



UNSW Estate Management

Solar Power Purchase Agreement

Solar Power Purchase Agreement



The Solar Farm Developer



The National Electricity Market (NEM)



The Transmission and Distribution Grids



The Energy Retailer



The Customer



Large-scale Generation Certificates (LGC's)

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PROJECT OBJECTIVES

- **Renew the UNSW Electricity Supply Contract from 01/01/2018**
- **Seek Emissions Reduction/Carbon Neutrality Opportunity Through Procuring Electricity from a Renewable Source**
- **Renewable Sourced Electricity Cost To Be Comparable With Fossil Fuel Generated Electricity Cost**
- **Preference is for UNSW Developed Photo Voltaic (PV) Technology**
- **Preference is for a New Generation Source To Address Additionality**
- **The Validity/Provenance of Carbon Offsets is to be Fully Verifiable by Audit**

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REQUEST FOR TENDER

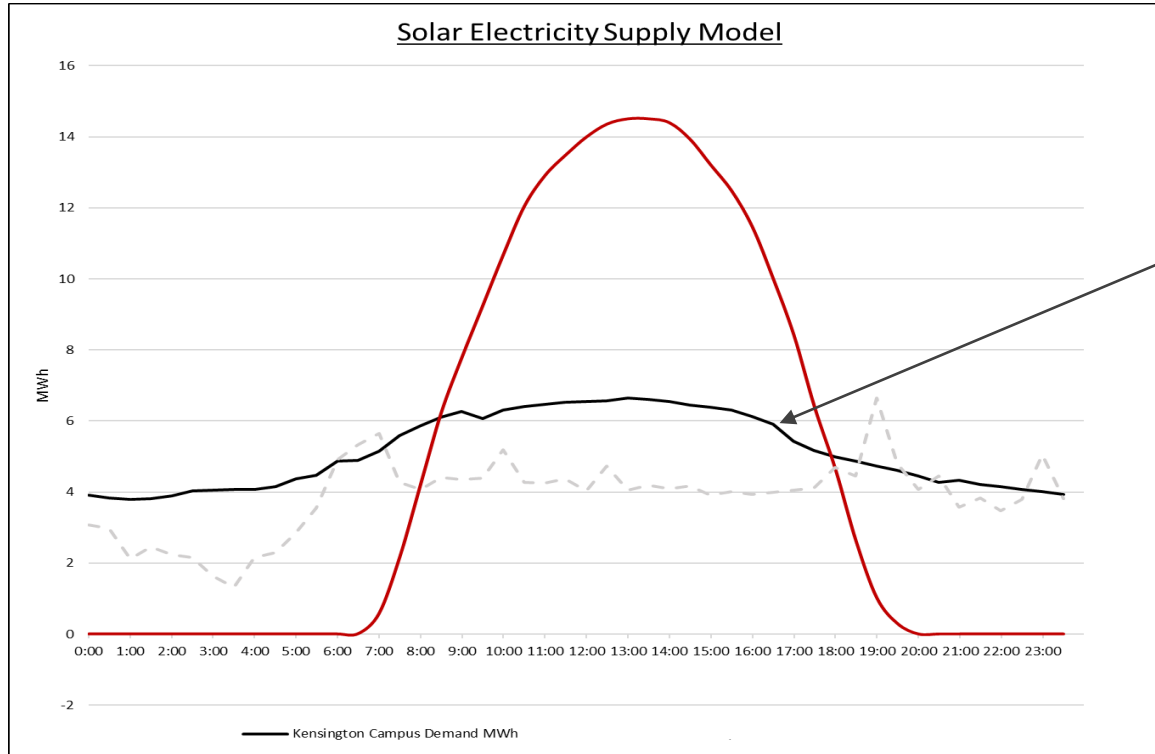
- **Pre-selected Solar Developer and Traditional Retailer Supplier Lists**
- **RFT Issued and Managed via Tender Link**
- **Documentation Included;**
 - **Solar PPA Requirement (bundled energy and LGCs)**
 - **Standard Energy Supply Requirement**
 - **Draft PPA contract**
 - **Premises Schedules**
 - **Forecast Energy Volumes**
 - **Pricing Templates**
- **Compliant Tenders Required**
- **Non Compliant Tenders Considered Only If Submitted Together With a Compliant Tender**

