



**ENA SUBMISSION TO AEMC DRAFT DETERMINATION ON
COMPETITION IN METERING AND RELATED SERVICES**

26 May 2015

CONTENTS

Executive Summary	1
Key Concerns	1
Other issues	3
Recommendations	6
Introduction	9
Assessment Criteria	9
Key ENA concerns	12
Network ability to meet obligations.....	12
Minimum services specification	15
Network access to services	16
Network device	22
Finalisation and implementation	23
Other issues	24
Access to services in emergencies	24
Ring fencing	24
Access to metering data	26
Cyber security.....	26
Prudential requirements on Metering Coordinators	27
Meter type	28
Remote reading of network meters	28
Cooperation between Metering Coordinator and distributor.....	28
Opt out provisions	29
Application to Victoria.....	29
LNSP Metering Coordinators - transitional arrangements.....	30
LNSPs access to their equipment.....	31
Coverage of TNSPs.....	32
Load management.....	33

EXECUTIVE SUMMARY

ENA welcomes the opportunity to make a submission on the Australian Energy Market Commission's (AEMC) draft determination on competition in metering and related services. ENA has appreciated the extensive and inclusive consultation and engagement that AEMC has undertaken on this complex task.

The ENA welcomes the stated intention of the AEMC for the reform proposal to achieve:

- » Better Information;
- » Cost Reflective Pricing;
- » Better Retail Service;
- » New Products and Services; and
- » Better Network Services.¹

The AEMC intends, and the ENA supports, that the regime should provide a basis for willing commercial negotiation between participants to support the use of meters by multiple parties on a commercial basis, so as to achieve:

- » benefits to **individual electricity consumers** participating in new services or information;
- » benefits to **energy retailers and third parties**; and
- » benefits to **all electricity consumers dependent on efficient network service provision** which can be supported by smart meter services.

If the risks associated with the current Draft Decision and Draft Rule can be demonstrably mitigated, a contestable metering market may provide increased scope for market-led meter deployment which supports the timely economic takeup of advanced meters.

For the reasons outlined in this submission however, the ENA considers the Draft Determination and Draft Rule change are inadequately defined to permit the conclusion by the AEMC that the rule change would meet the requirements of the National Electricity Objective (NEO) and National Electricity Retail Objective (NERO).

ENA would welcome the opportunity to meet with the AEMC to discuss this submission and seek resolution to drafting issues.

KEY CONCERNS

Network ability to meet obligations

Significant risks related to the proposed change include:

- » Regulatory exposure and legal risk: The draft rule creates the risk that the Network Service Provider's ability to perform its regulatory obligations is directly and solely consequential upon their ability to reach commercial agreements with Metering Coordinators.
- » Safety risk: The draft rule potentially exposes customers to significant safety risks when Metering Coordinators and/or retailers undertake disconnection/reconnection activities. This relates both to potential for disconnection of customers on life support equipment and to issues relating to wiring integrity and safety, including fire and injury risks associated with the remote re-energisation of sites.
- » Liability for actions of others: The draft rule exposes networks to unacceptable exposure to risk and liability by making them responsible for notification and performance of disconnection related to new and replacement metering installations when the agents undertaking these tasks have no contractual relationship with the networks.

Minimum Services Specification

The Commission considers that a relatively low minimum services specification allows the market to determine the services that consumers want at a price they are willing to pay. However ENA considers that the limited approach to the Minimum Service Specification undermines the establishment of sufficient service capability standardisation to provide the necessary basis for commercial contracting. This will risk timely and cost-effective achievement of the broad benefits which may be enabled by advanced meters, including tariff reform.

In addition, ENA considers that for the full benefit of smart metering infrastructure to be realised, it is essential that the shared market protocol has the capacity to deliver the range of AEMO documented primary and secondary/ value added services, including network services. If this is not enabled, it is likely to result in development of varying transactional arrangements that increase the overall cost and restrict the long term benefits to customers.

¹ 'Consumer Benefits' Infographic, AEMC, 26 March 2015

Access to services

The draft rule provides no support for network service delivery, relying on multiple bi-lateral commercial negotiations or on multi-lateral commercial negotiations in the form of framework agreements which appear unprecedented.

As part of its response to the draft determination, ENA commissioned an economic review by Farrier Swier of the potential operation of the proposed rule change in relation to network access to services².

The assessment undertaken by Farrier Swier on market power, continuity of services, framework agreements and early review of market operation confirms the view of the ENA that light handed regulation will be required to support delivery of metering services, including network services, within the contestable market, in the long term interests of consumers. Specifically Farrier Swier concludes:

- » Once appointed, the Metering Coordinator will be a monopoly supplier of network services. While the AEMC has identified theoretical mitigating factors, ultimately it is uncertain whether in practice these factors will limit market power to the level expected in a workably competitive market.
- » additional market power concerns and potential incentive problems exist in the proposed market arrangements including: practicalities of the processes for identifying the services that DNSPs require; Retailer incentives; the potential control of Retailers over contracting timelines; and complex planning challenges facing DNSPs, such as where network solutions require a certain density of meters to be available.
- » a key market power problem is the potential for “holdout” where a new Metering Coordinator is appointed in place of one with whom a DNSP has contracted for network services, and where the DNSP has made related network investments.
- » some form of regulation is warranted to address these problems and Farrier Swier disagrees with the AEMC that a three year review is appropriate or adequate to deal with the uncertainty.
- » Farrier Swier has not identified any evidence of framework agreements performing the role of providing certainty of price and non-price terms, which

the AEMC’s Draft Determination had suggested was “common in overseas markets”.

Light handed regulation

In view of the potential market power issues identified for a range of access seekers and market participants, ENA considers that the AEMC should establish a sufficient regulatory framework to support operation of the competitive market, whilst providing support for metering services delivery in the long term interests of consumers.

Specifically the AEMC should implement general measures of light handed regulation, including:

- » clear dispute resolution procedures in the National Electricity Rules for access seekers to Metering Coordinator Services; or the Farrier Swier proposal of constrained rights for DNSPs to seek directions;
- » a credible fall back regulatory framework based on a Negotiate and Arbitrate model to be implemented if required, through administrative action, rather than a rule change; and
- » Undertaking of a Readiness Review before market start.

Additionally, specific measures should be introduced to address the potential for “Hold Out Risk” once investments are sunk. Two minimalist options are identified and ENA considers this would be best effected through a regulation specifying that:

A Retailer cannot appoint a Metering Coordinator that does not agree to the assignment of the existing contractual agreements with third parties (including DNSPs) of the relevant incumbent Metering Coordinator.

ENA considers that the approach outlined would represent a balanced and proportionate mitigation of market power risks present in the current Draft Rule.

Network Device

ENA welcomes the recognition by the AEMC of potential difficulties for NSPs obtaining access to services provided by Metering Coordinators and the inclusion by the AEMC of the provisions to enable networks to install or retain their own devices to assist in management of their network responsibilities and afford some balance to market power of Metering Coordinators in potential negotiation of access to services.

While the inclusion of this clause is welcome, it seems to ENA that the drafting may not fully address the service access problems raised by NSPs. The ENA notes that the restrictions that are placed on LNSP use of network devices

² Farrier Swier Consulting, Economic Review of AEMC draft metering rules: report for the Energy Networks Association, 25 May 2015

under proposed *clause 7.8.6(c)* limit the services which can be supported.

When its utilisation is inappropriately constrained by drafting, this limits the useful value of the network device for 'by-pass' network service delivery and hence reduces the long term benefits to consumers, which is inconsistent with the NEO.

Finalisation and implementation

ENA remains concerned at the inadequate time for consideration by AEMC of stakeholder feedback between draft determination and final determination.

In addition, ENA is concerned that the current timetable for implementation is too compressed, particularly given:

- » the significant proposed rule changes including in operational roles and legal responsibility with service and safety implications;
- » significant features of the framework remain undefined including: the Service Specification and Performance Levels, Ring-fencing obligations, and Shared Market Protocol.
- » The significant system and business process change requirements which will be required to support: transitional arrangements for Metering Coordinators, new and replacement policies and the Shared Market Protocol.

OTHER ISSUES

Access to services in an emergency

Clause 7.8.5 of the Draft NER Rule, provides that a Metering Coordinator must ensure that access to a metering installation, services provided by it and energy data held in it are managed in accordance with "emergency priority procedures" established by AEMO in the event of an emergency condition.

However, LNSPs have extensive obligations relating to load shedding and system security requirements under NER Chapter 4 and Part 8 of the NEL, which need to have clear priority when considering emergency procedures.

Ring fencing

The AEMC's position under the Draft Determination is that if a DNSP takes on the role of Metering Coordinator, metering provider and/or metering data provider and performs these roles in a competitive market, then the DNSP should be subject to ring-fencing for those businesses.

ENA considers that AEMC final determination should provide direction for the AER that, in the following circumstances, ring fencing requirements will not apply:

- » Where DNSPs operate as a 'deemed' Metering Coordinator for existing type 5 and type 6 metering installations and do not operate in the competitive segment of the metering market;
- » Where DNSPs are required to provide type 7 metering services³; and :
- » Where Transmission Network Service Providers (TNSP), as the LNSP, will be required to make an offer to act as the Metering Coordinator for transmission network connection points and interconnections⁴

Further, ENA considers that it is not necessary or efficient to mandate that the AER establish these guidelines when the AER already has full discretion to do so. Nor is it necessary or efficient for the AER to seek to apply additional ring fencing measures above the already strong financial and related party aspects of the DNSP regulatory framework.

Access to metering data

In order for DNSPs and TNSPs to meet their statutory requirements, they require reliable and timely access to metering data, including for billing purposes.

The draft determination and draft rule do not provide confidence to the ENA that DNSPs will continue to receive the data that they require in order to perform their statutory roles or to support on-going network tariff reform.

In addition, ENA considers that provisions potentially limiting access to data or requiring commercial negotiation of access to data by DNSPs should be read in the context of obligations upon networks to provide free access by customers (and their authorised agents) to their energy consumption data. Networks should not be required to pay for access to data which they are then required to provide free of cost.

Cybersecurity

ENA considers that the cybersecurity risk inherent in the proposed rule change is of such a significant magnitude that it warrants rule provisions to explicitly require AEMO to put in place processes to audit, test and enforce cyber security with appropriate enforcement powers. This process should draw upon experience from the Victorian rollout of smart meters.

³ AEMC, *ibid*, pp. 101-102

⁴ AEMC, *ibid*, p. 103

Prudential requirements for MCs

ENA considers that the provisions covering eligibility as a Metering Coordinator should be enhanced to ensure that Metering Coordinator prudential requirements are adequate for the organisation to cover high consequence events such as mass meter recalls, damages associated with a cyber incident, and costs associated with network incidents caused by misuse of load control.

