

# Is randomised delay from smart chargers a long-term solution?

EIP043

28 February 2023

## Background

- **Electric Vehicles (Smart Charge Points) Regulations 2021:**
  - Randomised delay feature of up to 10 minutes
  - Manual consumer override
  - SSES 'Stage 2' requirements on grid stability due 'mid-late 2020s'
- **Anticipated problems:**
  - As EV uptake increases, so may no. of consumers participating in demand shifting on same price signals – 'step change' instability risk
  - A longer delay may hamper consumer experience/ exclude consumers from low prices
- **Potential solutions:**
  - Coordination of tariff settings?

## Enablers and Constraints

### Enablers:

- Australian dynamic operating envelope - Vehicle plugs in, capacity available dynamically on network is made available for charging

### Constraints:

- Multiple signals to different assets; giving users price signals may create cliff edge effects as it expects users to respond; a centrally dispatched balancing mechanism by ESO/DSO is required to decide who switches off when; problem of mass consumer override

## Involvement and Implementation

- **Key stakeholders:**
  - Primary: DNOs, chargepoint manufacturers, EV service providers, energy retailers, home energy management system operators
  - Secondary: Any energy smart appliance manufacturer – smart heat mandate
- **Target implementation date:**
  - Medium-long term solution - after 2030?
  - Implementation and scalability should align with projected increase in EV uptake
  - FES, CCC, ZEV Mandate
- **Key consideration:**
  - How will consumer charging behaviours respond to different solutions?

# Energy Innovation Basecamp

28 February 2023  
ICC Birmingham

## #Basecamp28

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