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*Toward fairer distribution of network costs*

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*Alternative Technology Association*
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# Why reflect network costs?

In an energy market framework that seeks equitable cost and service outcomes for consumers ***and embodies the principle that no consumer should forego supply due to inability to pay***, distribution of costs proportionate to how they are incurred promotes equity

- Acute and chronic affordability problems can be addressed in a systematic and targeted way as a shared responsibility of market participants backed up by strong government social policy.

# What costs should be reflected?

- What is the biggest driver of network costs?
  - Critical peak demand?
  - General peak demand?
  - Something else?
- What is the purpose of cost-reflectivity?
  - A behaviour-change signal (i.e. to change behaviour and thus reduce future costs)?
  - A cost-distributive tool (i.e. to ensure everyone pays their fair share)?

# How should household usage be measured for billing?

- Peak demand during annual  critical peaks?
- Weekly, monthly, quarterly peak demand during daily peak periods?
- Average annual or seasonal peak demand during peak periods?
- Is there a fairer way to distribute costs than demand-based charges?

# One approach

Centre for Environmental Markets (UNSW), IT Power, Australians PV Institute

- Annual network peaks (critical peaks) the cost driver
- How to current demand tariffs reflect that cost?
- (Not very well, if at all)

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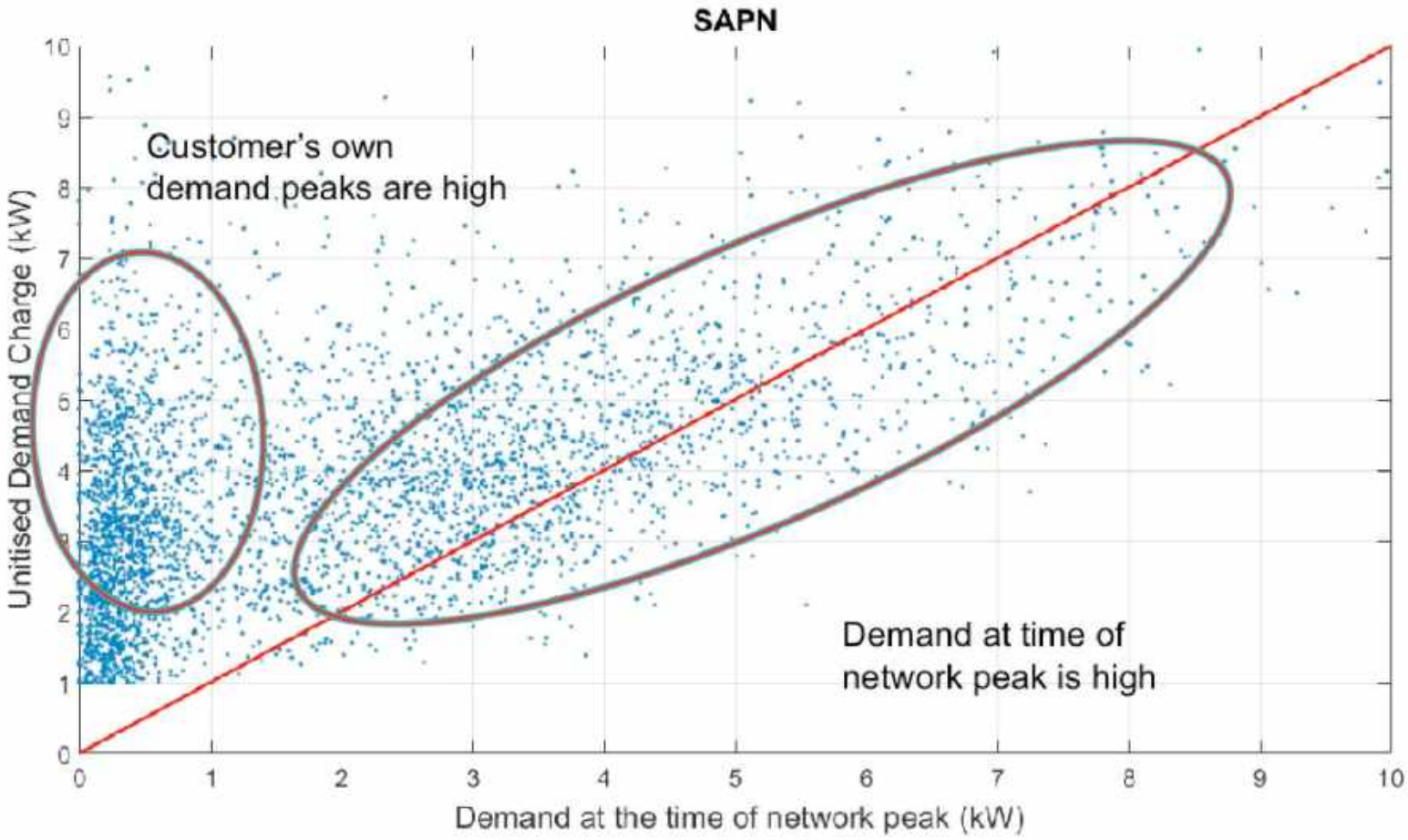
# Unitised demand charge



