

UPDATING THE REGULATORY FRAMEWORKS FOR DISTRIBUTOR- LED SAPS – DRAFT REPORT

STAKEHOLDER WORKSHOP

NOVOTEL HOTEL, BRISBANE
29 JANUARY 2020

AEMC

Agenda

1. Welcome
2. Overview of framework
3. Planning and service classification
4. Ring-fencing and SAPS services (AER)
5. Discussion 1

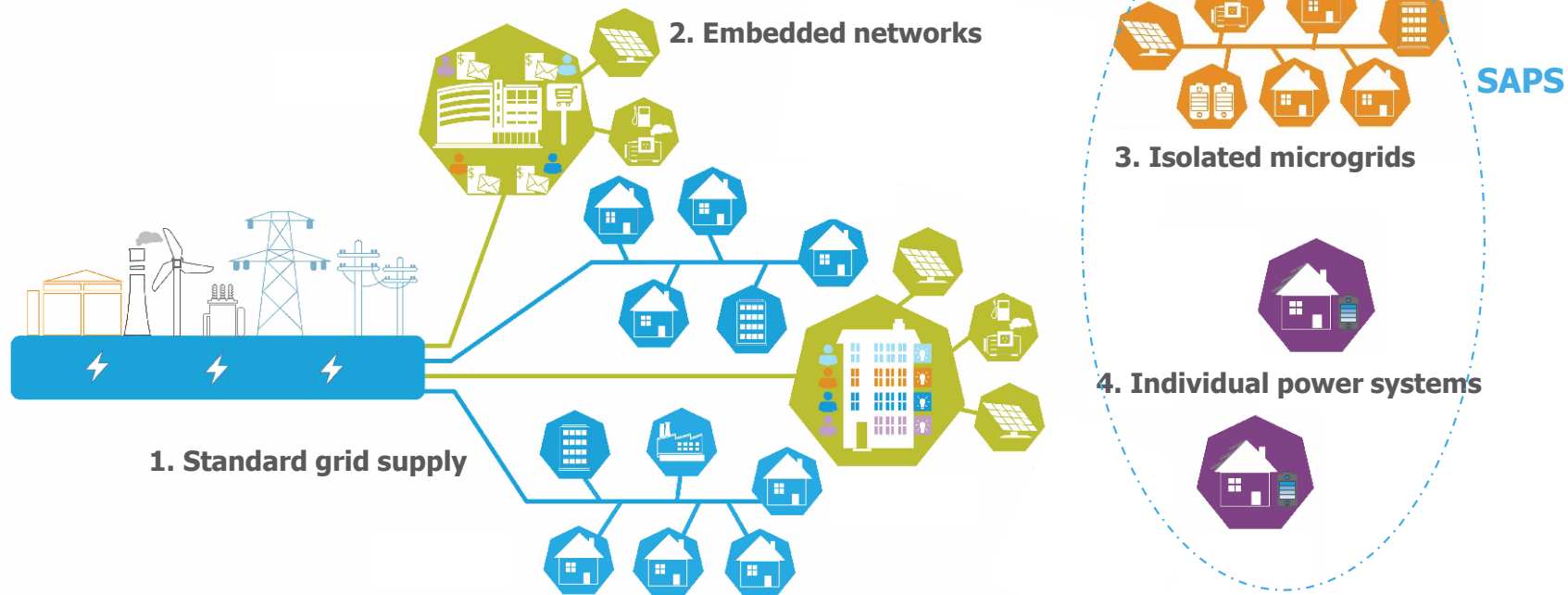
Lunch break

6. Settlement model
7. SAPS settlement price
8. Discussion 2
9. Implementation and next steps

OVERVIEW OF FRAMEWORK – ROLES AND RESPONSIBILITIES

ANDREW TRUSWELL

What do we mean by stand-alone power systems?



In our *Review of the regulatory frameworks for stand-alone power systems*:

- Priority 1 related to SAPS provided by Distribution Network Service Providers
- Priority 2 related to SAPS provided by parties other than DNSPs

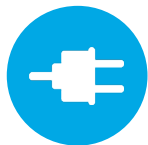
Background

- On 19 September 2019, the AEMC self-initiated a review into *Updating the regulatory frameworks for distributor-led stand-alone power systems*
- The purpose of the review is to provide advice to the COAG Energy Council on the detailed rules amendments required to implement the recommendations of the priority 1 final report
- The AEMC's priority 1 recommendations were considered and approved by COAG Energy Council in November 2019
- In developing detailed advice on rules to apply the recommended framework, the AEMC has focused on a number of areas where further clarification was required. These include:
 - Service delivery model
 - SAPS settlement price
 - Service classification
- In addition, the AEMC has maintained its approach to, and developed rules drafting on:
 - Network planning and customer engagement
 - Connection arrangements
 - Consumer protections
- The draft report includes proposed drafting for changes to the NER and NERR
- To implement the new arrangements, the COAG Energy Council will need to make law changes, and pass them through the SA parliament with the SA Minister then making the rules
- Jurisdictional governments and regulators will also need to review and amend relevant jurisdictional instruments

Maintaining broad consistency with the NEM arrangements

- The proposed model maintains a NEM consistent approach but utilises an administered settlement price charged to retailers for the delivery of energy in SAPS
- Existing wholesale energy market arrangements, including the settlement systems, would be used, amended as necessary, to cater for the SAPS specific settlement price
- Retail services would be provided by competing retailers. SAPS customers would be able to maintain their relationship with existing retailers and retain existing retail offers
- The proposed arrangements aim to achieve a seamless transition of grid connected customers to SAPS. SAPS customers would be no worse off in terms of price, following transition to SAPS supply
- Utilising an administered SAPS settlement price (rather than the spot price) would remove retailer risk associated with price volatility in the spot market and the need for retailers to hedge SAPS customer load

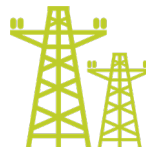
Delivery of SAPS functions – roles and responsibilities



Retail functions, including billing and customer management services, would continue to be facilitated by the competitive market.



