

DEIP Access and Pricing on a Page

VISION: pricing and access arrangements support investment and operation of distributed energy services that provide more equitable, sustainable and efficient outcomes for all energy users.

PROBLEM DEFINITION

Current pricing and access arrangements do not support investment and operation of distributed energy services for equitable and efficient outcomes for all energy users

Network technical issues:

- Particularly voltage fluctuations;
- Thermal constraints;
- Lack of DER visibility; and

Constraints to network pricing and pricing arrangements:

- Lack of efficient temporal and locational price signals (for import, export, consumption and generation);
- Barriers to implementing true cost-reflective tariffs such as resistance by some consumer advocates, governments and energy companies to pricing reform and lack of agreement on how cost reflective pricing can be implemented;
- Lack of incentives or requirement to pay for benefits to the grid/system;
- Metering, settlement and billing based on import and export, not consumption and generation; and

Constraints to network access and access arrangements:

- No firm access, where export can be prevented at any time;
- No access rights or agreement on how much can be exported and can be arbitrarily limited; and

Growth in types and uptake of DER services; is

Leading to negative outcomes for energy users including:

- DER services being over or undervalued at different times and places;
- DER services facing increasingly network constraints, resulting in loss of value for DER owner, creating inequity for new entrants who may face greater constraints and loss of value for all energy users;
- Further curtailment may limit DER emission reduction potential, and
- Network cost recovery creating inequity where non-DER households pay may of network cost recovery, disproportionately affecting people on low incomes.

Where DER services are defined as: Distributed generation and storage, solar pv, batteries, electric vehicles; Flexible load such as air conditioners, pool pumps, electric vehicles; Smart inverters.

PRINCIPLES

Energy is an essential service and everyone has the right to access clean, affordable, dependable energy

1. Put people at the centre

- Benefit all energy users
- Support access to DER
- Deliver DER services that energy users want at a price they are willing to pay
- Enable investment in a wide range of energy service models to meet the diverse and changing needs of people, businesses and communities

2. Think long term and be flexible

- Is flexible and responsive to support the innovation and growth in DER products and services
- Is clear and transparent

3. Be just and fair

- Fair distribution of costs and benefits
- DER owners pay to use the system and is rewarded for the benefits to the system
- Equitable access to shared network resources
- Risks sit with those best placed to manage them
- Aim to reduce inequality between cohorts
- Future energy users should not be left with unreasonable costs
- The costs and benefits of DER services should be made clear, so that policy makers and end users can respond appropriately.

4. Ensure it works

- Lead to efficient network investment in short, medium and long-term
- Incentivise uptake of DER products and services where it helps reduce costs to the energy system
- Support the secure operation of the grid with regard to frequency, voltage, and thermal constraints.
- Support system reliability with regard to generation sufficiency and network outages.
- Incentivise DER products and services where it helps to improve the resilience of homes and businesses in response to severe weather events and cyberattacks.
- Support and complements the uptake of energy efficiency and demand management

5. Deliver clean and healthy energy

- Support integration of more renewable and zero emissions energy
- Incentivise DER products and services to accelerate the transition to zero emissions

OBJECTIVES

Identify a suite of DER access and pricing solutions that could be implemented under existing rules or with new rules that:

- Support access to energy as an essential services
- Meet the needs of and optimise the outcomes for all energy users
- Reflect the systems costs and benefits of the two-way flow of distributed energy services
- Deliver equitable distribution of costs and benefits
- Incentivise more efficient network and DER investment and operations
- Are responsive and flexible to new distributed energy products and services
- Support the transition to zero emissions
- Are developed with energy users and seeks to be accepted by all

EVALUATION CRITERIA

1. Support consumer access and choice
2. Fair and equitable
3. Reflects costs and benefits
4. Flexible
5. Efficient signals
6. Implementable
7. Environmentally sustainable