Meter Type

It is not clear how advanced meters in the AEMC proposal will be distinguished in metering systems, AEMO systems and B2B transactions from current type 4 meters which do not meet the minimum functionality specification.

This will lead to significant complexity and ambiguity in identification of the capability of a significant and growing population of meters in the electricity market systems.

Remote reading of network meters

Current metering rules limit the ability of NSPs to remotely read their interval meters. A type 5 or type 6 metering installation may be altered to enable remote reading only in a situation where operational difficulties make remote reading reasonably required. ENA is disappointed to note the continuation of provisions in the draft rule maintaining these limitations.

Cooperation between Metering Coordinator and Distributor

A new clause 91A has been included in the Draft NERR, the effect of which is to require a distributor to (among other things) effect a supply interruption and provide such assistance as the Metering Coordinator may reasonably require, to enable the Metering Coordinator to install, monitor, repair or replace a meter. The review undertaken for ENA has identified some potential legal difficulties with including such a provision in the NERR.

The rights and obligations of distributors and Metering Coordinators under proposed new NERR clause 91A, need to be expressly subject to compliance with all relevant jurisdictionally based technical and safety requirements.

Opt out provisions

The draft rule provides that the customer's right to "opt out" will not apply where the replacement can be described as a "maintenance replacement". There is a potential difficulty with this (from a customer's and a DNSP's perspective), in that the currently proposed definition of "*maintenance replacement*", does not operate with sufficient certainty to ensure that a customer's right to 'opt out' is not potentially undermined.

Application to Victoria

As is acknowledged by the AEMC in the draft determination, the relevance and application of the metering rule change provisions differs in Victoria due to the rollout of advanced meters under the Victorian Government AMI program.

Highest priority for the ENA and the Victorian distribution businesses are the following key issues:

- » Delivery of customer benefits enabled by investment in the AMI services;
- » Ensuring recovery of investment by Victorian distribution businesses, and
- » Safeguarding continuity of delivery of network benefits enabled by the AMI investment.

ENA is aware of and supports the combined submission prepared by the Victorian distribution businesses to the AEMC draft determination covering the particular issues of concern to the jurisdiction which has almost completed their advanced meter rollout.

Consequently, the ENA submission only addresses the cost recovery issue for Victorian ENA members identified within the ENA legal review.

LNSP Metering Coordinators- transitional arrangements

The Draft Determination states that as a transitional measure, LNSPs who are currently the responsible persons for existing type 5 or 6 metering installations will:

- » become the Metering Coordinator for these metering installations (upon commencement of the proposed changes to NER Chapter 7); and
- » continue in this role for a connection point until a new Metering Coordinating is appointed by the FRMP or the services provided by the LNSP cease to be classified by the AER as direct control services.

ENA review has identified some practical issues relating to continuity and termination in relation to this provision.

LNSPs access to their equipment

The AEMC has proposed NER clause 7.15.2, setting out provisions for the Metering Coordinator to keep metering installations secure and to restrict access to them.

ENA notes that this provision as it is currently drafted could result in unintended restriction of access by networks to their equipment.

Coverage of TNSPs

ENA notes that the draft rule specifically identifies that the requirement to appoint a Metering Coordinator will also apply to transmission connection points.

This effectively captures TNSPs within the rule change with full Metering Coordinator obligations, without consideration or investigation of the relevance of these obligations to the TNSP actions and responsibilities at these points in the electricity system.

Load management

The draft determination notes the issues relating to potential impacts of synchronised load switching but declines to address them as it considers that such load management related issues extend beyond metering and will be managed in the context of new energy products and services review by the COAG Energy Council⁵

ENA considers that this remains a critical timing and coordination issue between processes underway.

⁵ AEMC, Draft Determination, op.cit. pp. 145-148

RECOMMENDATIONS

Network obligations

1. If the AEMC determines that Metering Coordinators should be allowed to undertake remote de-energisation and re-energisation, then the AEMC should:
 - a) clarify the interaction of network obligations under the NERL and the proposed draft rule, to ensure that networks are able to fulfil their regulatory requirements;
 - b) clearly identify in the final determination that the ability for Metering Coordinators to undertake connection, disconnection and reconnection activities will be fully dependent upon meeting jurisdictional safety regulations.
 - c) include an amendment to proposed NER *clause 7.8.6(c)* in relation to the LNSP's permitted uses of network devices to enable networks to utilise these devices to fulfil their network obligations.
 - d) include an additional NERR provision relieving DNSPs from liability to customers and from responsibility for compliance with relevant de-energisation and interruption provisions under the NERR, where premises are de-energised or re-energised by someone other than the distributor (or without the distributor's authorisation); and
 - e) amend draft NERR *clause 106(A)(6)* to delete the words "if the premises were de-energised by a retailer" and replace them with "if the de-energisation of the premises was arranged by a retailer".

Minimum services specification

2. AEMC should ensure that the framework to expand competition in metering services operates to facilitate effective delivery of network services in the long term interest of consumers by:
 - a) Revising its approach to a narrowly defined Minimum Services Specification and limited obligations to provide services, in view of evidence from metering businesses and other parties about the consequences for broad consumer benefits;
 - b) Providing sufficient guidance on service levels in the Determination and the Rules to ensure the regime will achieve effective network-related smart meter services;

- c) Clarifying communication requirements to support remote reading;
- d) Providing sufficient guidance in the Determination and the Rules to put beyond doubt the policy intent of the AEMC that the shared market protocol has the capacity to deliver the range of proposed primary and secondary services, including network services;
- e) Clarifying in the final determination that individual customer consent is not required for delivery of broad network services.

Access to services

3. **General Measures of light handed regulation** should be introduced to support access to metering services including:
 - a) Establish a clear dispute resolution procedures in the National Electricity Rules for access seekers to Metering Coordinator Services; or develop constrained rights for DNSPs to seek directions;
 - b) Explore guidance forums;
 - c) Create a credible fall back regulatory mechanism;
 - d) Undertake a Readiness Review before market start;
 - e) Establish a clear deferral mechanism in the National Electricity Rules;
 - f) Set objectives to promote cooperative behavior;
 - g) Establish a requirement for retailer to notify the DNSPs when it has selected its preferred Metering Coordinator(s).
4. Additionally, specific measures should be introduced to address the potential for "Hold Out Risk" once investments are sunk. This should be effected through a regulation specifying that a Retailer cannot appoint a Metering Coordinator that does not agree to the assignment of the existing contractual agreements with third parties (including DNSPs) of the relevant incumbent Metering Coordinator.

Network devices

ENA recommends that the definition of "Network Device" be amended as follows (amendments are marked up):

"network device

An item of apparatus or equipment associated with the provision or the monitoring of *network services* which may include *switching devices, measurement, protection* and control equipment and which may be housed within a facility that was previously used by the relevant *Local Network Service Provider* as a *metering installation or on a new meter panel housed within the metering installation.*"

Finalisation and implementation

5. ENA recommends that the timing of the AEMC final determination on expanding competition in metering and related services is revised and delayed to enable adequate review of the critical and inter-connected issues identified with the current drafted rules.
6. ENA recommends that subsequent (dependent) procedure and process development delivery timeframes are revised in line with the revised final determination delivery date to ensure delivery of high quality, fit for purpose systems and procedures.
7. Before the commencement date is locked down in the Final determination of the NER/NERR there should be a realistic, agreed industry plan which recognises the interdependencies and deliverables from a range of stakeholders including the safety regulators, the jurisdictions and the Essential Services Commission to ensure that the date is feasible.

Access to services in an emergency

8. To avoid uncertainty and inconsistency with the load shedding and system security requirements of NER chapter 4 and Part 8 of the NEL, the proposed new clause 7.8.5 should make clear that:
 - a) Any emergency priority procedures developed by AEMO under section 7.8.5(b) must be consistent with and made in accordance with any procedures developed under the load shedding regime set out in Part 8 of the National Electricity Law and section 4.3.2(h) of the NER.
 - b) The Metering Coordinator's and LNSP's obligations under clause 7.8.5 must also be subject to the load shedding and system security requirements of chapter 4.

Ring fencing

9. The AEMC final determination should provide direction for the AER that, in the following circumstances, ring fencing requirements will not apply:
 - a) Where DNSPs operate as a 'deemed' Metering Coordinator for existing type 5 and type 6 metering installations and do not operate in the competitive segment of the metering market;
 - b) Where DNSPs are required to provide type 7 metering services⁶; and :
 - c) Where Transmission Network Service Providers (TNSP), as the LNSP, will be required to make an offer to act as the Metering Coordinator for transmission network connection points and interconnections⁷
10. AEMC should retain the clause 6.17.2 (a) unchanged (that is delete proposal to replace 'may' with 'must' in clause 6.17.2 (a))
11. AEMC should include explicit restriction on the flow of commercially sensitive customer information to a retailer from being accessed by their Metering Coordinator business.

Access to metering data

12. The draft rule and associated procedures should ensure free access by network businesses to metering data essential to fulfilling their regulatory and billing obligations.

Cybersecurity

13. AEMC final determination should consider rule provisions to require AEMO to put in place processes to audit, test and enforce cyber security with appropriate enforcement powers.

Prudential requirements for Metering Coordinators

14. AEMC should expand guidance to AEMO on prudential requirements for Metering Coordinators to ensure their capability to manage high consequence events, including cybersecurity issues.

⁶ AEMC, *ibid*, pp. 101-102

⁷ AEMC, *ibid*, p. 103

Meter type

15. The smart meter meeting the minimum functionality specification should be identified by a unique meter type to enable it to be distinguished from current type 4 meters. This could be achieved by making the minimum functionality advanced meter without communications enabled a type 4A meter, the advanced meter with communications a type 4B.

Remote reading of network meters

16. AEMC should remove the restriction upon DNSPs being able to upgrade interval meters already installed to enable remote reading.

Cooperation between Metering Coordinator and Distributor

17. The rights and obligations of distributors and Metering Coordinators under proposed new NERR clause 91A, need to be expressly subject to compliance with all relevant jurisdictionally based technical and safety requirements.

Opt out provisions

18. If "sample testing" is going to be used as the basis for determining what will be considered a "maintenance replacement" and thereby excluded from small customers' rights to opt out of having their existing meters replaced, then much clearer provisions need to be included in the NERR. ENA recommends that the AEMC improve the drafting in the NERR to use terms utilised in NER chapter 7. Whilst the LNSP is in the Metering Coordinator role they need to be able to meet the requirements against their meter asset management plan for sample testing and requirements under the National Measurement Act.

