



Dumaresq Solar Farm

# DISCUSSION MATERIAL

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*Inverell Shire Council Presentation – Annotated Version*



The Dumaresq Solar Farm project site is located on the lands of the Ngarabal people, and we both acknowledge them as Traditional Owners and pay respects to Elders past, present & emerging.

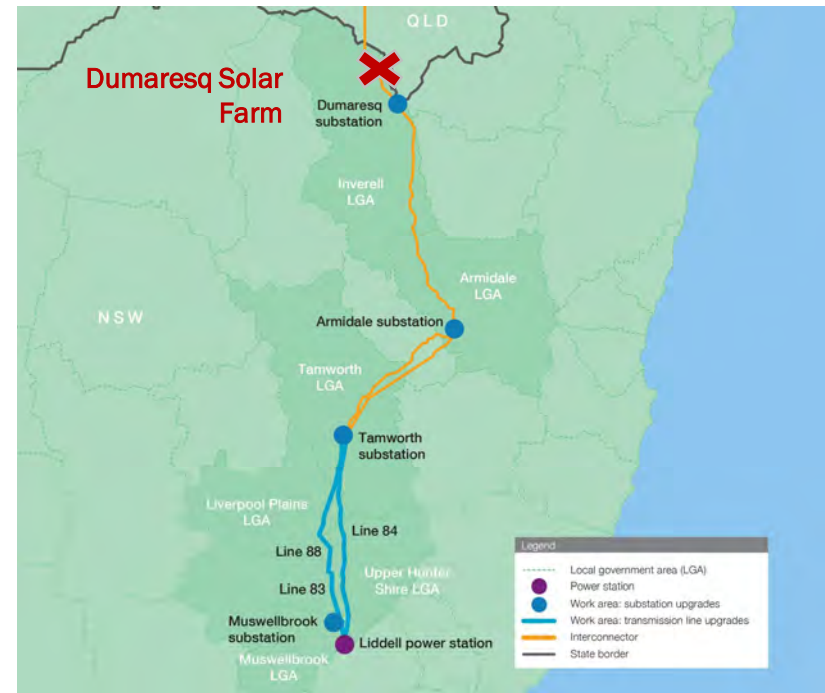


# Workbook Index

- 1 Sears Update – Key Issues
- 2 Nameplate Capacity & Technology
- 3 Design Finalisation
- 4 Stakeholder & Community Engagement

**Appendix** Walking Country & Site Pictures

190MW AC (245 MWDC) Utility Scale PV Generator with Long Duration BESS (up to 190MW/760MWh) ideally placed proximate to the Dumaresq Switch and on the 330kV Queensland – NSW Interconnector (QNI)





# SEARs Update – Key Issues

Most modules of work either completed or planned for completion



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## Biodiversity

Have completed extensive studies on site over multiple field studies – which researched entire Lot (not just proposed Generator footprint). Now exploring ACCU strategy for pasture improvement

## Heritage

All work has been completed and the draft report issued. This being “kept fresh” for inclusion in final EIS

## Traditional Owner

All work has been completed and the draft report issued. This being “kept fresh” for inclusion in final EIS. Walks on country completed. Management Plan being finalized. No design impact

## Traffic

All work has been completed and a draft report issued. Slowdown lane recommended at site for Bonshaw Road. Bonshaw Road already B Double rated.

## Land & Water

All work has been completed on site and draft report issued. Recommendations being considered as a part of final design

## Waste

Recycling of initial construction waste reviewed. *Battery Pollution* also now planned for BESS & Solar PV recycling. Focus on efficient recycling of various waste streams – including cardboard.

## Visual & Noise

Preliminary work undertaken and final report will be generated once the final generator footprint is determined. Remote location means minimal impact

## Hazards & Risks

Finalising PHA which includes extensive allowances for dedicated water on site, APZs & internal track sizing

## Socio Economic

- Extensive community engagement undertaken including letterbox drops, consultation, extensive media campaign in 2 regional newspapers, websites & social media
- Verifiable “regional spend” to date including extensive payments to landowners

## Status

- ✓ No species credits anticipated
- ✓ Acceptable ecosystem credits
- ✓ No further “fresh” work required
- ✓ No further “fresh” work required
- ✓ Management Plan Drafted
- ✓ Final adjustments – no issues anticipated
- ✓ Final adjustments – no issues anticipated
- ✓ Final report to be generated – no issues anticipated
- ✓ Final report to be generated – no issues anticipated
- ✓ Final report being prepared for larger BESS – Best practice
- ✓ Requires capstone “town hall meetings” but should be near completion of all works

