

ASX Announcement

8 October 2015

DEVELOPMENT OF UP TO 150MW KIDSTON SOLAR PROJECT AT KIDSTON “ENERGY HUB”

HIGHLIGHTS

- Proposal to develop up to 150MW Kidston Solar PV Project at the Kidston mine site
- Upon completion, Kidston Solar will be the largest solar farm in Australia
- Feasibility underway, with AECOM appointed as feasibility manager
- Numerous site specific advantages including high solar irradiation
- Potential integration with flagship 330MW Kidston Pumped Storage Project

INTRODUCTION

Genex Power Limited (ASX: GNX) (Genex or the Company) is pleased to announce the commencement of a feasibility study for the development of a new large-scale solar photovoltaics project on the Kidston site (Kidston Solar Project or Solar Project). The proposed Kidston Solar Project will have a nameplate generation capacity of up to 150MW and will be co-located adjacent to Genex’s proposed Kidston Pumped Storage Project (Figure 1). Subject to a successful feasibility study, and assuming 150MW of generation capacity, the Solar Project will be the largest solar project in Australia.

Figure 1: Kidston Solar Project co-location with the Kidston Pumped Storage Project



A full feasibility study in respect of the Kidston Solar Project has now commenced, with AECOM appointed as the Company's feasibility manager and owner's engineer. Genex is looking to optimise all aspects of the Solar Project, and will be working closely with AECOM and potential EPC contractors and solar component suppliers. The proposed (up to) 150MW of generation fits well within the carrying capacity of the new 275kV transmission line, which is targeted to be constructed as part of the Kidston Pumped Storage Project.

The development of the Kidston Solar Project alongside the Kidston Pumped Storage Project is believed to be a world first in terms of building and implementing a large scale integrated renewable energy generator with a pumped storage facility.

Importantly, the development at the Kidston site will offer fringe of grid renewable energy generation and storage in far north Queensland, which is currently a net energy importer. When developed, Genex believes the integrated scheme will open up a large part of Northern Queensland to future development, with Kidston becoming a significant centralised energy hub.

SOLAR FARM LOCATION

The Kidston Solar Project will be constructed on top of the existing Kidston mine tailings storage facility (TSF) at the Kidston site, which lies to the west of the former Wises mine pit (upper reservoir). The TSF is a large expanse of elevated and flat ground covering approximately 300ha in surface area, with an elevation of approximately 20m above natural ground level.

The TSF was originally constructed to hold mine tailings and waste rock materials from the former Kidston mining operations, and was designed to be geotechnically stable in the long term. The TSF is currently sparsely vegetated with small trees and shrubs which were planted upon mine closure.

Figure 2: Tailings Storage Facility, Kidston Solar Project site



SOLAR RESOURCE

As indicated on the Annual Average Solar Radiation map shown in Figure 3 below, the Solar Project is ideally located in the highest solar radiation region of Australia. As such, the Kidston Solar Project is expected to benefit from a strong solar resource year-round and to operate at high energy yield factor.

Genex has installed a solar radiation monitoring station at the Kidston site and is currently capturing radiation and other data to correlate with regionally based data sources. This information is being provided to Genex’s project designers and potential EPC suppliers to assist with project layout, PV module positioning and module angles.

Preliminary energy yield calculations show that the Kidston Solar Project will have an annual capacity factor of around 26-27% using fixed-angle solar panels, with 99% of this energy being produced during higher power demand periods. This capacity factor is currently amongst the highest in the Country. The potential to further increase the capacity factor using a solar tracking system will also be investigated as part of the project feasibility study.

