Ref: 20200214TG:CB

14 February 2020

Rupert Doney
Australian Energy Market Commission
PO Box A2449
Sydney South NSW 1235

Dear Rupert

Essential Energy submission to EMO0038 - Updating the regulatory frameworks for distributor-led stand-alone power systems draft report

Essential Energy welcomes the opportunity to provide a submission in response to the draft report on the regulatory arrangements that will apply for distributor-led stand-alone power systems (SAPS).

While Essential Energy appreciates the additional clarity provided in the draft report on how the proposed framework will operate, we consider that there are still some fundamental questions regarding the design of the proposed framework that have not been adequately addressed by the Commission.

Firstly, Essential Energy does not believe that the proposed arrangements are not sufficiently flexible and may not lead to the best outcomes for customers in all circumstances. The administrative burden and complexity introduced by the proposed arrangements are likely to have a significant negative impact on the viability of SAPS in certain circumstances. In particular, it may be more difficult for DNSPs to plan and roll-out smaller SAPS solutions for one or a very small number of customers in areas where a competitive market does not exist. This is due to the regulatory burden involved and the uncertainty inherent in the proposed ring-fencing arrangements.

Essential Energy has consistently advocated for flexibility in the regulatory arrangements for distributor-led SAPS to reflect the wide and varying use cases that SAPS can be deployed. Unfortunately, the proposed model is overly rigid and may slow the deployment of SAPS considerably. As such, Essential Energy considers that this review is a missed opportunity to lower network charges for all customers, improve customer experience for edge-of-grid customers and enhance the resilience of the network overall.

The complexity of the model will also constrain the ability of DNSPs to deploy SAPS quickly, for example in response to emergencies such as bushfires. The restriction on DNSPs performing any SAPS generation services may make it difficult for DNSPs to invest in the internal capabilities required to ensure that SAPS can be deployed quickly in response to emergencies. This will lead to adverse customer outcomes in situations where customers are already under severe stress.

Uncertainty around ring-fencing provisions will add time and cost and may make some smaller systems in remote areas unviable. The associated benefits may not outweigh these costs – our experience of serving customers in remote areas show that there may be limited competitive providers to serve the needs of customers. Forcing DNSPs to source SAPS services from the competitive market may not actually promote efficiency or improve customer outcomes.

Secondly, Essential Energy considers that the proposed arrangements do not promote the efficient use of energy services as the proposed pricing model does not reflect the costs of supply.

Essential Energy has consistently advocated for pricing arrangements that reflect the costs of provision of energy in a SAPS context. While the proposed pricing structure preserves the settlement and retail arrangements in the NEM, it does so at the expense of providing customers cost reflective price signals, and potentially an easy to understand framework for consumers. This will require DNSP led SAPS to be over-sized to account for the fact that they will not be efficiently utilised by the customers they serve. As such, it will add unnecessary costs to DNSP SAPS to the detriment of all network customers.

The Commission has determined that for third party SAPS vertical integration represents the most cost-effective service delivery model. Given that the aim of distributors transitioning customers to off-grid supply is to minimise cross-subsidies and reduce costs for all network customers it is not clear if the proposed pricing structure meets the National Electricity Objective.

Our submission focusing on the specific issues identified in the consultation paper is attached to this letter. If you have any questions on the submission please contact Therese Grace, Regulatory Strategy Manager on 02 9249 3121 or therese.grace@essentialenergy.com.au.

Yours sincerely

Chantelle Bramley
General Manager, Strategy, Regulation and Corporate Affairs

Essential Energy submission to AEMC draft report on updating the regulatory frameworks for distributor-led SAPS

General comments

Focus of the review

The draft report is focused on the design changes required to give effect to the Commission's proposed model. However, Essential Energy considers that significant questions remain as to whether the Commission's proposed approach represents the best outcomes for consumers in the long term.

Fundamental features of the design of the model were questioned in the previous review and these have not been adequately addressed in the draft report. The Commission should clearly outline the rationale behind some of the features of the model, including:

- The distinction between SAPS distribution and generation services is arbitrary, particularly for smaller SAPS.
- The proposed pricing model is likely to lead to inefficient outcomes and SAPS assets that are not fully utilised.
- The proposed pricing model is not cost-reflective and places unnecessary risks on networks and their customers.
- The regulatory arrangements are overly complex and will introduce unnecessary costs without any clear articulation or estimate of the associated benefits.
- Inconsistencies in approach between distributor-led, third- party SAPS and embedded networks remain, and stakeholder concerns regarding regulatory arbitrage have not been sufficiently addressed.