Generation functions would be subject to ring-fencing from distribution functions and therefore normally outsourced (which may include to a ring-fenced affiliate of the DNSP).

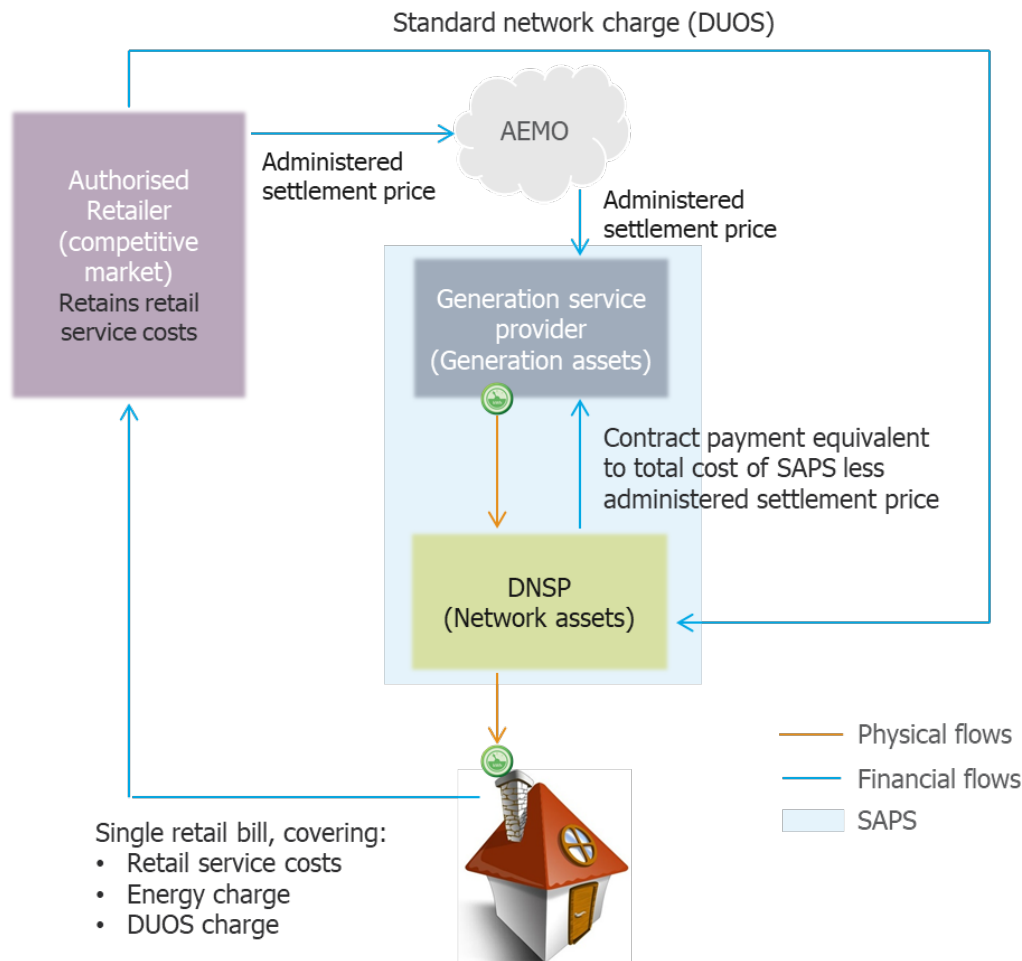


Distribution functions would continue to be provided by the DNSP.



Metering functions would continue to be provided by a metering coordinator appointed by the SAPS customer's retailer.

SAPS service delivery model and financial flows



Consumer protections

Protections for customers in DNSP-led SAPS should be equivalent to those under standard supply arrangements:

- Customers transitioned to SAPS should continue to be subject to all existing **national energy specific consumer protections** (i.e. the National Energy Customer Framework)
- **Network reliability and performance standards** – SAPS customers should receive reliability and quality of supply protections equivalent to those of grid-connected customers (noting that network reliability standards are a jurisdictional matter)
- Other **jurisdictional consumer protections** including safety regulation, guaranteed service level schemes, access to concessions and rebates and access to independent dispute resolution should be extended to SAPS customers, if they would not automatically apply – jurisdictional governments may wish to consider these matters

PLANNING AND ENGAGEMENT



CLAIRE ROZYN

SAPS planning and engagement

In summary, draft proposed rules will require DNSPs to:

1. include additional information in their **DAPRs** to report specifically on DNSP SAPS projects
2. revise their **demand-side engagement** strategies (and documents) to include SAPS
3. quantify all classes of market benefits considered to be material or which may alter the selection of the preferred option (currently optional) when conducting RIT-D
4. develop a **SAPS customer engagement strategy** to guide engagement with all parties who may be affected by the decision to transition a customer(s) to SAPS

