

When was the last time you were **first**?

The background is a dark blue gradient. A bright, glowing horizontal line of light blue and white light runs across the center. On either side of this line, there are wavy, rippling patterns of light blue and white, resembling digital data or light waves. The overall effect is futuristic and high-tech.



***ATUG Regional Conference  
Canberra, 15-16 May 2007***

***Aurora's Electricity Wires  
Getting smart and going fast***

***Bob Darwin,***

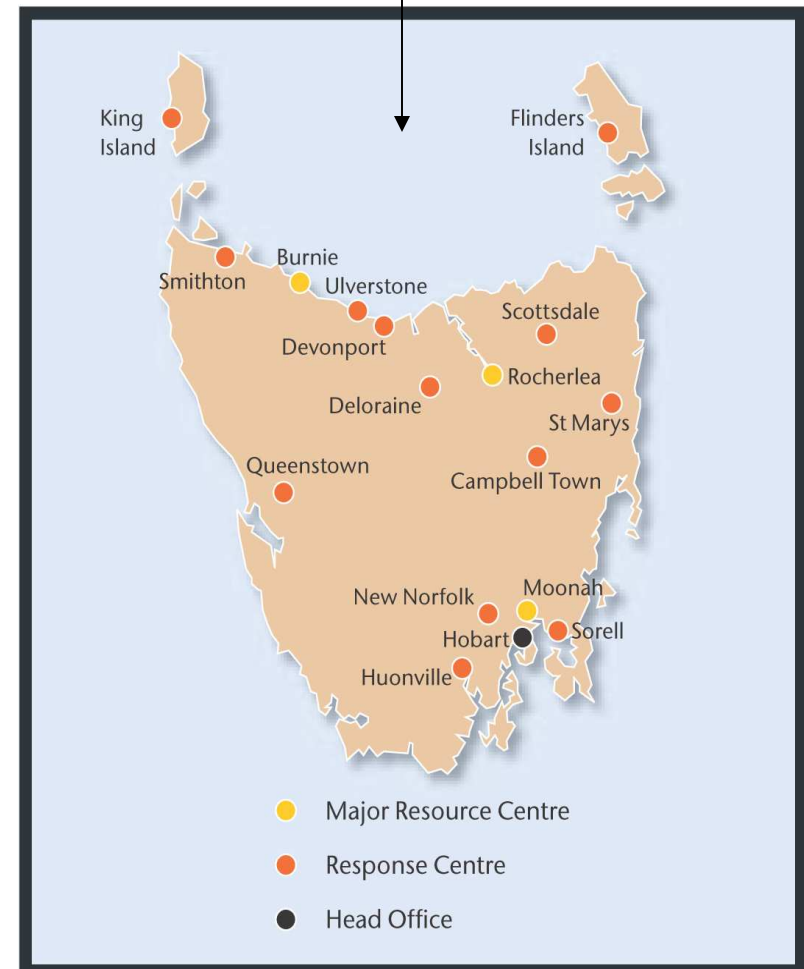
***Manager Broadband Power Line Telecommunications***

***Aurora Energy***

# Aurora Energy – Tasmania



- Aurora Energy is a Tasmanian Government owned electricity distribution and retail company
- Aurora manages assets valued at approximately \$1billion and directly employs 1120 staff.
- Electricity supplied to 213,832 residential installations and 42,621 businesses.
- Our network consists of:
  - 15,500 kilometres of high voltage lines
  - 7,400 kilometres of low voltage lines
  - 1,630 kilometres of underground cables
- Growing Telco capability
  - Fibre solutions, FTTH, BPL





## Aurora's BPL Commercial Trial

- Commercial trial launched in September 2005. Some 1200 homes passed.
- ~300 paying customers on the network.
- All customers have internet and VoIP bundle.

### Key lessons:

- Understand the capabilities and limitations of elements on electricity grid
- Understand the capabilities and limitations of BPL
- Understand ' how to ' and costs of implementation and support.
- Customer acceptance.
- Retailers eager to consider network alternatives to Telstra
- Interference - amateur radio lobby - regulatory

