



Application for Generation Licence

Iraak Sun Farm Pty Ltd

Public submission



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1 Information on the Applicant and nature of the application

1.1 Introduction

Iraak Sun Farm Pty Ltd (*ISF or Applicant*) is applying for a licence to generate and transmit electricity from a 112.5MW_{DC}/90 MW_{AC} Solar Farm that is being built approximately 35km south of the town of Mildura, Victoria. The Iraak Solar Farm (ISF) will be owned and operated by ISF Pty Ltd, which is ultimately owned by BayWa r.e. renewable energy GmbH according to the corporate structure provided in Figure 1. It is expected that the project will be fully energised by 15 June 2018.

The farm will consist of the following components that are being procured from the suppliers SMA¹, GCL², and Nextracker³:

- 346,260 polycrystalline modules⁴ (Solar photovoltaic modules)
- 40 central inverters⁵ (SC 2500-EV)
- Single axis solar tracking system⁶ rated for 112.5MW_{DC} as required
- 1,700,000m of Prysmian cables (Solar)
- 1 x 100MVA Transformer
- 40 x 2.5MVA Transformers
- RMU/Switchgear

The contract for Engineering, Procurement, and Commissioning (EPC) has been awarded to Energy Solutions Pty Ltd (*Beon or Contractor*) as of 25 January 2018. The parent company to the applicant (BayWa r.e.) has good relations with Beon as they recently collaborated on a 20MW solar farm in Hughenden, Queensland. Hughenden is currently in commissioning stages, and BayWa r.e. intends to oversee the Operations and Maintenance (O&M) of the project for the next 10 years.

The full land lease agreement for the ISF project was executed on 21 December 2016, and the Generator Deed with Powercor executed on 31 October 2016. Development of the project began in Q1 2016. A Power Purchase Agreement (PPA) has been made for 33% of the plant's annual output as per section 1.6. As the project is to be energised 15 June 2018, a generator licence is required by this date.

The Mildura Rural City Council has approved all planning permits⁷ for the project to allow for use and development of the land for a renewable energy facility. The project received press coverage as of March 2018⁸. Following commissioning of the project, BayWa r.e. plans to undertake O&M as well as asset management for a period of 10 years. This will involve upkeep of services through regular inspections (drone thermography and visual inspections), landscaping (grass slashing and panel cleaning), and monitoring of switch room/SCADA systems. The capability of BayWa r.e. has been proven through their maintenance of 4500MW of renewable energy projects globally including the O&M for the Hughenden Solar Farm.

¹ See website <https://www.sma-australia.com.au/>

² See website <http://www.gcl-poly.com.hk/en/>

³ See website <https://www.nextracker.com/>

⁴ See attachment 1

⁵ See attachment 2

⁶ See attachment 3

⁷ See attachment 4

⁸ See <http://reneweconomy.com.au/construction-112mw-mildura-solar-farm-underway-84711/>

1.2 Applicant Details

The details of the Applicant applying for a generator licence are provided in Table 1.