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TENDER EVALUATION

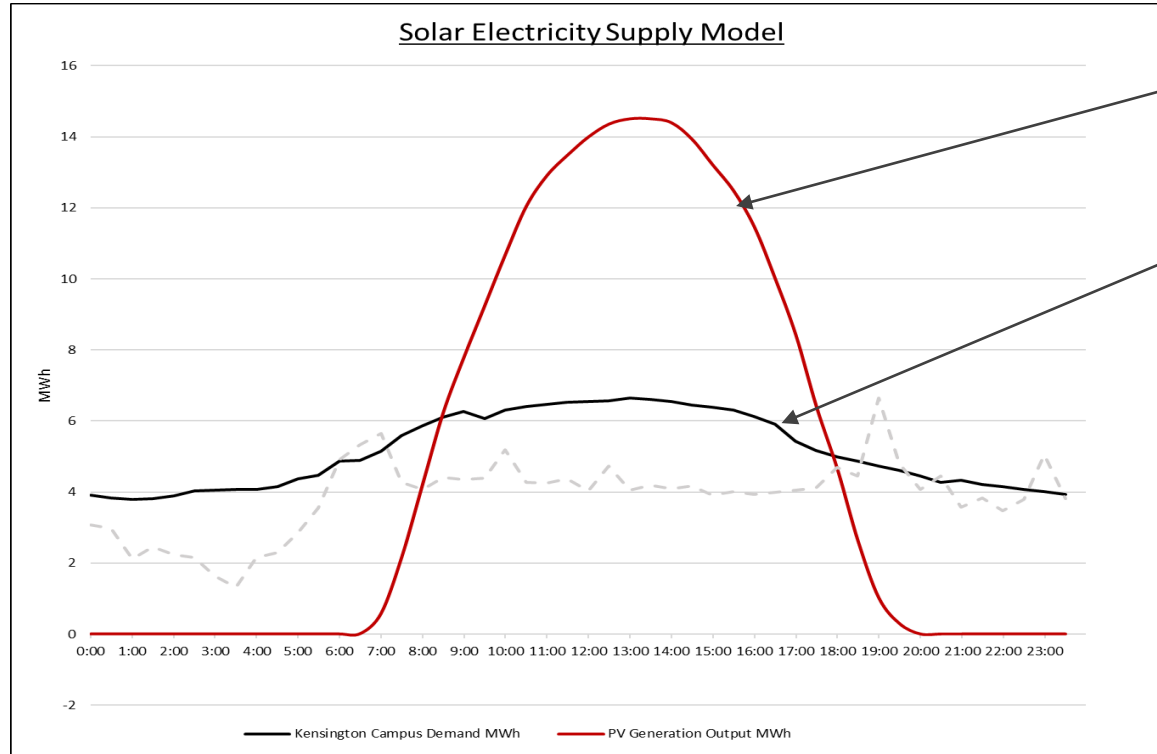
- **No Consortium Tenders Were Submitted**
- **Solar Developer and Traditional Retailer Supplier Evaluated Independently**
- **Tender Interviews Carried Out with All Respondents**
- **Tender Short List Identified**
- **Best And Final Prices Requested**
- **Interviews Carried Out to Select Preferred Suppliers**
- **Preferred Suppliers Selected and Final Negotiations Entered Into**

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This is the volume of electricity we need on a half hourly basis during a 24 hour period

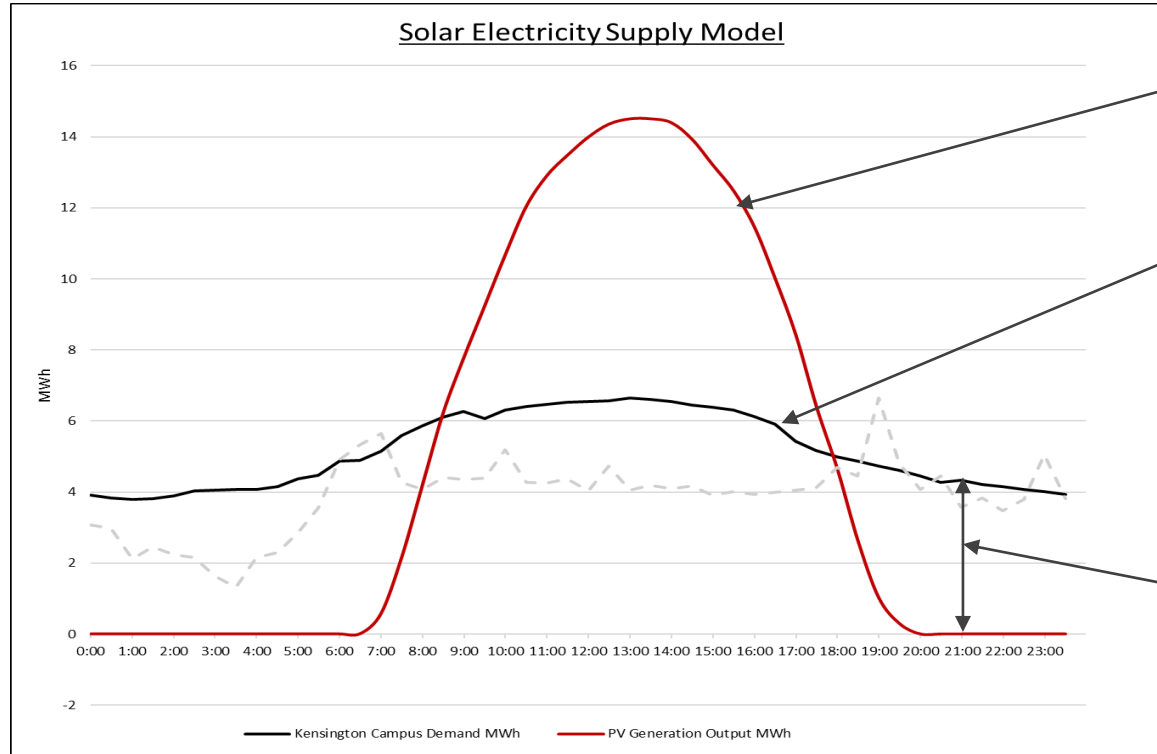
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This is the volume of solar electricity and associated LGC's we need to buy from the Developer to match our total 24 hour requirement