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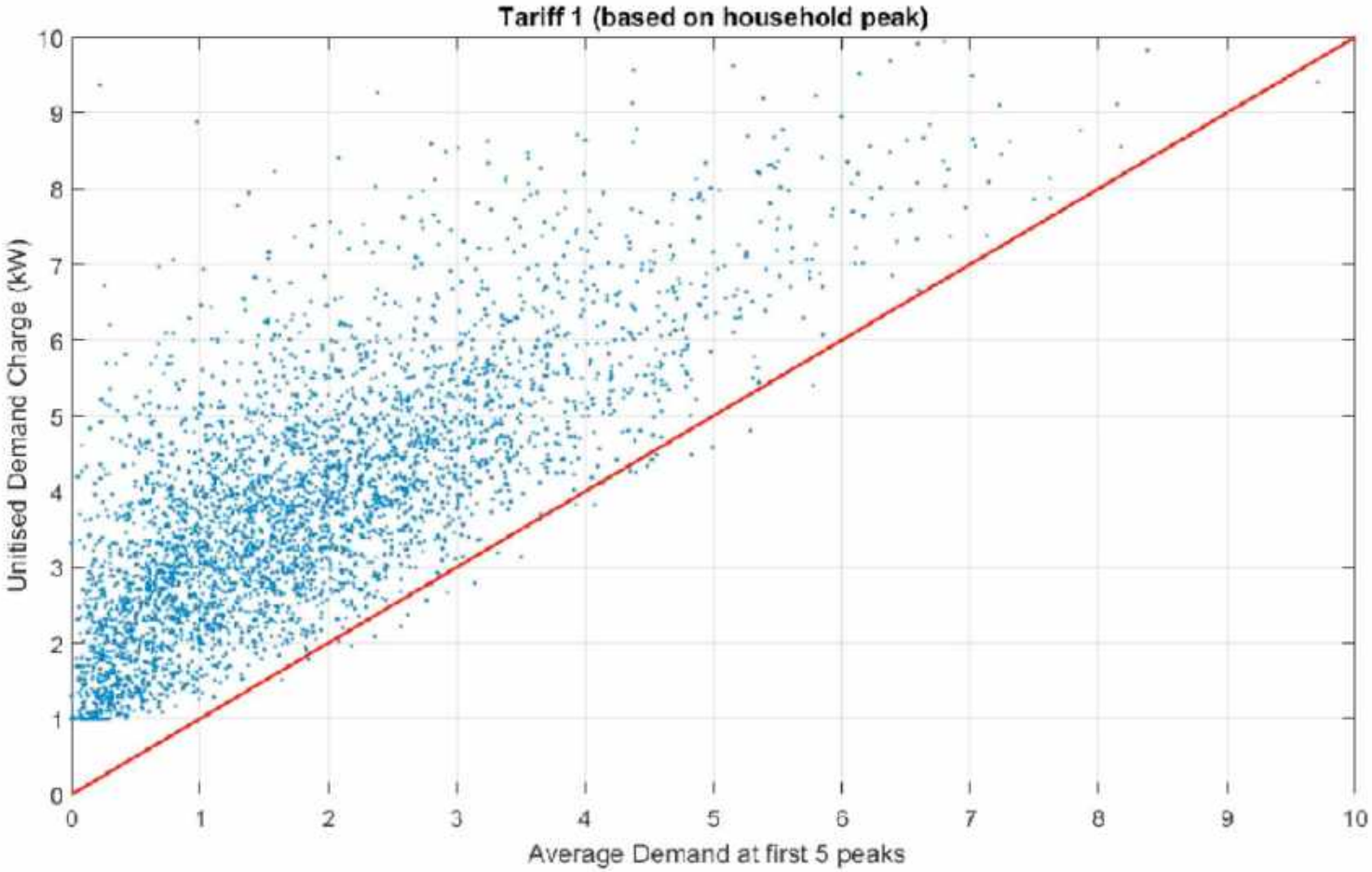
# UDC compared to first 5 network peaks