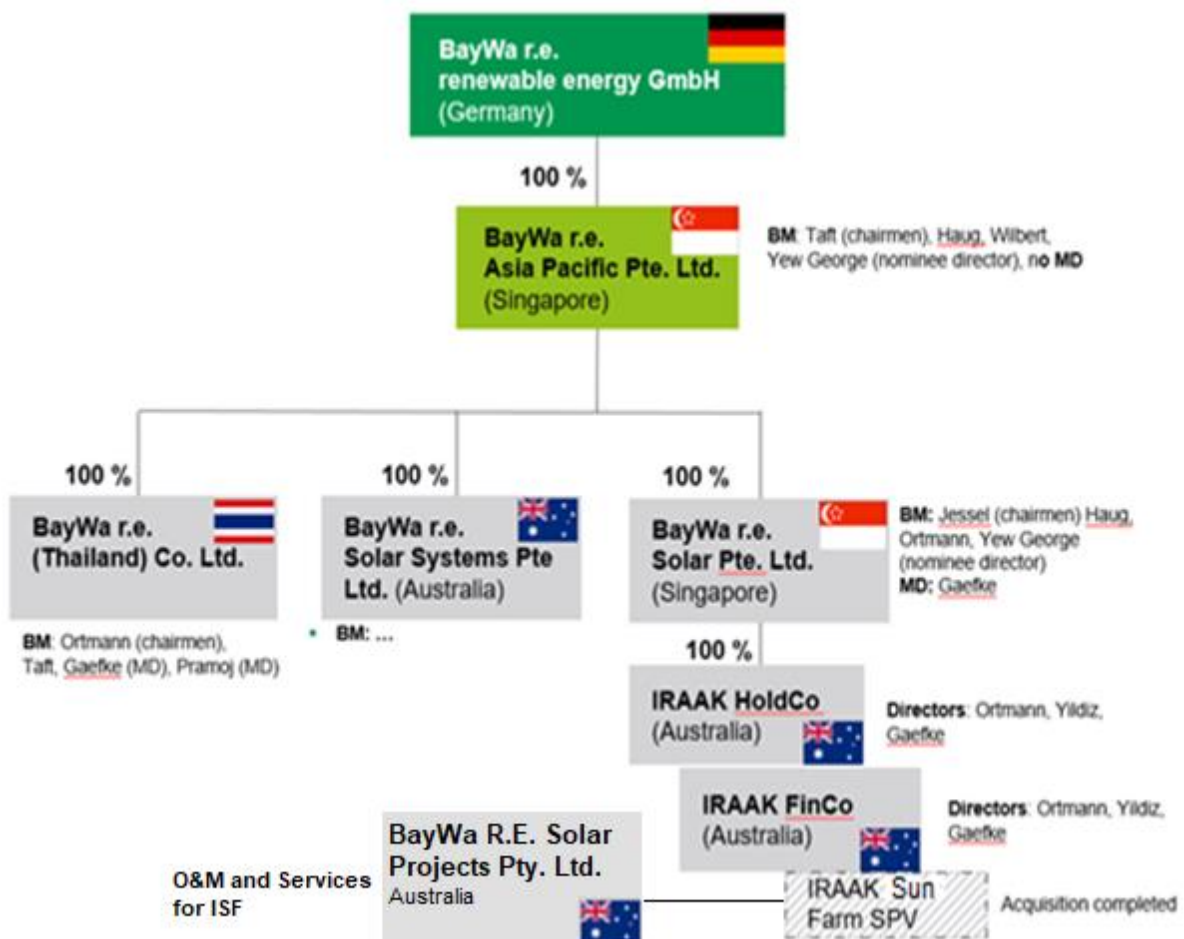
Applicant's name	Iraak Sun Farm Pty Ltd
ABN	38 611 727 774
Registered business address	[REDACTED] Melbourne, Vic 3000
Contact person	Krish Karimbil, [REDACTED]
Incorporation details	Iraak Sun Farm Pty Ltd was incorporated on the 7th of April, 2016 ⁹

Table 1: Applicant details

1.3 Corporate Structure

Iraak Sun Farm is a subsidiary of a structure of companies and is directly owned and managed by Karadoc Solar Farm FinCo Pty Ltd. Figure 1 shows this structure in its entirety.

