

Demand Response in EQL

February 2018



Part of the Energy Queensland Group

About Energy Queensland

7,355
employees across QLD



\$24 Billion
electricity assets



Covering 1.7 Million km²

34
isolated systems

2.2 million
Connected customers



740,000
Electricity retail
customers



4,814MW
South East
Queensland
peak demand

2,637MW
Regional
Queensland
peak demand

34,600GWh
Electricity delivered

459,000
solar energy systems
connected
355MW
large scale
renewables connected



High levels of
innovation



Energex and Ergon Energy have best practice DM capabilities



	Energex (MW)	Ergon (MW)	Total (MW)
T33 (Hotwater)	367	103	470
T33 other	0	48	48
T31 (Hotwater)	154	52	206
PeakSmart Aircon	58	0	58
Contracted Demand Response	24	27	51
Network mobile and embedded generation	0	17	17
Total	603	247	850

Short Term Benefits

Medium Term Benefits

Long Term Benefits

Up front incentives with no lock in contracts

Lower ongoing electricity costs

Reduced costs to maintain and build network to meet demand

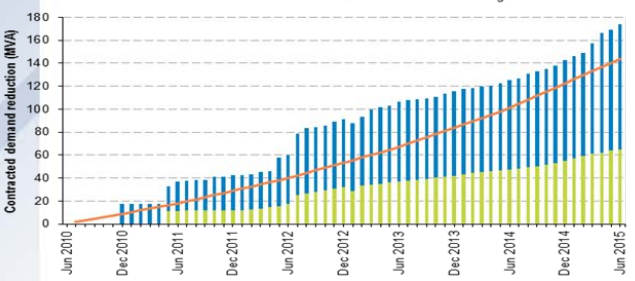
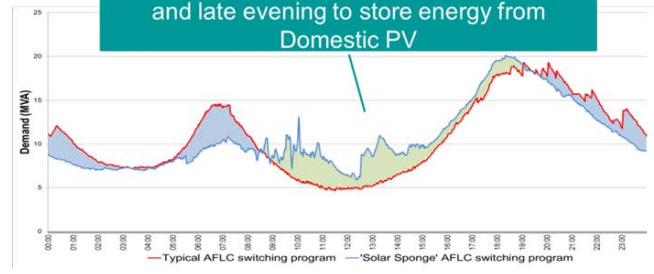
We work with suppliers to enable customer choice and access to efficient appliances



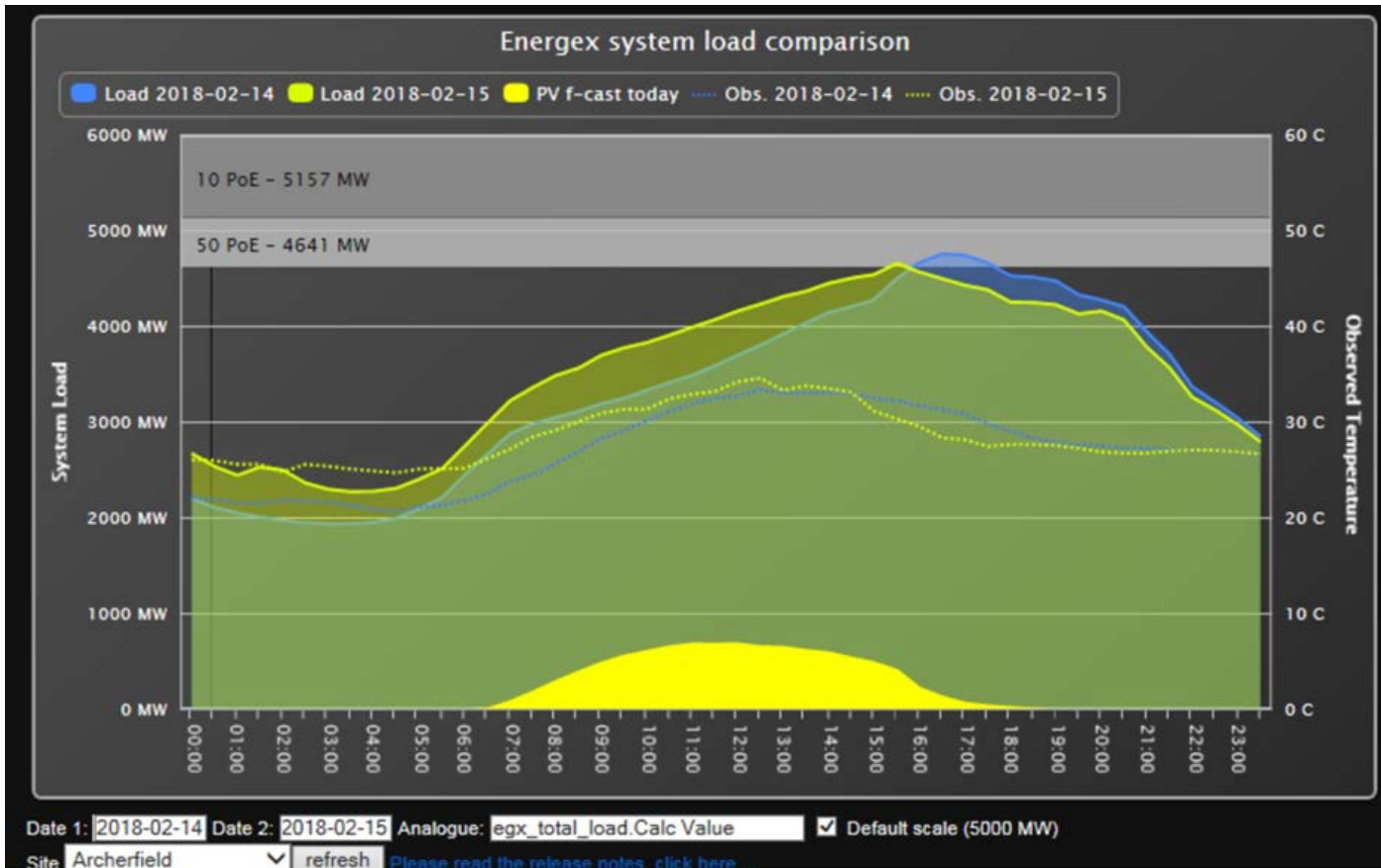
Existing programs are delivering for our customers; managing peak demand and reverse power flow



