

29 March 2019

Mr John Pierce  
Chair  
Australian Energy Market Commission  
PO BOX A2449  
Sydney South NSW 1235

Via online submission

Dear Mr Pierce,

**RE EMO0037: REVIEW OF THE REGULATORY FRAMEWORKS FOR STAND-ALONE POWER SYSTEMS – PRIORITY 2**

TasNetworks welcomes the opportunity to make a submission to the Australian Energy Market Commission's (**AEMC**) consultation paper on *Review of the Regulatory Frameworks for Stand-alone Power Systems (SAPS) Priority 2*.

As the Transmission Network Service Provider (**TNSP**), Distribution Network Service Provider (**DNSP**) and jurisdictional planner in Tasmania, TasNetworks is focused on delivering safe and reliable electricity network services while achieving the lowest sustainable prices for Tasmanian customers. This requires the prudent, safe and efficient management and development of the Tasmanian power system. TasNetworks is therefore supportive of AEMC's efforts to review the regulatory framework applicable to third-party SAPS.

TasNetworks supports Energy Networks Australia's (**ENA**) submission and would like to make several further comments with a particular focus on the Tasmanian context. The key points in this submission are:

- As an essential service with potentially deadly consequences from a lack of adequate protections, TasNetworks considers third-party SAPS should be regulated to ensure appropriate customer protections and outcomes.
- In order to minimise regulatory developments costs, TasNetworks considers that the National Electricity Market (**NEM**) consistency model is appropriate for third-party SAPS. That is, current arrangements for licensing, access, operations and consumer protections should apply.
- As with the proposed DNSP SAPS regulation, TasNetworks considers that existing SAPS should not automatically be included in any third-party SAPS arrangements. Allowing jurisdictions flexibility in terms of the timing of opting into a national framework will allow

any local issues to be fairly and cost-effectively dealt with and thereby promote overall economic efficiency.

- TasNetworks appreciates that, owing to size and technical differences, there may be a case for differing regulatory treatment of selected elements of Individual Power Systems (**IPSS**) and microgrids. However, TasNetworks contends that these are best dealt with on an exception basis within the same framework rather than establishing entirely different regulatory frameworks.
- Aside from minimising regulatory burden, this would help to avoid any perverse incentives that might otherwise work against economic scale benefits such as favouring installation of multiple IPSs over one microgrid because of differing regulatory treatment.
- TasNetworks sees risks from the proposal to mandate an operator of last resort and with the system operator function. By intentionally decoupling the benefits and risks from those best placed to manage them, a moral hazard situation could develop resulting in potentially dangerous and costly customer outcomes.
- TasNetworks suggests that if the AEMC considers that a DNSP is required to act as a system operator, or an operator of last resort, it would likely be more economically efficient to have DNSPs provide the SAPS in the first instance.
- TasNetworks also sees many issues with having differential reliability standards applicable to third-party SAPS. This is likely only to promote informational asymmetries between customers and suppliers that could result in economically inefficient outcomes with customers paying more.
- Beyond this risk, different reliability standards specific to third-party SAPS could inadvertently incentivise white-anting of the grid. This would ultimately result in higher costs for remaining customers as the economic benefits to DNSP SAPS are foregone and extra cost to address network remediation issues are incurred.
- If different reliability standards are allowed, TasNetworks considers that an efficiency precondition involving an assessment for the transition of customers to third-party SAPS be required so that total economic impacts are properly understood and managed.

TasNetworks responses to individual questions are provided below and we welcome the opportunity to discuss this submission further with you. Should you have any questions, please contact Tim Astley, Team Leader NEM Strategy and Compliance, via email ([tim.astley@tasnetworks.com.au](mailto:tim.astley@tasnetworks.com.au)) or by phone on (03) 6271 6151.

Yours sincerely,



Chantal Hopwood  
Leader Regulation

## **QUESTION 1: SHOULD WE REGULATE THIRD-PARTY STAND-ALONE POWER SYSTEMS?**

### **(a) Is there a need for regulation of a third-party SAPS? Why or why not?**

Competition in providing third-party SAPS may promote customer choice but there are several risks to customers that may result from a lack of regulation. These include:

- customer protections, particularly safety, security and reliability being compromised,
- risk being inappropriately allocated to customers because of informational asymmetries such as confusion on the technical difference amongst installation offerings, and
- an unequal regulatory playing field amongst grid connected and SAPS customers that creates perverse incentives for customers to leave the grid, thereby exacerbating network security issues, increasing costs to remaining grid-connected customers and reducing overall economic efficiency.

