

Maintaining energy security and reliability

Wivenhoe Power Station (photo courtesy of CS Energy)

The Queensland Government is committed to ensuring that Queenslanders have access to secure, reliable and affordable energy.

Queensland is well positioned to transition to a clean energy future with high levels of security and reliability

Queensland has a secure and reliable electricity supply, underpinned by eight coal-fired generators, four of which are the youngest and most efficient coal-fired generators in the National Electricity Market.

Modelling undertaken by the Renewable Energy Expert Panel found current reliability standards would be maintained in the transition to a 50 per cent renewable energy target by 2030.

However, recent extreme weather events and developments in the National Electricity Market (including closure of ageing coal-fired power stations) highlight the need for careful planning and ongoing vigilance in relation to energy security.

The Government is committed to ensuring that Queenslanders have access to secure, reliable and affordable energy, including bringing forward the next generation of clean, reliable power.

To deliver on this commitment, the Queensland Government is establishing an Energy Security Taskforce that will provide advice to Government on short-term and long-term plans for maintaining system security and reliability in the state.

ACTIONS

- ▶ Establish the Queensland Energy Security Taskforce to develop short-term and long-term plans for maintaining system security and reliability in the state, including:
 - a summer preparedness plan
 - implementation of Finkel Review recommendations
 - a demand management and energy efficiency strategy
 - options to increase the hydro-electric and pumped storage generation capacity
 - a feasibility study of strategic transmission infrastructure in North and North-West Queensland and expanded interconnection.



Our actions in more detail

High voltage towers near Brisbane, Queensland

Establish the Queensland Energy Security Taskforce

System security has emerged as a critical issue across the National Electricity Market.

Queensland has a strong fleet of baseload generators, and is well placed to commence its transition to a 50 per cent renewable energy target, ongoing vigilance is needed. The Queensland Government will establish a Queensland Energy Security Taskforce to develop an energy security plan for the state.

The taskforce will be quickly mobilised, with its first priority to develop a Queensland summer preparedness plan for 2017–18 by September 2017. This plan will map out what needs to be done to ensure Queensland's system remains secure in the short term.

The taskforce will also develop a demand management and energy efficiency strategy to help Queenslanders manage their power bills and to better manage peak demand, improving the resilience of the grid.

The taskforce will provide advice on long-term market design for Queensland and the National Electricity Market, taking into account outcomes of the Finkel Review.

The taskforce will investigate:

- ▶ deployment of new hydro-electric and pumped storage generation capacity
- ▶ strategic transmission infrastructure in North and North-West Queensland to support a clean energy hub
- ▶ expanding interconnection between Queensland and other states.

The taskforce will be chaired by Mr Terry Effenev, former CEO of Energex and member of the Finkel Review panel. The Taskforce will also comprise Prof Suzanne Miller (Queensland's Chief Scientist), Prof Paul Simshauser (Director-General of the Department of Energy and Water Supply) and Mr Jim Murphy (Queensland's Under Treasurer).

Commission a hydro-electric study to assess options for deploying hydro in the state

At present, Queensland has around 200 megawatts of 'run-of-river' hydro plant and 500 megawatts of pump storage hydro-electric plant. These facilities provide key security services to the grid.

Hydro-electric generation has the potential to play an important role in Queensland's future energy mix.

To assess this potential, the Queensland Government will undertake a feasibility study to assess options for the deployment of new hydro-electric and pumped storage generation capacity in the state.

Develop strategic transmission infrastructure in North and North-West Queensland

Achieving a sustainable transition to 50 per cent renewable generation will require a diverse portfolio of renewable energy projects. While Queensland is well suited to large-scale solar projects, other forms of renewable energy generation will also play an important and significant role in meeting the state's target.

Queensland has areas of high quality wind and hydro resources in the North-West; however, transmission connection costs have been identified as a key barrier to unlocking these resources.

The taskforce will commission a feasibility study of strategic transmission infrastructure to identify options to integrate renewable energy resources in the North and North-West of Queensland, and create a clean energy hub. The Queensland Government has committed \$150 million to develop the transmission infrastructure, subject to the feasibility study.

Investigate expanded interconnection between Queensland and other states

The taskforce will also examine opportunities to expand interconnection between Queensland and other states to further enhance the stability of Queensland's system and the National Electricity Market as a whole.