Legislative Assembly of the Northern Territory

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### Briefing to Committee on the NT Energy Future

Stuart Pearce – Chief Executive Officer Danny Moore – Executive Manager, Sales & Strategy

27 March 2015

### Agenda

- Introduction
- A changing market and benefits of smart metering for consumers
- Retailer led roll out of smart meters
- Jacana Energy's ToU plans
- Questions and discussion

### Introduction

### **Stuart Pearce, Chief Executive Officer**

- Senior energy industry executive with more than 20 years' experience within the electricity supply chain across Australia, New Zealand and South East Asia
- Experience includes:
  - Introduction of energy and home services, including solar PV
  - Member of the Federal Government's National Stakeholder Steering Committee and the Victorian Government's Industry Steering Committee on Smart Metering
  - Led the introduction of customer tools to profile and understand their consumption
  - Responsible for the retail component in the federal government-funded *Smart Grid Smart City* project

### Danny Moore, Executive Manager – Sales & Strategy

- 9 years' experience in energy retailing within the National Electricity Market having worked for AGL, Origin Energy and EnergyAustralia.
- Experience includes:
  - Leading the retail project in the Australian Government's \$100m Smart Grid, Smart City project
  - Expertise in the implementation of the National Energy Consumer Framework
  - Ombudsman relationship owner and complaints function leadership across the NEM

### We're the relationship holder and key interface for customers to the electricity market

NT Electricity Supply Chain



# A changing market and benefits of smart metering for consumers

### **Consumers expectations are changing and needs are changing and the industry needs to evolve**

#### Background

- Consumers profile is changing:
  - The NT has the lowest median age of any state average age of 31 years
  - Customers expectations are set by their experience with other industries (i.e. telcos)
  - Customers want immediate access to information and response with smart phone penetration now above 75% and more internet use through handheld devices than PCs
- Customer ability to control electricity costs
  - Our current system is outdated and provides no visibility to control costs
  - Customers don't understand how their consumption impacts on their bills
- Technology has evolved, but is not utilised
  - Real time information and control of appliances is now possible through the internet
  - Many metering manufacturers no longer produce basic meters
  - A retailer-led roll out of smart meters in NSW coincides with the completion of the Victorian roll out

### **Consumers can benefit from technology to help control and understand their costs**

### How consumers benefit

- Enablement of new product and pricing options for customers
- Customers can understand when they use electricity and how much as well as get live information
- Ability to remotely control household appliances through the 'internet of things'
- Operational costs and customer service timeframes to supply are greatly reduced
- Smart metering can improve network performance through monitoring supply conditions and enabling faster resolution of black outs or problems

### **Consumption is the driver of high bills in the Territory, not price**

### **AEMC's Electricity Price Trends Report 2014**

State	Average standing offer price (c/kWh)	Average medium sized usage MWh
Australian Capital Territory	21.70	7.18
New South Wales	28.76	6.50
Northern Territory	25.90 (3 <sup>rd</sup> lowest)	9.13 (highest)
Queensland	28.71	4.53
South Australia	32.65	5.00
Tasmania	24.72	7.62
Victoria	28.82	4.64
Western Australia	26.04	5.74

## Smart meters enable innovative products and pricing options for consumers

### New products and pricing options

- In the current NT environment, the meter and tariff are dependent upon each another
- Smart meters through remote communication can enable a range of pricing options including:
  - Traditional flat tariffs
  - Time of Use
  - Seasonal pricing
  - Critical peak pricing
  - Pre-payment
  - Pre-purchase
  - Interruptible load options



## Feedback technologies and real time information provide customers with the ability to control costs

### **Customer understanding and information**

- Accumulation meters read between periods, smart meters can capture consumption every 15 minutes providing insight to how customers use their electricity
- Feedback technologies can provide customers with the ability to monitor and take preventative steps to avoid cost
- Web-portals, in-home displays and smart devices provide ability to manage costs
- When combined with pricing options, feedback technology drives strong customer engagement