The proposed regulatory framework will reduce the viability of SAPS as an alternative to traditional grid supply for DNSPs in many circumstances. While the proposed model may be fit for purpose for larger microgrids in areas where a competitive market exists it may be overly onerous for smaller systems located in remote or hard-to-access areas of the network. These are the areas of our service territory where SAPS offer real potential. As such the review is a lost opportunity to reduce network charges for all customers, to improve the customer experience for edge of grid customers and to enhance the resilience of the electricity network.

Customer outcomes have been sacrificed in favour of administrative ease.

The provision of energy via a SAPS is a different paradigm than traditional grid supply. The Commission has recognised this in designing the regulatory arrangements for SAPS provided by third-parties but has chosen a different approach for distributor-led SAPS. The Commission's focus appears to be on administrative consistency with supply arrangements for grid supplied customers. For example, the pricing model appears to be designed solely with the willingness of retailers to continue to serve SAPS customers in mind. However, in achieving this consistency, the arrangements introduce inappropriate levels of complexity, cost and administrative burden for little or no discernible consumer or network benefit. This is particularly the case in fringe-of-grid or hard to access areas where the SAPS system in serving a small number of customers.

Essential Energy supports the principle that customers should not be disadvantaged as a result of being transitioned to off-grid supply through a SAPS. However, a key question remains as to how the "do no harm" principle has been applied.

Customer outcomes should be the primary benchmark as to the effectiveness of the regulatory framework, regardless of whether SAPS are led by DNSPs or third parties. As such, Essential Energy again puts forward the suggestion that where DNSPs obtain the explicit informed consent of customers, they be allowed to provide suitably-sized, market sourced SAPS to customers for a cost-reflective price, in the same manner as that allowed for third-party led SAPS. This practical, customer focussed approach will enhance the viability of DNSP led SAPS and reduce costs for all network customers compared to the Commission's proposed approach.

Such an approach could be subject to the DNSP providing evidence that significant customer engagement has taken place and the customer has been provided with sufficient information regarding the implications of moving to off-grid supply via a SAPS.[1]

Specific comments on the design of the proposed framework

Pricing model proposed

Essential Energy has a number of concerns with the pricing model proposed by the Commission, these include:

- The link to the wholesale price does not provide the customer with an appropriate price signal and may not be easily understood by the customer;
- It will not encourage innovation in the retail market;
- It is not clear why the SAPS settlement price proposed is the appropriate price benchmark; and
- The proposed model does not meet the Commission's own assessment criteria that risks and costs are allocated to the party that is best placed to bear them.

Each of these items introduces costs for which the associated benefits are yet to be proven or quantified.

These concerns are discussed in turn below.

The pricing model does not provide cost-reflective price signals

Essential Energy has consistently advocated for pricing arrangements that reflect the costs of provision of energy in a SAPS context. Our analysis, presented in our submission to the AEMC's 'Review of the Regulatory Frameworks for Stand-alone power systems – Priority 1 Draft Report, showed that for the majority of the year (at least seven months), the wholesale price does not provide the correct price signals to customers to maximise the utilisation of the SAPS.

While the proposed pricing structure preserves the settlement and retail arrangements in the NEM, it does so at the expense of providing customers cost reflective price signals. This will require DNSP led SAPS to be over-sized (at a cost to customers) to account for the fact that they will not be efficiently utilised by the customers they serve. As such, it will add unnecessary costs to DNSP SAPS to the detriment of all network customers – a cost that third-party led SAPS will not incur.

Battery costs are a significant driver of the overall cost of SAPS. If the customer is provided with the correct price signals and shifts consumption to the middle of the day, a customer's energy needs can be served by a SAPS with a battery that is one half to one third the size compared to a SAPS for a customer on a typical wholesale tariff.[2]

It is therefore not clear why linking DNSP led SAPS generation to developments in the wholesale market is an appropriate price benchmark. The wholesale price is a function of supply of large-scale generation and demand from a variety of customers, including large industrial customers, businesses and residential customers. In addition, the proposed model would link SAPS generation to wholesale market conditions one year in the past.