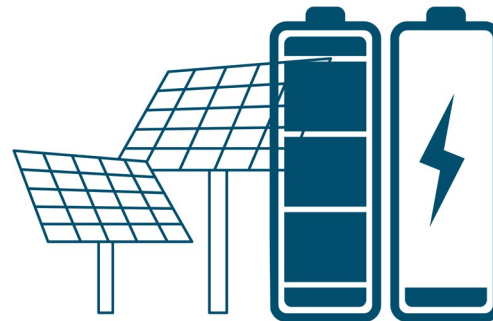
Draft proposed rules:

- largely reflect the SAPS P1 final recommendations
- are broadly consistent with existing arrangements supporting distribution planning and engagement
- include a few changes and additions to acknowledge the nature of SAPS as distinct from either network or non-network solutions

Underpinned by position that DNSPs should only seek to transition existing grid-connected customer(s) to a SAPS where a SAPS solution has been identified as being the **most efficient** means of continuing to supply a customer(s)

SAPS planning – DAPR recommendations (1/3)

- It is the Commission's view that the existing distribution planning and investment framework is largely appropriate and fit-for-purpose
- However, existing planning arrangements should be supplemented by a number of additions to the DAPR reporting requirements to increase transparency around SAPS opportunities



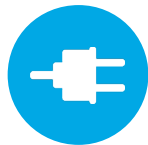
Objective is to increase transparency around current and future opportunities for, and decisions made in respect of, SAPS

SAPS planning – DAPR recommendations (2/3)

The Commission has recommended that DNSPs include additional information in their DAPRs on:



- **potential opportunities for SAPS** in the forward planning period (5 years) including location, timing and potential type of SAPS that may address the relevant system limitation



- **committed new SAPS projects** due to be implemented during the forward planning period



- **SAPS options considered** by the DNSP over the past year



- **total numbers** of SAPS implemented, and customer premises transitioned to SAPS supply, under the DNSP SAPS regulatory framework

SAPS planning – DAPR recommendations (3/3)

Additional information requirements have a number of benefits:



- helping to ensure that proponents of SAPS have access to sufficiently detailed and timely information on current and future opportunities for SAPS



- allowing the outcomes of the new regulatory framework for SAPS to be captured in a central location



- assisting the AER in its distribution determination process by reducing information asymmetries between the AER and DNSPs



SAPS engagement – recommendations (1/3)

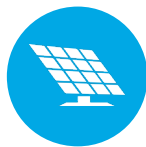
- To meet expected customer engagement outcomes, the Commission proposes a number of obligations on DNSPs to engage with affected parties throughout the planning, development and operational stages of a SAPS project
- Imposing obligations on DNSPs to engage with affected parties (including potential SAPS customers and the local public) is particularly appropriate in the absence of customer consent provisions
- Draft proposed rule contains three parts:
 - Development of a strategy and document
 - AER guidelines
 - Formal consultation process



Objective is to facilitate effective and timely engagement between DNSPs and affected parties throughout the SAPS project life cycle

SAPS engagement – recommendation 1

The draft proposed rule requires that DNSPs:

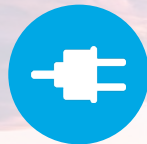


- develop a **strategy** to achieve effective and timely engagement with parties affected by a DNSP decision to implement a SAPS



- communicate that strategy through publication of a SAPS customer engagement **document**

When developing and amending the strategy, DNSPs will be required to have regard to the **SAPS customer engagement objectives:**



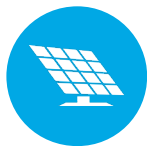
1. to **provide relevant and timely information** about DNSP-led SAPS projects and SAPS customer engagement strategies and processes



2. to **engage in timely and effective communications and other engagement** with affected network users and landowners during the planning, development, construction and commissioning of a DNSP SAPS project

SAPS engagement – recommendations 2 and 3

The draft proposed rule also provides for the following:



- The AER may develop and publish **guidelines** about engaging with affected network users and the public in relation to DNSPs' SAPS projects
- Intention is to provide general guidance on the form and content of SAPS customer engagement documents and other matters the AER considers appropriate to promote the SAPS customer engagement objectives



- DNSPs must provide **formal notice** to affected parties in respect of a proposal to implement a SAPS solution in the area
- Notice would include reasonably detailed information on the proposal and a reasonable timeframe in which affected parties may comment
- DNSPs *would not* be required to give notice where a proposal for a SAPS is intended to address an urgent and unforeseen network issue (but must use reasonable endeavours to meet the SAPS customer engagement objectives)