# “Nameplate” Capacity & Technology

Objective of adopting best in class technology to ensure reliability of Generator



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## Generator

Continue to strive for maximum generator capacity of 190MW AC

## BESS

Continue to strive for maximum BESS Capacity of 190MW/ 760 MWh maximum

## AEMO

DSF is now registered as an Intending Participant (Generator) in the National Energy Market

## Panels

Size of panels to be determined – rapid growth in size – recent 800w panel released

## Trackers

Combination of Single/Dual Axis tracking & Fixed Tilt [tracking can produce c. 20% +]

## Inverters

Design considering Central vs String inverter configuration. AEMO acceptable OEM key

## BESS

Discussions with Vendors commenced– design influenced by changing PHA frameworks

## SCADA

Discussions with Vendors commenced

## Software

Objective of introducing best in market software / technology solutions to areas including:

- Operations & management optimisation
- “Predictive weather”
- Bidding optimisation

## Examples of OEMs



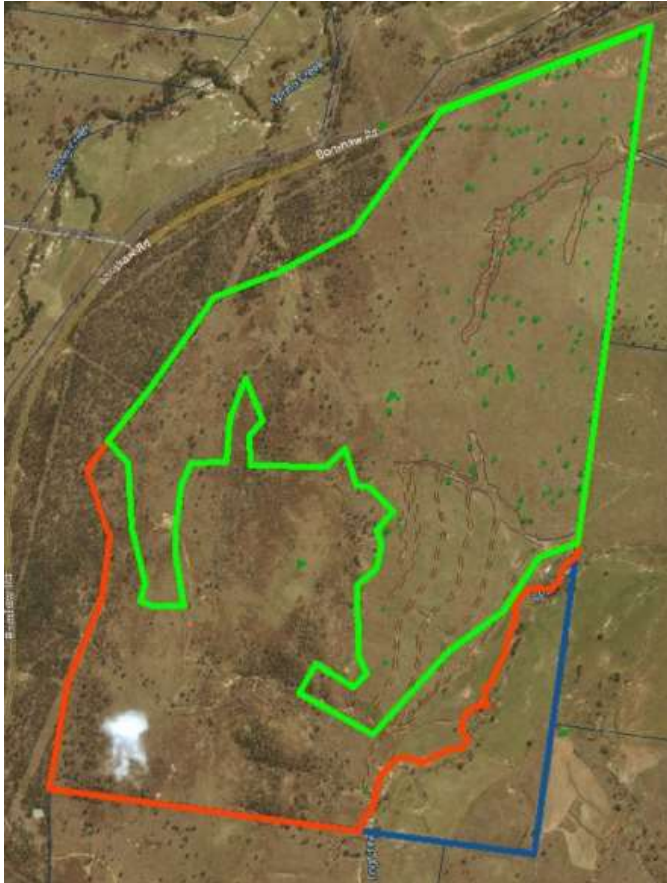


# Design Finalisation

Biodiversity Field Studies completed late January 2023 allow near term finalization of all planning



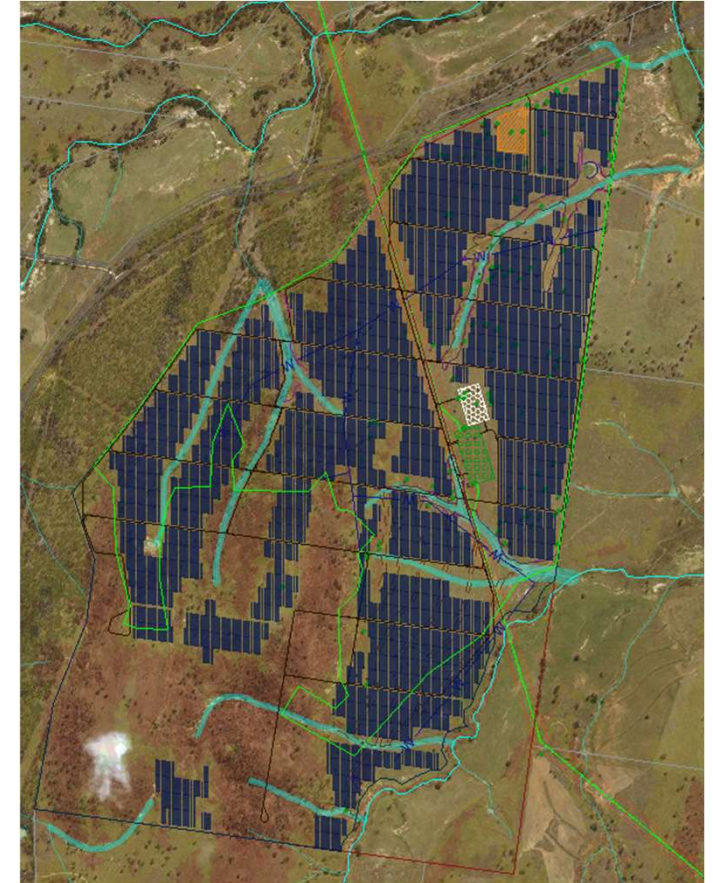
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Project Boundaries as per original Scoping Report supporting SEARs