Figure 1: Corporate structure

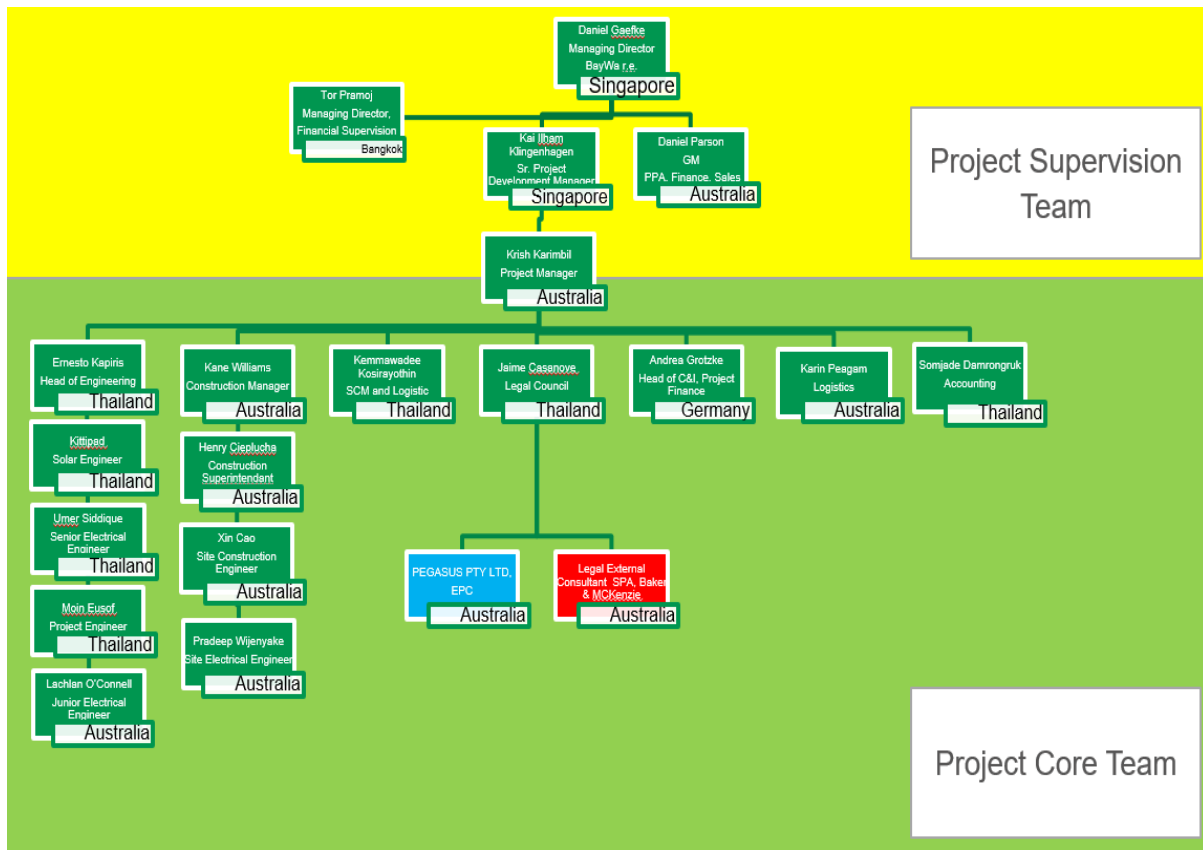


1.4 Organisational Structure

The organisational structure of the Applicant is provided below in Figure 2.

⁹ See attachment 5

Figure 2: Project organisational structure



1.5 Experience of key personnel

The long-term experience of some of the key personnel working directly with the solar farm project will contribute greatly to the project’s success. A summary of these key members’ experience is provided in attachment 6. The project team is backed by the company BayWa r.e. Renewable Energy GmbH as is shown in figure 1. BayWa r.e. has delivered 142 solar projects around the world and currently manage approximately 1300MW of solar energy in various regions:

- North America: 13 solar projects with 57MW installed
- EMEA: 129 solar projects with 557MW installed
- Asia-Pacific: 4 solar projects with 230MW installed

Most recently, BayWa r.e. constructed the Hughenden solar farm in Queensland where Beon undertook the EPC for the project. The site consisted of close to 60,000 solar panels, and the entire process from purchase of the lease to construction of the farm was completed within only a few months. A PPA for the project was secured for 13 years, and BayWa r.e. will be overseeing the O&M for the project for the next 10 years. With this being their first project in Australia, BayWa r.e. utilised their resources efficiently to bring their expertise into a market previously unknown to them.