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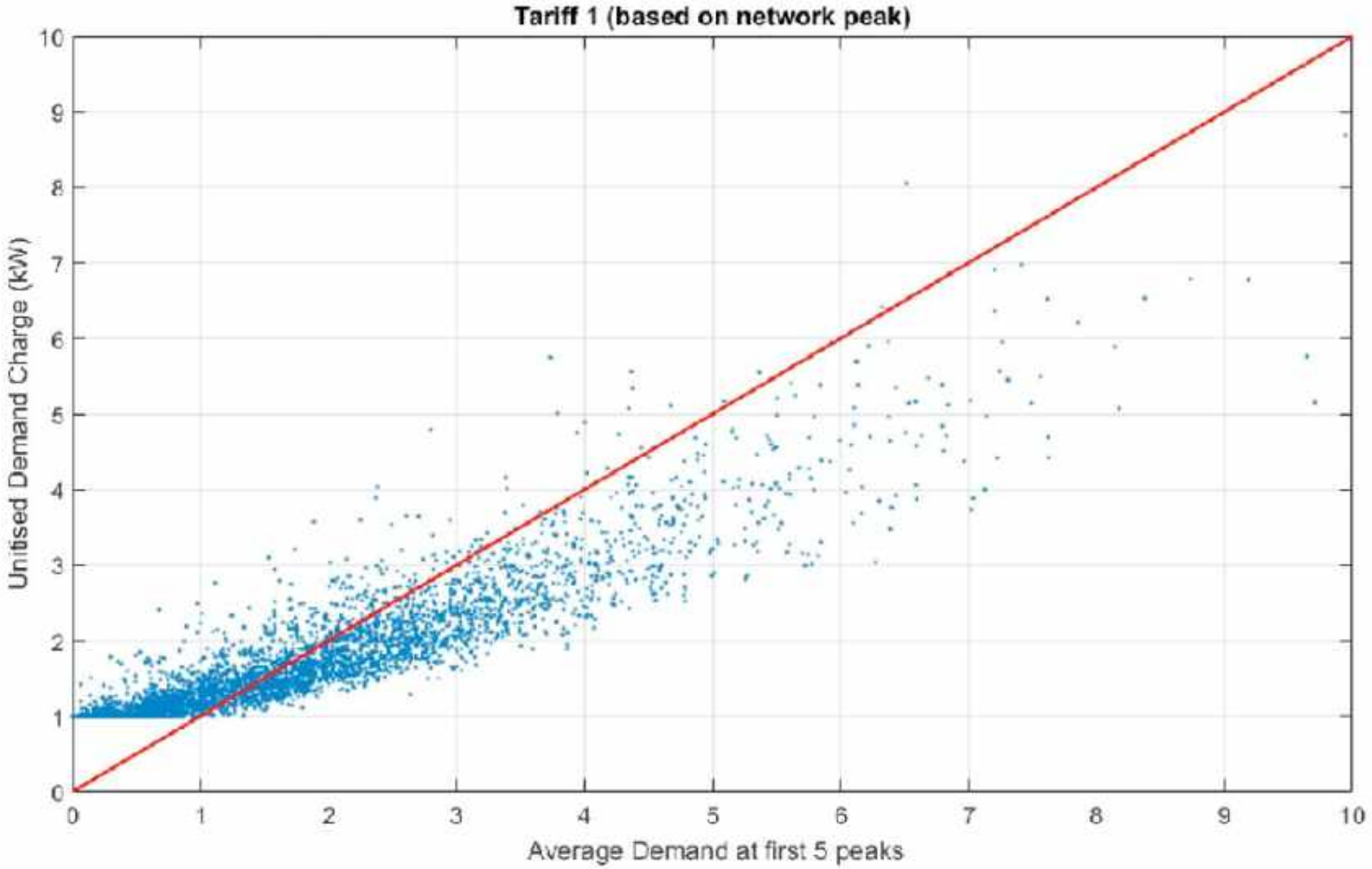
# DC applied to coincident demand (all year)