Vegetation Condition Assessment Report completed January 2023 to ensure all seasonal species investigated & considered



Exploring Alternative Design Layouts to consider consultant recommended adjustments

# Stakeholder & Community Engagement

Extensive & Ongoing Consultation



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## Regional Landowners

Sensitive to local issues. These include water management, rural fire response & resources and “community enriching” activities which will contribute to local economy

## Community

Process of development has been to communicate via various media whilst maintaining a philosophy of best practice development for a critical & necessary piece of infrastructure. Respect of environment, traditional owner heritage & local issues maintained at all times

## Probity

Maintenance of detailed communication logs and a focus on initiatives that will provide sustainable benefit – short & long term

## To Date

### Landowners

Substantial development payment payments made

### Community

“Grass Roots” support of initiatives such as “Fierce Female Farmers” during the drought

## Proposed

- Initial 20 Year Lease + staged options for further 20 years
- Up to 40 years of annual rental payments
- Potential ACCU strategy for carbon capture / land improvement
- Combination of Inverell Shire Council & Local Initiatives
- Explore local suppliers & employment opportunities
  - Accommodation\*
  - Extractive materials\*

## Community Fund Principal Elements

1. Support key Legacy project (Aquatic Centre) & “Bonshaw local” initiatives
2. Legacy project commitment (on DA) of XXX per annum for a 10 year period
3. Additional support to Legacy project of Panels & BESS to cap of XXX
4. Paperwork as simple as possible whilst maintaining highest levels of probity
  - DSF happy to take ISC lead on structures & approaches to maximise efficiency
  - **“Simplicity, Positive Impact & Transparency”** objectives in funding management

1. Bonshaw local initiatives a result of detailed consultation
2. Open to other regions for inclusion where economically feasible
3. Part managed by ISC under grants structure. Simplicity, transparency & equality of opportunity key criteria: Examples:
  - “Bonshaw Campdraft” “rolling commitment” based on annual success & ongoing commitment to conduct
  - Rural Fire Service support for local “mobile” fire response hardware – decentralized equipment strategy