Application to Victoria

19. Cost recovery for rollout of AMI investments in Victoria must be ensured.

LNSP access to their equipment

20. Given:
 - a) the proximity that a metering installation necessarily has to LNSP operated equipment and LNSP wiring (to which the metering installation is connected);
 - b) the likely proximity of the metering installation to LNSP network devices; and
 - c) the LNSP's need to ensure it maintains access to its own equipment, wiring and network devices, to satisfactorily discharge its obligations under the NERL and under jurisdictional specific network safety and technical responsibilities,

clause 7.15.2 should include amendments to make it clear that the Metering Coordinator must ensure access is provided at all times to LNSPs in respect of any LNSP equipment, wiring or devices:

- i. to which the metering installation is connected; or
- ii. which is co-located within any facility within which the metering installation is housed or located.

Coverage of TNSPs

21. TNSPs operating as 'Metering Coordinators' at transmission connection points must be differentiated from Metering Coordinators (not TNSPs) operating at other locations.
22. Transmission metering should be excluded from the proposed rule change, as competition is not intended or feasible to operate at this point in the electricity system.

Load management

ENA considers that the AEMC should include a requirement in the determination and rule that Metering Coordinators shall only switch load in accordance with jurisdictional requirements and procedures to ensure network stability and maintain quality of supply to customers.

INTRODUCTION

The ENA is the national industry association representing the businesses operating Australia's electricity transmission and distribution and gas distribution networks. Member businesses provide energy to virtually every household and business in Australia.

ENA members own assets valued at over \$100 billion in energy network infrastructure.

ENA welcomes the opportunity to make a submission on the Australian Energy Market Commission's (AEMC) draft determination on competition in metering and related services. ENA has appreciated the extensive and inclusive consultation and engagement that AEMC has undertaken on this complex task.

The ENA submission is structured to address the following:

- » the assessment framework,
- » key ENA concerns, and
- » other issues.

Where ENA considers there are alternative preferred solutions to the changes proposed by AEMC, these are identified within the submission and in recommendations.

As part of the preparation for this submission, ENA commissioned both legal and economic assessments of the AEMC proposals with a view to constructively identifying potential solutions where issues are identified. These reports are attached to the submission.

ASSESSMENT FRAMEWORK

ENA supports reform in metering and related services that contribute to achievement of the National Electricity Objective (NEO):

to promote efficient investment in, and efficient operation and use of, electricity services for the long term interests of consumers of electricity with respect to:

(a) price, quality, safety, reliability and security of supply of electricity; and

(b) the reliability, safety and security of the national electricity system."

ASSESSMENT CRITERIA

The AEMC propose the following assessment criteria for their rule change on competition in metering and related services:

- a) Review against the NEO and National Electricity Retail Objective (NERO)
- b) Competition
- c) Transparency and predictability
- d) Administrative burden and transaction costs, and
- e) System integrity

ENA has submitted previously to AEMC its concern that the effectiveness of the new metering framework should be judged on whether it:

- » enables a competitive, open and fair market for demand side services;
- » benefits customers through economic achievement of future network operational benefits
- » facilitates broader adoption of smart meters while minimising cross-subsidies and any associated price impact on customers
- » enables a transition to cost reflective network tariffs as quickly as practicable
- » maintains current network services and efficiently leverages existing investments.

ENA believes that these considerations are directly relevant to the achievement of the National Electricity Objective and the assessment framework proposed by the AEMC.

Hence, ENA will include consideration of whether the AEMC proposal meets these needs.

ENA review of assessment

The ENA does support key elements of the AEMC's proposed reform if it can be implemented in a manner which is demonstrably in the long-term interests of consumers as particularised in the NEO.

The ENA welcomes the stated intention of the AEMC for the reform proposal to achieve:

- » Better Information;
- » Cost Reflective Pricing;
- » Better Retail Service;
- » New Products and Services; and
- » Better Network Services.⁸

If the risks associated with the current Draft Decision and Draft Rule can be demonstrably mitigated, a contestable metering market may provide increased scope for market-led meter deployment which supports the timely economic takeup of advanced meters. The AEMC intends, and the ENA supports, that the regime should provide a basis for willing commercial negotiation between participants to support the use of meters by multiple parties on a commercial basis, so as to achieve:

- » benefits to **individual electricity consumers** participating in new services or information;
- » benefits to **energy retailers and third parties**;
- » benefits to **all electricity consumers dependent on efficient network service provision** which can be supported by smart meter services.

For the reasons outlined in this submission however, the ENA considers the Draft Determination and Draft Rule change are inadequately defined to permit the conclusion by the AEMC that the rule change would meet the requirements of the NEO and NERO.

Risks to Cost Outcomes for Customers

- » Multiple studies demonstrate the long-term financial risk to consumers if tariff reforms dependent on advanced meters are not implemented. If LNSPs and third parties are discouraged from entering into commercial contracts with Metering Coordinators because they cannot manage the commercial risks involved, then the business case for meter replacement is weakened, which will impede the timely economic transition to advanced metering.

- » All customers are exposed to higher costs as the Draft Rule currently imposes inefficient network cost outcomes through impacts on network access to metering data or services; access to alternative network devices; or unnecessary ring-fencing and interface costs;

Operational and Safety Issues

- » The Draft Rule creates material risks in relation to "...the reliability, safety and security of the national electricity system" and this requirement of the NEO appears to have received insufficient focus in the AEMC's evaluation to date.

Competition, Transparency & Predictability

- » The requirements nominated by the AEMC for Competition, Transparency and Predictability are unable to be met through the Draft Rule in its current form. The current drafting would create a market which would feature significant potential for market power and weak transparency without regulatory support. The regime would achieve inadequate predictability to support commercial investments by Network Service providers reliant on metering services contracts. This is because it would permit the contractual rights of Network Service Providers under agreements with Metering Coordinators to be violated at the time of churn. This unpredictability of service continuity is increased by the narrow or undefined rights to services in the Minimum Service Specification and Shared Market Protocol.

The AEMC has stated that it considers the draft rule "*maintains, and in some cases, strengthens, existing regulation to support the integrity of the national electricity system and the delivery of energy services to consumers*".⁹ However, as outlined in the following sections of this submission, ENA considers this conclusion cannot be made based on current drafting. The rule, as currently drafted, creates significant risk and uncertainty in delivery of network obligations to maintain security, safety and reliability of the national electricity system in the interest of consumers.

The Draft Rule and its implementation can be modified to address the concerns identified by the ENA and other stakeholders

⁸ 'Consumer Benefits' Infographic, AEMC, 26 March 2015

⁹ AEMC, Draft Determination National Electricity Amendment (Expanding competition in metering and related services) Rule 2015, 26 March 2015, p. 28

However, there remain material issues and the risks are exacerbated by:

- » the inadequate timeframes proposed for both the finalisation of the Rule Change and assessment of implementation issues;
- » compressed timeframes for parallel implementation activities including legal, procedural and system changes; and
- » the delegation of fundamental design features to be completed by other parties subsequently, despite the outstanding design features being likely to determine the long-term outcomes for consumers.

In this submission the ENA has endeavoured to provide constructive solutions which would meet the policy intent of the proposed reform while addressing the identified issue. ENA urges the AEMC to ensure the outstanding issues identified in this submission are resolved in the Final Determination and Rule Change, rather than being deferred to:

- » subsequent definition of fundamental market design features related to the obligation to provide metering data and services, and exit fees;
- » a reliance on the unlikely emergence of multi-lateral 'framework agreements' to address market power created by the Draft Rule; and
- » observation and an undefined market review after 3 years to deter abuse of that market power.

Clearly, it is essential that the AEMC demonstrates a proposed Rule Change is in the long-term interests of consumers and that the advantages (compared to the status quo) outweigh its disadvantages. The ENA considers the draft Rule Change to be one of the most significant in the history of the National Electricity Rules in its scope and implications for the industry's capacity to provide better outcomes to consumers. The draft rule change will fundamentally restructure roles, responsibilities and market power for one segment of a vertically integrated service model, with potential implications in downstream markets. The draft rule change replaces an existing framework which includes:

- » Regulatory oversight of efficient metering cost
- » Clearly defined roles and responsibilities
- » Operational procedures for managing network and customer safety;
- » Metering assets integrated in networks with system wide benefits (eg. load control and grid intelligence services); and

- » Regulatory oversight remote re-energisation and de-energisation service levels and cost.

The Draft Rule proposes to replace this existing regime with a model relying on market competition among Retailers for customers, but which creates risks to other outcomes valued by customers. While these issues may be able to be addressed such that the benefits of the regime outweigh the costs, this is yet to occur in the Draft Determination and the Draft Rule. The Rule Change is not demonstrably in the long term interest of consumers until these important issues are resolved.

KEY ENA CONCERNS

ENA has identified five key concerns relating to the approach in the AEMC draft determination on competition in metering and related services. The key concerns of the ENA are:

- 1) Ability of the networks to meet their statutory and regulatory obligations under the National Energy Retail Law (NERL);
- 2) The minimum services specification;
- 3) Ability of networks to access network services from Metering Coordinators (MCs);
- 4) Utilisation of network devices; and
- 5) Scheduling for finalisation and implementation.

These key issues are considered in the section below.

NETWORK ABILITY TO MEET OBLIGATIONS

The attached legal review by Ashurst undertaken on behalf of the ENA identified a significant risk to the ability of networks to meet their obligations under the National Energy Retail Law due to AEMC's proposed changes in the draft NER Rule.¹⁰

Significant risks related to the proposed change include:

- » **Regulatory exposure and legal risk:** The draft rule creates the risk that the Network Service Provider's ability to perform its regulatory obligations is directly and solely consequential upon their ability to reach commercial agreements with Metering Coordinators. Specific issues relating to effective negotiation of access for network services without regulatory support is addressed later in this section of the ENA submission.
- » **Safety risk:** The draft rule potentially exposes customers to significant safety risks when Metering Coordinators and/or retailers undertake disconnection/reconnection activities. This relates both to potential for disconnection of customers on life support equipment and to issues relating to wiring integrity and safety, including fire and injury risks associated with the remote re-energisation of sites.
- » **Liability for actions of others:** The draft rule exposes networks to unacceptable exposure to risk and liability

¹⁰ Ashurst report for ENA, *Review of AEMC Metering Contestability Rule Change*, attached as Appendix A

by making them responsible for notification and performance of disconnection related to new and replacement metering installations when the agents undertaking these tasks have no contractual relationship with the networks.