This is the volume of electricity we need on a half hourly basis during a 24 hour period

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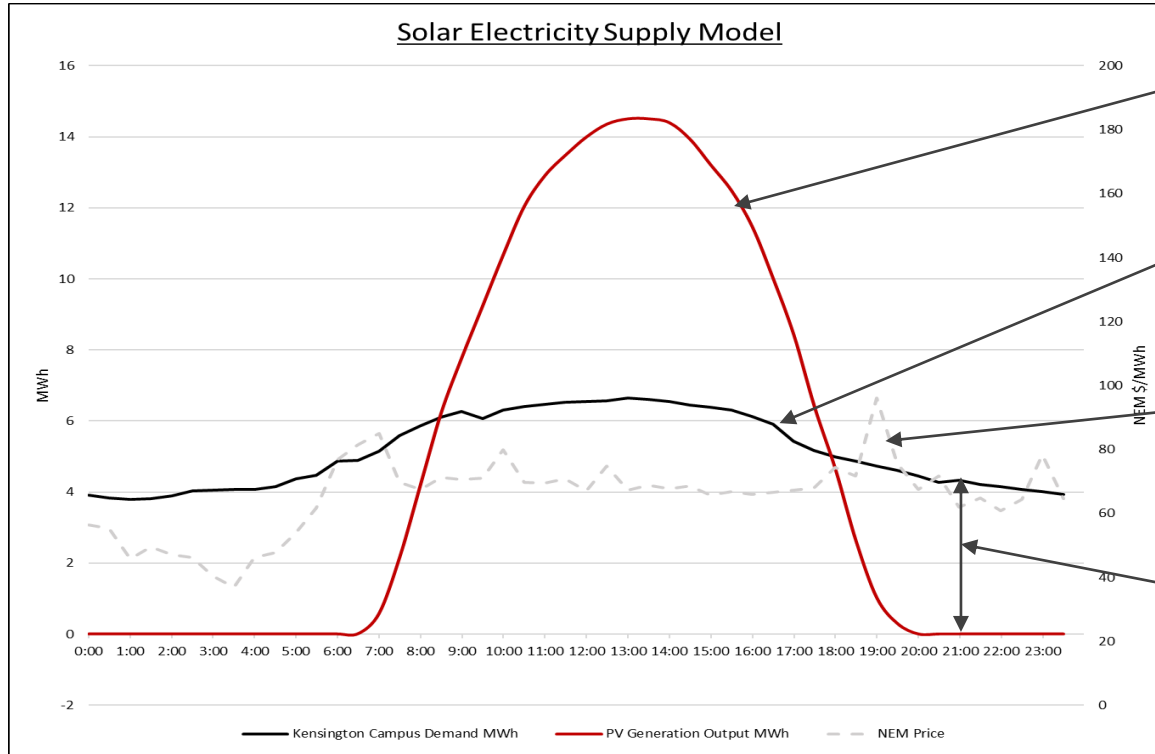


This is the volume of electricity and associated LGC's we buy from the Developer on a CFD basis to match our total 24 hour requirement

This is the volume of electricity we need on a half hourly basis during a 24 hour period