In very simple terms, as SAPS are disconnected from the grid, they will not contribute to or experience grid constraints. They will however have local constraints associated with the SAPS that need to be managed. This is most effectively and efficiently done through local price signals and demand side management which are not available under the proposed model.

---

[1] Essential Energy submission on the consultation paper – Review of the regulatory frameworks for stand-alone power systems - Priority 2, 29 March 2019, page 2, https://www.aemc.gov.au/sites/default/files/2019-04/19-5679%20%20Rule%20Change%20Submission%20EMO0037%20-%20Essential%20Energy%20-%2020190329.pdf and Essential Energy submission to the priority 2 draft report – Review of the regulatory frameworks for stand-alone power systems, 15 August 2019, page 4, https://www.aemc.gov.au/sites/default/files/2019-08/Essential%20Energy%20submission%20Priority%202%20SAPS%20review%20draft%20report%20190815.pdf

[2] Essential Energy submission to the SAPS Priority 1 draft report, page 3-4, available at: https://www.aemc.gov.au/sites/default/files/2019-02/Essential%20Energy_0.PDF

The pricing model will not encourage retail innovation and competition

The Commission has indicated that the number of DNSP led SAPS will be relatively small, perhaps less than 10,000 over the next ten years[3] and the bulk of these will be very small SAPS such as Individual Power Systems. Such a small customer base is unlikely to drive retailers to innovate their tariff choice and many retailers may not even seek to target such a small and unchanging share of the market.

It is just as likely that the Commission's current desire to preserve retailer choice for customers will actually reduce retail competition for such customers over the longer term.

Instead, Essential Energy's proposal to allow DNSPs to provide suitably-sized, market sourced SAPS to customers for a cost-reflective price, where they have the customer's explicit informed consent, will allow for more innovative, bespoke cost-reflective pricing arrangements for these SAPS customers. For example, Powerco, New Zealand's 'Base Power' offer does not include a retailer. The customer deals directly with Powerco and pays a maintenance fee for the supply and maintenance of the SAPS equipment. However, the customer is responsible for diesel payments and refuelling the backup generator. The diesel payment acts as incentive for the customer to shift their load to maximise solar consumption and efficiently utilise the SAPS. Models such as these have the advantage of being both easy to understand and promote the behavioural change that allows for the SAPS to be efficiently sized and effectively utilised.

Risks are allocated to parties that are not best placed to manage them

The proposed model exposes networks to price risk as the payments made by the DNSP to the SAPS generator will vary depending on the average wholesale price in the previous year.

One of the assessment principles used in the review is that risks should be borne by parties best placed to manage them. For wholesale market supply, this risk is managed by retailers and generators. However, in this instance the Commission has transferred this price risk to DNSPs and by extension their customers. There has been no explanation provided as to why this departure from traditional roles is appropriate and seems to be at odds with the desire to maintain 'NEM consistent' arrangements.

The proposed model incurs costs without proven benefits

The proposed pricing arrangements are likely appropriate for large DNSP led SAPS (large microgrids, serving many customers in areas where a competitive market exists), but they are overly complex and costly for smaller SAPS. The Commission recognised this fact in its Priority 2 SAPS review, whereby a simpler, vertically integrated service delivery model was deemed most appropriate and could also provide appropriate consumer protections. In the case of distributor-led SAPS, the Commission has not articulated or attempted to quantify the benefits associated with their proposed pricing framework that justifies the additional costs imposed.

The proposed DNSP led pricing model introduces cost and complexity in a number of ways, including:

- Participant fees and use of AEMO settlement systems;
- Full retail margins despite the fact the customer receives a reduced retail service offer (billing and complaint handling services only);
- Agreeing contracts with SAPS generation providers, given the uncertainty regarding wholesale revenues; and
- Uncertainty around the retail offer the customer will choose and the potential for non-cost-reflective price signals to be offered to the customer which will lead to conservatism in sizing the SAPS.