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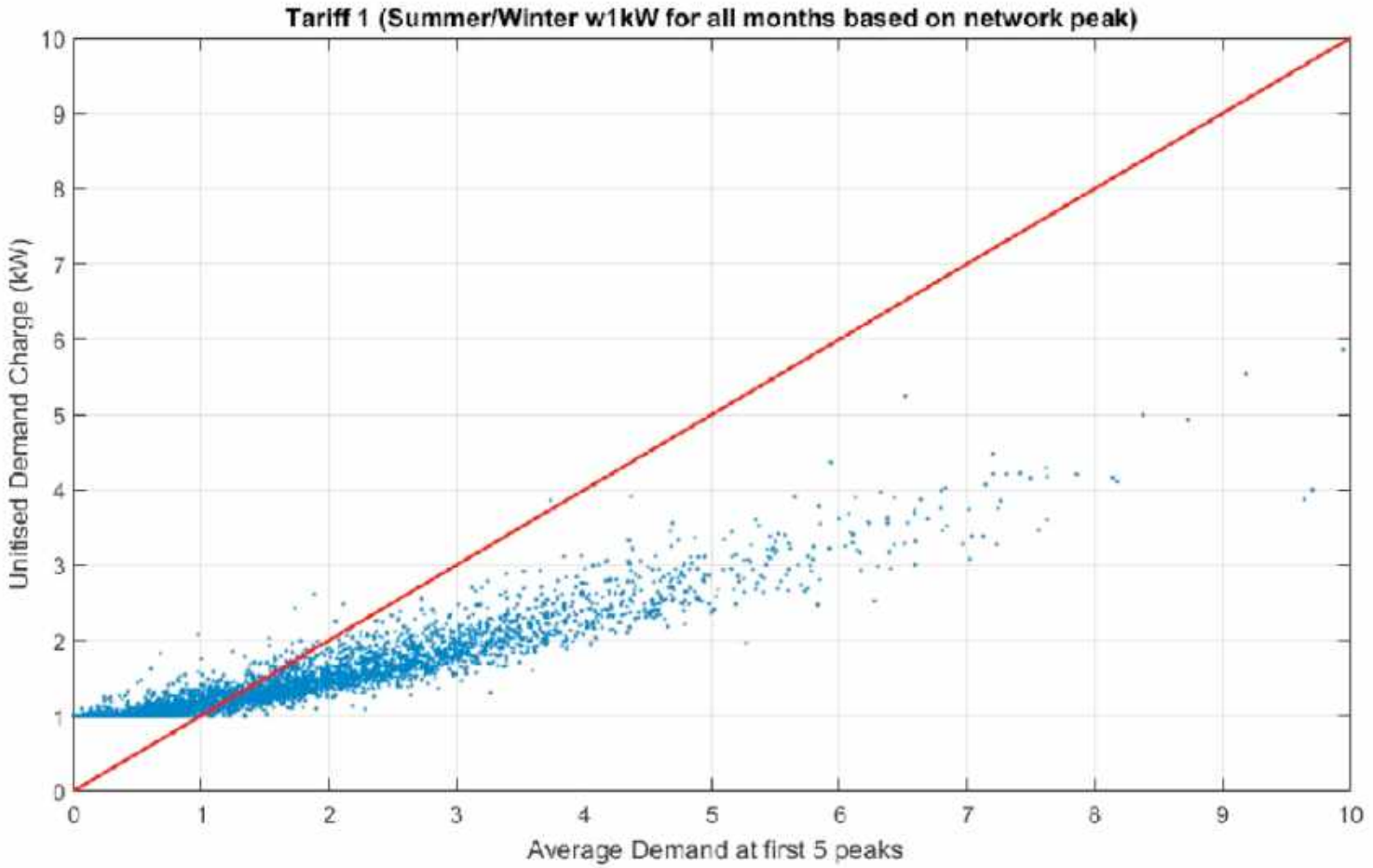
# DC applied to coincident dem summer & winter