1.6 Contracts and agreements

Contract/Agreement	Related party
Iraak Sun Farm Lease ¹⁰	Ian Keith McNabb and Elizabeth Anne McNabb
Engineering, Procurement, and Commissioning (EPC) Contract ¹¹	Energy Solutions Pty Ltd
External Road Works Agreement ¹²	Roads Corporation (VICROADS)
Power Purchase Agreement ¹³	CUB Pty Ltd
Generator Deed ¹⁴	Powercor Australia Limited

Table 2: Contracts and agreements

1.7 Planning and Environment

1.7.1 Cultural Heritage Management Plan

The site for the Iraak Solar Farm was examined by Archaeology at Tardis¹⁵ via the GeoVic online mapping application and was assessed against the Aboriginal Heritage Regulations 2007. It was determined that since the area was not situated within a legislated area of Aboriginal cultural heritage sensitivity, a Cultural Heritage Management Plan is not required.

1.7.2 Flora and fauna assessment

Biosis Pty Ltd was commissioned to undertake a Flora and Fauna Assessment¹⁶ of the solar energy site at Iraak. The results of the study have been taken into consideration in the design of the project.

1.7.3 Planning permit

Mildura Rural City Council has allowed for use and development of the land for a renewable energy facility through a planning permit¹⁷. The permit also allows for removal of native vegetation and alteration to a road in a road zone.

1.8 Lease agreement and conditions

A lease has been secured between the applicant and the related party as mentioned in section 1.6. The conditions of this lease enable the applicant to make use of the land for Solar Plant Activities as defined in the contract while ensuring compliance with all relative environmental and statutory laws.

1.9 Incorporation details

Refer table 1, section 1.2.

1.10 Details of any prosecutions or regulatory complaints against the Applicant

There have been no prosecutions or regulatory complaints commenced against the Applicant or any other company or person related to or associated with the Applicant.

¹⁰ See attachment 7

¹¹ See attachment 8

¹² See attachment 9

¹³ See attachment 10

¹⁴ See attachment 11

¹⁵ See attachment 12

¹⁶ See attachment 13

¹⁷ See attachment 4

1.11 Licence information

1.11.1 Type of licence sought

ISF is seeking a licence for the generation of electricity under the Electricity Industry Act 2000. The substation is scheduled to be energised in July 2018. It is intended that the solar farm begin generating electricity immediately, and so ISF is seeking a licence from June 15 2018.

1.11.2 Nature and scope of operations

Electricity will be generated and sold through the National Electricity Market to the buyer as agreed (refer section 1.6). The agreement with the buyer is valid until 31 December 2030.

No other unsuccessful licence has been sought in this or any other jurisdiction.

No other licences are held by the Applicant or by associates of the Applicant in this or other jurisdictions.

The applicant is not seeking any non-standard licence conditions.

2 The Commission's objectives

The ongoing project at the Iraak site will contribute to protecting the long-term interests of Victorian consumers as is a primary objective of the commission¹⁸. Introducing a new renewable source of generation into the market will provide consumers with greater choice, meaning the equilibrium price of the market will shift down. Additionally, the lack of emissions resultant of the form of generation will attribute to a cleaner energy market with lower impact on the environment. The quality and reliability of these services is guaranteed by the many years of experience of the project team and the Applicant's mission of constantly setting new standards in the renewable industry.

ISF is conducting the project in a manner which complies with the Commission's objectives outlined in section 8A of the ESC Act¹⁹.

2.1 Efficiency in the industry and incentives for long term investment

Through its introduction to the industry, ISF will contribute to competitive pricing and lower emissions. The technology's reliability is generally accepted and the project's operational life expectancy is 25 years, creating a strong opportunity for long term investment.

2.2 Financial viability of the industry

The Applicant is backed by a structure of companies and is completely financed by its parent company BayWa r.e. The renewable industry is growing rapidly and will continue to expand with the desire to reduce emissions and generate cleaner energy. The National Electricity Market provides a platform for the competitive sale of electricity, where renewable energies are emerging as the strongest competitors for price with the greatest incentive to consumers.