In conducting Essential Energy's trial SAPS at Bulahdelah, engaging with the customer has been paramount. This has resulted in the customer having a clear understanding of how the system operates, being satisfied with the experience and recommending the system to others. This is an

[3] *Draft Report – Review of the regulatory Frameworks for Stand-alone Power Systems – Priority 1*, Australian Energy Market Commission, 18 December 2018, page ii

example of an area that would not be well served by the competitive market and where a more flexible approach to SAPS deployment may be appropriate.

Ring-fencing and classification of SAPS services

Case for separating SAPS generation and distribution services is not fully justified

In Essential Energy's service territory SAPS will be used to reduce overall network charges through targeting of very high cost-to serve customers. SAPS will also be an important tool to enhance network resilience in parts of our network that are prone to bushfires and other natural disasters. These use cases may necessitate a different approach to SAPS service delivery than the proposed model.

The Commission has not provided a compelling case for the proposed separation of SAPS services as 'SAPS distribution services' and 'SAPS generation services'. Essential Energy considers that this distinction is arbitrary as the entire SAPS is used as a substitute for the existing network. It would not be possible to provide the 'SAPS distribution service' without the associated 'SAPS generation service'.

There are other examples where DNSPs can own and operate generation assets (for example for grid support) so it is not clear why the Commission has chosen this approach in this context.

Essential Energy also questions the rationale behind the Commission's distinction between SAPS distribution and generation services, especially for smaller SAPS systems. If the Commission's proposed model is consistent with the National Electricity Objective there should be a number of benefits associated with the proposed service classification. Further work is required by the Commission to articulate exactly what these benefits are and to demonstrate that they exceed the loss of efficiency from a more vertically integrated service delivery model. This is particularly important if the expected uptake of SAPS is small over the short to medium term, which may mean that a competitive market may not be viable, especially in regional and remote areas.

More detail on the rationale behind the decision to provide specific guidance in the National Electricity Rules (NER) on the classification of SAPS services would also be welcome. This is a level of prescription that seems to restrict the ability of the AER to classify SAPS services using the existing rules. It appears to contradict the Commission's position that the current process for service classification can accommodate SAPS. This is discussed in more detail below.

Service classification under the framework and approach will provide a better customer outcome

In the draft report "the Commission considers that the existing framework for distribution classification in the NEM is broadly appropriate and fit-for-purpose to support the AER in determining the classification of the distribution service provided by means of a SAPS". Essential Energy agrees with this statement. However, we do not agree with the position that additional guidance in the NER is required to pre-empt the process of service classification. This restricts the ability of the AER to classify SAPS services through the normal process.

Under incentive-based regulation DNSPs are incentivised to find the lowest cost option to meet a particular network need. In some cases, this may be to outsource SAPS generation services in the manner proposed by the Commission. However, there are many circumstances that we can foresee where the proposed model is not workable and alternative arrangements should be made available.

Essential Energy does not believe that specific guidance in the NER is required and allowing the AER to classify SAPS through the processes already in place is more appropriate. The AER undergoes a well-established consultation process through the framework and approach publications for each DNSP in advance of the regulatory determination process and engages with stakeholders on service classification through the regulatory determination. This process has worked well in the past and there is no reason to suggest that it could not accommodate the inclusion of SAPS into the regulatory framework.

There are many advantages to this approach, including:

- It would allow for jurisdiction-specific and network-specific circumstances to be considered in the service classification process.

- It would reduce the reliance on waivers for specific circumstances, for example, it may allow for a sub-set of SAPS services (for example, fault and emergency response) to be performed by the network under certain circumstances.
- It would provide more certainty to DNSPs regarding the services that could be performed and would make it easier for DNSPs to provide SAPS in circumstances where they would likely require a waiver under the proposed approach. This will help DNSPs to integrate SAPS as a viable alternative to network investment throughout the regulatory period as the services they can legitimately provide will be well defined and known in advance. Under the proposed arrangements there would be uncertainty over the services the DNSP could provide, which would increase the unknowns and risks of a SAPS solution relative to other investment options (such as traditional poles and wires).