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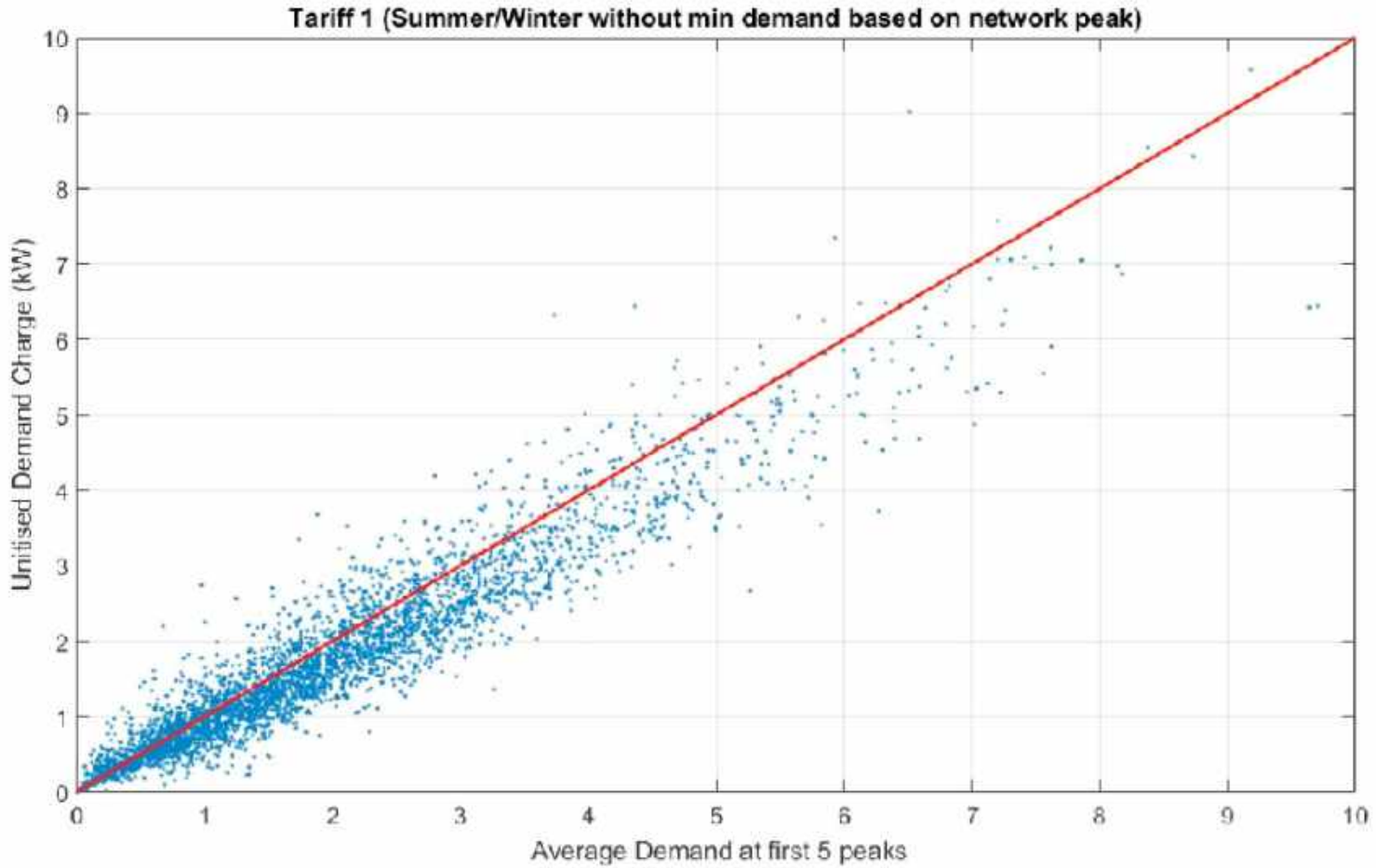
# Then no 1kW min charge