As an essential service with potentially deadly consequences from a lack of appropriate protections, TasNetworks therefore considers that it is imperative that third-party SAPS are regulated to ensure appropriate customer outcomes.

### **(b) If there is a need for regulation, is this sufficiently provided for via the existing broad-based regulatory framework (for example, the Australian Consumer Law)? Why or why not?**

### **(c) If the existing broad-based regulatory framework is insufficient for the purposes of regulating a third-party SAPS, which additional regulations are needed? Should these additional regulations be national or jurisdictional?**

Although Australian Consumer Law may go some way to alleviating some of the risks described above, it would not be sufficient to mitigate against all of them. As with DNSP SAPS regulation, TasNetworks considers that the NEM consistency model is appropriate for third-party SAPS. In this manner, all current national and jurisdictional regulations would apply, i.e. regulatory protections stemming from the national frameworks such as the National Electricity Law (NEL), National Electricity Rules (NER), the National Energy Retail Law (NERL), the National Electricity Retail Rules (NERR) and jurisdictional reliability obligations.

### **(d) Do the seven dimensions identified by the Commission capture all the potential areas for regulation of a third-party SAPS? If not, which areas are not covered?**

TasNetworks considers these are appropriate but suggests these be supplemented with an economic efficiency assessment. That is, in those jurisdictions where competition is unlikely to develop or result in suboptimal economic and customer outcomes, DNSPs be allowed to provide SAPS solutions in the first instance. Beyond this, if third-party SAPS are likely to result in increased costs for remaining grid-connected customers, then these costs should be reimbursed.

### **(e) Should the regulatory framework for a third-party SAPS distinguish between an IPS and a microgrid? Why or why not?**

### **(f) Should the regulatory framework for a third-party SAPS distinguish between microgrids based on size or some other criteria? If so, what might these criteria be?**

The risks to customers delineated above are unlikely to differ due to the size of solution to which they are connected, except perhaps in certain technical aspects. Where possible, TasNetworks considers that regulation of initial third-party installation and supply should be as parsimonious as possible in order that regulatory complexity and burden is minimised. If, owing to technical differences, there is a case for differing regulatory treatment of selected elements of IPS and microgrids supply, TasNetworks contends that these are best dealt with on an exception basis rather than establishing two entirely different regulatory frameworks.

In terms of the regulation applicable to ongoing operating and maintenance elements, TasNetworks considers that the regulatory treatment may differ for IPSs depending on the ownership model. For

example, whether the IPS is owned outright, leased or is included as part of a property rental agreement.

**(g) Should the regulatory framework for third-party SAPS address large customers as well as small customers? Why or why not?**

TasNetworks agrees with the AEMC that large customers should be better placed to negotiate outcomes in general. The regulatory framework is therefore likely more efficiently applied to small customers. Notwithstanding this distinction, TasNetworks considers that this should include organisations such as local councils, community groups and others that are acting on behalf of small customers. Although being larger than a singular customer entity, it is not always the case that these groups have the commercial and/or technical capability to ensure optimal outcomes for their constituents.

**QUESTION 2: PROPOSED ASSESSMENT CRITERIA FOR A THIRD-PARTY SAPS**

**(a) Are there assessment criteria included that should not be? If so, what are these?**

**(b) What should be the broad objectives under the Commission's assessment of a third-party SAPS regulatory framework?**

Please see the answer to 1 (d) above.

**QUESTION 3: NATIONAL AND JURISDICTIONAL REGULATORY FRAMEWORKS FOR A THIRD-PARTY SAPS**

**(a) What, in your view, are the advantages for jurisdictions to allow some parts of the interconnected grid to transition to a community SAPS regulated under a jurisdictional framework?**

**(b) What, in your view, are the advantages for jurisdictions to regulate some or all SAPS under a national framework?**

**(c) Which do you think are the advantages of maintaining multiple SAPS frameworks within and across jurisdictions?**

**(d) Which do you think are the disadvantages of maintaining multiple SAPS frameworks within and across jurisdictions?**

**(e) Which elements of third-party SAPS regulation should fall under a national framework and which ones should fall under jurisdictional frameworks? Why?**

TasNetworks considers that a nationally consistent framework for SAPS provision is to be preferred over a range of differing jurisdictional arrangements. Regulatory harmonisation is likely to lead to greater economic efficiency than the counterfactual approach. For example, by minimising search costs in creating clarity for customers and suppliers as well as minimising regulatory burden.