Regulatory exposure and legal risk

The Draft NER Rule effectively provides that:

- » Remote disconnection and reconnection are services that are to be provided by Metering Coordinators via new type 4 metering installations which must be installed for all new or replacement meters for small customers (*clause 7.8.3*).
- » The Local Network Service Provider (**LNSP**) and the Financially Responsible Market Participant (**FRMP**) for a connection point will be entitled to access those services from the Metering Coordinator (*clause 7.3.2(h)(i)(iii)*), subject to agreeing commercial terms with the Metering Coordinator (*clause 7.6.1(a)(b)*).
- » The LNSP is prohibited from using its own Network Devices to undertake its own remote disconnection or reconnection services (*clause 7.8.6(c)(ii)*).

Ashurst concludes that the above provisions, taken together, essentially prevent LNSPs from remotely disconnecting or reconnecting premises themselves, requiring them to instead negotiate "access" to this service from the Metering Coordinator by commercial agreement.

There are difficulties with this from an LNSP's perspective, some of which have previously been raised by NSPs with the AEMC.

The AEMC has sought to address some of these concerns in the Draft Determination and the Draft NER Rule Changes by introducing a new provision allowing DNSPs to install their own Network Devices at or adjacent to the Metering Coordinator's metering installation, for the purposes of monitoring or operating the NSP's network (*clause 7.8.6*).

However, a number of key difficulties remain with the provisions relating to network responsibilities and remote disconnection and reconnection which are not satisfactorily addressed by new clause 7.8.6. (Specific issues relating to utilisation of network devices will be considered in a separate section.)

The legal review undertaken for ENA has identified legal uncertainty in the approach undertaken by the AEMC.

The National Energy Retail Law (**NERL**) clearly provides that electricity supply for premises, including energisation, de-energisation and re-energisation of premises, form part of

the "customer connection services" which are required to be provided to customers by distributors, under customer connection contracts as regulated by the NERL¹¹.

This is also reflected in the National Energy Retail Rules (NERR), in their current form, which impose directly upon distributors' extensive requirements for the energisation, de-energisation, and re-energisation of customer premises, as part of the customer connection services they must provide¹². Extensive obligations are also imposed directly upon them in relation to interrupting supply from their networks to customer premises¹³.

The NERR allows the retailer to "arrange" energisation, de-energisation and re-energisation, where (for example) the customer has breached its retail agreement, by notifying the distributor¹⁴. However it is clear that the responsibility for actually performing the energisation, de-energisation or re-energisation or any interruption to supply, for any reason, rests squarely with the distributor. This is consistent with the NERL allocation of this role to the distributor as a fundamental part of its "customer connection service".

The NERL and NERR provisions described above place clear responsibilities directly upon the distributor to supply, energise, de-energise and re-energise customers. Retailers can arrange this by requesting that the distributor do it, but it is the distributor who has the clear obligation to undertake these tasks and has imposed upon it clear obligations relating to notification and other matters which it must observe in undertaking these tasks.

The AEMC appears to recognise the potential conflict inherent with these provisions in their draft rule with references within the draft NERR to options for de-energisation and re-energisation "*If...in accordance with the energy laws...*" (eg clause 104, clause 106, clause 106A). However, ENA considers that the significant risks inherent in this approach require clarity and redress prior to finalisation of the AEMC metering determination process.

As it stands, the apparent conflict in the provisions would imply either:

- 1) AEMC rule change provisions relating to disconnection and reconnection cannot be

introduced without substantial changes to jurisdictional safety laws; or

- 2) AEMC proposed changes to disconnection and reconnection risk breach of legal validity.

Safety issues are considered in the following section.

Safety risk

The Draft Rule leaves manual connection/disconnection to NSPs and leaves them with responsibility for "customer connection services". It also notes the need to engage with jurisdictional safety regulators to ensure safe operation of metering installation and services by retailers and Metering Coordinators, but provides little direction or detail on this matter¹⁵.

The AEMC analysis in section A3 of the draft determination review of current provisions notes the competition benefits of retailers being able to arrange remote disconnection and reconnection services from the Metering Coordinator, but does not directly address the risk factors associated with Metering Coordinators undertaking these tasks.

Under the AEMC's draft rule, work in the field will be undertaken by the selected installation resource of the retailer, Metering Coordinator, or metering providers. A number of parties in this chain have very little field experience and safety training. ENA and its members are concerned that insufficient attention has been paid to safety related matters in the draft determination, and that this approach seriously underplays the significance and potential impact of risk to customers and field staff where adequate safety procedures are not understood, implemented and enforced.

The ENA strongly recommends that the safety implications of remote disconnection and reconnection services are fully addressed in the final determination. Specifically, clear guidance should be provided that these services will not be available from Metering Coordinators unless and until they have developed appropriate systems and undergone accreditation processes in line with jurisdictional safety regulators to ensure the safety both of their personnel and of customers. It is important that the body making decisions on accreditation does not do so without ensuring that there are appropriate levels of field capability, safety training and management and that field audit processes are in place. Current reference within the draft determination notes that jurisdictional safety regulators 'may' develop additional

¹¹ See the definition of "customer connection services" in section 3 NERL and section 66 NERL.

¹² See NERR Part 6, Division 3 and 4.

¹³ See NERR Part 4, Division 6.

¹⁴ See for example existing NERR clauses 19(2) as well as clauses 111, 112 and 119(1)(a).

¹⁵ AEMC, *op.cit.* p. 138

requirements with respect to safely disconnecting and reconnecting customers¹⁶.

In Victoria, the pre-existing AMI deployment and associated jurisdictional safety regime undertook a safety risk management, testing and system commissioning approach. This included a defined functionality of "auto-disconnect" for the remote re-energisation service. At this time the AEMO advice on advanced services and the draft rule changes have not addressed such safety issues in:

- » the specification of this Primary Service in the NER Minimum Services Specification; or
- » accreditation requirements.

The AEMC should not permit these issues which determine the safety outcomes of its proposed Rule Change to remain unresolved if it seeks to make an assessment of whether the Draft Rule is in the long-term interest of consumers.

Life support

Regarding customer safety, the AEMC has noted the current provisions that operate to provide 'double check' of life support registry by retailers and distribution businesses before de-energisation to provide extra security to customers, but has rejected the need to retain these provisions¹⁷.

ENA welcomes AEMC acceptance of the need for life support registers by retailers and NSPs, obligations to exchange information on re-energisation and de-energisation activities and the denial of rights to over-ride the other party's disconnection operation.

However, ENA is concerned at the removal of the current 'double check' provisions and that the obligations for a retailer in the circumstances relating to de-energisation are significantly lower than those of the distribution business. Specifically, the AEMC Draft Rule would result in a regime in which:

- » a DNSP must ensure that registration details under rule 125 in relation to life support equipment are kept up to date (r 126(1)). There is no such obligation on retailers. Significantly, the obligation on DNSPs is a civil penalty provision.
- » A DNSP is able to request a customer whose premises have been registered as requiring life support, to inform them if the person who requires the life support equipment has vacated the premises or no longer

requires the equipment (r 126(2)). Retailers do not have an equivalent power under Part 7 of the NERR.

The effect of this is that life support equipment registers maintained by retailers and DNSPs are more likely to be inconsistent – particularly where the DNSP is required to keep those details up to date and is empowered to request information from customers.

If the AEMC provisions enabling the Metering Coordinator to remotely disconnect and reconnect customers is introduced, this differentiation in obligations increases the likelihood of inadvertent de-energisation and ignores the fact that it is generally retailers who provide the life support information to the DNSPs in the first place.

Liability for actions of others

As noted earlier, distributors have strict obligations under the NERL and the NERR which place direct responsibility on them for de-energising, re-energising and interrupting supply to premises. These obligations apply whether de-energisation, re-energisation or interruption is undertaken remotely or physically. So, for example, any remote de-energisation undertaken by the Metering Coordinator:

- a) at the retailer's request, for which the retailer fails to notify the distributor;
- b) by the Metering Coordinator at its own instigation (for example, for metering installation repair or maintenance); or
- c) through the Metering Coordinator's faulty operation of the remote disconnection switch,

would necessarily amount to both a "de-energisation" and a "supply interruption" under the NERL and the NERR, which has not occurred (or been notified to the customer) in accordance with the requirements of the NERR, potentially exposing distributors to breach of their customer connection contracts and breach of the NERR.

Distributors should not be left in a position of continuing exposure to these risks under the NERL and NERR and without any means of preventing such an unauthorised breach or of mitigating their exposure.

¹⁶ Ibid, p. vii, 138

¹⁷ Ibid, p. 135

ENA recommendations

If the AEMC determines that Metering Coordinators should be allowed to undertake remote de-energisation and re-energisation, then the AEMC should:

- a) clarify the interaction of network obligations under the NERL and the proposed draft rule, to ensure that networks are able to fulfil their regulatory requirements;
- b) clearly identify in the final determination that the ability for Metering Coordinators to undertake connection, disconnection and reconnection activities will be fully dependent upon meeting jurisdictional safety regulations.
- c) include an amendment to proposed NER clause 7.8.6(c) in relation to the LNSP's permitted uses of network devices to enable networks to utilise these devices to fulfil their network obligations.
- d) include an additional NERR provision relieving DNSPs from liability to customers and from responsibility for compliance with relevant de-energisation and interruption provisions under the NERR, where premises are de-energised or re-energised by someone other than the distributor (or without the distributor's authorisation); and
- e) amend draft NERR clause 106(A)(6) to delete the words "if the premises were de-energised by a retailer" and replace them with "if the de-energisation of the premises was arranged by a retailer".

MINIMUM SERVICES SPECIFICATION

The AEMC proposes that under the draft rule, all new and replacement meters installed at small customer connection points must meet a new minimum services specification. This specification relates to the services that those metering installations must be capable of providing, rather than the technical functionality of the metering installation itself.

The draft rule includes a description of the services that comprise the minimum services specification. AEMO are to establish, maintain and publish procedures that set out the minimum service levels, standards and relevant technical requirements for each service set out in the minimum services specification.

The minimum services specification includes the following services:

- » remote disconnection service;
- » remote reconnection service;

- » remote on-demand meter read service;
- » remote scheduled meter read service;
- » meter installation inquiry service;³⁴² and
- » advanced meter reconfiguration service.

The Commission considers that a relatively low minimum services specification allows the market to determine the services that consumers want at a price they are willing to pay¹⁸.