Hot water load shifted from early morning and late evening to store energy from Domestic PV

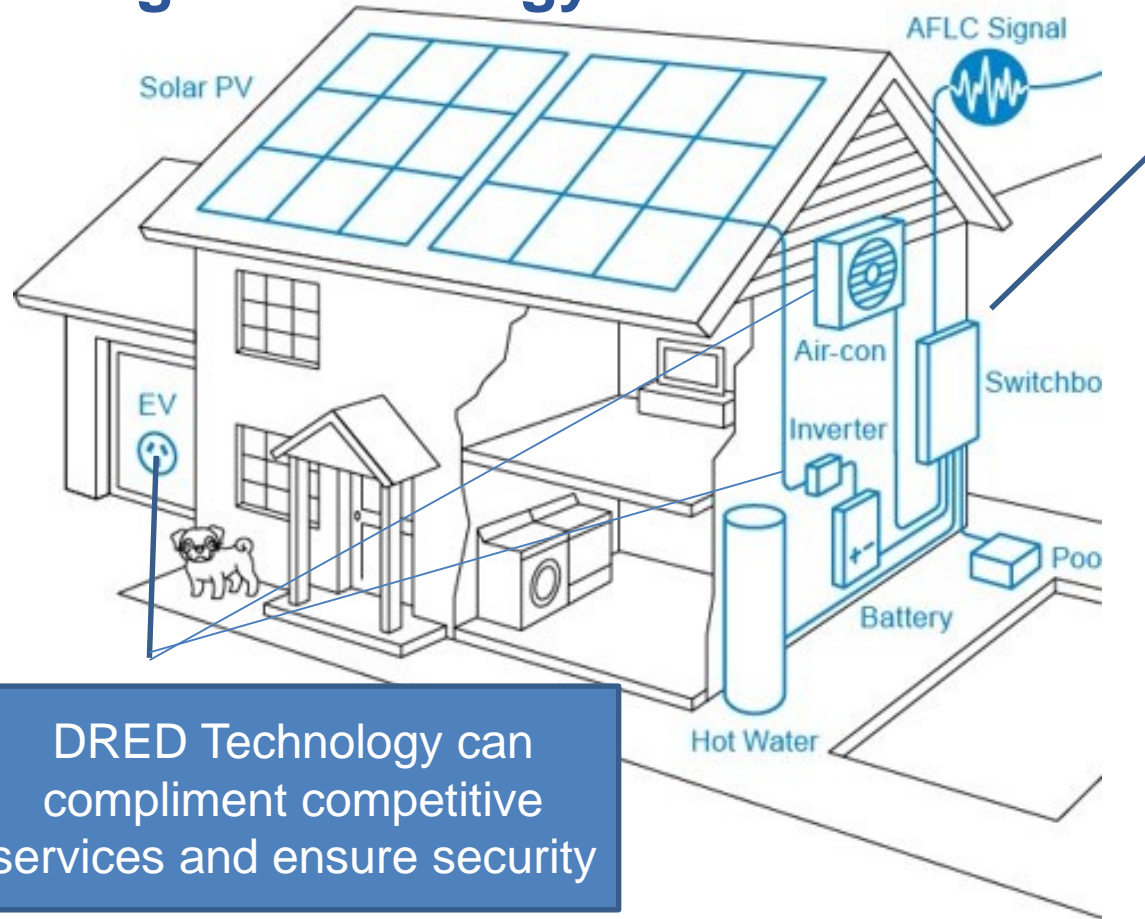


Energex case study – Peak demand Feb 2018



Despite consecutive extreme days there we NO major loss of supply events - peak smart and hot water load control remain integral security of supply

What of the near future – customers will and should expect security of supply and access to multiple products to manage their energy needs



DRED Technology can compliment competitive services and ensure security

Customers will likely have:

- Home energy management systems
- One or more market products (eg VPP)
- New pricing plans

The meter as a boundary for service delivery is a legacy concept – as evidenced by the effective DR programs in Queensland DNSP’s and customers should be able to work together to deliver energy security and enable competitive services.