## The 'internet of things' and remote control of appliances can help consumers control cost

### **Remote appliance control**

- Customers can use the internet to remote switch appliances on/off
- Consumption of appliances can be individually monitored and compared to total use to understand the drivers of costs in their household





### Remote communication from meters provides operational and customer service efficiencies

#### **Operational and customer service benefits**

- Can eliminate estimated bills as meter data is collected remotely without the need for access to a property
- Customers moving into homes can have the power turned on immediately and no longer waiting for a technician to attend
- Consumption data can be collected in more frequent intervals, allowing more frequent billing rather than quarterly helping reduce bill shock
- Customers are able to see the consumption profile and identify times of high use to reduce cost

Jacana Energy is keen join PWC's trial of 1,000 smart meters and run customer trials . The trial is currently focussed on the remote reading and engergisation.

## An integrated smart grid can lead to faster identification and resolution of issues

### **Network benefits**

- Enables better monitoring of network to proactively identify issues and manage demand
- Ability to immediately identify and isolate problems, faults and issues on the grid driving faster restoration of power



### Case Study: \$100m Australian Government funded *Smart Grid, Smart City* project

## SGSC was designed to test applications and collate data to inform business cases across the nation

### **Trial overview**

- \$100m funded
- NSW based, focussed on Newcastle but also Sydney and the Upper Hunter
- A range of trials:
  - Customer trials
    - Metering roll out
      - Network opt-out
      - Retail opt-in
    - Pricing trials
    - Feedback technology
  - Grid trials
    - Electric vehicles
    - Distributed generation
    - Grid monitoring
    - Fault detection

Results, data and models available to the industry and public online through the Information Clearing House

# Benefits of a retailer led roll out of smart metering

## Retailers are best placed to provide metering solutions that meet customer needs

### Background

- Customer consideration is often neglected in network roll outs as the focus is on poles, wires and electricity supply
- Metering has traditionally been used to simply measure consumption and currents over time and not deliver multiple and innovate solutions
- The Australian Government's *Smart Grid, Smart City* project successfully tested a retailer-led sign up and roll out of smart meters when combined with strong value propositions
- Horizon Power is rolling out smart meters to it's customer base in WA

## Focussed on the customer, retailers are best placed to provide solutions to meet needs

### How retailers are best placed to roll out smart metering

- Retailers hold the relationship with customers and therefore best placed and know where it makes sense to engage consumers on the benefits of smart metering
- Through delivery of innovative solutions, plans and pricing, retailers can provide value to the end customers to help them manage their energy bills
- Unbundling the cost of metering provides further transparency for customers around the costs of electricity supply

## The NT is in a perfect position to capture the benefits and learning of other trials

### **Considerations for the NT**

- Fit for purpose and focussed around benefits for the consumer
- Ability to work within existing infrastructure and not overhaul the whole grid
- Don't build new, use tried and tested:
  - Victorian roll out
  - Horizon Power
  - Smart Grid, Smart City
  - Energex's learnings in Qld
  - Overseas UK, USA etc.

### Jacana Energy's Time of Use plans

## The current flat rate model provides no opportunity for consumers to control their costs

### Time of Use tariff

- Customers feel powerless to manage their costs
- ToU enables us to reward customers for doing the right thing
- Customers want choice

*"Implementation of pricing schemes to match customer's needs."* 



## Time of Use provides customers with control of cost by choosing when they use electricity

### Time of Use tariff

- Available for all Jacana Energy's residential areas, but won't suit all customers
- Customer choice opt-in, not mandatory
- Regular email after each bill to show how they're performing i.e. are they better off
- Two rate tariff day/night under pricing order (vs. flat rate 26.88 c/kWh)
  - Peak 31.72 c/kWh
  - Off-peak 24.19 c/kWh
- Metering requirements
  - An interval meter is required, all customers will need to either upgrade or have meters re-programmed