SERVICE CLASSIFICATION



CLAIRE ROZYN

Service classification – background

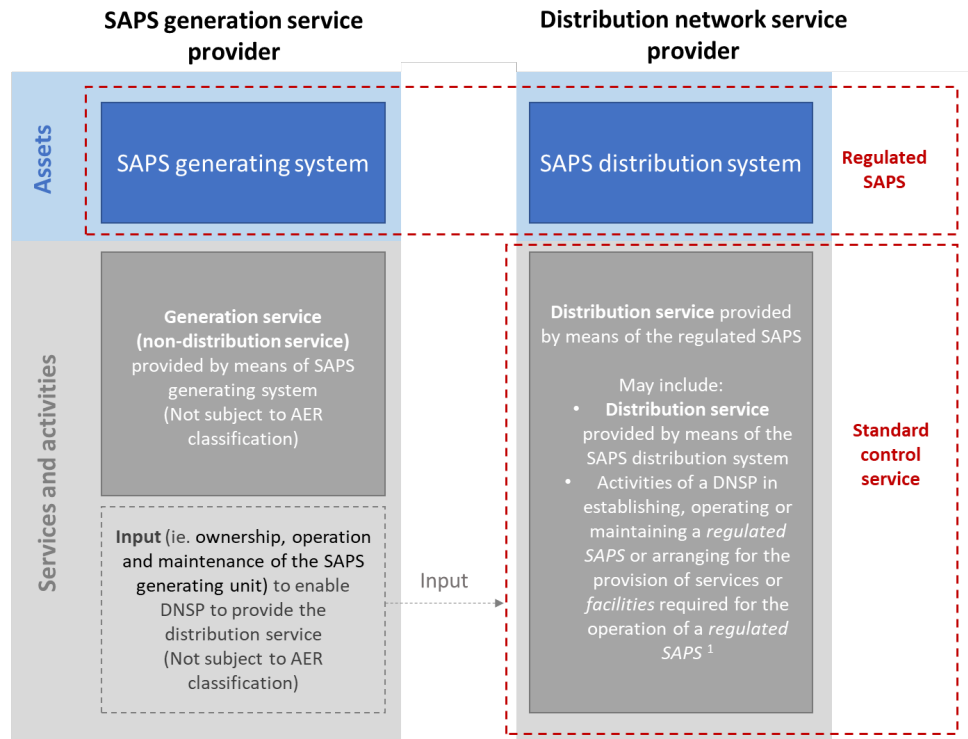
- The driver behind allowing DNSPs to use SAPS to provide distribution services to existing grid-connected customers is the fact that DNSPs would be able to do so at a cross-subsidised price
- Without the cross-subsidy, existing customers would be unlikely to choose to leave the grid and the potential reductions in distribution costs for all customers from moving certain customers to SAPS supply would not be captured
- For DNSPs to continue to cross-subsidise the provision of distribution services to SAPS customers, the services and activities provided by means of a SAPS must include a distribution service which has (or will be) classified by the AER as a standard control service



Focus of proposed draft rules is on clarifying the approach to the classification of services provided by means of a SAPS distribution system for regulatory purposes

Service classification – recommendations (1/3)

- In general, the existing framework for distribution service classification is appropriate and fit-for-purpose to support the AER in determining the classification of the SAPS distribution service
- However, in certain circumstances, guidance in respect of how SAPS services and activities should be treated within the regulatory framework may be beneficial – for example, IPS
- The Commission has developed guidance on the basis that a SAPS comprises two components:
 1. a SAPS distribution system, which will provide a distribution service, and
 2. a generating system(s) connected to the SAPS distribution system, which provides a generation service and is also an input into the distribution service



¹ These must be classified as a standard control service or treated as an input into a standard control service.

Service classification – recommendations (2/3)

Draft proposed rule includes a set of principles to which the AER must give effect when identifying and classifying the distribution services provided by means of a SAPS:



1. The distribution service provided by means of a SAPS distribution system must be given **the same classification** that it would have been given if the service were not provided by means of a DNSP-led SAPS



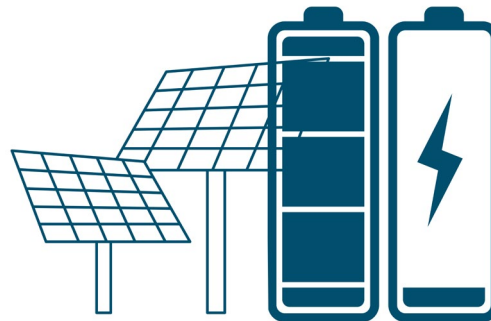
2. The activities of a DNSP in establishing, operating or maintaining a regulated SAPS or arranging for the provision of services or facilities required for the operation of a regulated SAPS must be classified as a **standard control service** or treated as an **input** into a standard control service



Service classification – recommendations (3/3)

The proposed draft rules recognise that:

- to implement a SAPS solution, a DNSP will (unless granted a waiver by the AER) need to contract with a third party to design, install, operate and maintain SAPS generation assets to supply electricity to SAPS customers
- the activities of the DNSP in relation to that contract (including payment of contract charges) should be classified either as standard control services or considered as an input into a standard control service
- the generation of electricity consumed by SAPS customers and the sale of the electricity by the retailer are not distribution services, and not subject to classification by the AER



Implication of the proposed approach is that, unless granted a waiver by the AER or subject to a deemed exemption, DNSPs will need to procure generation services from a third party, which may be a subsidiary or other affiliate of the DNSP

RING-FENCING AND SAPS SERVICES

AUSTRALIAN ENERGY REGULATOR



AUSTRALIAN
ENERGY
REGULATOR

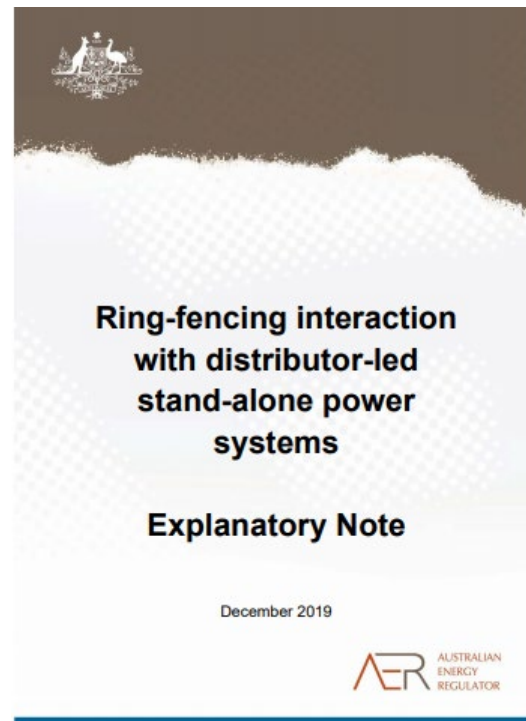
Ring-fencing and the regulatory framework for distributor-led SAPS

Olivia Boyd

AEMC workshop, 29 January 2020

AER Explanatory Note

- Aims to support informed stakeholder submissions to the AEMC's draft proposed rules.
- Provide more guidance on how we would assess future ring-fencing waiver applications and enforce any waiver conditions.
- Includes case studies and examples.