# The Customer Environment



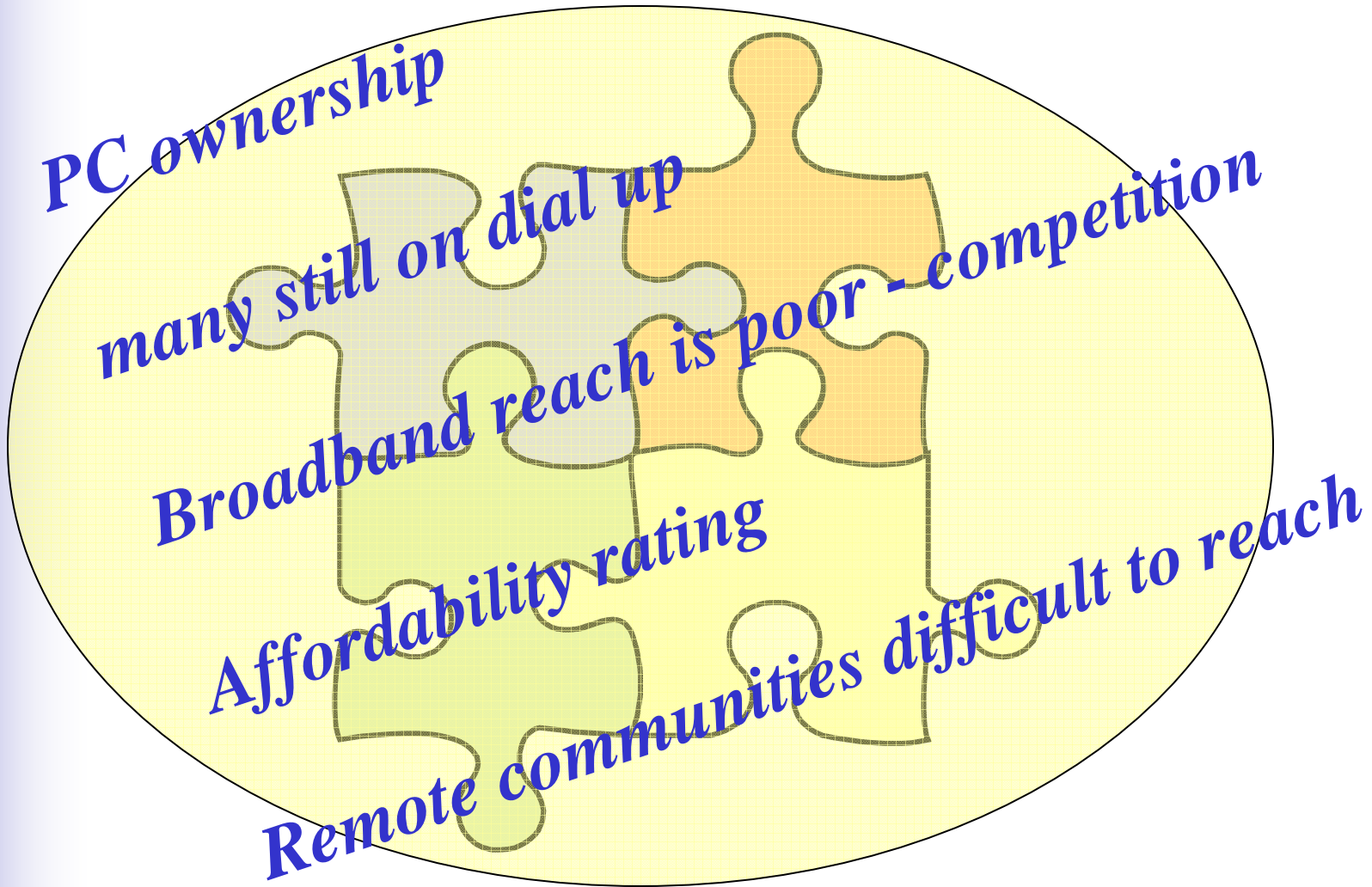
Ethernet connection  
for broadband

Cheap phone service  
Simple  
NO computer req'd



Home Gateway and STB to take BPL into customer lounge room

# Challenges in Regional Australia



# BPL – a positive experience



- Fast, symmetric services
- Viable access technology for the last mile
- Marginal cost to existing electricity network
- Completely independent of incumbent network
- Complimentary with Fibre roll outs
- Sustainable network, multiple applications

## SMART Metering or DUMB Strategy ?

- Telco's capability is devices and mobility
- Reading meters is not a big deal
- Changing **behaviour** is the challenge
- Requires fast , high capacity two way network
- Need to support customer lifestyle choices
- Load control = appliance control

