Ref: C2124033

8 November 2017

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

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Dear Mr Pierce

ERC0215 – Essential Energy submission on the draft rule determination – National Electricity Amendment (Alternatives to grid-supplied network services) Rule 2017

Thank you for the opportunity to provide a submission to the Australian Energy Market Commission's (AEMC) Draft Rule Determination National Electricity Amendment (Alternatives to grid-supplied network services) Rule 2017, 26 September 2017 (the draft determination).

Essential Energy is encouraged by the AEMCs agreement with our view that it is efficient to allow distribution network service providers (DNSPs) to offer off-grid supply as a regulated service where competition is not practicable and off-grid supply would be cheaper than maintaining a grid connection, albeit we disagree with some of the recommendations of the draft determination. We also understand and support the AEMC's position of not making a draft rule at this stage, recognising the broader package of changes that are required to existing laws, rules and jurisdictional instruments to protect consumers in the first instance.

In line with the draft determination, this letter applies only to DNSPs considering the move of grid-connected customers to an alternative power supply. It does not extend to customers who are currently off-grid, in a microgrid or looking to go off-grid of their own volition. We have used the terms individual power system (IPS) and microgrid in line with the definitions outlined in the draft determination.

We support the draft determination's approach to microgrids - namely, where it is efficient, existing assets are removed from the regulatory asset base (RAB) and replaced with a DNSP commissioned microgrid. We do not, however, agree with the draft determination's approach to IPSs. When operating in remote locations, these systems cannot access the additional value/revenue streams of the electricity system available to similar grid-connected systems. As such, we believe that efficient investment by networks in these systems should be treated in the same manner as microgrids in the draft determination.

The remainder of this letter suggests alternatives to specific components of the draft determination we believe will lead to downside and impracticality for remote customers, arising from the assumption that effective competition can exist in a real-world market where supply will likely fail to generate competitive offerings. Remote areas do not give rise to the same competitive market conditions that arise in more urban and customer dense areas. Naturally, competition requires a sufficient level of potential customers for market participants to establish regional operations and realise the required economies of scale. Without these economies of scale, it is not viable to operate. Essential Energy's region has customers that fall into both of these categories and the level of market participants in our existing accredited service provider (ASP) program highlights that competition is more prevent in areas with higher customer density. Attachment A which shows Essential Energy's regional depot

regions and the locations of existing level 1 and level 2 ASPs as well as a second map showing our network overlaid on local government area census population data. We see the proposed rule as likely applying to areas with less than 0.1 customers per km^2.

Without our suggested changes, the draft determination may cause a real burden to remote customers by delivering an overly complicated process that will ultimately reduce service levels. It will also limit efficient network investment that would otherwise benefit all network users through reduced network charges. It is worth highlighting that Essential Energy fully supports the use of third-party providers to provide and install both microgrids and IPSs. Our concerns relate to the envisaged IPS ownership model and associated repairs and maintenance process that carries a higher risk of service provider insolvency events and will disadvantage customers through both higher costs and extended service times.

Many of these views are similarly supported by the Public Interest Advocacy Centre (PIAC) and the Alternative Technology Association (ATA). We have noted where they support our views throughout our letter.

IPSs cannot access the value streams of grid-connected systems

The draft determination proposes that DNSPs cannot own IPSs on the basis that they do not have natural monopoly characteristics and can, therefore, be provided by the emerging contestable energy services market. Essential Energy disagrees with this proposal on the basis that the remote and disconnected nature of the IPS's envisaged under the proposed rule renders them incapable of simultaneously providing any of the multiple value/ revenue streams in either the regulated or non-regulated segments of the electricity system as envisaged under the 'Contestability of Energy Services draft rule determination'. Their very 'islanded' nature means they cannot offer benefits beyond that of the customer to which they are attached. As such, the 'Contestability of Energy services draft rule determination' should not apply to IPSs installed under this proposed rule.

Customers want simplicity, reliability and a timely response

We understand that the AEMC wants to ensure a competitive market in the provision of IPS, however we do not believe that the approach proposed in the draft determination will necessarily provide the best outcome for customers. Our customer engagement has indicated that, so long as reliability can be maintained at current levels and the network price is no higher than the grid connected price, our customers would be willing to have their electricity supplied by an alternative form. However, we have also learnt that our customers are already confused as to the different components of the electricity supply chain and who plays the different roles in the provision of electricity to their home. If the efficiencies to be gained from IPSs are to be realised for the benefit of all network customers, then a seamless and timely customer experience is paramount.