¹⁸ Refer http://www8.austlii.edu.au/cgi-bin/viewdoc/au/legis/vic/consol_act/esca2001327/s8.html

¹⁹ Refer http://www8.austlii.edu.au/cgi-bin/viewdoc/au/legis/vic/consol_act/esca2001327/s8a.html

2.3 The degree of, and scope for, competition within the industry, including countervailing market power and information asymmetries

ISF will contribute to competition in the industry, and by generating only a small portion of the demand for electricity in Victoria, ISF will not be able to monopolise the market. Market power will be taken from larger suppliers as the related party in the power purchase agreement will be able to supply at a competitive price.

2.4 The relevant health, safety, environmental, and social legislation applying to the industry

ISF prioritises health and safety in the workplace through risk management and safe work methods. Assessments of the planning area were carried out in the initial stages of the project to determine potential environmental impacts relating to heritage sites, flora and fauna, traffic considerations, and fire management. These assessments were taken into consideration during the design stages of the project. Both the construction and the operation of ISF will comply with the HSE legislations of the electricity industry in Victoria.

2.5 The benefits and costs of regulation for consumers and regulated entities

The power purchase agreement made by the applicant with CUB Pty Ltd dictates a fixed sale price of the generated electricity that will be very competitive in the current market. This will benefit consumers as they will be supplied electricity at a lower rate, and should result in less need for regulation by the NEM, forcing greater competition between regulated entities.

2.6 Consistency in regulation between States and on a national basis

The creation of new renewable energy generation sites will incentivise growth in the industry, leading to the production of more sites nationally. By setting an example through the creation of a reliable solar farm generating clean electricity, the industry will grow and similar projects will be undertaken nationally. This will promote consistency in regulations between the States as the supply of cheaper electricity greatly increases.

3 Information on financial viability

The ISF project is fully financed by its parent company BayWa r.e., who had a turnover of €945.9 million in the 2016 financial year. BayWa r.e. is in turn financed by the umbrella company BayWa AG, a 100-year-old German company that deals primarily in agriculture with a 2016 turnover of €15.4 billion. With the support of these large-scale businesses, any external factors affecting the time scale of the project or the capabilities of ISF can be effectively dealt with. ISF will effectively have sufficient financial resources to sustain the proposed operations, including all relevant prudential requirements set by AEMO. This section will provide supporting data on the financial viability of the ISF project.

3.1 Financial data

A Consolidated Financial Statements report is provided in attachment 14 and includes a balance sheet, an independent auditor's report, and statements of assets and liabilities.

3.2 Significant Contracts

Significant contracts are provided in section 1.6

3.3 Business plan

The only interest of ISF Pty Ltd is to deal in the generation of electricity from the Iraak Solar Farm, as it has no further plan to develop additional assets. As outlined in section 1.6, a power purchase agreement has been made with CUB Pty Ltd for 74GWh (33% of the farm's annual capacity) per annum at a fixed price that will last until 31 December 2030. Additionally, a second agreement for the sale of 55% of the facility's annual output is currently underway. As the parent company is trying to enter the Australian market and become competitive, it is in their strong interest to continue support for the ISF project post completion to manage the farm and maintain it for as long as possible. To this effect, BayWa r.e. plans to oversee O&M of the project and asset management activities for 10 years post commissioning of the farm through the dedicated company BayWa R.E. Solar Projects Pty Ltd.

3.4 Annual report

The annual report is provided in attachment 15.

3.5 Certificate of registration

The certificate of registration is provided in attachment 16.

3.6 Statements from parent company

A statement from the parent company BayWa r.e. Pte Ltd is provided in attachment 17.

3.7 Guarantees in place

The ISF project is guaranteed by its parent company according to Figure 1, which is in turn guaranteed by the umbrella company BayWa AG. The support of these companies will enable ISF to deal with any external interference or discrepancies that negatively influence the project. A statement from the parent company BayWa AG is provided in attachment 17. This statement assures the capability to sustain operations as it implies the provision of sufficient financial resources.

3.8 Australian Financial Services Licence

An Australian Financial Services Licence is not required as ISF Pty Ltd is not providing financial services to clients²⁰.

3.9 Discussions with licensed distributors

A PPA has been made with CUB Pty Ltd for the purchase of 33% of the annual output of ISF as per attachment 10. Additional distributors are being contacted to secure a second contract for the purchase of the majority of the annual output at a fixed price for a set period.