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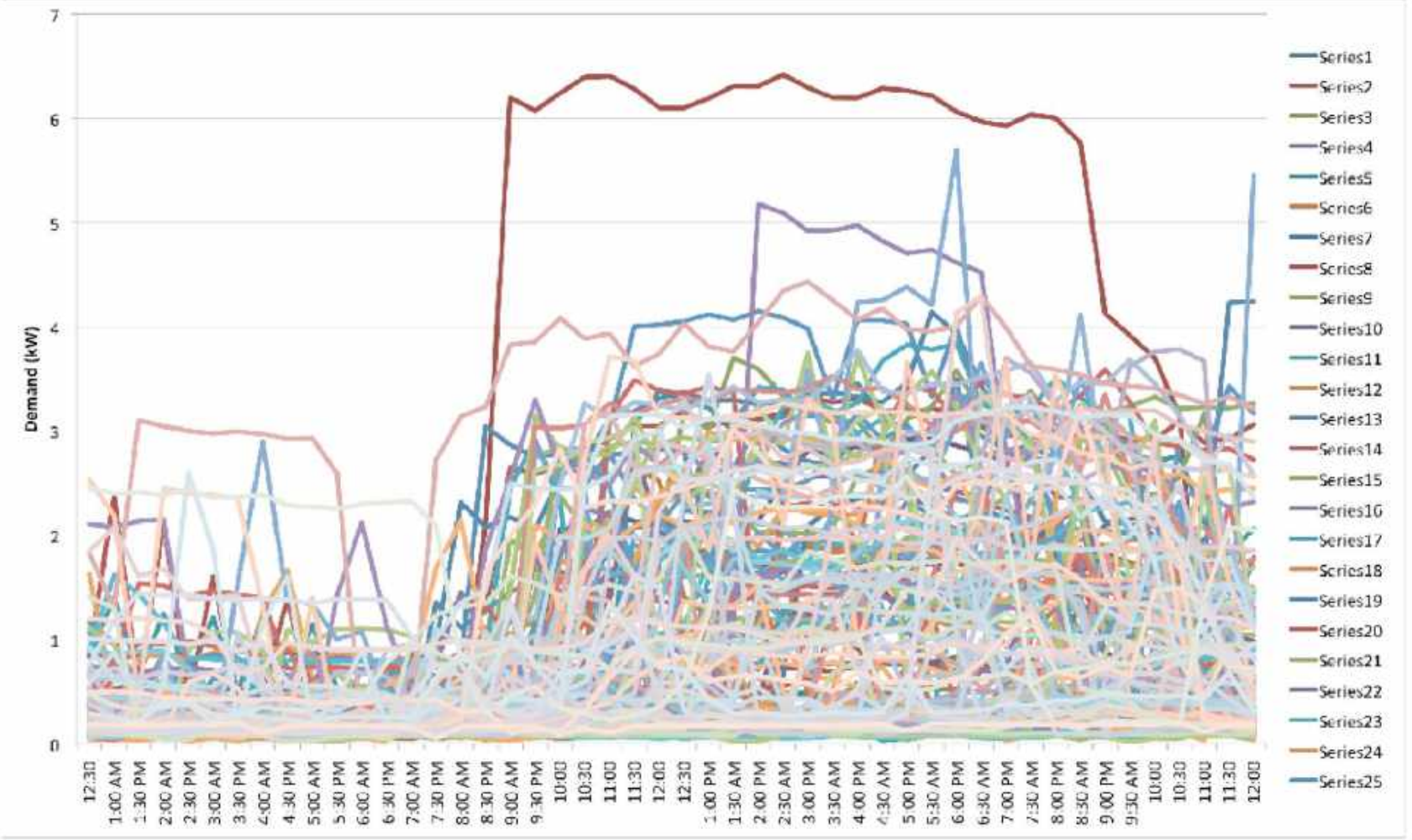
# Annual Peak – Separate loads