Neither the AEMC or AEMO have undertaken meaningful analysis of the costs and benefits of the proposed metering service specification compared to a wider definition more consistent with the services achieved in Victoria's deployment. However, the AEMC has heard evidence at its stakeholder forum from metering businesses that the approach to the Minimum Service Specification risks deterring the inclusion of functionality which would have broad consumer benefits, even where it has a low incremental cost.¹⁹ This contradicts the AEMC's assumption that such functions would be left within meters even where not required by the minimum service specification. ENA considers that the limited approach to the Minimum Service Specification undermines the establishment of sufficient service capability standardisation to provide the necessary basis for commercial contracting. This will risk timely and cost-effective achievement of the broad benefits which may be enabled by advanced meters, including tariff reform, and may stifle future innovation if the service and communications capacity does not enable new service delivery.

In addition, the AEMC Draft Determination and Draft Rule provides for no obligation on Metering Coordinators to provide metering services other than scheduled meter read, with access provided on a commercial basis.

The potential availability of broad network services to benefit customers will be critically impacted if systems supporting service delivery do not have the capacity to support services beyond the minimum services.

AEMC and AEMO have been considering development of the shared market protocol to support delivery of services between parties. AEMC notes that *'the parties using the shared market protocol may wish to have access to services or performance standards beyond the minimum functionality specification ... the shared market protocol*

¹⁸ Ibid, p. 168

¹⁹ See for example, *AEMC Forum – Metering Business Perspective*, by Adrian Clark, CEO, Landis and Gyr, 30 April 2015, available on AEMC website.

may need to provide for that wider range of services and performance standards. While it might not be necessary for it to provide for the 'maximum' market expectations possible, to allow it to meet the needs of most parties it would be beneficial for it to manage most common transactions²⁰.

In addition, ENA considers that for the full benefit of smart metering infrastructure to be realised, it is essential that the shared market protocol has the capacity to deliver the range of AEMO documented primary and secondary/value added services, including network services. If this is not enabled, it is likely to result in development of varying transactional arrangements that increase the overall cost and restrict the long term benefits to customers.

Notably, delivery of smart metering services will be dependent upon adequacy of service levels; communication system capacity; and cost effective delivery of services. The metering framework will also need to provide:

- » Sufficient guidance on service levels in the Determination and the Rules to ensure the regime will achieve effective network-related smart meter services,
- » Clarification of communication requirements to support remote reading, and
- » Support for cost effective access to services by all participants in the long term interests of customers. As will be shown in the next section, ENA supports light-handed regulation to ensure appropriate access to services from MCs.

It is apparent that there are different perspectives on some issues between AEMC and AEMO staff, which is not surprising given they are matters of judgement. However, the AEMC is responsible for concluding if a proposed rule change meets the NEO, and as such the definition of key features determining the outcomes of its proposal can not be deferred to a process after the Rule has been made.

Finally, ENA is concerned at the statement within the AEMC draft determination that "*Access to services provided by [small customer] metering installations that are in addition to services set out in the minimum services specification can **only** [emphasis added] be provided to a person or for a purpose to which the customer has given its prior consent*"²¹

ENA believes that this statement is intended to ensure that customers provide consent for provision of enhanced services, for example relating to demand management, which may be enabled by the new technology. However, ENA is concerned by the implication which may arise from this statement that no advanced services or network services may be introduced without individual customer consent. This would constitute a significant barrier to introduction of services which have been previously identified, including within the draft determination itself²², as providing significant customer benefit from the availability of advanced metering. Requiring individual customer consent for voltage or power quality adds administrative cost complexity.

ENA would welcome clarification from AEMC within the final determination on their consideration of customer protections required relating to access to services.

ENA recommendations

AEMC should ensure that the framework to expand competition in metering services operates to facilitate effective delivery of network services in the long term interest of consumers by

- a) Revising its approach to a narrowly defined Minimum Services Specification and limited obligations to provide services, in view of evidence from metering businesses and other parties about the consequences for broad consumer benefits;
- b) Providing sufficient guidance on service levels in the Determination and the Rules to ensure the regime will achieve effective network-related smart meter services;
- c) Clarifying communication requirements to support remote reading;
- d) Providing sufficient guidance in the Determination and the Rules to put beyond doubt the policy intent of the AEMC that the shared market protocol has the capacity to deliver the range of proposed primary and secondary services, including network services; and
- e) Clarifying in the final determination that individual customer consent is not required for delivery of broad network services

²⁰ AEMC Consultation Paper Implementation advice on the shared market protocol, 18 December 2014, p. 12

²¹ AEMC Draft Determination, p. 38.

²² Ibid, pp. 20-21

NETWORK ACCESS TO SERVICES

ENA has previously advised AEMC of its concern that:

- » While the regime establishes “customer choice” for Retailers by transferring to them the ability to appoint Metering Coordinators, the consequence for Network Service Providers and third parties (such as Demand Side Participation Aggregators) is that they are access seekers to Metering Coordinator controlled services which have ‘natural monopoly’ characteristics at the location.
- » Metering Coordinators seeking to profit maximise will seek to ‘shadow price’ to the cost of the next best alternative to the Network Service Provider, which may represent the cost of bypass.
- » The proposed regime does not provide sufficient certainty in service continuity and cost of metering services to Network Service Providers as customers of Metering Coordinators to support commercial decisions for investment in grid-side analytics and services. The Draft Rule does not ensure, or allow a Network Service Provider to ensure, that the contractual rights with an existing Metering Coordinator endure after churn determined by another party (the Retailer).
- » If a Network Service Provider does not have confidence to contract, it will be unable to contribute to the deployment or enhanced service costs and this will reduce the timely and economic take-up of smart meters, delaying cost-reflective tariffs and demand-side services.

The draft rule provides no support for network service delivery, relying on multiple bi-lateral commercial negotiations or on multi-lateral commercial negotiations in the form of framework agreements which appear unprecedented.

In addition, the potential motivation for retailers to restrict or make access difficult for competitive parties should be considered in relation to the ability for a retailer to have a subsidiary company as Metering Coordinator, metering provider or metering data provider.

As part of its response to the draft determination, ENA commissioned an economic review by Farrier Swier of the

potential operation of the proposed rule change in relation to network access to services²³.

The report identifies specific issues – and potential solutions- relating to:

- » Market power and negotiation of commercial agreements;
- » Continuity of reliable and economic supply of network services after ‘churn’ of a Metering Coordinator, due to the risk of ‘holdout’ strategy from an incoming, uncontracted Metering Coordinator;
- » Viability of framework agreements;
- » Viability of resolution after a three year review; and
- » Need for light handed regulation, with options identified.

The following section references the Farrier Swier analysis, with detail provided in the report attached as Appendix B.

Market power

The AEMC Draft Determination acknowledges possible risks to effective competition from the potential restriction of access by Metering Coordinators to services and products under reasonable terms and conditions or at efficient prices. The AEMC analysis suggests that these risks may be constrained by:

- » The number of potential contestants in the market;
- » Risk that metering assets will become stranded if Metering Coordinators restrict access to them;
- » Bargaining power of DNSPs as the only potential party interested in particular services, and
- » Ability of consumers to switch retailers²⁴.

The Farrier Swier report reviews potential market power issues. It notes the difficulty of relying upon a theoretical analysis of the power of competition in order to conclude that network service delivery will be assured by commercial negotiation. The analysis concludes that reliance on the theoretical competition framework to address market power does not take account of significant factors including:

- » Subtleties and practicalities of the **processes of negotiation and supply of network services;**
- » **Complex DNSP planning**, influencing the practicality of coordinating with multiple Metering Coordinators;

²³ Farrier Swier Consulting, Economic Review of AEMC draft metering rules: report for the Energy Networks Association, 25 May 2015

²⁴ AEMC Draft determination, op cit, p. 252

- » **Potential weak or conflicting incentives for cooperation between retailers and DNSPs** (For example, where a retailer may focus upon lower cost retailer competition and speed to market);
- » **Metering Coordinator assurance issues** (For example relating to technical and commercial capability. A DNSP is limited to contracting with a party selected by a retailer. The retailer may be interested in a lower range of services than DNSPs and the retailer would have no obvious incentive to undertake assurance or manage supplier performance risk for services other than the ones they are contracting for;
- » **The control by retailers of contracting timeframes** such that a DNSP may be left with limited time to negotiate with a Metering Coordinator ('take it or leave it'); and
- » A lack of **cost transparency**²⁵.

Continuity of service

The previous section of this submission considered the issues relating to market power and access to network services in a general sense, including as they apply *before* agreements are negotiated. However, the exposure of a Network Service Provider to the market power of Metering Coordinators would be greater *after* the NSP had undertaken sunk investments or decisions to defer investment, based on a solution reliant on an agreement with a Metering Coordinator. As noted previously by ENA, commercial decisions by DNSPs will rely on being able to manage the risks to the continuity and commercial terms of metering services should the Metering Coordinator 'churn'.

The critical concern for Networks considering commercial contracting is that the regime would permit the contractual rights of Network Service Providers under agreements with Metering Coordinators to be violated at the time of churn. This unpredictability of service continuity is increased by the narrow or undefined rights to services in the Minimum Service Specification and Shared Market Protocol.

Based on information in the AEMC rule change, an NSP would not have certainty, especially after churn of the Metering Coordinator or meter asset, that:

- » The meter asset will be capable of providing the service in the same format [as the Minimum Service Specification is narrow; it excludes network services as secondary services; and performance levels are yet to be defined];

- » A new Metering Coordinator would be willing to provide the same service [as only Scheduled Meter Reads must be provided by the Metering Coordinator in the current Regime]; and
- » A Metering Coordinator would not increase the cost of the service, aware of the sunk cost exposure of a network customer or its bypass cost [as the AEMC has to date not proposed any light handed economic regulation of the Metering Coordinator function].

The Farrier Swier report identifies the potential for a '**hold out**' power to be provided to the Metering Coordinator by the current proposal. This would occur where a Metering Coordinator is appointed to locations where a Network Service Provider has a pre-existing contract with the incumbent Metering Coordinator for network services and the 'new' Metering Coordinator has no agreement in place with the DNSP to support continuation of supply of these services. Farrier Swier note that this could result in:

- » The new Metering Coordinator not providing the required network services to enable provision of a network solution; or
- » The new Metering Coordinator using its market power to require payment for network services at well above the efficient cost.

The Farrier Swier report notes that this hold out risk potentially creates an unmanageable commercial risk for DNSPs²⁶. The consequences could be that the network-side investment is economically stranded creating cost and operational risks to networks and their customers.

In considering this issue, the AEMC in the draft determination considers that the market power and continuity of service issues may be resolved/moderated by "framework agreements". The Draft Determination indicates that framework agreements:

- » could provide certainty of the continuity of the commercial terms including price (ie. not just continuity of services) after Metering Coordinator churn;
- » that the AEMC considered such framework agreements were "common in overseas markets"; and
- » that a Network Service Provider could establish such agreements with potential Metering Coordinators which churn into their service area.