Figure 3: Average annual solar irradiation in Australia

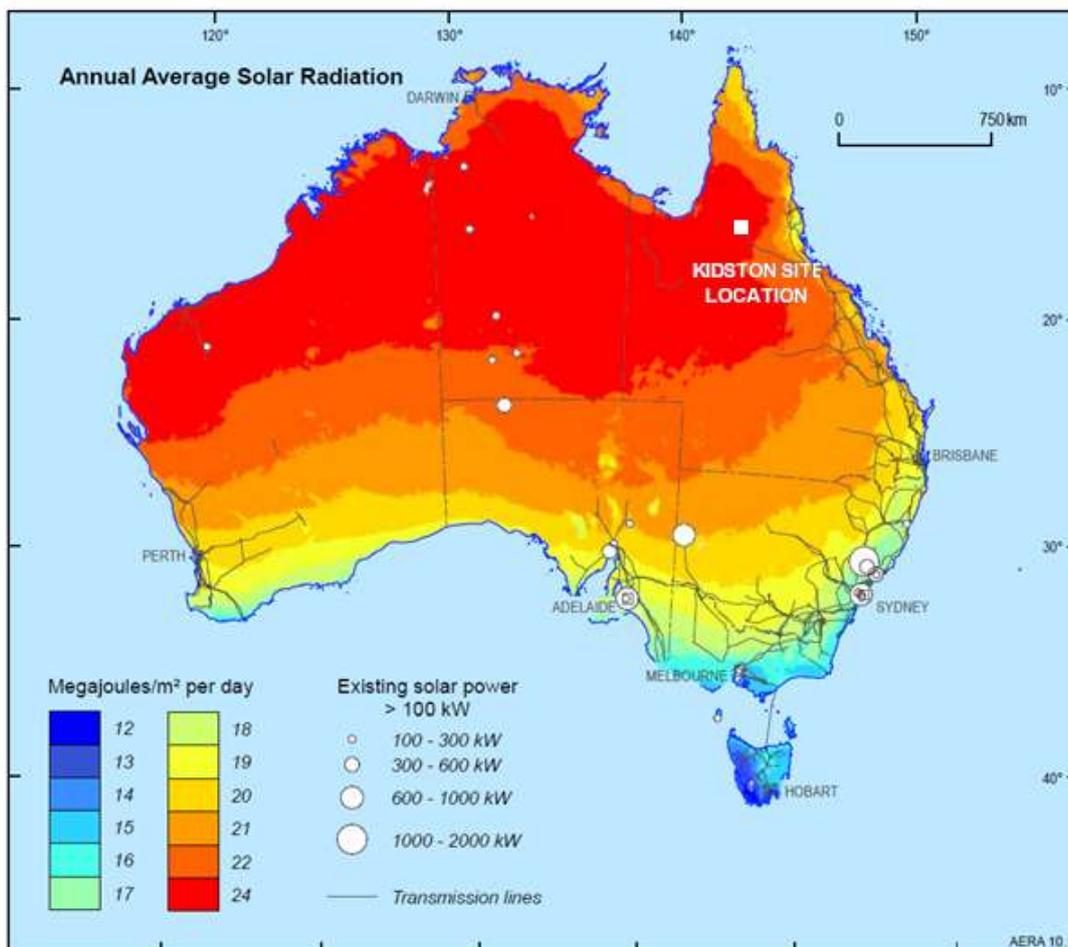


Figure 10.1 Annual average solar radiation (in MJ/m²) and currently installed solar power stations with a capacity of more than 10 kW

Source: Bureau of Meteorology 2009; Geoscience Australia

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PROJECT ADVANTAGES

In addition to the strong solar resource, the Kidston Solar Project will benefit from a number of other site specific advantages, including:

- Existing onsite accommodation, providing a low cost alternative to the construction of a new worker's camp during the construction period;
- Minimal environmental issues given the project is located on an already disturbed mine site;
- Minimal land use/native title/cultural heritage sensitivities;
- Plentiful water supply for use during construction and operations from the nearby Kidston Dam;
- Existing onsite grid power for construction;
- Good existing road access to the site and to the TSF; and
- Expected strong support from local government.

COMMENTARY

Commenting on the commencement of the solar feasibility study, Genex Power's Managing Director Michael Addison said:

"Whilst our Kidston pumped storage project remains our principal focus, the tailings storage facility at the Kidston site presents itself as an obvious and ideal solar generation platform.

Developing the Kidston Solar Project is a natural next step for the Company as we seek to leverage our existing physical and intangible assets and recognise the potential of the Kidston site as a large-scale energy hub co-location.

Our solar initiative will be pursued in conjunction with solar PV funding initiatives currently being promoted in the market and in parallel with power purchase agreement discussions with electricity retailers and end users."

CONTACT:

Michael Addison
Managing Director
Tel: +61 2 9993 4411
Email: ma@genexpower.com.au

Simon Kidston
Executive Director
Tel: +61 2 9993 4443
Email: sk@genexpower.com.au

About Genex Power Limited:

Genex Power is a power generation development company listed on the ASX. The Company is focussed on innovative clean energy generation and electricity storage solutions which deliver attractive commercial returns for shareholders. Genex is currently pursuing a number of unique energy development opportunities across Australia.

The Company's current focus is on the development of the 330MW Kidston hydro pumped storage power generation project located in Northern Queensland. Following acquisition of the Kidston site in June 2014 and completion of the associated pre-feasibility study, the Company has now secured funding in order to undertake a full Bankable Feasibility Study (BFS). The BFS will determine the economic and technical merits of developing its proposed flagship project.