A note on waivers in the proposed approach:

The proposed approach relies heavily on waivers and exemptions for DNSP-led SAPS, at least in the short to medium term. Our concern is that waivers will be required across our service territory as competition develops and our experience shows that in many areas a viable competitive market may never develop. We note that the AER is open to improving the waiver process for SAPS and we welcome this collaborative approach. However, in our experience the waiver process is administratively complex and often the outcome is uncertain. Given that DNSPs are still in the process of trialling SAPS and determining the use cases for SAPS it is likely that, DNSPs will apply for a waiver on a case-by-case basis, at least initially.

The time taken to consider a waiver will be dependent on resourcing at the AER and we foresee a risk that if the number of waiver applications increases, this may negatively impact the time taken to process them. There is also a proposal currently under consideration that would introduce a regulatory sandbox in the NEM, which includes a new power for the AER to consider 'sandbox waivers'. This may also increase the number of applications for waivers received by the AER over the coming years.

Ideally, over time DNSPs will enter into agreements with SAPS suppliers to procure multiple SAPS over a defined period of time. For example, a network could identify a number of sites across its service territory that would be transitioned to off-grid supply over a number of years. This would allow the network to lower the unit cost per SAPS because of scale efficiencies and reduce the number of times the network has to go to market and undertake a tender process. This type of arrangement is common in other jurisdictions where SAPS are deployed.

However, this will take time to be developed as DNSPs get more experience with SAPS deployment. Our experience with previous waivers with a broader scope like described above is that they take a considerable amount of time and require a large amount of engagement to gain a favourable outcome.

- The appropriateness of the service classification for SAPS services would be reviewed at each regulatory period and could be changed in response to market conditions. This would allow for more flexibility in the market. For example, if the market for SAPS generation services becomes more mature this could be reflected by reducing the scope of services that DNSPs would be allowed to perform, without the need for waivers or rule changes.
- It could cover a range of circumstances, for example the arrangements that would be in place in the event that a SAPS generation service provider became insolvent or was no longer able to discharge its contractual obligations (for example if the service provider relocated). This would provide certainty and reduce the need for urgent waiver requests or breaches of ring-fencing requirements in circumstances that are beyond the DNSP's control.

This approach is likely to be less administratively complex and more efficient as specific criteria could be defined where networks could provide some or all SAPS generation services to customers, without the need for a waiver. These criteria could relate to, for example: remoteness (similar to the regional office exemption); vegetation impediments; difficult terrain or other access issues; bushfire risk; or other physical characteristics of the SAPS site. If these criteria are met the network should be able to provide a defined set of 'SAPS generation services' provided it can demonstrate that the SAPS solution is the most efficient option.

A simple example of how the classification of services process can be used in a pragmatic way to improve customer experience and outcomes can be taken from the 2019-24 regulatory determinations for the NSW distribution networks. As part of this process the classification of 'simple rectification of customer faults' under a specific range of circumstances was included as a standard control service. In reclassifying this service, the AER acknowledged that "a stringent application of [the] Ring-fencing Guideline could result in poor outcomes for customers in a small number of instances".[4] A similar pragmatic approach could be taken to SAPS generation services under Essential Energy's proposal.

Uncertainty remains about cost recovery

More clarity is required in the AER Explanatory Note as to how a network would recover any capital expenditure used to provide 'SAPS generation services' under a ring-fencing waiver. Whilst a waiver from ring-fencing requirements would allow the DNSP to perform the service in question, it does not allow for the SAPS capital expenditure to be included in the DNSP's Regulatory Asset Base (RAB). As such, the AER and AEMC should clarify how capital expenditure incurred by a DNSP in procuring a SAPS under a ring-fencing waiver would be treated.

On this note, it is worth highlighting that the current regulatory building block model was built for the traditional energy market and compensates networks for large up-front, long-term capital investments. The model needs to be revised to provide DNSPs with adequate compensation for funding a higher operating cost business, like that arising from the procurement of SAPS services and the other services networks will likely procure from customers in the future.

Inconsistency of arrangements between third-party and DNSP-led SAPS

The Commission has argued that vertical integration represents the most efficient supply model for third-party led SAPS. The Priority 2 findings conclude that one party should provide network, generation and retail functions in all cases, except very large microgrids that are large enough to justify inclusion in the economic regulatory framework and be subject to a revenue determination by the AER.