This is the volume of electricity we need to source for our "overnight" use

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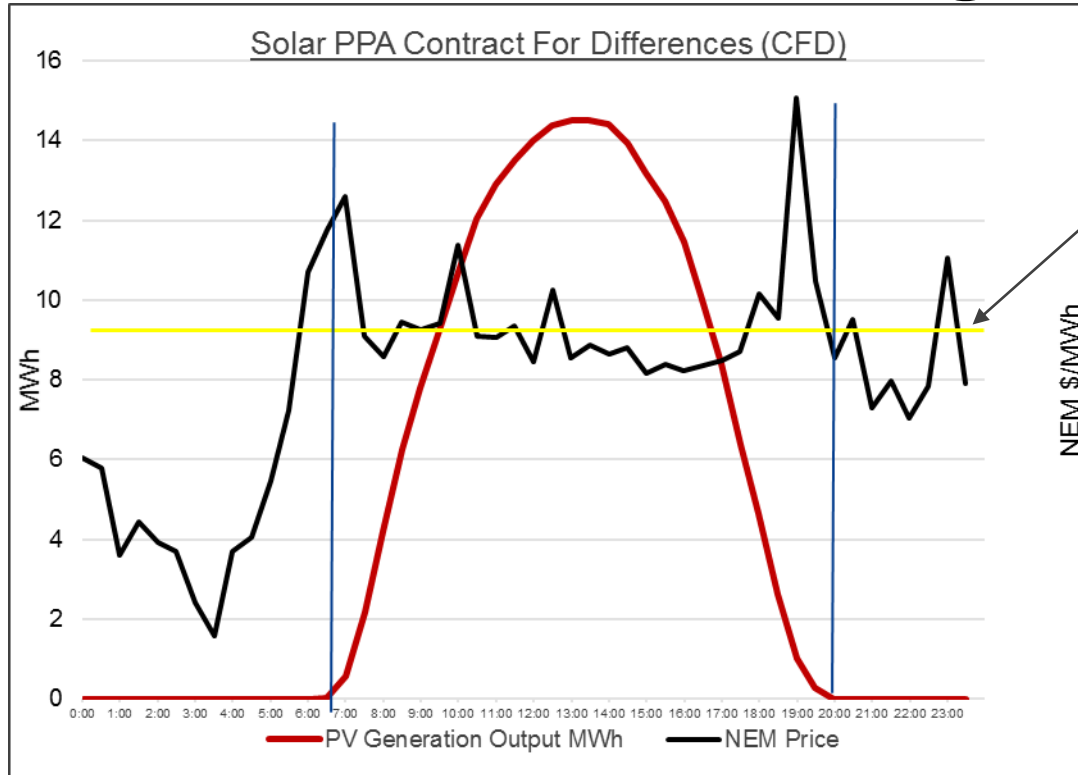
This is the volume of electricity and associated LGC's we buy from the Developer on a CFD basis to match our total 24 hour requirement

This is the volume of electricity we need on a half hourly basis during a 24 hour period

This is the Spot price of electricity in the NEM wholesale market determined by AEMO on a half hourly basis during a 24 hour period and paid to the solar farm

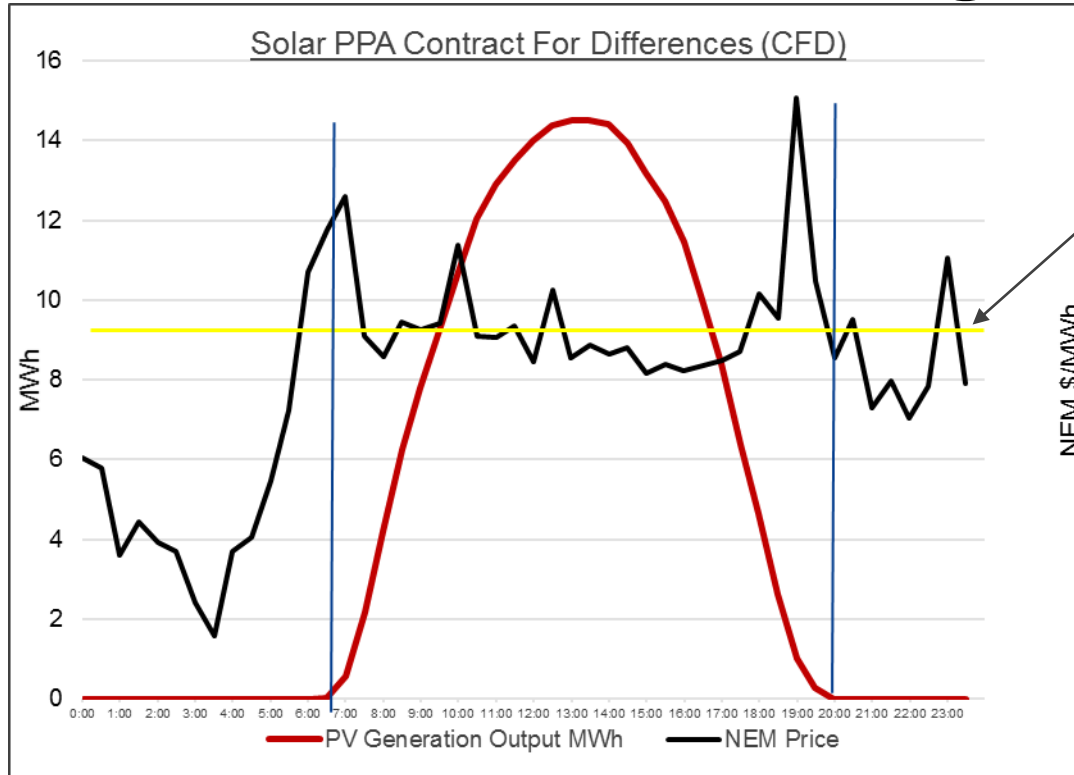
This is the volume of electricity we need to source for our "overnight" use