²⁵ Farrier Swier Consulting, op.cit, p. Section3 and 5

²⁶ Ibid, Section 6

As discussed below, these statements in the AEMC Draft Determination appear demonstrably incorrect based on evidence currently available.

The AEMC Draft Determination proposes one other alternative to achieve commercial contracting by DNSPs. It suggests that the DNSP could seek to avoid taking such exposure to market power risks by instead contracting with a Demand Side Participation (DSP) aggregator which would be the counterparty with the Metering Coordinator. The ENA is unaware of any potential DSP aggregator which considers the market power risks are manageable. By contrast, the AEMC received evidence at its Metering Forum that potential DSP aggregators consider significant potential for market power to be exploited, effectively resulting in “the customer paying twice for the same asset” and recommending some form of access regulation.

The current NER allows a metering data provider to provide additional or enhanced services to the LNSP at incremental cost. The proposed NER remove this clause and enable charging by a monopoly from the incremental costs of providing the service up to the bypass cost. The proposed NER may lead to additional costs for network or demand response services compared to the current rule which does not necessarily further the NEO.

Framework agreements

In the draft determination, the AEMC defines ‘framework agreements’ as “an agreement that sets out the price and non-price terms and conditions of access that will apply when a DNSP deals with a particular metering coordinator at any site in its network. These agreements are common in overseas markets”²⁷

Neither ENA nor Farrier Swier have been successful in identifying framework agreements as envisaged by the AEMC. Neither Farrier Swier, the ENA or AEMC staff in our discussions have identified any example of such multilateral framework agreements being used to provide commercial certainty of “price and non-price terms” to a pre-existing customer of metering services at the location.

It is understood the AEMC based the commentary on an understanding of New Zealand and UK markets.

Regarding the New Zealand market, Farrier Swier notes:

“The New Zealand model for competitive decisions about metering services is highly decentralised and relies heavily on voluntary agreements, with no

industry specific economic regulation... We ... understand that competition in the market for advanced metering services is focused upon competition for long term contracts with retailers...

Further we understand that there is little evidence of contracts for network services in the New Zealand market.

Farrier Swier conclude that “... there seems to be little relevant learning about framework agreements so far from the New Zealand experience.”²⁸

Regarding Great Britain, Farrier Swier concludes that:

*“The ENA was advised, and we have confirmed this point, that there is no need for framework agreements between network businesses and meter owners in the Great Britain metering arrangements.”*²⁹

Farrier Swier notes that Great Britain has adopted a centralized and regulated approach to the metering market and meter data access market, incorporating:

- » The Smart Energy Code (SEC): a multi-party agreement which defines the rights and obligations of energy suppliers, network operators and other relevant parties involved in end to end management of smart metering in Great Britain;
- » The Smart Energy Code Company Limited (SECCo): established to facilitate the operation of the Smart Energy Code;
- » All authorised parties (suppliers, network operators and certain other third parties) can access smart meters via a single recently established Data Communications Company.

In the Great Britain context, framework agreements are an agreement by which relevant parties and SECCo agree to give effect to and be bound by the SEC.³⁰

ENA considers that theoretically, it is possible framework agreements may operate to support initial delivery of service, if parties are able to negotiate workable terms and conditions that address the interests of both parties.³¹ However, such agreements are unlikely to extend to addressing the hold out risk identified earlier, whereby an

²⁷ AEMC draft determination, op.cit, p.71

²⁸ Farrier Swier Consulting, op. cit. Section 7.3.1 and Appendix D

²⁹ Farrier Swier Consulting, op cit. p.59

³⁰ Ibid, Section 7.3.2 and Appendix E

³¹ Farrier Swier’s report seeks to identify potential approaches to develop Framework Agreements for these more limited purposes

uncontracted Metering Coordinator is appointed to connection points without any obligation (or, possibly, ability) to continue to provide the network services previously supplied by another Metering Coordinator.

Review after three years

The AEMC concludes that regulation of access to metering services is not appropriate at the commencement of the market, but recommends that the state of competition in the metering services should be reviewed three years after the commencement of the new Chapter 7 of the NER, once the market has had time to develop³².

In reviewing this option, Farrier Swier notes:

We consider there is high probability that it will be too late to take regulatory action ex post if, over the next three to four years:

- *The detriments from any significant market power and incentive problems become embedded in long term network service agreements; and*
- *Advanced meter rollouts are well underway, that are not optimally efficient (in the long term interests of consumers)*

The form of any future regulation that might result from the review is not clear...In our experience, the threat of regulation is a poor tool to influence behavior unless it is credible, and the regulatory framework is in place to enable swift implementation

Therefore we consider that the proposed three year review and implied threat of regulation (where the form of that regulation is yet to be defined) are unlikely to be effective in addressing any actual competition or incentive problems that may emerge.³³

ENA endorses the conclusions of Farrier Swier in this regard. Instead, it is essential that the AEMC establishes fundamental design features at the outset of any new metering framework which provides appropriate mitigation of market power risk. Farrier Swier address a number of options for light-handed regulation, as summarised below.

Light handed regulation

The assessment undertaken by Farrier Swier on market power, continuity of services, framework agreements and

early review of market operation confirms the view of the ENA that light handed regulation will be required to support delivery of metering services, including network services, within the contestable market, in the long term interests of consumers.

ENA also sought assessment by Farrier Swier of viable forms of light handed regulation, which were included as Sections 5-7 of the Farrier Swier report.

ENA considers that the AEMC should consider the regulatory options to support operation of the competitive market, whilst providing support for metering services delivery in the long term interests of consumers. ENA considers that the approach outlined would represent a balanced and proportionate mitigation of market power risks present in the current Draft Rule.

General Measures of Light Handed Regulation

In this section, ENA provides a general framework for light handed regulation, based primarily on the analysis in the attached report from Farrier Swier:

1. **Establish clear dispute resolution procedures in the National Electricity Rules for access seekers to Metering Coordinator Services; or develop constrained rights for DNSPs to seek directions -** Establish dispute resolution procedures as recommended in the South Australian Power Networks Submission. Alternatively, develop the concept outlined by Farrier Swier which provides for a regulation which would create a constrained right for DNSPs to seek directions from an agreed decision maker, that promotes a more balanced commercial negotiation. Directions would be binding on the Metering Coordinator.
2. **Explore guidance forums -** Explore the concept of a forum to enable actual issues encountered in negotiation of access to Metering Coordinator services to be objectively assessed.
3. **Create a credible fall back regulatory mechanism –** The threat of regulation is ineffective unless it is credible and capable of swift implementation. The AEMC should create the ability to extend, by an administrative act a pre-defined negotiate/arbitrate regime to apply to Metering Coordinators and access seekers including DNSPs involved in negotiating for network services. This extension must be capable of easy implementation, i.e. by an administrative act, and not by a Rule change.
4. **Undertake a Readiness Review –** Before market start, governance arrangements and resources should be allocated to assess: a) registration and readiness of multiple Metering Coordinators; b) readiness of systems and processes; satisfactory negotiation of commercial

³² AEMC draft determination, op. cit., p. 276

³³ Farrier Swier Consulting, op cit. p.31

agreements for network services; and the need to trigger the credible Negotiate and Arbitrate regime to.

5. **Establish a clear deferral mechanism in the National Electricity Rules** – This deferral mechanism should ensure COAG Energy Council can defer competitive metering market start date if the readiness review warrants.
6. **Set objectives to promote cooperative behavior** (eg. notification; consultation; fair and reasonable terms; negotiate in good faith; dispute resolution); and
7. **Establish a requirement for the Retailer to notify the DNSP when it has selected its preferred Metering Coordinator(s).**

These measures would assist in mitigating risks during the initial negotiation of metering services between Metering Coordinators and access seekers. It would not be sufficient to address the “Hold Out Risk”, which is the subject of a separate proposal below.

Additional Measures to address “Hold Out” Risk

The section below considers mechanisms that could mitigate the material risks to continuity of network services, particularly after churn:

- » **Option 1: Regulate Metering Coordinator appointment:**
Under this Option, Farrier Swier propose that the appointment of a Metering Coordinator by the retailer could be subject to NSP consent, to ensure availability and reasonable cost of on-going network services in the long term interest of consumers; OR
- » **Option 2: Regulate the process for making a network service agreement:** Farrier Swier assess a number of variations of this option, preferring an approach by which a regulation would specify that a Retailer could not appoint a Metering Coordinator that does not agree to the novation or assignment of the existing contractual obligations of an incumbent Metering Coordinator.

The ENA considers that such a mechanism is essential to address the material “hold out” risks which are demonstrably not addressed by the AEMCs proposed measure of voluntary, multi-lateral framework agreements.

The ENA considers Option 2c to be the preferable solution as it provides no more, and no less, than the continuation of the pre-existing contractual rights of a Network Service Provider after Metering Coordinator churn. This is, after all, the apparent policy intention of the Framework Agreements proposed by the AEMC; which the AEMC Draft Determination contemplates being voluntarily adopted by Metering Coordinator market participants to bind

themselves to provide equivalent commercial certainty in price and non-price terms. Given this, Option 2 represents no material increase in the barriers to entry for new market participants, compared to the AEMC’s intended outcome.

The ENA is concerned to ensure a fit-for-purpose regulatory solution and notes Farrier Swier’s observation that concerns could be raised by potential new entrant Metering Coordinators if there was a requirement to automatically assign an agreement entered into between a Network Service Provider and an affiliated Metering Coordinator. As Farrier Swier note, these scenarios may require access to dispute resolution procedures to put any concern of barriers to entry for Metering Coordinators beyond doubt.

The Farrier Swier report includes substantial detail and assessment of these options. As the Farrier Swier report is attached at Appendix B, the analysis and detail is not repeated in this submission.

ENA recommendations

General Measures of light handed regulation should be introduced to support access to metering services including:

- » Establish a clear dispute resolution procedures in the National Electricity Rules for access seekers to Metering Coordinator Services; or develop constrained rights for DNSPs to seek directions
- » Explore guidance forums
- » Create a credible fall back regulatory mechanism
- » Undertake a Readiness Review before market start.
- » Establish a clear deferral mechanism in the National Electricity Rules
- » Set objectives to promote cooperative behavior
- » Establish a requirement for retailer to notify the DNSPs when it has selected its preferred Metering Coordinator(s);

Additionally, specific measures should be introduced to address the potential for “Hold Out Risk” once investments are sunk. This should be effected through a regulation specifying that a Retailer cannot appoint a Metering Coordinator that does not agree to the assignment of the existing contractual agreements with third parties (including DNSPs) of the relevant incumbent Metering Coordinator.