Ring-fencing waivers and exemptions

- **Waivers:** AER can waive the requirement for a DNSP to legally and functionally separate (i.e. separate officer, staff, branding) provision of contestable electricity services.
- **Regional office:** exempts DNSPs from functional separation requirements in remote areas.

Waiver application process

- Consult with AER staff to see whether a waiver is needed.
- AER assesses waiver according to Guideline criteria (cl. 5.3).
- AER would consider other SAPS-specific factors
 - e.g. extent to which DNSP has demonstrated that third-party SAPS providers are unable to provide the service, etc. (see p. 3 Explanatory Note for more detail on this).
- Public consultation on waiver application.

Waiver conditions

- **Duration of waivers:** We grant waivers for a maximum duration of five years or to end of the next regulatory control period. This is the same approach that we take to all aspects of network regulation, including classification of services.
- **Revoking waivers:** We can revoke waivers with 40 days notice. This is one of our enforcement options in the event that waiver conditions are breached, but we would see it as likely being a 'last resort' enforcement option.

Questions

Discussion

SETTLEMENT MODEL



ANDREW TRUSWELL

Overview

- In the SAPS priority 1 report, the Commission concluded that the delivery of SAPS services by DNSPs would be best supported by the existing wholesale market arrangements, with AEMO being responsible for the settlement of generators and retailers operating within a SAPS
 - This would enable SAPS customers to retain access to retail competition
- Rather than using the spot price to settle the delivery of energy to SAPS customers, the Commission recommended retailers would be charged an administered price – the SAPS settlement price (SSP)
 - This would limit the need for retailers to hedge SAPS customers' loads by reducing exposure to price volatility on the spot market
- The Commission has considered a number of matters relevant to the SAPS service delivery arrangements:
 - registration requirements
 - non-energy charges
 - allocation of electricity losses
 - establishing the SSP (discussed later)

Settlement of load and generation

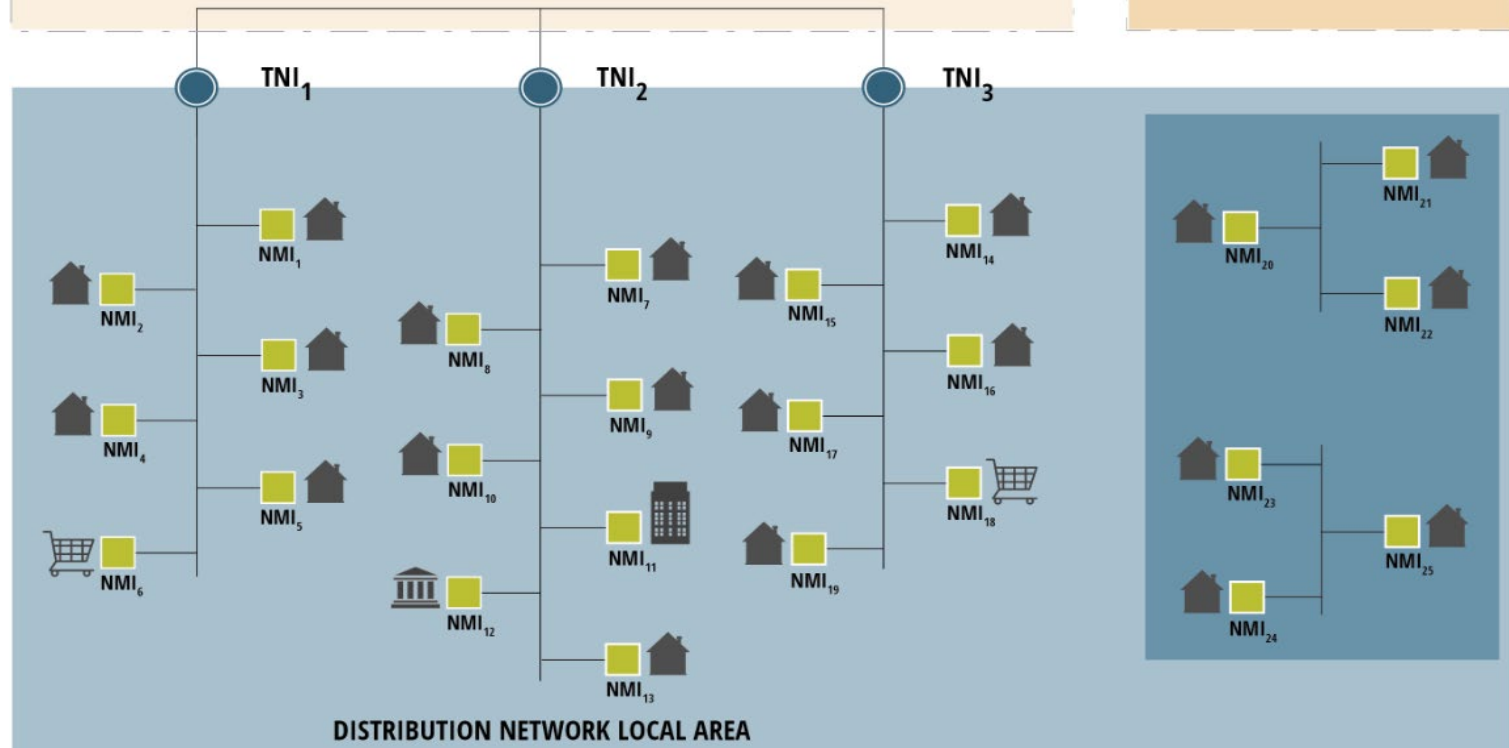
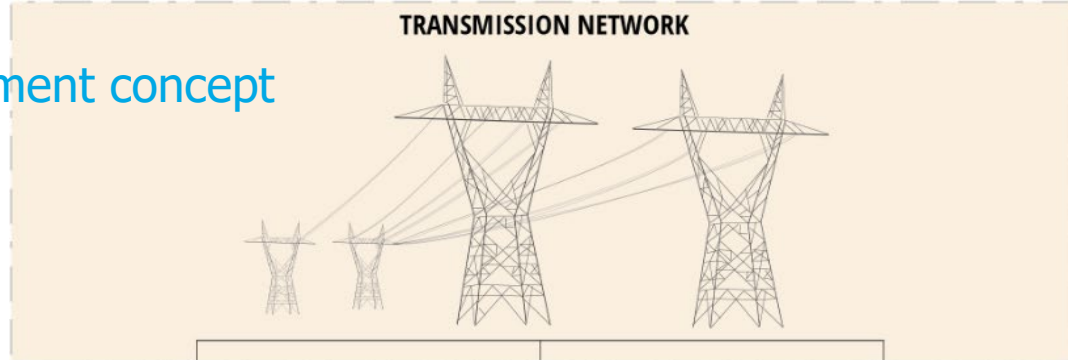
The Commission's proposed approach to settlement seeks to:

