

LEGISLATIVE ASSEMBLY OF THE NORTHERN TERRITORY

WRITTEN QUESTION

Mr Guyula to Minister for Renewables and Energy:

Renewable energy in remote communities

In April 2021 the NT Government announced a \$2 million fund to Indigenous Essential Services to enable a two stage procurement process for new renewable energy assets in remote communities across the NT. Its stated aim is to achieve private investment in the order of \$400 million in renewable energy generation.

In order to do this it has been suggested that the existing diesel power stations in these communities, and other energy distribution assets, would be included in the offering to private entities.

1. Please advise whether existing energy generation assets will be sold off as part of the proposed procurement process and if so, how this privatisation of remote power generation assets doesn't conflict with commitments to retain public ownership of the Territory's energy networks?

No decision has been made to sell existing energy generation assets.

The Government supports an open and contestable process to deliver renewables in remote communities and is developing the framework which will maximise external investment and participation, including from Aboriginal organisations, in delivery of the renewable remote power program. Local participation through upskilling and jobs will be key outcomes.

2. Please advise what the roles of PwC and Indigenous Essential Services will be in the procurement process?

PwC and IES are key stakeholders. The Government has been, and will continue to work with PwC and IES to develop the project.

3. Please advise whether any consultation with stakeholder groups including land councils, the Electrical Trades Union, or other Aboriginal community-controlled organisations has taken place, or is proposed to take place, to inform the proposal for private investment procurement?

The Government is undertaking detailed planning activities for the renewable remote power program and has commenced limited discussions with stakeholders to inform the planning activities. Comprehensive consultation with key stakeholders is proposed throughout the planning process.

4. Please advise on proposed timelines in relation to tender release and procurement processes?

The procurement process can commence once planning activities are completed and the Government has had an opportunity to consider next steps.

Pre-paid metering and solar power connections on low-income households

Increasing numbers of low-income households across the Northern Territory are attempting to reduce their power bills by installing rooftop solar on their homes. However, these customers (a large majority of whom are Indigenous Territorians) are being advised by PwC that they will not be approved to export additional solar power back to electricity networks and must only connect on a 'no-export' agreement.

5. Please advise why customers with pre-paid meters are not entitled to the same conditions of connection as other customers within the Territory's regulated electricity networks, and how these disparities are being addressed?

Neither of the types of pre-paid meters that are used in IES communities have the ability to cope with exporting excess power not being used by the consumer, as is the case in grid connected communities.

To date Power and Water has not received any applications for a solar connection on a residential property in an IES community, but there should be no constraints to a customer on a pre-paid metering arrangement installing a rooftop solar PV system with a zero export system.

6. Why has Power and Water instigated caps on the installation of solar systems in remote communities such as restricting community stores, organisations and other businesses from installing rooftop solar?

This question falls within the Indigenous Essential Services portfolio, of which Minister Paech has carriage.

Review of Solar SetUp Program

Power and Water Corporation reports indicate that the solar SetUp program has failed to achieve savings for Power and Water Corp and has instead suffered a significant financial loss.

7. Please confirm the amount of money lost under the SetUp program and;

This question falls within the Indigenous Essential Services portfolio, of which Minister Paech has carriage.

8. Please advise how much of this loss is attributable to the fact that the SetUP solar arrays have been poorly designed and integrated with the existing diesel power plants in host communities, requiring the systems to be switched off during peak solar production?

This question falls within the Indigenous Essential Services portfolio, of which Minister Paech has carriage.

9. Please provide a breakdown of solar curtailment in each of the SeTUP host communities?

This question falls within the Indigenous Essential Services portfolio, of which Minister Paech has carriage.

Darwin – Katherine Network

Large scale solar arrays such as those at Katherine, Batchelor and Manton Dam have been recently constructed.

10. Please confirm the current status of these Solar Farms?

The solar power stations at Katherine and Manton, and Batchelor are connected to the power grid and have been energised. Each are now progressing through the final stages of commissioning and compliance testing to ensure each power station operates in a safe, stable and predictable manner.

11. Please explain the current challenges the Northern Territory Government faces with the onset of more ‘before the meter’ renewable energy generation and how the stability of the Darwin - Katherine is affected.

The key challenges with increasing behind the meter renewable energy are system security and reliability while keeping costs as low as possible.

Please refer to the response to query 12 for discussion on how the stability of the Darwin-Katherine system is affected.

12. Please advise of identified risks to ‘system security’ with more renewable energy coming onto the system and how these are being addressed?

The increased uptake of solar PV presents manageable challenges for the maintenance of reliability and system security:

- solar output requires back-up by firm sources of electricity supply to ensure reliability
- solar output requires additional essential system services to manage system frequency and voltage within defined limits.

The increasing diversity of the Territory's electricity systems, in terms of technologies and participants, is being facilitated by implementation of the Northern Territory Electricity Market Priority Reform Program. These reforms will:

- improve coordination of solar and gas-fired generators (dispatch)
- ensure there is sufficient generation capacity available to meet consumers' needs (reliability)
- facilitate payments between retailers and generators (settlement)
- improve the efficiency of the provision of essential power system security services (essential system services).

Electricity Market requirements vs Generation Operational needs

The Electricity Market and the optimum operational configuration of generation assets have different priorities in being able to meet their respective requirements/objectives.

13. Please advise how Market requirements and Generation Operational needs are prioritised to ensure that generation assets are protected and run in their most efficient configurations?

14. Please advise who has the final say in Generation merit order - The Electricity Market or Operations?

15. Please advise any challenges being experienced in both satisfying the Electricity Market and Generation providers?

16. Please advise of any identified or potential risks to 'system security' in relation to Electricity Market influences on the operation of generation assets?

Response to questions 13, 14, 15 and 16:

The System Controller is required to ensure generation (and other schedulable) units are started (and stopped) and energy is dispatched to meet system demand. Decisions are based on the principle of security-constrained economic dispatch, meaning that in addition to taking security constraints into account, the System Controller must dispatch the lowest cost possible combinations of energy sources. This supports the interests of consumers and taxpayers.