A strong relationship of trust is required to successfully deliver an efficient IPS, due to the requirement to install significant equipment on the customer's land, the potential need for the customer to interact with the IPS and the customer's desire to be no "worse off". This view is supported by Western Power's trials that identified customer perception and experience as being one of the most challenging barriers to overcome[1]. In terms of customer expectations for IPSs, we believe that reliable and timely customer service is critical and that a fully contestable market will be unable to deliver a single accountable point of customer contact for IPS management in regional and remote locations.

It is likely that retailers view that their direct relationship with the customer provides them in good stead to provide IPSs. However, to date, retailers have made little, if any, service offerings in remote locations. This is most likely due to the high cost-to-serve in such sparsely populated regions. As such, they have no presence to provide the key on the ground engagement required in regional and remote locations envisaged for IPSs under the draft determination.

[1] Western Power, *Stand-alone Power System Pilot – One Year On*, September 2017, p.4

The likely IPS customer outcome of the proposed draft determination

Clearly, it is uncertain what a market in which DNSPs are unable to own IPSs might look like, however, we have attempted to outline some potential market structures. Considering that the IPSs covered by this rule change operate in remote locations, it is highly unlikely that the party/ies contracted by the DNSP to rollout and own IPS's will be based in the local area. They will likely sub-contract out the building and/or maintenance and reliability obligations of the various components, with the strong possibility that these contracts may be further sub-contracted to local service providers or fly-in/fly-out service providers. We consider that the number of participants willing to service these locations is very few, if any, so it is equally likely that the service contract will come full circle back to the DNSP, with the application of a remote ring fencing exemption. The downside of this process is the cost of market complexity and the erosion of service value to the customer through additional margins.

Difficulties are likely to occur as the IPS ages. For example, the customer reports a fault with the IPS to the DNSP. The DNSP contacts the third-party IPS owner. They dispatch a call to the maintenance contractor (who may then pass this on to a further sub-contractor) who will contact the customer and schedule a visit. They attend the site and identify the faulty part. This scenario highlights the erosion of a significant portion of the reliability benefit gained by the customer in moving to an IPS from a network connection. The nature of these multi-party, multi-responsibility relationships is such, that without all parties having cost-effective physical access to confirm or audit accountabilities against contracts, obligations mean little and market efficiency is compromised.

Lastly, the risk of potential service contractor insolvency needs to be considered. Such an event would leave a gap in the supply chain, to the detriment of all parties. Where this risk falls back to the next contracted party, it is common for the probability of this to be factored into product or service pricing. For the DNSP, as both the initiator and the party obliged to service guarantees, these cumulative risks will be reflected in higher operating costs for IPSs, eroding the reduction in locational subsidies to remote customers that would otherwise benefit all network customers.

Our suggested IPS customer outcome

Compare this to a process where the IPS is commissioned and built by a third party on behalf of the DNSP, but is both owned and maintained by the DNSP. The customer reports a fault, the local field crew attend and identify the faulty part. Common IPS spare parts are held in the local inventory, so ideally the IPS is restored within a day. If the part is not a common part, it is ordered from the supplier. Once delivered, it is installed and the service restored. Any warranty claims are managed outside of the repair process by the DNSP and do not impact the customer's restoration time. The DNSP maintains full control over the servicing and reliability of the system. Like a grid-connected customer, the customer has access to a reliable service provider with guaranteed longevity and an on-hand, local workforce to provide timely servicing.

Attachment B provides a contrast these two scenarios pictorially.

Our proposed IPS solution

It would be contrary to the National Electricity Objective (NEO), and an utterly perverse outcome, if this rule gave rise to a poorer customer experience coupled with network customers paying more than the efficient costs for a IPS because the attempt to drive uniform competition across metropolitan and remote markets was seen as being more important than the efficient provision of electricity for the long-term benefit of all consumers. We cannot allow such market failure from the customer's perspective to occur.