- Allow for the settlement of customers and generators individually
- Minimise changes to the rules and procedures
- As far as possible, be capable of being implemented by AEMO through offline systems while take-up of SAPS is low

Broadly, the proposed approach would consist of two stages:

1. Undertake settlement as if SAPS generators and customers were grid-connected
 - Changes will be required for losses/unaccounted for energy
2. Adjust trading amounts to reflect the SSP rather than the spot price

Settlement concept



Registration requirements and financially responsible market participants

Under the Commission's proposed arrangements:

- each customer NMI (connection point) transitioned to a SAPS by a DNSP would be flagged as belonging to a SAPS in AEMO's systems
- all SAPS customer NMIs would have a market customer (usually, a retailer) as the financially responsible market participant (FRMP)
- SAPS generators would have either a market small generation aggregator (MSGGA) or a market customer as the FRMP
 - large generators (to the extent there are any in SAPS) could be registered by a MSGGA if exempted by AEMO from registration as a generator

Treatment of non-energy costs

- An implication of the proposed approach is that market customers and MSGAs will be liable for non-energy costs in settlement
- This is consistent with the overall rationale for the NEM consistency approach, and we expect that the materiality of charges will be very low
- Market customers should however be exempt from liability for Provider of Last Resort (PoLR) for their SAPS customers, to avoid RRO requirements to contract

Table 4 Current NEM non-energy settlement recovery

	Cost recovery from	NER Reference
Market ancillary services		
Frequency Control Ancillary Services (FCAS) – contingency raise	Market Generator including Market Small Generation Aggregator (MSGAs)	3.15.6A (f)(3)
FCAS – contingency lower	Market Customers	3.15.6A (g)(3)
FCAS – regulation	Market Generator and Market Customers on causer pays basis	3.15.6A (i)
Non-market ancillary services		
Network support control ancillary services (NSCAS)	Market Customers	3.15.6A(c2)(1)
System restart ancillary services (SRAS)	Market Customers, Market Generators including MSGAs	3.15.6A(c2)(2)
Interventions		
Direction – energy	Market Customers	3.15.8(b)
Direction – FCAS	Market Customers, Market Generators on a causer pays basis	3.15.8(e)
Direction – other	Market Customers, Market Generators and MSGAs	3.15.8(g)
Mandatory Restriction	Market Customers	3.12A.7(e)
Reliability and Emergency Reserve Trader (RERT)	Market Customers	3.15.9(f)
Other events		
Market shortfall and surplus	Market Generators including MSGAs	3.15.23
Administered price cap or administered floor price compensation Payments	Market Customers	3.15.10(a)

Treatment of losses

The Commission's proposed approach is that:

- Transmission and distribution loss factors would be set at 1 for SAPS NMIs
- Any losses in a SAPS system would be included in the calculation of unaccounted for energy (UFE)

Unaccounted for energy (UFE)

- UFE is currently allocated to the local retailer for its local area, but will soon be allocated to all market customers in a distribution network under global settlements
- SAPS NMIs will be carved out of the relevant DNSP's local area for purposes of calculating UFE, with SAPS UFE calculated across all of a DNSP's SAPS networks
- There may be a period between implementation of the DNSP-led SAPS regulatory framework (e.g. mid-2021) and start of global settlement (6 February 2022)
- Interim arrangements for this period will be considered prior to the publication of the final report for this review – we would be very interested in stakeholder views

Calculation of adjusted SAPS trading amounts

Initial settlement

- Settlement would be run as normal and include:
 - all SAPS NMIs allocated to a DNSP
 - all spot market transactions and non-energy charges
 - SAPS losses included in UFE, with UFE allocated across a separate SAPS 'local area' for each DNSP
 - prudentials calculated for energy and non-energy charges as normal