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# Appendix





## Dumaresq Solar Farm

# Inverell Shire Council Session Q&A

Key questions of interest only summarized – in no order of importance

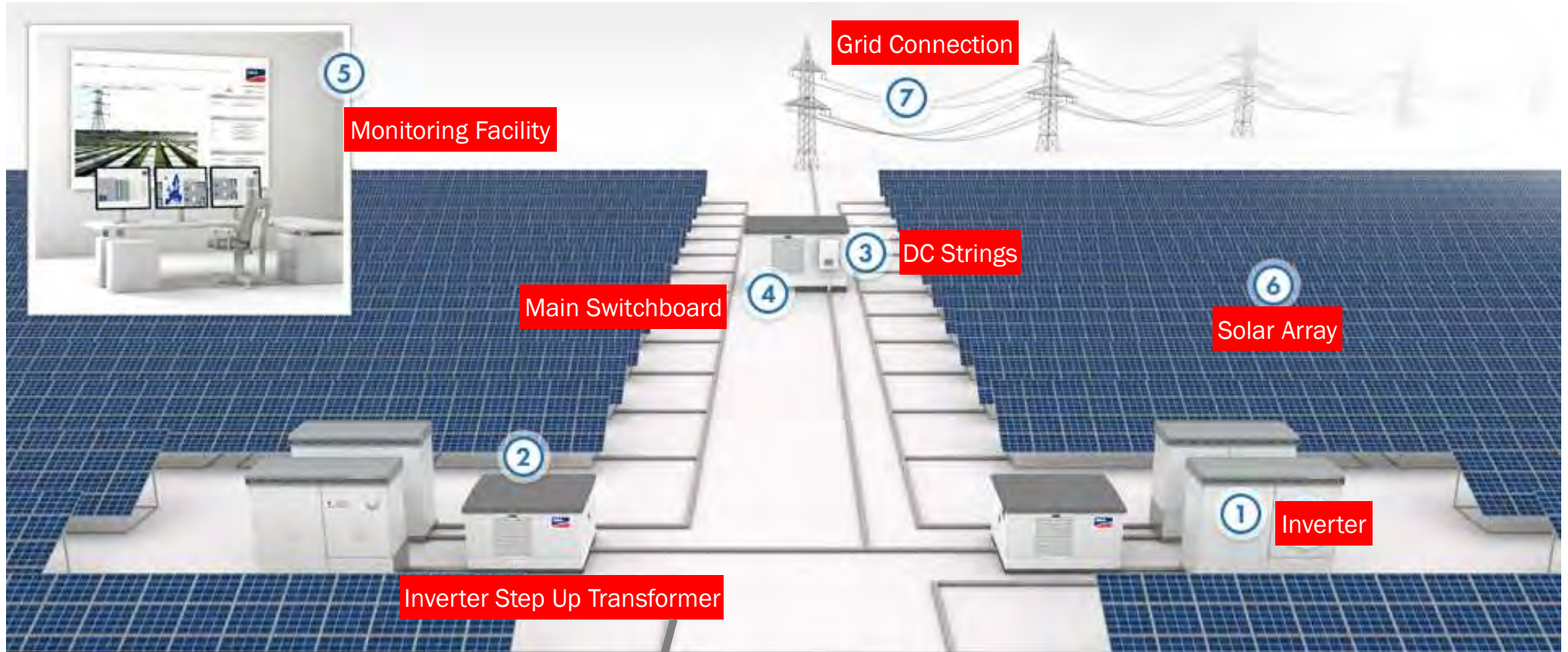
Councillor	Question	Response
Cr Dight (Deputy Mayor)	Proposal is for economic support of areas such as Bonshaw & Ashford – but are we open to other regions such as Yetman ?	Absolutely happy to explore. All commercial matters will of course need to be economically feasible Our verifiable approach to date has been to support regional businesses - & that will continue
Cr Baker	(comment) It is a high priority that the smaller towns and regions are supported as much as possible during these projects	Agreed. The DSF project will promote opportunity in employment for ISC residents as an example. Not all will want the work but the opportunity will be there. We have also already been focused on areas of priority for ISC including accommodation, support for local businesses and waste management
Cr Williams	What is the average useful life of a Solar Panel or Battery Storage unit ?	The “warranty” on these units is usually around 10 years but they are designed for long duration. We expect that there will be various single unit failures in shorter duration ( <i>design / manufacturing flaws &amp; weather events as examples</i> ) – hence why there is a specialist waste recycling strategy
Cr Harmon (Mayor)	What if the prioritised regional funding support initiatives are not advanced ?	After extensive consultation our priorities for community support are “functional” and based on wide ranging benefits. Of the many areas investigated initial areas of support post approval will be the “Bonshaw Campdraft” and the development of mobile firefighting units for landowner benefit. Our preference is for these initiatives to be reviewed annually and if community seek annual extension that that is automatic”. If community does not renew then a simple process of those funds being redirected through ISC grants on a collaborative & transparent basis
Cr Dight (Deputy Mayor) & Cr Harmon (Mayor)	Timing on the submission of EIS ?	All packages of work are now completed and consultants are writing the final reports. We are working towards submission in April 2023

# Typical Hardware Components

On DSF project optimised to leverage position next to the QNI



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Battery Energy Storage System





# Walking Country & Site Photos

Archaeological Studies



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# Walking Country & Site Photos

QNI Splits the Dumaresq Solar Farm Site



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# Walking Country & Site Photos

Ideal Remote Country – Paddock Has Had Livestock Grazing For Over 50 Years



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# Contact Details



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