NETWORK DEVICE

In the Draft Determination the AEMC notes the concerns previously raised by NSPs about the lack of certainty for NSPs obtaining access to services provided by a Metering Coordinator and indicates that in response to this concern, the AEMC has included a new provision entitling LNSPs to install their own network devices at or adjacent to the Metering Coordinators metering installation (i.e. new *clause 7.8.6*).

This is intended (among other things) to provide NSPs with a credible threat of "by passing" the Metering Coordinator's services, if the Metering Coordinator will not agree to terms with the DNSP³⁴.

ENA welcomes the recognition by the AEMC of potential difficulties for NSPs obtaining access to services provided by Metering Coordinators and the inclusion by the AEMC of the provisions to enable networks to install or retain their own devices to assist in management of their network responsibilities and afford some balance to market power of Metering Coordinators in potential negotiation of access to services.

While the inclusion of this clause is welcome, it seems to ENA that it will not really address the service access problems raised by NSPs. The ENA notes that the restrictions that are placed on LNSP use of network devices under proposed *clause 7.8.6(c)* limit the services which can be supported. Under this clause, an LNSP must **not**:

- 1) use a network device except in connection with the "operation or monitoring of its network"; and
- 2) (without limiting (1) above) use the device to reconnect or disconnect a metering installation via remote access.

One of the most important services which an LNSP needs access to (via either the Metering Coordinators metering installation or, failing this, from its own network device) is precisely the ability to remotely disconnect or interrupt the whole or part of the load supplied to premises. This is vitally important to enable an LNSP to:

- » ensure it can comply efficiently with its de-energisation and supply interruption responsibilities under the NERL and NERR (as outlined above);
- » ensure it is able to comply with its network, customer connection and customer installation technical and safety obligations under jurisdictional legislation; and

- » have access to reliable load control arrangements, to enable it to have options to manage and defer network investment and offer load (and time of use) differentiating network tariffs.

So if NSPs are unable to use their network devices for these purposes, then the main apparent purpose of the AEMC allowing them to have a network device in the first place (i.e. to "by-pass" the Metering Coordinator, if terms can't be agreed) is frustrated.

The AEMC has expressed the view that the above prohibition in proposed *clause 7.8.6* should not prevent an LNSP from using a network device for "load control" for (i.e. remotely disconnecting) some load within a customer's premises. However:

- » it is not clear that this is correct. It seems that any remote disconnection of load at a customer's premises would potentially breach proposed *clause 7.8.6(c)(1)* and (2); and
- » in any event, it doesn't allow the LNSP to "control" the whole of the load at premises (i.e. by interrupting all of it by remote disconnection and reconnection) at the premises connection point.

Hence, clause 7.8.6 in its current form will be of limited, if any, real use to LNSPs as a viable means of ensuring they are able to reliably have access to controlled load services at customer premises.

ENA recommendations

ENA recommends the definition of "Network Device" be amended as follows (amendments are marked up):

"network device

An item of apparatus or equipment associated with the provision or the monitoring of *network services* which may include *switching devices, measurement, protection* and control equipment and which may be housed within a facility that was previously used by the relevant *Local Network Service Provider* as a *metering installation* or on a new meter panel housed within the *metering installation*."

³⁴ Ibid, section 4.8.4 and relevant parts of Annexure D

FINALISATION AND IMPLEMENTATION

ENA remains concerned at the inadequate time for consideration by AEMC of stakeholder feedback between draft determination and final determination.

With the rule change process to expand competition in metering and related services, the AEMC is undertaking fundamental changes to the structure and operation of the system. The draft determination proposes to replace the current regulated framework which includes:

- » Regulatory oversight of efficient metering cost
- » Clearly defined roles and responsibilities
- » Operational procedures for managing network and customer safety
- » Metering assets integrated in networks with system wide benefits

with a proposed framework which is still under construction in subsequent processes and requires critical drafting review to ensure that the draft rule accurately meets the policy intention without unforeseen consequences.

In addition, ENA is concerned that the current timetable for implementation is too compressed, particularly given:

- » the significant proposed rule changes including in operational roles and legal responsibility with service and safety implications;
- » significant features of the framework remain undefined including: the Service Specification and Performance Levels, Ring-fencing obligations, and Shared Market Protocol.
- » The significant system and business process change requirements which will be required to support: transitional arrangements for Metering Coordinators, new and replacement policies and the Shared Market Protocol.

Even if the AEMC addresses the clarification issues related to policy guidance and rules highlighted above by the ENA, the timeframes remain insufficient. Only 6 weeks is currently provided for stakeholder consultation on the proposed rule changes. Given the key drafting issues identified in this submission which require urgent attention and resolution, ENA considers that further time is required for engagement, consultation and resolution of identified problems before AEMC final determination.

In addition, AEMC identifies a wide range of procedures requiring update by AEMO, with delivery scheduled for 1 April 2016, these including:

- » Service level procedures for metering providers and metering data providers;
- » MSATS
- » Metrology procedure
- » Meter churn procedure
- » B2B procedure
- » Procedures relating to the minimum services specification, and
- » Emergency priority procedures,

Successful delivery of such wide ranging revisions within a tight timeframe encompasses significant risk.

ENA recommendations

ENA recommends that the timing of the AEMC final determination on expanding competition in metering and related services is revised and delayed to enable adequate review of the critical and inter-connected issues identified with the current drafted rules.

ENA recommends that subsequent (dependent) procedure and process development delivery timeframes are revised in line with the revised final determination delivery date to ensure delivery of high quality, fit for purpose systems and procedures.

Before the commencement date is locked down in the Final Determination of the NER/NERR there should be a realistic, agreed industry plan which recognises the interdependencies and deliverables from a range of stakeholders including the safety regulators, the jurisdictions and the Essential Services Commission to ensure that the date is feasible.

OTHER ISSUES

In addition to the five key items of concern identified in the previous section, ENA also raises the following issues:

ACCESS TO SERVICES IN EMERGENCIES

Clause 7.8.5 of the Draft NER Rule, provides that a Metering Coordinator must ensure that access to a metering installation, services provided by it and energy data held in it are managed in accordance with "**emergency priority procedures**" established by AEMO in the event of an emergency condition.

The Draft Determination explains that these requirements are intended to address situations where it might not be possible for the Metering Coordinator, metering provider or metering data provider to process all service commands in line with its performance requirements during emergency conditions. This is intended to provide DNSPs with greater certainty that they can rely on the services they have negotiated with the Metering Coordinator when managing a network security issue during an "**emergency condition**".

Proposed clause 7.8.5(b) requires AEMO to establish the "emergency priority procedures" setting out the criteria for determining when an emergency condition is present and which metering installations are affected and which services the Metering Coordinator may be required to prioritise at the request of a LNSP. The LNSP must comply with the procedures when issuing any service prioritisation request to a Metering Coordinator under the procedures.

However, LNSPs have extensive obligations relating to load shedding and system security requirements under NER chapter 4 and Part 8 of the NEL, which need to have clear priority when considering emergency procedures.

ENA recommendation

To avoid uncertainty and inconsistency with the load shedding and system security requirements of NER chapter 4 and Part 8 of the NEL, the proposed new clause 7.8.5 should make clear that:

- a) Any emergency priority procedures developed by AEMO under section 7.8.5(b) must be consistent with and made in accordance with any procedures developed under the load shedding regime set out in Part 8 of the National Electricity Law and section 4.3.2(h) of the NER.
- b) The Metering Coordinator's and LNSP's obligations under clause 7.8.5 must also be subject to the load shedding and system security requirements of chapter 4.

RING FENCING

The AEMC's position under the Draft Determination is that if a DNSP takes on the role of Metering Coordinator, metering provider and/or metering data provider and performs these roles in a competitive market, then the DNSP should be subject to ring-fencing for those businesses. This is intended to limit the ability of the DNSP to:

- a) cross-subsidise the contestable services carried out by these businesses from its regulated services; and/or
- b) provide these businesses with access to commercially sensitive information that is not available to others in the market (such as the likely timing of meter replacement, where the meter is located and conditions at the customer's site and applications for new connections that may require a meter to be installed).

However, the AEMC notes that the AER already has power to impose extensive ring fencing requirements upon DNSPs, via the AER's power to adopt ring fencing guidelines (under clause 6.17.2), which DNSPs must then comply with (under NER clause 6.17.1).

So the only change the AEMC proposes is to make it mandatory (rather than discretionary) for the AER to adopt ring fencing guidelines under clause 6.17.2(a), by replacing the word "may" with "must" in that clause.

While the AEMC does not propose any amendments to the type of ring fencing requirements that can be included in the AER's guidelines, the AEMC does comment that the AER may wish to consider the following when making guidelines:

- » The types of behaviour that DNSPs could engage in that would operate to the detriment of competition in the market.
- » The extent to which existing NER provisions, such as cost allocation requirements, achieve some of the objectives of ring-fencing and therefore reduce the need for additional ring-fencing requirements.
- » The costs of implementing measures and the effectiveness of those measures.

ENA welcomes the acknowledgement by the AEMC of the difference in potential application of ring-fencing requirements applying in the case of a DNSP:

- » Deciding to operate in the competitive segment of the market and compete with other Metering Coordinators, metering providers and/or metering data providers; and
- » Deciding just to provide direct control metering services as the initial Metering Coordinator for existing type 5 and type 6 metering installations and not operate in the competitive segment of the market³⁵.

ENA considers that, in considering ring fencing issues, AEMC and AER should acknowledge the distinction between concerns regarding unfair competition (operation of potential cross subsidies or access to information unavailable to others) and operation of competitive advantage in the market to ensure that their approach does not inadvertently disadvantage customers by unnecessary limitation of choice or increase in cost.

ENA considers that AEMC final determination should provide direction for the AER that, in the following circumstances, ring fencing requirements will not apply:

- » Where DNSPs operate as a 'deemed' Metering Coordinator for existing type 5 and type 6 metering installations and do not operate in the competitive segment of the metering market;
- » Where DNSPs are required to provide type 7 metering services³⁶; and :
- » Where Transmission Network Service Providers (TNSP), as the LNSP, will be required to make an offer to act as the Metering Coordinator for transmission network connection points and interconnections³⁷

Further, ENA considers that it is not necessary or efficient to mandate that the AER establish these guidelines when

the AER already has full discretion to do so nor for the AER to seek to apply additional ring fencing measures above the already strong financial and related party aspects of the DNSP regulatory framework This discretion allows the AER the flexibility to balance ring fencing with the broad range of other regulatory powers at its disposal for the regulation of distribution services.