²⁰ Refer <http://asic.gov.au/for-finance-professionals/afs-licensees/do-you-need-an-afs-licence/>

4 Information on technical capacity

4.1 Organisational chart of key personnel with details of experience and knowledge of the industry

A chart showing the organisational structure including key personnel related to the project is provided in section 1.4, with supporting details of experience and knowledge of the industry provided in section 1.5.

4.2 Contracts with external service providers, including customer and supply contracts and outsourcing arrangements

All related contracts and agreements are outlined in section 1.6.

4.3 Statements from industry bodies

Since ISF Pty Ltd has not participated in the energy market in Victoria to date, there are no applicable statements from EWOV or any other industry body. Despite this, ISF has contacted AEMO and Powercor to secure a generator registration²¹ and a generator deed²² with BayWa r.e. Solar Projects Pty. Ltd. acting as intermediary. Additionally, an agreement has been made with CUB Pty Ltd for the sale of 33% of the farm's full annual output with another agreement for the sale of an additional 55% underway.

4.4 Internal controls, policies and procedures

As Energy Solutions Pty Ltd manages EPC, they are responsible for providing a project specific Work Health and Safety Management Plan (WH&SMP) and for ensuring principles of Safety in Design are followed throughout all phases of the work as per sections 5.3.1 and 5.3.2 of the EPC contract (refer attachment 8). In accordance with this, they have provided the following policies and procedures:

- Construction Management Plan²³
- Health, Safety and Environment Management Plan for Construction²⁴
- Project Procedures Manual²⁵

4.5 Business model

Refer to section 3.2.

4.6 Risk management policies

Risk management is a major component of any project, and BayWa r.e., as the owner of ISF Pty Ltd, makes it a priority to understand and manage all potential risks prior to the commencement of a project. Australian standards were adhered to in the development of a risk management plan based on the legislation AS/NZS ISO 31000:2009 Risk management – Principles and guidelines. The Risk Management plan can be found in attachment 22. For relevant risk management policies provided by the EPC contractor, refer to section 4.4.

²¹ See attachment 18

²² See attachment 11

²³ See attachment 19

²⁴ See attachment 20

²⁵ See attachment 21

Additionally, Energy Solutions Pty Ltd as the holder of the EPC contract has the following accreditations:

- AS/NZ 4801 Workplace Health and Safety Management
- ISO 9001 Quality Management
- Federal Safety Commission Accreditation
- ISO14001 Environmental Management

4.7 Demonstrations of billing and management systems

As ISF is a generator and does not deal in the distribution of its output, ISF will have no billing or management systems with consumers.

4.8 Complaints register and procedures

Any complaints that arise are to be emailed to [REDACTED], as is clearly posted on all site construction signs. All complaints are documented and dealt with within three business days from the time they are received, and all reasonable complaints are considered during construction.

4.9 Privacy statements

ISF keeps electronic backups of all related documents and includes privacy statements as required by statutory obligations.

4.10 Document retention policies

ISF Pty Ltd makes use of the online software Aconex for document management and sharing. By incorporating all related contractors into specific groups, documents can be posted and shared with the necessary recipients and cannot be removed. Each organisation on the network can control its own data and set rules around how that data is shared. In addition to Aconex, the online platform Box is used to store all documents related to the project and a backup of the directory is stored independently on most devices linked to the company Box through Box Sync.

In accordance with the National Electricity Rules, these documents will be retained for a minimum period of 7 years.

5 Information in support of a generation licence application

5.1 Details of experience in and knowledge of the electricity industry

ISF Pty Ltd.'s parent company BayWa r.e. has extensive experience in the renewable electricity industry through its international delivery of 142 projects with approximately 600MW of solar energy capability delivered. BayWa r.e. currently manages approximately 4500MW of solar and wind energy around the world, and has the knowledge to bring their expertise to the Australian market in Victoria.

Currently BayWa r.e. manages O&M for a 20MW solar farm in Queensland. This solar farm was created by BayWa r.e. with the EPC of the project handled by Beon, leading to good relations between the two companies.