As such, Essential Energy suggests that the draft determination be altered to allow efficient IPS investments to be undertaken by DNSPs and added to the RAB in the same manner as microgrids. Our suggested process places appropriate recognition on the real-world practicalities of servicing the remote locations in which these assets will operate and will avoid the inevitable pitfalls that would otherwise arise from the recommendations outlined in the draft determination. This practical solution also provides the best outcome for all customers both in terms of lower network prices and the reliability of a service provider that is here for the long-term.

We would strongly suggest that the AEMC test both the proposed approaches with potential IPS customers before making a final decision. We are confident customers would support our suggested approach. As previously mention, customer support is imperative for this rule change to successfully unlock valuable network cost savings.

Our suggested approach is supported by both PIAC and ATA.

The pricing of IPSs and microgrids

Charging and recovering the generation component

The role of the retailer in the energy market is to manage wholesale market risk, package this into retail tariffs and manage the customer billing and payment cycle. In the case of IPSs and microgrids, there is no associated wholesale market risk – the only risk comes from asset failure that results in the use of back-up generation, most likely diesel fuel.

If, as Essential Energy suggests, the DNSP owns and maintains the assets, the asset maintenance and repair costs are recovered through distribution charges. For simplicity, we would also suggest that the forecast operating costs for the back-up generation be included in the DNSP's regulatory submission and recovered through distribution charges. This approach places no further wholesale risk on the retailer and, in fact, likely improves their position, as there will be lower electricity losses as fringe-of-grid customers are moved to microgrids and IPSs. Until the value of generation exceeds the current system losses (which the installation of these remote systems is unlikely to achieve), it is difficult to see how retailers could argue they are any worse off under this proposal especially as, given the DNSP only recovers the efficient generation operating costs, it keeps customer bills as low as possible.

This suggestion is supported by both PIAC and ATA.

Our customers do not support locational pricing

Whilst the distribution industry is slowly moving towards more cost-reflective tariffs, we would like to highlight that our customers are particularly averse to the notion of locational pricing. This is a persistent theme across our customer engagement (80% against at our most recent stakeholder forums). Consumers see electricity as a 'public good' and do not believe that remote consumers should pay more than other network users. When the politics of electricity prices are also considered, for example the 2015 intervention by the Victorian Minister for Energy and Resources to limit cost-reflective tariffs to an opt-in basis only, Essential Energy does not consider that locational pricing is likely to occur in the near future.

Packaging IPS and microgrid costs into distribution charges

With no support for locational pricing and the generation component dealt with, Essential Energy believes the simplest way to charge customers for microgrid and IPS investments undertaken by the DNSP is to treat them in the same manner as other efficient network investments. That is, the distribution costs, including the savings from investing in IPSs and microgrids, are allocated to existing tariff classes from which the customer can choose from a suite of tariffs. This appropriately passes the cost savings from IPSs and microgrids investments through to relevant network users, satisfies the consumer want for equality and fairness in tariffs regardless of location and minimises the number of distribution tariffs required.

This suggestion is supported by both PIAC and ATA.

The role of retailers in providing remote IPSs and microgrids

The draft role proposes that customer relationships and billing are managed by a retailer (or equivalent). Essential Energy supports this in principle, but has some concerns as to how this will impact the overall cost of such supply, particularly to rural customers. Given locational network pricing is not favoured by customers and the costs of larger scale off-grid supply and the appetite of retailers to participate in these markets is still unknown, it seems premature to assume that adding an

additional layer (and associated margin that customers will have to pay) to the supply chain will necessarily benefit customers. We believe it is equally arguable that if the primary aim of electricity regulation is to ensure customers receive a reliable electricity service at the lowest cost possible, then the IPS and microgrid services should be vertically integrated and provided by DNSPs. We have shown the removal of the retail role in our proposed process in Attachment B.

As mentioned above, retailers have not yet actively sought to offer any additional services to remote customers, beyond the provision of a retail bill. With retailer exposure to wholesale market risk eliminated from the IPS and microgrid process, it should not necessarily be assumed that they need to be part of the chain. Retailer revenues currently total 20-30% of a customer bill. If the AEMC considers that to be an appropriate charge for the simple service of providing a retail bill from four to 12 times a year, then regulation is failing to serve the interests of the very consumers it was designed to protect.

This view is similarly supported by both PIAC and ATA.