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This is the PPA's CFD "Strike" Price for electricity and LGC's

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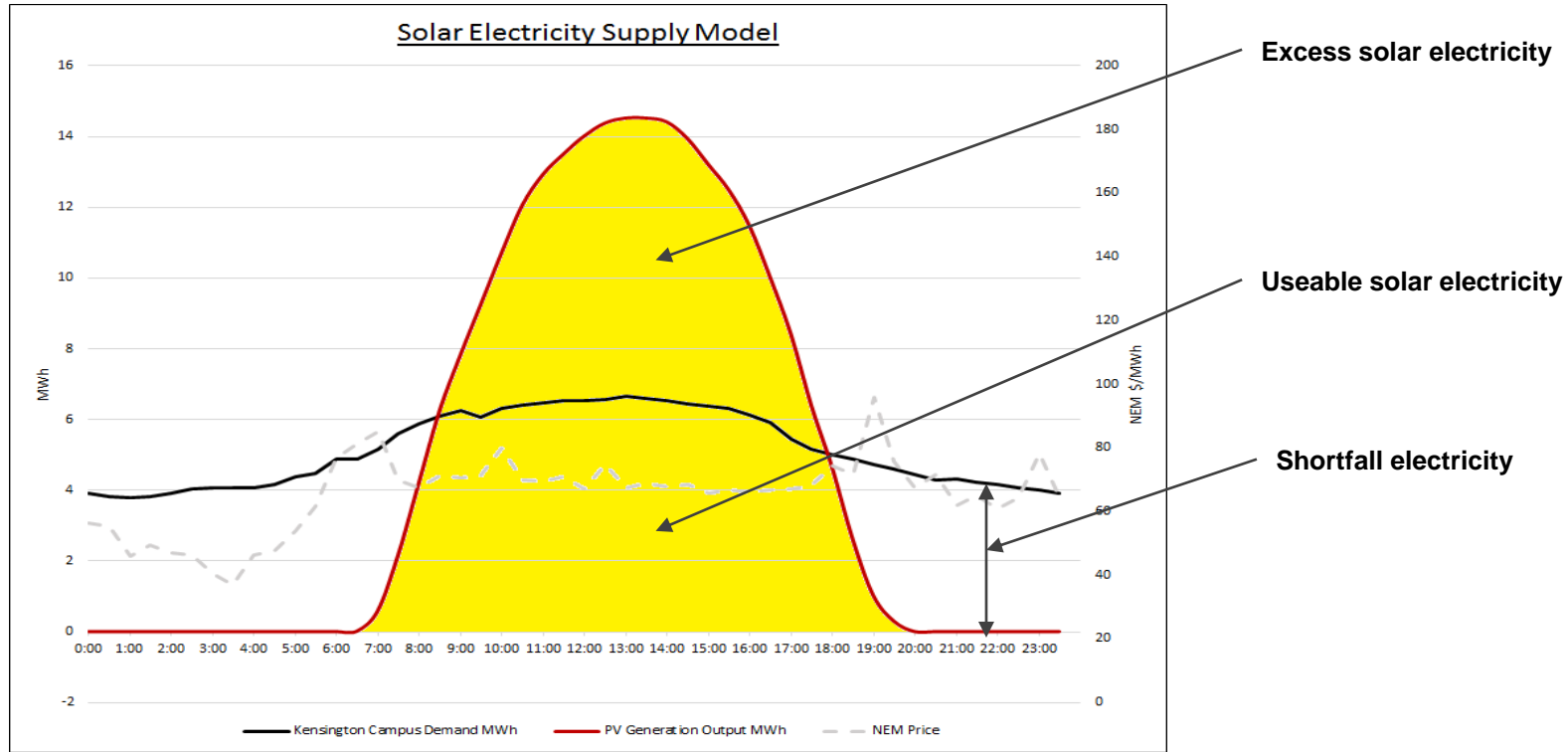
If the NEM Spot Price Is Less Than The Strike Price When The Solar Farm Is Generating, then UNSW Pays The Developer The Difference.