Adjusted trading amounts

- AEMO would then calculate and settle a trading amount adjustment for SAPS load and generation
- this adjustment would be the difference between the spot market transaction for each trading interval using the regional reference price and an adjusted spot market transaction for the same interval using the regional SAPS settlement price
- this adjustment requires the initial calculation of SAPS UFE to be quarantined to ensure that settlement balances

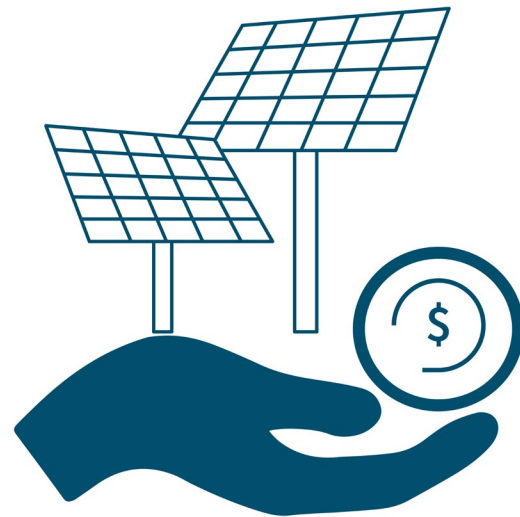
SAPS SETTLEMENT PRICE



RUPERT DONEY

Purpose of the SAPS settlement price (SSP)

- Under the proposed service delivery model, an administered price would be used to settle the delivery of energy to SAPS customers
- The SSP is designed to remove retailer exposure to price volatility within the spot market, and therefore the need to hedge SAPS customers' load with NEM generators
- The SSP also reduces the risk of customers receiving unsuitable price signals



Houston Kemp's proposed approach to designing a price setting mechanism

The design of the SSP was assessed on the basis of achieving two key objectives (set by the AEMC):

- removes or substantially mitigates retailers' pricing risk, limiting the need to hedge SAPS customers
- allows retailers to supply SAPS customers using market offers

Houston Kemp proposed the following components should be considered as key design elements:

- the underlying price data
- data sample period
- timing of price adjustments



HOUSTONKEMP
Economists




Designing a pricing mechanism
for distributor-led standalone
power systems

A final report for the Australian Energy Market Commission

25 November 2019

Evaluation of options for the design of the SSP

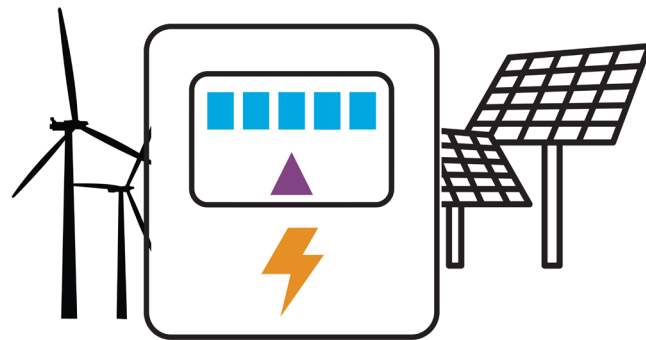
The Commission has given detailed consideration to the trade-offs involved in different approaches to the design of the SSP. The key options we considered included:

-  **Option 1A: Simple wholesale price with annual update frequency** – simple calculation based on historical wholesale prices, updated annually, conservative adjustment factor
-  **Option 1B: Simple wholesale price with quarterly update frequency** – simple calculation based on historical wholesale prices, updated quarterly, conservative adjustment factor
-  **Option 2: Sophisticated wholesale price** – a more complex approach that seeks to more accurately capture the cost of wholesale energy based on wholesale prices and ex-post adjustments
-  **Option 3: Base swap contract** – a contract-based approach that uses trade weighted base contract prices to produce a conservative estimate, incorporating market expectations regarding future prices
-  **Option 4: Sophisticated hedge approach:** a sophisticated contract-based approach that seeks to replicate the cost of a retailer through approximating a prudent retailer's hedging approach.

Features of the recommended SAPS settlement price

The Commission is proposing an SSP that includes the following design features:

- The SSP would be based on historical wholesale price data with a conservative adjustment of 0.8
- The data sample period will be a twelve month period
- The SSP will have an annual outlook period; updated on 1 July each year
- The SSP would be applied by AEMO at settlement



Giving effect to the SSP

The draft proposed rules:

- Include a description of the formula for calculating the SSP
- Provide that AEMO is responsible for notifying the market of the SSP to be applied to SAPS customer load
- Require AEMO to publish the SSP on its website



Discussion

IMPLEMENTATION AND NEXT STEPS

ANDREW TRUSWELL

Overview – next steps and implementation

This review

- We will consider issues raised in submissions, and will provide a final report to the COAG Energy Council by May 2020
- We are likely to further consider the application of technical and performance standards to SAPS, and would welcome feedback in this regard

Implementation of review recommendations

- COAG Energy Council is currently developing law changes drawing from recommendations made in the earlier priority 1 report
- South Australian minister will be able to make the rules developed in this review following the agreement of the COAG Energy Council and the passage of the law changes through the South Australian parliament
- A number of further steps will need to be undertaken by jurisdictions, market institutions and industry before the framework commences

SAPS technical and performance standards

Technical regulation

- DNSPs must adhere to a number of technical regulations and design and performance standards when supplying grid-connected customers, and designing their networks
- Additionally, there are power quality obligations relating to voltage range, frequency, disturbances and compliance monitoring
- Power quality obligations exist in a variety of regulatory instruments including the NER, jurisdictional Acts, codes and licences (depending on the jurisdiction) and in relevant Australian Standards

Draft report recommendations

- Existing technical and performance standards should apply to DNSP-led SAPS where they

are appropriate and required to maintain equivalent power quality outcomes

- A limited number of amendments to the NER chapter 5 technical schedules are proposed to clarify that a particular standard is or is not relevant to a SAPS

Stakeholder feedback

- Is the proposed application of technical standards set out in NER schedules 5.1a through to 5.3a (see Table C2 in draft report) appropriate for DNSP-led SAPS?
- Would further changes to potentially relax the standards given effect through the rules be appropriate? If so, how should this be achieved – by specifying revised standards or considered on a case-by-case basis?