Overall, we believe the draft determination is a good start to progressing better solutions for electricity network consumers, but a more optimal outcome will be derived with the inclusion of our suggested changes. It is imperative that DNSPs be allowed to invest in and maintain IPS and microgrids in remote locations where this is the most efficient investment under the NEO. This will provide the safest and most reliable solution for customers and eliminate the risk and associated issues created by service provider insolvency. When wholesale market risk has been eliminated from the process, the vertical integration of such systems within the operating role of DNSPs would provide the lowest price for customers. As such, the need for retailers to play a role in the operation of such systems in remote locations is questionable.

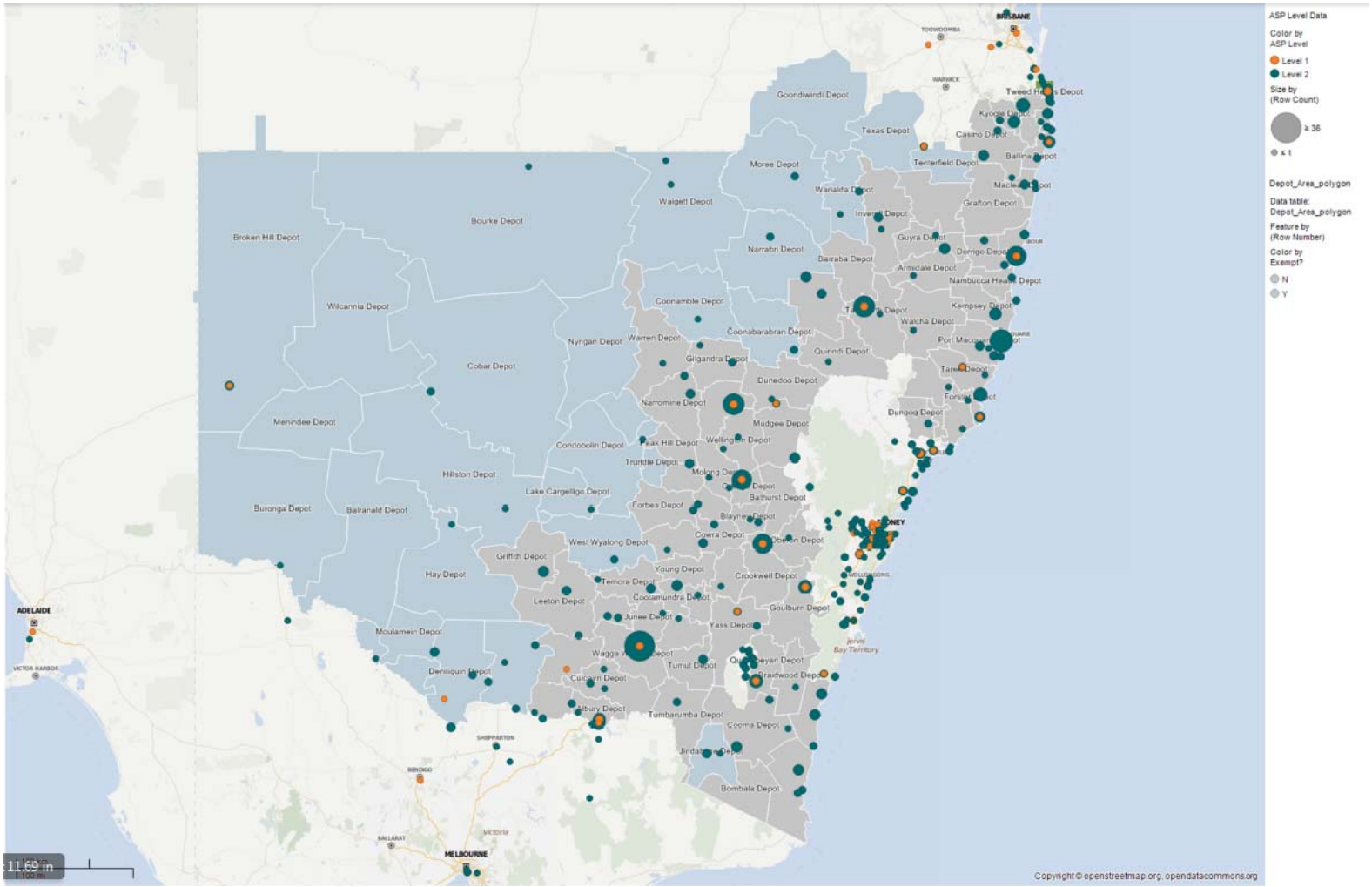
As we have offered in the past, we remain more than happy to provide any assistance required to help conclude this topic in a timely manner. Should you have any questions or require further information about this submission, please don't hesitate to contact Natalie Lindsay on 02 6589 8419 or by e-mail natalie.lindsay@essentialenergy.com.au