If the NEM Spot Price Is More Than The Strike Price When The Solar Farm Is Generating, Then The Developer Pays UNSW The Difference.

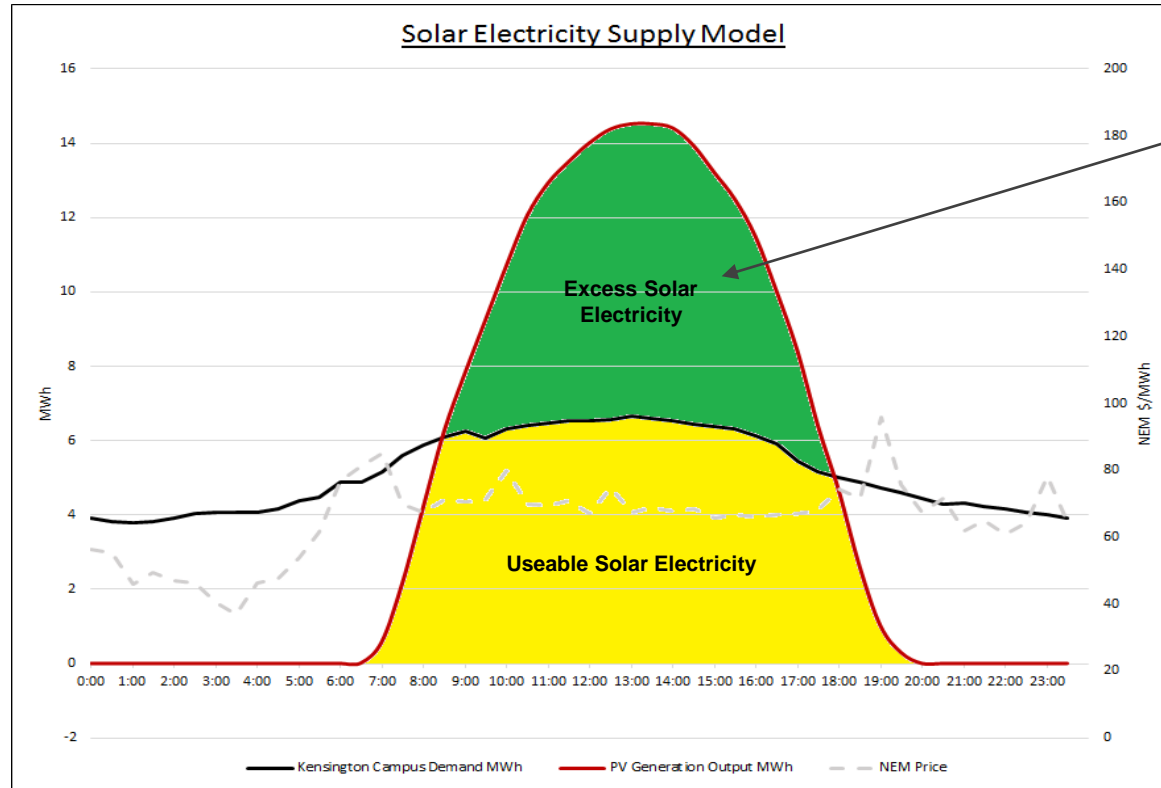
The Retailer Charges UNSW the NEM price For Solar Power.

