a Barrier Highway Committee which deals with emergency response issues and he was concerned that the increased truck movements may impact the emergency services.

AGL to provide answer to question about number of truck movements on the Barrier Highway.

Q3. How much hazardous materials are used in the oil at the substation?

A3. The Broken Hill Solar Plant is connecting directly to TransGrid's existing 22kV Substation. There will be approximately 40 small transformers installed at the site, which will transform output from the solar arrays to grid voltage. Each of these transformers will use a small amount of oil. However no other hazardous materials are used at the site. [FS to confirm]

Q4. Will vegetation be an issue at the site once it is operational?

A4. RB answered that this will be monitored regularly as a balance is required for dust control but also to ensure that the solar panels are not impacted. At the Greenough Solar Plant in WA, sheep were trialed and this was found to be effective.

Q5. What is the cost and efficiency of these solar panels compared to residential solar panels?

A5. The manufacturing cost is lower and the efficiency is similar.

Q6. Are these panels more robust than residential solar panels?

A6. The technology used for the solar plant panels performs very well in high temperatures and degrades less than typical residential solar panels. The output is also better over the course of a year.

Q7. It was noted earlier that sheep chewing the wires could be a problem, what about birds?

A7. We have considered this and do not anticipate that this will be an issue.

Q8. Is this project being funded by the Federal Government?

A8. Four parties are jointly involved in the funding. The Federal Government, NSW Government, AGL and First Solar. AGL is providing approximately 50% of the total project cost.

Q9. Who will be responsible for the maintenance of the plant?

A9. It is AGL's asset so AGL will be responsible overall and First Solar will be engaged to maintain the plant.

JMc also noted that First Solar will have a team based at the Broken Hill site full time for 5 years. There will also be jobs contracted out locally such as replacing broken panels, mowing the grass, fixing the fence etc.

Q10. How much water is required for the project?

A10. There is no water required during operations as the panels will be cleaned by rainfall. The panels perform well even if they are dirty. A minimal supply of untreated water is required during the construction stage to keep dust down. AGL and First Solar are working with Essential Water on this.

The amount of water used will also depend upon how much rainfall Broken Hill receives during the construction stage.

AGM noted that water is required for the construction of the road and a balance of water use and safety eg. dust suppression for the road is required. He also noted that at Nyngan was very dusty at the start of construction and then they had a lot of rain.

Q11. What is the lifecycle of the panels?

A11. There is a 25 year warranty on the panels however the expected lifecycle is 30 years.

Q12. Will you be able to conduct tours around the plant?

A12. When the plant is operating there will be access to site will be restricted. The public will be able to see the plant from the side of the road. However, AGL and First Solar will offer site tours to the community.

Q13. Will you consider having a viewing bay on the side of the road?

A13. This will need to be discussed with the Council.

Councillor Jim Nolan commented that AGL would have unanimous approval from the council on this matter.

Q14. Will there be issues with glare and reflection from the solar panels to motorists?

A14. There is minimal reflection from the panels as they are designed to absorb light, not reflect. This issue was looked at in detail in the Environmental Assessment and RMS was interested in the potential impact early in the morning and late at night.

Q15. What happens after the 30 years?

A15. It is possible that new panels could be installed as there will be existing infrastructure and there will always be sunlight. Alternatively, the plant could be decommissioned.

RB noted that the structural components are built to last and the technology components are easiest to replace.

Q16. What happens to the plant when it is very sunny then suddenly gets cloudy?

A16. The plant will cover approximately 140 ha and passing clouds may not affect the whole at the same time.

<p>4. Ongoing meeting schedule</p> <p>HO noted that if the Broken Hill CCC meetings were to be held on a bi-monthly basis, the next meeting would fall during the school holidays. It was raised by some attendees that this may not be convenient.</p> <p>It was agreed that school holidays will be avoided.</p> <p>It was discussed that the next CCC meeting should be prior to starting construction on the plant.</p> <p>AGL will advise attendees of the next meeting date.</p>	<p>AGL to advise the attendees of the next meeting date.</p>
<p>5. Next meeting and close</p> <p>It was commented by an attendee that Broken Hill has had a big uptake of residents installing solar panels at home and the town is very interested in residential solar and very supportive of the solar plant.</p> <p>DL commented that the support from the town and council was one of the reasons why AGL decided to build the plant at Broken Hill and that AGL is very excited to be part of the community.</p> <p>The meeting closed at 7:55pm</p>	

Action Item	CCC meeting	Status
AGL to provide answer to question about number of truck movements on the Barrier Highway.	May 2014	Closed – please see post meeting note on page 5
AGL to advise the attendees of the next meeting date.	May 2014	Open