Yours sincerely

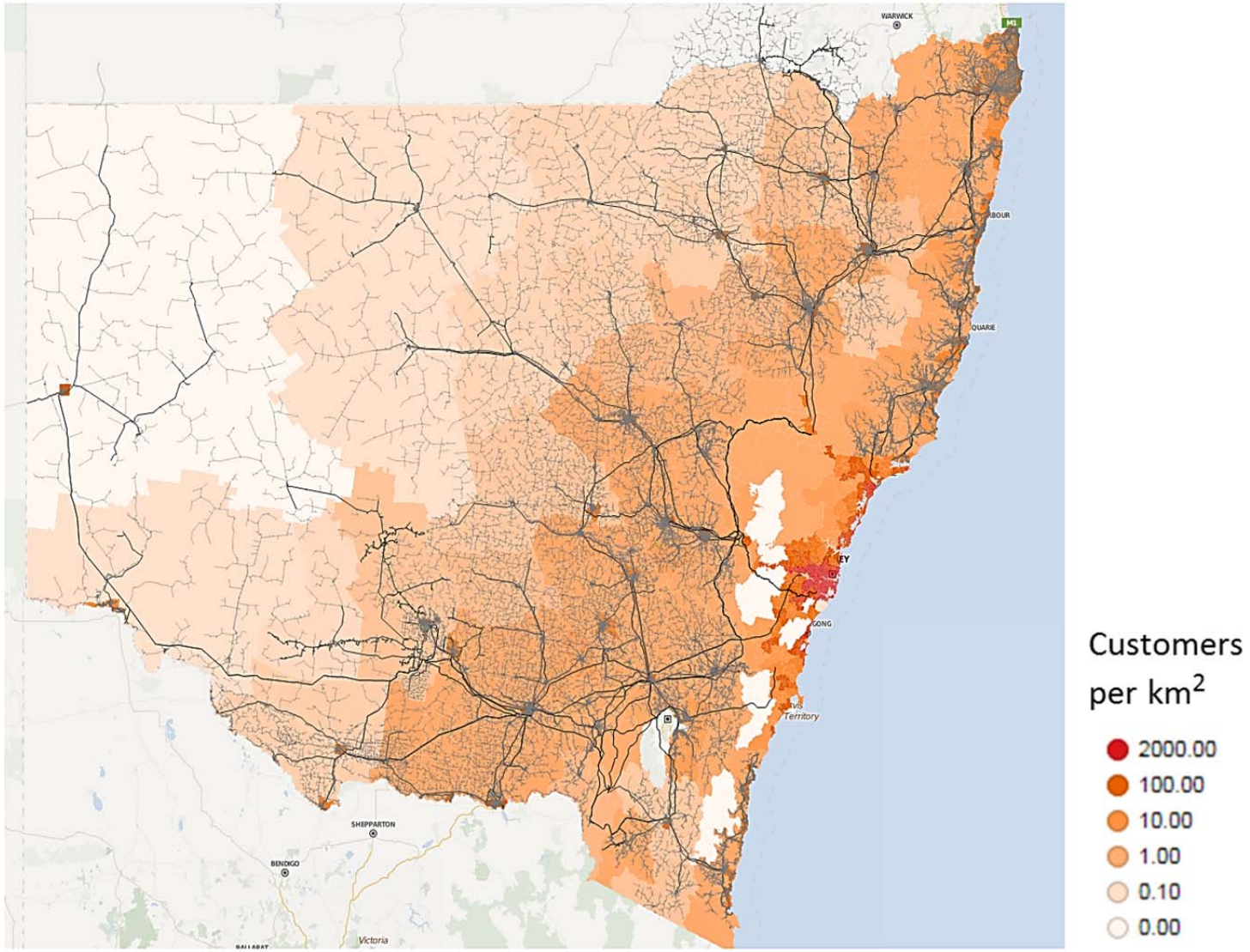
Gary Humphreys
Executive General Manager Regulation & Innovation