Although advocating for such a national framework, as with the proposed DNSP SAPS framework, allowing jurisdictional flexibility on the timing of opting into the national framework is important. This will support individual jurisdictions to transition in the most cost effective manner by providing time for the appropriate resolution of any existing jurisdictional SAPS concerns. That is, TasNetworks considers that existing SAPS should not automatically be included in any third-party SAPS changes as part of this review unless and until appropriate jurisdictional consultation has been conducted.

**QUESTION 4: REGISTRATION AND LICENSING**

**(a) Would it be appropriate to apply either a licensing regime or a registration regime (or both) for third-party SAPS?**

**(b) Does the justification for a licensing or registration regime for third-party SAPS differ for microgrids and IPSs?**

**(c) Does the justification for a licensing or registration regime for third-party SAPS differ based on microgrid size? Why or why not?**

**(d) Should any licensing or registration regime for third-party SAPS be applied solely at a jurisdictional level, or a national level where this is consistent with NEM arrangements?**

In keeping with the comments above, TasNetworks considers that existing regulatory frameworks should apply so that risks to customers from third-party SAPS are mitigated. This includes licensing and registration arrangements. TasNetworks sees no justification for why these should differ between IPSs and microgrids given that the risks licensing seeks to mitigate exist either way, i.e. dangerous, unreliable and insecure installations. As above, this should be applied via a national framework that provides flexibility on the timing of jurisdictional opt in.

**(e) Is there a requirement for specific arrangements to be developed to maintain the continuity of supply in the event of the failure of a third-party SAPS service provider? How might an operator of last resort be selected and funded?**

**(f) Are there any other issues related to eligibility criteria and arrangements for maintaining the continuity of supply that the Commission should consider?**

TasNetworks foresees many risks to making specific arrangements to maintain continuity of supply in the event of failure, particularly from mandating an operator of last resort. The greatest of these concerns the moral hazard incentive that would be created from inappropriately allocating the costs and consequences of risk to another entity without any of the attendant benefits. That is, in guaranteeing continuity of supply via an operator of last resort, the competitive discipline imposed on suppliers to install, operate and maintain safe, reliable and secure SAPS solutions would be diluted. This could lead to increased costs for all electricity customers if local DNSPs are forced to step in to remedy market failures and would be particularly expensive if standards between third-party and DNSP SAPS were different. Beyond this, questions on limitation of liability issues, inventory ownership, whether DNSP staff could actually work on third-party assets given occupational health and safety concerns along with how such assets would be accurately valued and transferred into a DNSP RAB would require further consideration.

TasNetworks suggests that if the AEMC considers that a DNSP is required to act as an operator of last resort under a third-party SAPS framework, it would likely be more economically efficient to have DNSPs provide the SAPS in the first instance. That is, risk would be allocated to the entity best able to manage it and all attendant costs from moral hazards and development of additional regulatory oversight would be obviated. Although this might limit customer choice, competition via tendering for selected supply element of SAPS provision could be maintained if current regulatory pricing mechanisms were not considered sufficient to ensure appropriate fiscal discipline.

An alternative approach might be to allow third-party SAPS providers to contract with the incumbent DNSP for last resort services. In this manner, there would be a natural incentive for third-party providers to align equipment, standards and processes with those of grid connected customers. That is, where different, less reliable and/or technically limited equipment was installed, a higher fee for last resort services would be expected.

**(g) Should any regulation address both large industrial customers and small customers?**

Please see the answer to 1 (g) above.

**QUESTION 5: THIRD PARTY ACCESS TO THIRD-PARTY MICROGRIDS**

**(a) Should third-party microgrids be subject to a third-party access regime?**

**(b) Should only third-party microgrids above a certain size be subject to a third party access regime?**

**(c) Should third-party microgrid service providers be obliged to offer to supply or connect customers? Should these obligations address small customers only or both small customers and large industrial customers?**

- (d) To the extent that it would be appropriate to place obligations on operators of third-party microgrids to offer third-party access and/or to offer to supply new customers, should these obligations be applied through national or jurisdictional legislation?**
- (e) Do the concepts of third-party access or supply and connection obligations have any relevance for individual power systems?**
- (f) Are there any other issues relating to third-party access or supply and connection obligations that the Commission should consider?**

Consistent with the foregoing comments, TasNetworks considers that existing NEM regulatory frameworks should apply for third-party access. That is, operators should be obliged to offer and connect customers to existing microgrids. This should apply only for small customers or groups looking after the interests of small customers, e.g. community groups, but would seem inapplicable for IPSs. The framework should be a national one but provide jurisdictions flexibility in terms of the timing to opt in.