The Net Outcome Being that UNSW always Pays the Strike Price for the Solar Power

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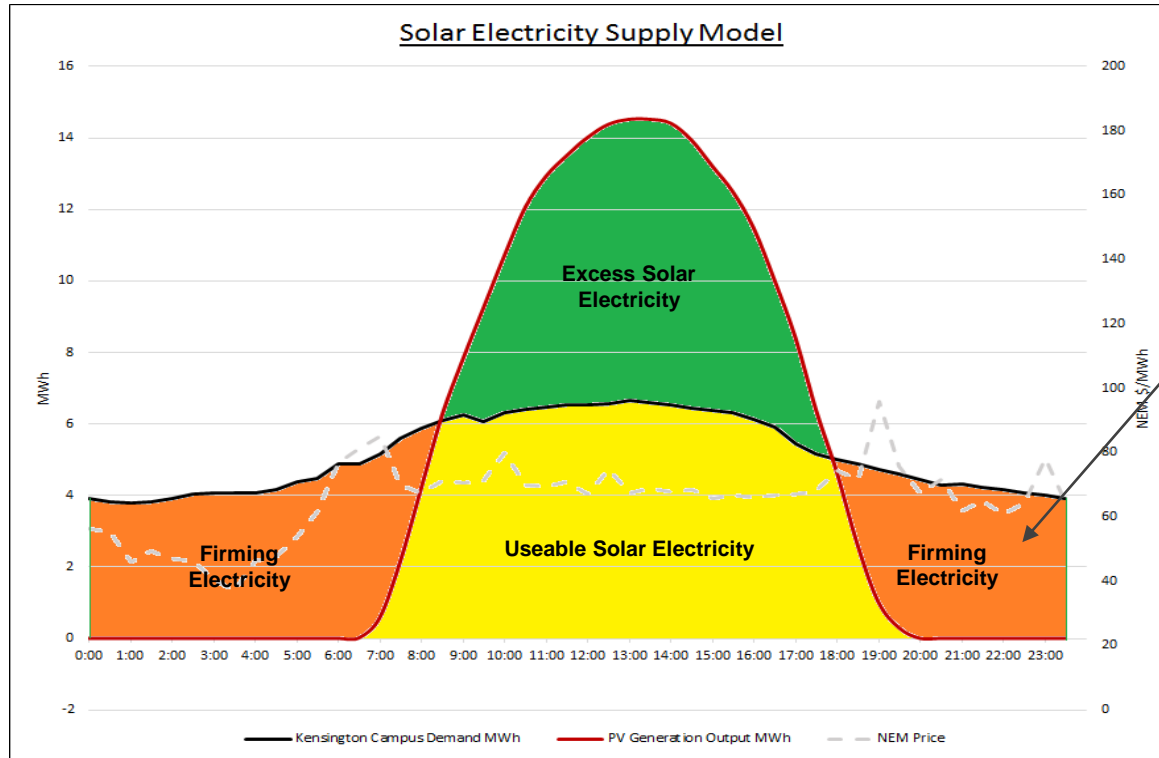


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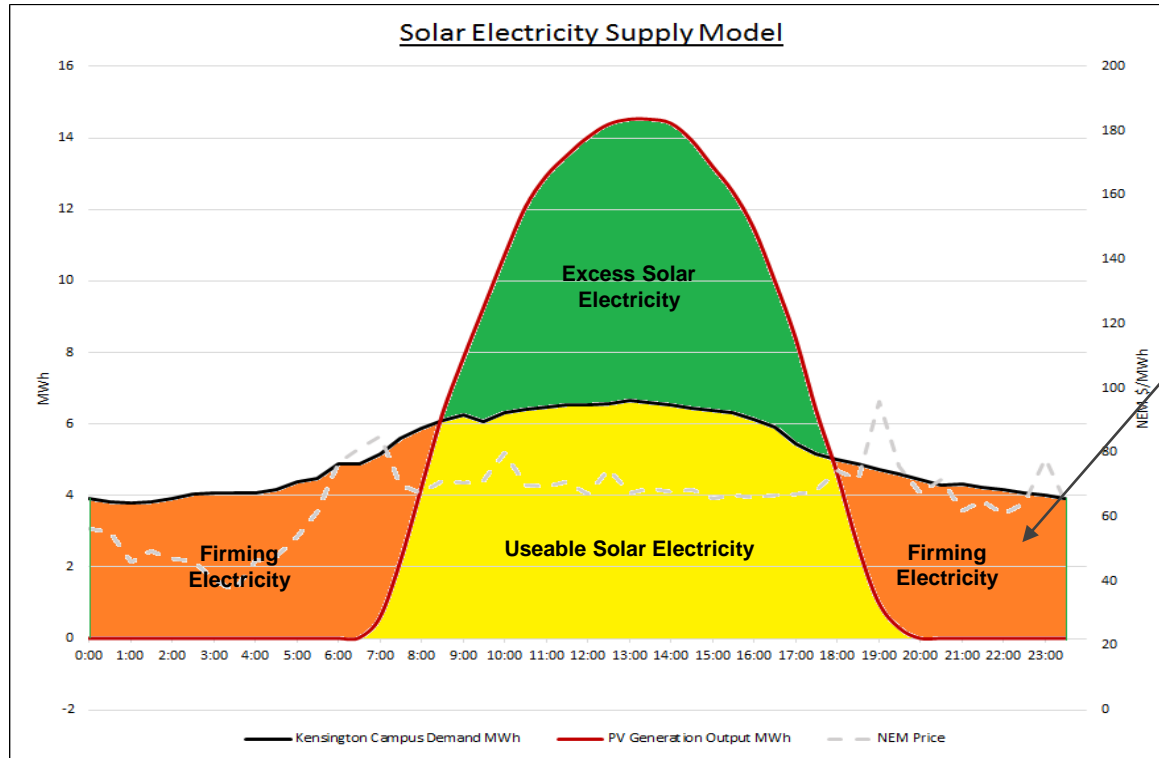
Excess solar electricity is bought by the Retailer from UNSW. UNSW retains the LGC's