In contrast, in this review the Commission considers that all distributor-led SAPS, regardless of size or complexity of the system in question, are best served by a disaggregated service delivery model. This is despite the fact that the underlying cost structure of providing a SAPS does not change depending on the party providing the system.

The Commission points to the fact that distributor-led arrangements need to be designed differently because the customer is not required to consent to the transition to SAPS. It is for this reason, that Essential Energy again raises the suggestion that where explicit informed consent is obtained from the customer, that market sourced, DNSP-led SAPS also be allowed to operate in the same manner as a third-party SAPS.

Presumption that the competitive market will deliver the lowest SAPS price

The objective of DNSPs deploying SAPS is to prioritise high cost-to-serve customers and reduce network charges for the entire customer base. As such, some consideration should be given to the costs of SAPS service provision by the DNSP, relative to the cost of third-party provision. The difference in costs may be significant, particularly in areas that are not well served by the competitive market.

The case studies presented in the AER Explanatory Note imply that the only reason for a DNSP to justify performing SAPS 'generation services' is because the competitive market does not respond to a request for tender to provide these services. However, it may be the case that a DNSP receives a quote from a competitive provider that exceeds the price for which the network could perform the service itself. In addition, the level of service that the competitive provider can deliver may not be to the same standard that the network can deliver.[5]

The AER should clarify that the network is able to compare the competitive offers received with the costs of providing the services in-house. DNSPs often have local knowledge and a ready workforce

[4] AER - Essential Energy 2019-24, Draft decision, Attachment 12 - Classification of services, November 2018.

[5] Noting that the minimum standard required will be determined by the reliability standard for the SAPS customers.

located in areas where SAPS will likely be deployed. This is particularly the case in areas that are remote or hard to access (for example in heavily forested areas or national parks), but do not qualify under the 'regional office' exemption in the Ring-fencing Guideline.

Ring-fencing requirements should not pre-empt commercial outcomes as this may lead to adverse outcomes where SAPS 'generation services' are provided by the competitive market at a cost that is higher, or at a standard that is lower, than the DNSP can provide. Essential Energy has experience with the competitive energy market in regional areas. The market is often very thin and there may be only one party in the area that can provide the service.

Such a scenario may lead to situations where the SAPS 'generation services' are supplied by what could be described as a competitive monopoly provider, with little or no competitive pressure to drive down prices. This will impact on both the reduction in the cross-subsidy achieved by the network in investing in the SAPS and the outcomes for customers that have been transitioned to SAPS.

For example, in our recent liaisons with customers in relation to the rectification of identified faults with private assets, mainly power poles, we have heard how customers have received a wide range of quotes from competitive providers. Often, some quotes received are twice as expensive as others received. Customers have also had issues trying to engage an Accredited Service Provider who is able to complete their job in a timely manner and for a reasonable price.[6]

Our experience highlights the difficulties regional areas may face in sourcing appropriately skilled energy service providers. The example of private poles relates to a relatively simple job with a traditional technology. It is likely that the pool of suitably qualified service providers to perform SAPS generation services would be even smaller, exacerbating the issues outlined above.

We recognise that the AER may have concerns that allowing DNSPs to quote for the SAPS themselves would stifle the development of a competitive market. To remedy this, it could specify that the SAPS equipment be sourced from the competitive market and build in a review mechanism to ensure that the DNSP transitions the operation of the SAPS to the competitive market once competition is viable.

Proposed model may lead to customer confusion

The Commission's proposed model would require functions to be split between parties in delivering energy to customers. However, the network would retain ultimate responsibility for customer outcomes and experience.

In the case of an urgent fault with a SAPS the following situation would need to happen:

- The customer would contact the DNSP to notify them of the fault and request that power be restored.
- The DNSP would then have to contact the SAPS generation provider to inform them of the issue and request that they respond to the fault.
- If there is any delay in this response, the customer is likely to contact the DNSP again to enquire about the timeframe for rectification of the fault. Again, this will require follow up with the service provider to ensure that the fault can be rectified in a timely manner.
- When the generation service provider attends the customer site, they will not be branded as the DNSP. The customer is unlikely to know who they are and will question why they are not from the DNSP.