5.2 Evidence of the capacity to comply with licence conditions

Through the experience and knowledge of the project's key personnel and parent company (refer section 1.5), ISF Pty Ltd will provide a sound product that complies with the conditions specified by the licence and will operate wholly within the bounds of the statutory obligations that accompany the licence. This is evidenced by the recent undertaking of the Hughenden Solar Farm in Queensland that is currently being maintained by the parent company BayWa r.e.

5.3 Related entities

Energy Solutions Pty Ltd was chosen to perform all engineering, procurement, and commissioning duties of the ISF project. Energy Solutions Pty Ltd operates under the name Beon, and is an energy solutions business with a heritage in safety and reliability. Beon has been involved in more than \$3billion of Australian utility assets including transmission, distribution, and substations. BayWa r.e. and Beon have worked collaboratively on a project before, and the good relations between the two companies will assist in making the ISF project successful. Refer to section 1.6 for the EPC contract.

A consultancy agreement was made with Aurecon²⁶ such that Aurecon will oversee the reliability of the engineering designs created by Energy Solutions Pty Ltd. Aurecon is an engineering and infrastructure advisory company that is certified to ISO 9001 who pride themselves on quality assurance. The consultancy of the design of the project will ensure the high standard to which ISF intends to maintain the asset.

5.4 Preliminary registration with NEMMCO

Preliminary discussion for registration as a generator in the NEM has been discussed with AEMO as per attachment 23.

5.5 Confirmation that all planning and environmental approvals have been completed

All planning and environmental assessments have been completed and a planning approval has been supplied by the Mildura Rural City Council as per section 1.7.

5.6 Risk, governance and compliance management strategies

An overview of risk management policies is provided by the applicant in attachment 22 and a HSE plan provided by the EPC contractor in attachment 20. As required by the EPC contract, the contractor is responsible for HSE management on site, as well as managing construction and project procedures according to the manuals provided in attachments 19 and 21.

Compliance to Australian Standards for all constructions on site is ensured by the accreditations of the contractor as stated in section 4.6. Additionally, Aurecon has been contracted as a consultant for all engineering drawings proposed by the EPC contractor to ensure the compliance to Australian Standards and their reliability. Revisions are made by the EPC contractor based on feedback from the consultant and from the project team of the applicant.

5.7 Evidence that demonstrates that the entity can successfully operate a business within the electricity industry

The groundwork for future success in this venture has been laid out with a long term PPA contract as well as the necessary deeds required for the progression of the project. The ongoing management of

²⁶ See attachment 24

1200MW of solar generation by the parent company displays the capability of the entity to succeed. The success with the Hughenden project most recently in Queensland gives insight into how well the ISF project will perform. With the strong knowledge and experience background of the key personnel participating in the project, in addition to the backing by such a strong parent company, there is good evidence that the proposed licence will be of ongoing benefit to the NEM and will pave the way for future projects of a similar scale across all jurisdictions.

5.8 Cross ownership

There are no cross-ownership issues arising under the provisions of Part 3 of the EI Act – cross ownership.

6 List of Attachments

1. Multi-Crystalline Module data sheet
2. Medium Voltage Power Station data sheet
3. Tracking System installation manual
4. Mildura Rural City Council Planning Permit
5. Constitution of Iraak Sun Farm
6. Experience of Key Personnel
7. Iraak McNabb Sun Farm Lease
8. EPC Contract
9. External Road Works Agreement
10. Power Purchase Agreement
11. Generator Deed
12. Heritage Statement
13. Flora and Fauna Assessment
14. Consolidated Financial Reports BayWa AG
15. Annual Report
16. Iraak Sun Farm Pty Ltd ABN Registration
17. Statement from BayWa r.e. (parent company)
18. Generator Registration
19. Construction Management Plan (Beon)
20. HSE Plan (Beon)
21. Project Procedures Manual (Beon)
22. BayWa Risk Management Plan
23. Confirmation of Application for Registration in the NEM
24. Consultancy Agreement – Aurecon
25. Statutory Declaration