ATTACHMENT A

DEPOT CLASSIFICATION UNDER THE AER'S RING-FENCING GUIDELINE AND EXISTING ASP PRESENCE

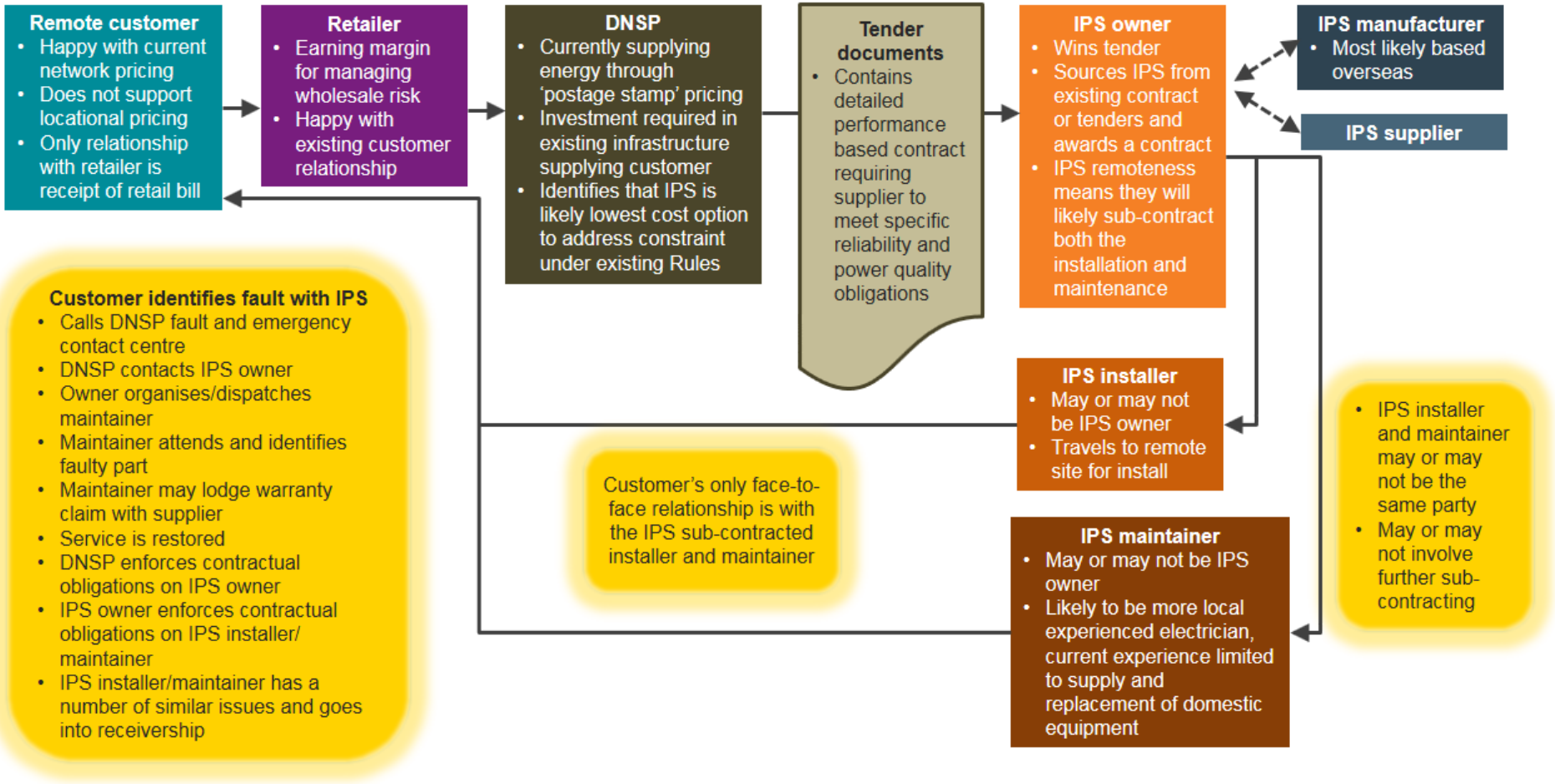


CUSTOMER DENSITY IN ESSENTIAL ENERGY'S NETWORK AREA



ATTACHMENT B

IPS PROCESS UNDER DRAFT DETERMNINATION



IPS PROCESS PROPOSED BY ESSENTIAL ENERGY