Beyond these considerations TasNetworks notes that there is no contemplation of the interplay between SAPS and embedded networks or SAPS that might also have grid connection capabilities as back up supply options. Any difference in the regulatory treatment of these supply models could lead to unintended consequences both for those seeking to operate and maintain SAPS and the customers within them. TasNetworks suggests further consideration is given to the consistency or otherwise of these proposed regulatory settings.

#### **QUESTION 6: ECONOMIC REGULATION**

- (a) Should third-party SAPS be economically regulated and what should the scope of regulation be?**
- (b) Should a different approach be taken for an IPS compared to a microgrid, or for different sized microgrids? If so, why? If not, why not?**
- (c) Which of 'full', 'light', or 'no' economic regulation is most appropriate for a third-party SAPS? Why?**
- (d) Are there other more appropriate approaches to economic regulation of a third-party SAPS not discussed above?**
- (e) Should economic regulation of third-party SAPS be undertaken at a national or jurisdictional level?**

TasNetworks considers that the supply and installation of third-party SAPS should be economically regulated. Practical considerations such as technical characteristics may necessitate slightly different approaches for IPS and microgrids supply. However, these should be treated on an exception basis within the same broad framework rather than requiring two completely different frameworks to be developed. Aside from minimising regulatory burden, this would help to avoid any perverse incentives that might otherwise work against benefits derived from economies of scale such as the installation of multiple IPSs instead of one microgrid because of differing regulatory treatment.

In terms of the regulation applicable to ongoing operating and maintenance elements, TasNetworks considers that the regulatory treatment may differ for IPSs. For example, there is likely to be less requirement for economic regulation of an IPS that is owned directly by a customer compared with one that is provided as part of an ongoing rental agreement by a landlord. That is, additional regulation should apply in the latter case to provide appropriate customer protections.

These considerations should be applied nationally with jurisdictions allowed flexibility in the timing of opting in to the national scheme.

#### **QUESTION 7: CONSUMER PROTECTIONS**

- (a) Is it appropriate to apply the full suite of energy-specific consumer protections (national and jurisdictional) to third-party SAPS? Are there any consumer protections which would not be appropriate and proportionate for third-party SAPS?**
- (b) Are there any additional SAPS-specific consumer protection provisions which should apply to third-party SAPS? If so, what are they?**
- (c) Is there a justification for the consumer protection provisions applied to third-party SAPS differing between microgrids and IPSs? Or between microgrids of different sizes?**
- (d) Should consumer protections generally be applied to third-party SAPS on a national basis (excluding concessions and rebates and ombudsman schemes), or a jurisdictional basis?**
- (e) Are there any other consumer protection issues the Commission should consider?**

TasNetworks considers that current protections should be extended to third-party SAPS and sees little justification for having these differ based on size or type characteristics except as they relate to practical and technical concerns such as system protection settings. Ideally, these protections should be national in nature to preserve harmonisation and consistency benefits but allow for jurisdictional flexibility in opt in timing so that any legacy issues can be fairly and cost-efficiently dealt with.

#### **QUESTION 8: RELIABILITY**

- (a) Would it be appropriate to apply some form of regulatory reliability protections to third-party SAPS? If so, how might such protections be specified?**

TasNetworks considers it essential that current jurisdictional reliability obligations such as Guaranteed Service Level (GSL) schemes are applied to third-party SAPS. For example, it would seem an inappropriate and inequitable outcome were two neighbouring SAPS customers to experience different fault response times because one was a third-party SAPS and the other was a DNSP SAPS. Where such standards might preclude third-party SAPS being offered at all, such as in cases where the associated inventory, travel and labour costs to repair SAPS were prohibitive, DNSPs should be able to offer SAPS solutions to customers to remedy the market failure.

- (b) Should IPSs be subject to any reliability standards, targets or benchmarks? If so, what may be appropriate?**

TasNetworks considers that the same reliability standards should apply for IPSs as for microgrids. As above, this would reduce the potential for economic inefficiency resulting from perverse incentives such as installing multiple IPSs over one microgrid.