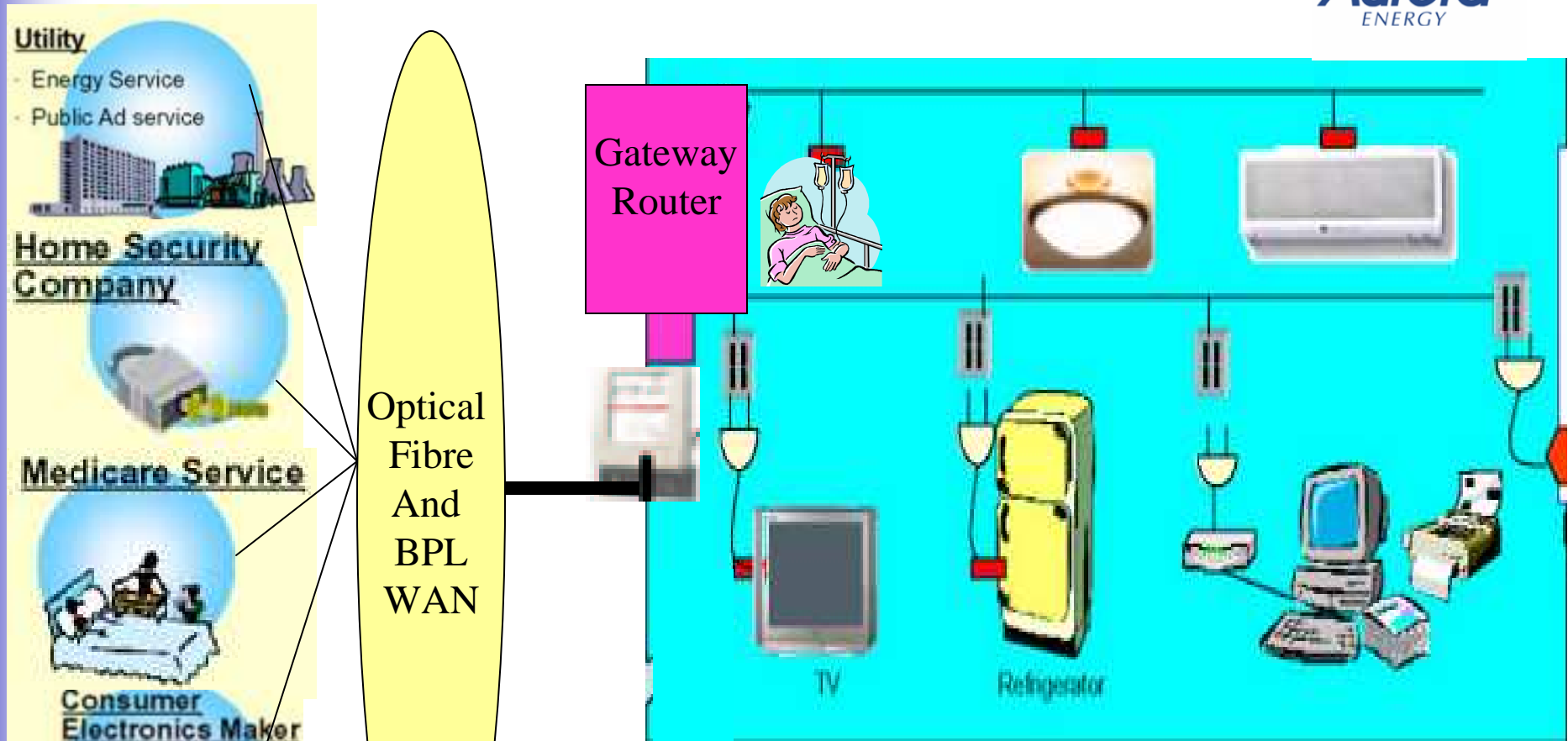
Narrowband is yesterdays hero ?

# BPL is an enabler of .....

- SMART grids
- SMART metering
- SMART lifestyles
- SMART choice
- SMART environment

Australia cannot afford to be DUMB

# A Smart and intelligent future..



## PLC chipset in appliances



- Remote support
- Warranty review
- Auto control
- Demand Side management



## BPL Global Position

- Aggressive technology development
- Standardisation & Co-existence between access and in-home PLC
- Global volumes = competitive pricing (match adsl)
- Enabling Electricity Grid Management and Smart metering
- Adoption of BPL/PLC in industry for automation, telemetry, control
- Demand management tool to combat global warming

# *Some final personal thoughts...*

*BPL will be an important enabler of the communications mosaic of the future*

- 1. facilitate delivery of DSM initiatives to reduce Global Warming*
- 2. BPL is a competitive alternative to incumbent Telco's access platform*
- 3. BPL can underpin SMART Grid's and Facilitate customer choice*

# SMART and creative..the next wave



*Thank You*

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