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Shortfall (firming) electricity is bought by UNSW from the Retailer under a “standard” supply contract

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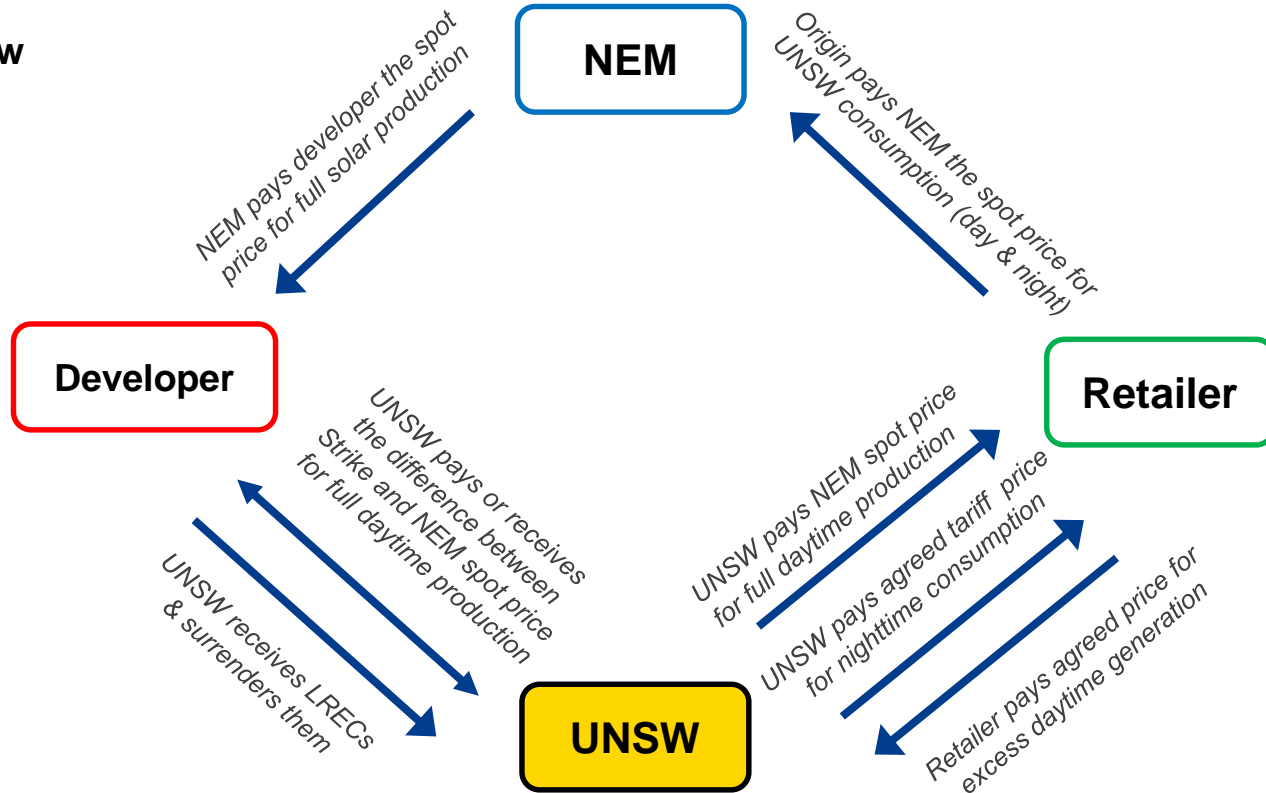
Shortfall (firming) electricity is bought by UNSW from the Retailer under a “standard” supply contract

The Proceeds From The Sale Of Excess Solar Electricity Are Used To Offset The Cost Of The Firming Electricity.

The Retailer Submits A Net Invoice To UNSW.

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Cashflow



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Critical Success Factors

- **Brief the Executives**
- **Agree the Project Objectives**
- **Obtain Executive Approval to Proceed Before Starting the RFP Process**
- **Communicate Often and Freely With Internal Stakeholders (executive, legal, treasury, finance, procurement**)
- **Engage An Experienced and Knowledgeable Legal Team**
- **Engage An Experienced and Knowledgeable Energy Procurement Team**
- **Select A Developer And Retailer Willing To Work Together**
- **Clearly Identify Risks and Risk Mitigation Measures**

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200MW Sunraysia Solar Farm nr Balranald – Maoneng/Origin

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