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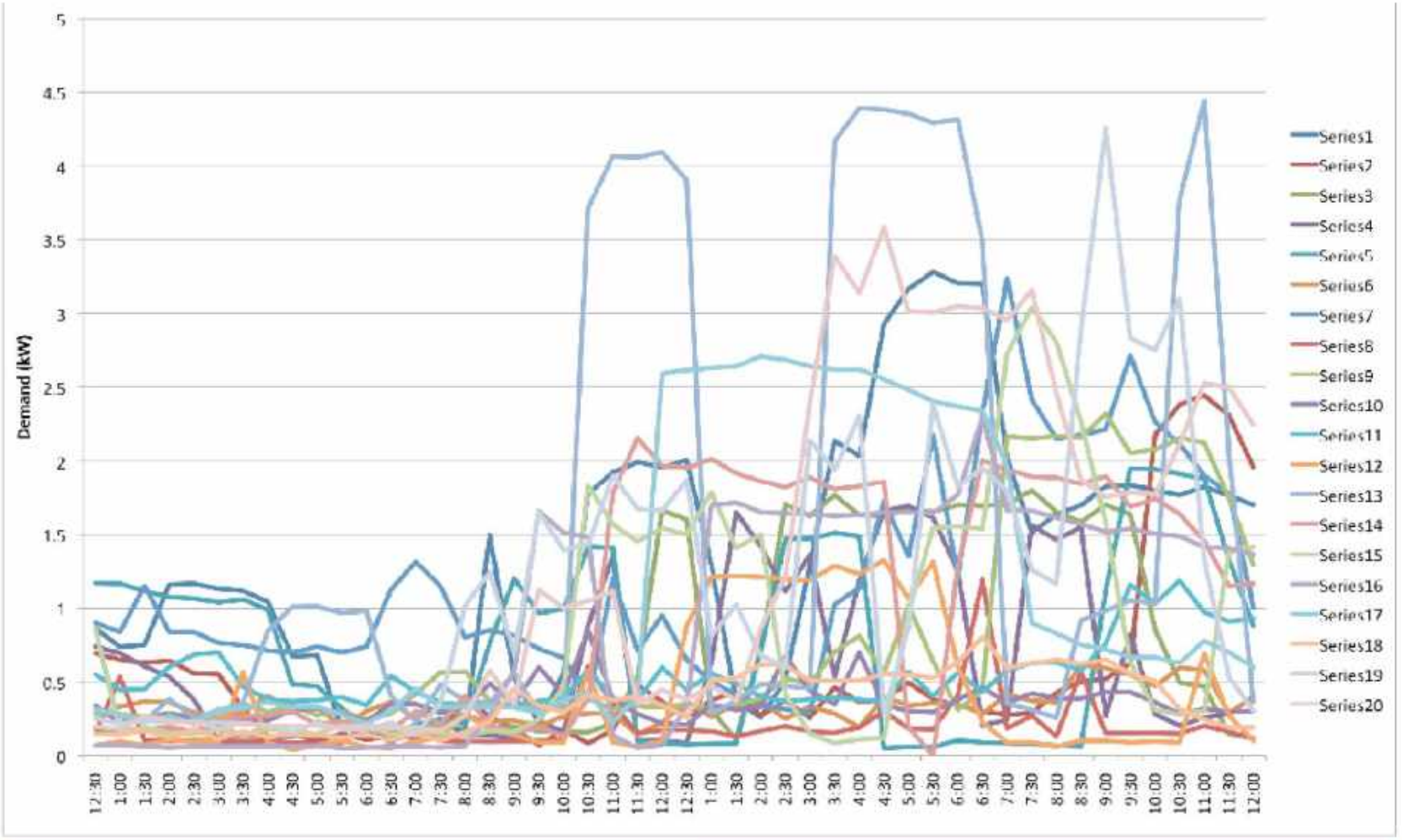
# Annual Peak – 20 houses



# Our project

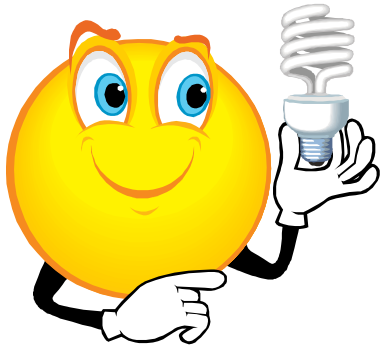
Looking at impact of proposed cost-reflective tariffs on household loads typical of different types of households

*For all except the largest users (65kWh/day), annual peak demand was between 2.5 and 6 times average daily peak demand.* ***Under most of the networks' demand tariffs, households are being charged according to their outlier peaks on a handful of days per year, instead of their typical peaks.***

# What we need to see

- Clarification of the purpose of cost-reflective tariffs
  - Behaviour change?
  - Cost-distribution?
- Clear info showing the relative contribution to network costs of annual and daily peak demand
- Tariffs that reflect those costs
  - This could totally be average demand-based tariffs with critical peaks price/rebate aspect
- Granular analysis of customer impacts including identification of systemic impacts and strategies for dealing with issues

# Thanks



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