- (c) Should reliability standards for third-party SAPS be governed under jurisdictional frameworks, consistent with the existing governance for network reliability? Is there a case for having any element of reliability protections specified or developed at a national level?**

Although TasNetworks supports regulatory harmonisation wherever possible, in terms of reliability standards, TasNetworks considers existing jurisdictional arrangements are appropriate. This is due to the flexibility with which local characteristics can be appropriately reflected in service standards. For example, customer remoteness and access, weather and the lack of alternative viable fuel sources such as gas are but several Tasmanian considerations that would require reflecting under a national reliability standard.

- (d) Are there any circumstances under which customers should be able to determine an acceptable level of reliability in consultation with the third-party SAPS provider? If so, what are those circumstances, and would any additional protections or information requirements be needed in relation to that negotiation?**
- (e) Are there any other issues related to the reliability of third-party SAPS that the Commission should consider?**

Customer choice is important and is to be supported wherever possible but TasNetworks considers that there are great risks in having differential reliability standards applicable to third-party SAPS. For example, although customers might be able to understand and assent to a given level of reliability, they are very unlikely to also understand the full technical aspects of a SAPS installation. As such, an informational asymmetry would exist between customer and supplier that could result in customers potentially paying more than would be economically optimal.

Different reliability standards specific to third-party SAPS could also incentivise white-anting of the grid and fail to provide a level playing field for provision of DNSP SAPS. This would ultimately result in higher costs for remaining customers as the economic benefits to DNSP SAPS are foregone and extra cost to address network remediation issues are incurred. In this case, TasNetworks considers that an efficiency pre-condition involving an assessment for the transition of customers to third-party SAPS be required so that total economic impacts are properly understood and managed.

Beyond these risks, it should be noted that this might necessitate other legislative change in areas which the AEMC has no jurisdiction. For example, to real estate laws to manage how different electricity supply and reliability standards are communicated and accounted for in the sale process. TasNetworks suggests this additional regulatory impost is better avoided by providing reliability certainty for all customers.

#### **QUESTION 9: NETWORK OPERATIONS**

**(a) What are the key system security and technical standards that should be applied to all third-party microgrids at a minimum? Are there any minimum system security and technical standards that should apply to IPSs?**

TasNetworks considers that specific details on technical standards are best answered once the regulatory standing and approach to both DNSP and third-party SAPS has been formalised. In principle, however, TasNetworks contends that these minimum standards should be similar amongst all SAPS varieties to ensure adequate customer protections and confidence in SAPS provision.

**(b) Should there be a system operator role for large third-party SAPS? If so, what party would be most appropriate to perform this role, and what SAPS size threshold should trigger the need for this role?**

TasNetworks considers there is likely to be a requirement for system operators for larger SAPS. In this case, local DNSPs would seem to be the obvious entity with the appropriate skillset to manage operator activities. However, as with 4 (f) above, this risks decoupling costs and benefits of the various economic actors meaning customers could end up paying more. Once again, if the AEMC considers that a DNSP is required to act as a system operator in a third-party SAPS framework, TasNetworks suggests it would likely be more economically efficient to have DNSPs provide the SAPS in the first instance.

**(c) What are the key metering and settlement obligations that should be applied to all third-party microgrids at a minimum? Are there any metering or settlement requirements that would be relevant for IPS?**

**(d) Should the regulatory frameworks for system security and metering and settlement be national or jurisdictional, or a combination of both?**

**(e) Are there any other issues related to system security, technical standards or metering and settlement that the Commission should consider in respect of third-party SAPS?**

Per the previous comments, TasNetworks suggests that consistency with current NEM processes will ensure optimal customer protections and impose the least regulatory costs in terms of market development. The one change to current processes that would be likely to improve overall efficiency would be mandating communication enabled smart-metering in every SAPS. This is likely to provide cost savings in terms of metering data accuracy and collection which can only help to lower costs to consumers.



**QUESTION 10: SAFETY**

- (a) Is it appropriate to apply the current jurisdictional safety obligations that are imposed on DNSPs on third-party SAPS? Are there any provisions which would not be proportionate for third-party SAPS?**
- (b) What are the key safety obligations that should be applied to all third-party microgrids at a minimum? What are the minimum safety obligations for IPS?**
- (c) What compliance, monitoring and enforcement powers relating to safety are appropriate for third-party SAPS?**
- (d) Are there any other issues related to safety that the Commission should consider?**

TasNetworks considers it appropriate to apply jurisdictional safety obligations, compliance and enforcement regimes currently imposed on DNSPs to third-party SAPS. As above, similar regulatory treatment will ensure adequate customer protections and provide a level playing field in SAPS service provision.