Key changes to jurisdictional arrangement to adopt the framework

Changes to NERL application Acts in certain jurisdictions

- Changes to NERL application Acts in New South Wales, South Australia and Tasmania may be required in order to ensure that DNSP SAPS customers receive the protections of the NECF

Review jurisdictional regulations

- To provide a complete set of consumer protection and safety regulations for customers transitioned to DNSP-led SAPS, state and territory energy regulatory functions need to be considered. Consideration should be given to the following areas:
 - State and territory concessions and rebates
 - Access to independent dispute resolution
 - Network reliability and GSL schemes
 - Safety and technical regulation
 - Land access arrangements

Jurisdictional opt-in

- We are recommending an “opt-in” to national laws and rules to be triggered when a jurisdiction is comfortable that its jurisdictional regulation is ready

Implementation roles – AEMO and AER

AEMO



- Changes to settlement systems to accommodate the SSP

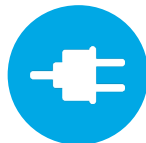


- Required to notify the market in advance of the SSP to apply to SAPS customers' load



- Review and, where appropriate, amend existing guidelines and procedures to ensure they are consistent with the new national arrangements

AER

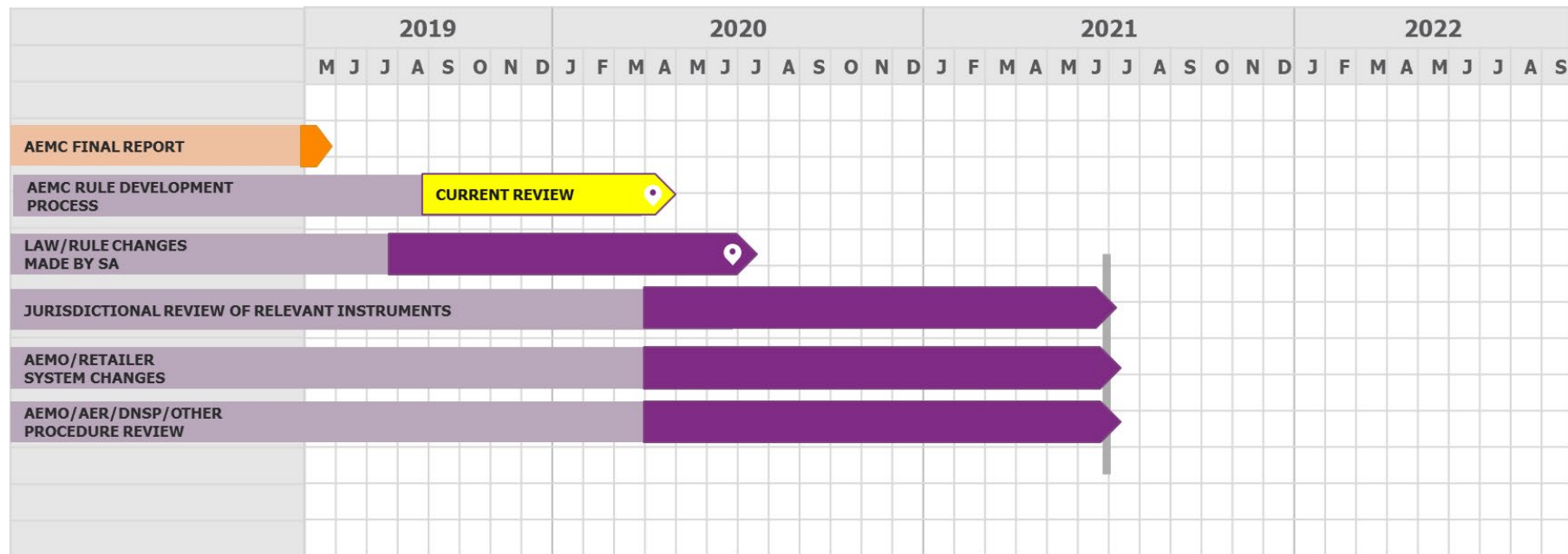


- New provision to develop a SAPS customer engagement guideline



- Review and, where appropriate, amend existing guidelines to ensure they are consistent with the new national arrangements, prior to the framework taking effect

Implementing the recommended regulatory framework for SAPS

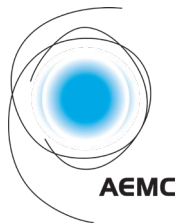


Source: AEMC

Next steps and lodging a submission

Project milestone	Date
Submissions on draft report close	13 February 2020
Proposed publication of final report and final proposed rules	By May 2020

- Written submissions on this draft report must be lodged with the Commission by 13 February 2020
- Stakeholders are also invited to provide any comments on the AER's Ring-fencing explanatory note as part of their submissions to the Commission on the draft report and draft proposed rules.



Office address

Level 6, 201 Elizabeth Street
Sydney NSW 2000

ABN: 49 236 270 144

Postal address

PO Box A2449
Sydney South NSW 1235

T (02) 8296 7800

F (02) 8296 7899