

Public Record



Capital Solar Farm Submission to the Anti-Dumping Commission

Dumping Investigation:

ADC 239 – PV Modules or panels being exported from China

Submitter Contact Details:

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Role of Party:

Infigen Energy is an Australian developer, owner and operator of renewable generation assets with interests in 24 wind farms (1,646 MW equity interest) across Australia and the US.

Introduction:

Infigen Energy is in the final stages of developing Capital Solar Farm, a 30MW_{AC} solar farm in the Canberra region. Infigen has been developing this site for approximately four years. To date, Infigen has secured the land, executed the main Engineering, Procurement and Construction contract and the connection agreement. As a result, the project is now construction ready.

The site has been designed utilising 300 and 305 watt Poly Crystalline Solar Modules supplied from China, mounted on a ground mount system. The site layout has been optimized for these size modules, with a DC/AC ratio of 1.27 and will utilise approximately 130,000 panels.

It is Infigen Energy's view that the photovoltaic modules being sourced for Capital Solar Farm, being a mix of 300 and 305 Watt 72 cell modules, cannot be replaced with equivalent goods currently being produced or manufactured in Australia. In addition to not manufacturing or having the capability to manufacture 72 cell modules or panels with a wattage of 300 or greater, the sole Australian manufacturer's production capacity is extremely limited. Even if the Tindo factory was operating at maximum capacity and 100% of this production was dedicated to supplying Infigen, it would still take in excess of 15-16 months to produce the volume of modules required for the Capital Solar Farm. The cost of this delay on the project (resulting from a materially longer construction timeframe and resultant additional debt and construction costs) would make the project commercially unviable.

Infigen Energy does not believe Tindo manufacture a like good to the goods we require for our project. Below is an overview of Infigen's concerns relating to the use of Australian manufactured PV modules in utility scale projects and the impact any introduced tariff may have.

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Physical Likeness:

Tindo do not manufacture any product other than 250W, 60 cell modules. The optimised design for Capital Solar Farm requires 300/305W, 72 cell modules. The Tindo application (Page 14) specifically notes that a 300W module is not produced in Australia and that Tindo are not certified to produce this model. The use of these larger modules allows for a 22% increase in Power output for a 7% increase in size.

If the Capital Solar Farm project was redesigned to incorporate 250W modules, the following design modification would be required:

1. Number of panels to be supplied: >300W – 129,880, 250W – 155,856
2. Physical area of modules required: 300W – 242,613sqm, 250W – 271,205sqm
3. Estimated additional ground mounting system required – 20% increase
4. Estimated additional DC cable required – 12% increase
5. Estimated additional panel mounting cost increase – 20% increase
6. Significant increase to area required for bio-diversity offset (1:30 ratio)
7. Additional operational costs – TBD (related to increased servicing of balance of plant and modules, additional ~30,000sqm of panels to be cleaned, increased land rent)
8. Additional debt funding costs due to materially slower construction timeframe.

Commercial Likeness:

Infigen Energy traditionally uses project finance for the construction of projects such as the proposed Capital Solar Farm. Financiers do not consider Tindo Solar a suitable supplier for the purpose of non-recourse project finance for the following reasons:

1. Financial:

- a) PowerGuard Insurance is not available on the Tindo Products and is required by project financiers;
- b) Inadequate balance sheet;
- c) Tindo were not listed in the Bloomberg New Energy Finance bankability survey (28th April 2014) as a bankable module supplier

2. Technical:

- a) Tindo is not currently certified to manufacture 72 cell, 300/305W modules required in utility scale projects;
- b) Tindo cannot be factory audited and are not certified to: ISO9001, ISO 14002 or OHSAS18001;
- c) Tindo Solar modules are not certified for ground-mounted systems in the Clean Energy Councils accreditation system:
<http://www.solaraccreditation.com.au/solar-products/modules/modules-for-ground-mounted-systems.html>
- d) There are economies of scale applicable to the production of larger wattage modules, therefore the price per watt of a 250W is not comparable to a 300/305W module

3. Schedule:

- a) The production rate for Tindo solar would be inadequate to deliver a project of this size in a timely manner (Tindo would require 15-16 months at full production, 100% dedicated to Capital Solar Farm).

Public Record



Functional Likeness:

A 250W panel primarily designed and sold to the domestic rooftop market is not interchangeable with a 300+W 72 cell panel designed for deployment in ground mounted utility scale generators. Although all PV modules convert sunlight to electricity, the efficiency, economies of scale and end use of individual modules varies considerable.

Production Likeness:

Tindo's maximum production rate is inadequate to meet a financeable project timeline. Assuming 100% of the Tindo manufacturing capacity was dedicated to production for Infigen Energy, including all currently closed manufacturing lines, the manufacture of 38 MW_{DC} would take approximately 15-16 months.

As previously stated, it is currently not possible to source 72 cell utility scale solar PV modules in Australia.