This simple example highlights the process that will need to be undertaken when dealing with a rectification of a fault in a SAPS and the time and complexity it will add to how the DNSP responds to SAPS customers. Each DNSP will need to have processes in place to deal with these faults and the complexity of this process will increase if there are a large number of SAPS generation providers under contract with the DNSP.

Our experience in dealing with customers in relation to the sub-division of energy market services, for example private poles, is that customers have limited understanding of the regulatory framework related to their energy supply. Most customers just want their power to be reliable and any outages

[6] Specific examples are available on request.

restored as quickly as possible. They want the process to be simple (they want to make only one phone call) and the response to be timely.

In short, Essential Energy does not consider that the proposed model is transparent or easy for customers to understand and will not enhance the customer experience, particularly when faults occur.

Other considerations

Bushfires and emergency restoration of supply

SAPS can reduce bushfire risk and improve network resilience

Essential Energy manages significant bushfire risk across our service territory. One million spans of our network are in designated bushfire zones. In addition, vegetation management is our single biggest operational expense. We consider that SAPS are an important tool for us to manage our bushfire risk and enhance the resilience of our network. Essential Energy has previously stated in a submission to the AEMC that deployment of SAPS may result in $1 million worth of savings each year, from reduced bushfire risk alone.

Our recent experience of restoring supply to customers in the wake of bushfires has highlighted the importance of speed of deployment of SAPS systems in the short term.

Over the longer term, SAPS may be viable solutions to permanently supply power to some impacted customers. This would have dual benefits. First, the cost to supply these fire-affected customers will fall, leading to a reduction in network charges for the entire customer base. This is because the cost of rebuilding the lines to reconnect these customers to the grid, as well as ongoing maintenance, vegetation management and costs to restore power after a fault on the network are likely to be considerably higher than a SAPS solution.

Second, there may be significant benefits from removing network infrastructure from some higher risk areas in the form of reduction in bushfire risk and enhanced network resilience. By removing network infrastructure from areas where there is high bushfires risk there is a reduced chance that fires will be started in the first place. Also, having customers in these areas off-gridded means that even if a fire event does occur fewer customers will be left without power, less network repairs will be required and the cost of responding to the natural disaster will be lower.

In the aftermath of the significant fires that impacted the South Coast of NSW in early January 2020 we had over 130 customers that were without power for an extended period of time. This duration of outages is dependent on a number of factors, namely extent of network damage sustained in the area, terrain, customer density, ability to access the impacted area (for example if fire activity is ongoing). This experience highlights the value of targeting specific customers that may be particularly impacted by bushfires or other natural disasters and taking measures to improve the resilience of the network in these areas.

Speed of delivery of a SAPS solution is an important consideration

Recent experience with the repair of our network in the wake of the extreme bushfire events demonstrate clearly the importance of networks improving their internal capabilities in providing generation services to customers quickly to restore power. The proposed arrangements are not conducive to this internal capability build occurring.

The AER Explanatory Note mentions that DNSPs have the ability to provide customers with a temporary generator to restore power in the case of an emergency such as a bushfire. However, if DNSPs had the ability to provide customers with a SAPS on a permanent basis in the first instance it would represent a much better customer outcome.

Under the proposed approach the network could provide a customer with a temporary solution only, despite the fact that it may be as simple to provide them with a permanent SAPS solution. The network would then have to undertake a long process of going to market and procuring the SAPS services (even though the customer is already receiving these services from the DNSP).

There are also costs associated with unwinding the temporary supply arrangements. These may include removing assets that are no longer required, shipping equipment back to the original supplier and staff costs involved with negotiating and executing new arrangements.

If the SAPS is located on the customer's property, the change to supply arrangements may require further disruption as network owned equipment may need to be removed and replaced with equipment provided by the competitive 'SAPS generation service' provider. It will be difficult to explain to customers why this change is necessary as they would already be served by a SAPS and may not understand what is prompting the change in longer term supply arrangements.

Consideration should be given to whether the DNSP would be able to provide customers with supply via a SAPS on a more permanent basis in the aftermath of a natural disaster in limited circumstances. These conditions could include a requirement for the customer to consent to the permanent supply arrangement, evidence that the DNSP has undertaken significant stakeholder engagement and a cap on the price the customer may pay for energy provided via a SAPS.