ENA also notes the potential for retailers to benefit from operation of Metering Coordinator businesses and believes that the AEMC should explicitly restrict the flow of commercially sensitive customer information obtained by retailers, from being accessed by their own related Metering Coordinator businesses.

Unless this is in place, the retailer's own related Metering Coordinator business would obtain a potentially significant competitive advantage over the competing Metering Coordinator businesses of other retailers, DNSPs as well as independent / third party Metering Coordinators, meter providers and data agents.

ENA recommendations

The AEMC final determination should provide direction for the AER that, in the following circumstances, ring fencing requirements will not apply:

- » Where DNSPs operate as a 'deemed' Metering Coordinator for existing type 5 and type 6 metering installations and do not operate in the competitive segment of the metering market;
- » Where DNSPs are required to provide type 7 metering services³⁸; and :
- » Where Transmission Network Service Providers (TNSP), as the LNSP, will be required to make an offer to act as the Metering Coordinator for transmission network connection points and interconnections³⁹

AEMC should retain the clause 6.17.2 (a) unchanged (that is delete proposal to replace 'may' with 'must' in clause 6.17.2 (a)).

AEMC should include explicit restriction on the flow of commercially sensitive customer information to a retailer from being accessed by their Metering Coordinator business.

³⁵ AEMC, *op. cit*, p.237

³⁶ AEMC, *ibid*, pp. 101-102

³⁷ AEMC, *ibid*, p. 103

³⁸ AEMC, *ibid*, pp. 101-102

³⁹ AEMC, *ibid*, p. 103

ACCESS TO METERING DATA

In order for DNSPs and TNSPs to meet their statutory requirements, they require reliable and timely access to metering data, including for billing purposes.

The AEMC notes in its draft determination that the key amendments relating to access to energy and metering data are:

- » Clause 7.15.5(a) of the NER now refers to "persons who may be granted access to energy data or may receive metering data". This compares with the current wording of clause 7.7(a) of the NER, which refers to "persons entitled to access energy data or receive metering data"(emphasis added). This change is designed to clarify that the listed people do not have an absolute entitlement to access or receive this data. For example, as discussed below, in some cases these parties will need to negotiate access with the Metering Coordinator and agree on a price for access.
- » Clause 7.15.5(b) provides that remote access to energy data by the parties listed in clause 7.15.5(a) must only be provided where passwords in accordance have been allocated in accordance with the NER, otherwise access shall be to metering data from the metering data services database or the metering database
- » Clause 7.15.5(d) provides that the Metering Data Provider (or AEMO, where AEMO is responsible for the provision of metering data services), must ensure that access is provided to metering data from the metering data services database only to the parties referred to in clauses 7.15.5(a)(1) to (6) and (a)(11). . . .⁴⁰

The draft determination notes that parties will only have an automatic entitlement to access metering data from the metering services database and that if they wish to receive other metering data directly from the metering data provider, they will need to negotiate access on commercial terms.⁴¹

The rule change does not state that any service MUST be provided by the Metering Coordinator, instead stating that all services will be subject to commercial negotiation⁴². ENA notes that service availability will be impacted by the issues relating to network access to services considered earlier in this submission.

⁴⁰ Ibid, p.165

⁴¹ Ibid, pp.165-166

⁴² Ibid, p.169

ENA notes that one of the key drivers or values from rollout of advanced meters was identified by AEMC as being enabling network tariff reform⁴³.

The draft determination and draft rule do not provide confidence to the ENA that DNSPs and TNSPs will continue to receive the data that they require in order to perform their statutory roles.

In addition, ENA considers that provisions potentially limiting access to data or requiring commercial negotiation of access to data by NSPs should be read in the context of obligations upon networks to provide free access by customers (and their authorised agents) to their energy consumption data⁴⁴. Networks should not be required to pay for access to energy consumption data that they are obligated to pass on to customers free of charge.

ENA recommendation

The draft rule and associated procedures should ensure free access by network businesses to metering data essential to fulfilling their regulatory and billing obligations.

CYBER SECURITY

The AEMC draft determination does not address the risks to cybersecurity inherent in the growing complexity of the energy system and the increasing number of parties and technological solutions that will be attached to the system.

The draft rule includes security factors relating to the metering installation and energy data, requiring password and security controls in some instances (clause 7.15.4 c) but does not address issues of cyber security end to end through market systems, Metering Coordinator systems, meter provider or meter data provider systems.

The remote connection/disconnection functions enabled by the advanced meters (and other technology applications including internet services) provide significantly greater risk to customer supply of electricity.

A successful system penetration with malicious intent could result in disconnection of multiple customers and result in mass extended outages. In a worst case scenario system

⁴³ Ibid, p. 21

⁴⁴ Ibid, pp. 164-165

recovery may not be possible remotely and could require extensive site visits and replacement of many meters.

The Victorian AMI Rollout had a number of governance processes in place including the AMI Order in Council, the Victorian Functional Specification, AMI Project Office and Industry Steering Committee. The AMI Functional Specification addressed this issue in clause 3.12. The Victorian Order in Council had a specific requirement on the Distributors to establish and maintain a risk management strategy and risk register, which among other issues, addressed the end to end testing of the AMI systems for defence against cyber attacks, and this was risk management was overseen by the governance processes.

ENA considers that the cybersecurity risk inherent in the proposed rule change is of such a significant magnitude that it warrants rule provisions to explicitly require AEMO to put in place processes to audit, test and enforce cyber security with appropriate enforcement powers. This process should draw upon experience from the Victorian rollout of smart meters. There may be benefit in considering the inclusion of ISO 27001 in the proposed NER and accreditation requirements.

ENA Recommendation

AEMC final determination should consider rule provisions to require AEMO to put in place processes to audit, test and enforce cyber security with appropriate enforcement powers.

PRUDENTIAL REQUIREMENTS ON METERING CORDINATORS

The AEMC draft determination requires that to be eligible for registration as a Metering coordinator, an applicant must:

- » not be a Market Customer;
- » satisfy AEMO that it is complying with and will comply with the NER and the procedures authorised under the NER;
- » have appropriate processes in place to determine that a person seeking access to a service listed in minimum service specification is an "access party" in respect of that service;
- » have an appropriate security control management strategy and associated infrastructure and communications systems for the purposes of preventing unauthorised access to metering installations, services provided by metering installations and energy data held in metering installations;

- » have insurance as considered appropriate by AEMO; and
- » pay the prescribed fee.⁴⁵

ENA considers that the provisions covering eligibility as a Metering Coordinator should be enhanced to ensure that Metering Coordinator prudential requirements are adequate for the organisation to cover high consequence events such as mass meter recalls, damages associated with a cyber incident mentioned above, and costs associated with network incidents caused by misuse of load control, etc.

ENA recommendation

AEMC should expand guidance to AEMO on prudential requirements for Metering Coordinators to ensure their capability to manage high consequence events, including cybersecurity issues.

⁴⁵ Ibid, p.113

METER TYPE

AEMC has classified the advanced meter meeting the minimum functionality specification as a Type 4 meter. If the meter provider/Metering Coordinator has permission to install an advanced meter without remote communications connected (eg in a remote area where remote communications are not available) AEMC notes that this will be a Type 4A meter.

It is not clear how these advanced meters will be distinguished in metering systems, AEMO systems and B2B transactions from current type 4 meters which do not meet the minimum functionality specification.

This will lead to significant complexity and ambiguity in identification of the capability of a significant and growing population of meters in the electricity market systems.

ENA Recommendation

The smart meter meeting the minimum functionality specification should be identified by a unique meter type to enable it to be distinguished from current type 4 meters. This could be achieved by making the minimum functionality advanced meter without communications enabled a type 4A meter, the advanced meter with communications a type 4B.

REMOTE READING OF NETWORK METERS

Current metering rules limit the ability of NSPs to remotely read their interval meters. A type 5 or type 6 metering installation may be altered to enable remote reading only in a situation where operational difficulties make remote reading reasonably required.

ENA is disappointed to note the continuation of provisions in the draft rule maintaining these limitations to situations where the metering installation is:

1. *At a site where access is difficult; or*
2. *On a remote rural property⁴⁶*

This limitation continues to block distribution businesses and their customers from receiving full value in services from investments already made in interval meters, for

⁴⁶ AEMC, Draft Electricity Amendment (Expanding competition in metering and related services) Rule 2015, Clause 7.8.9 b-d, pp. 27-28

example by Ergon Energy in rural and regional Queensland. As energy consumers have already paid for these installations, they should be able to receive the improvement in services enabled by the technology installed.

ENA recommendation

AEMC should remove the restriction upon DNSPs being able to upgrade interval meters already installed to enable remote reading.

COOPERATION BETWEEN METERING COORDINATOR AND DISTRIBUTOR

A new clause 91A has been included in the Draft NERR, the effect of which is to require a distributor to (among other things) effect a supply interruption and provide such assistance as the Metering Coordinator may reasonably require, to enable the Metering Coordinator to install, monitor, repair or replace a meter.

The review undertaken for ENA has identified some potential legal difficulties with including such a provision in the NERR. More specifically:

- » We understand that installing a meter will generally require close interaction with the distributor's own equipment and wiring, which forms part of the distributor's infrastructure. For example, installing a meter will often require a supply interruption (involving the operation of a distributor's equipment) as well as the disconnection or reconnection of the metering equipment to the distributor's wires, equipment and infrastructure.
- » The connection, disconnection and reconnection of customer installations and metering installations to a distributor's equipment and infrastructure is an area the subject of separate, detailed technical and safety regulation, under separate legislation operating in each jurisdiction. More specifically, in each Jurisdiction, distributors are given:
 - statutory rights and obligations relating to technical and safety requirements for the connection of customer installations and metering installations to their networks; and
 - statutory protections which make it an offence to interfere with a distributor's electricity equipment and infrastructure.

As noted earlier in this submission, the interactions of the proposed rule change with jurisdictional safety frameworks

will require careful consideration. For example, under the NSW *Electricity Supply (Safety and Network Management) Regulation 2014*, the NSW DNSPs must, as part of their Electricity Network Safety Management System, address the safety impacts of a customer's installation on its network including the connection, disconnection and reconnection of customer installations and metering installations.

ENA Recommendation

The rights and obligations of distributors and Metering Coordinators under proposed new NERR clause 91A, need to be expressly subject to compliance with all relevant jurisdictionally based technical and safety requirements.

OPT OUT PROVISIONS

The Draft Determination states that small customers will have the right to opt out of having their existing meters replaced with a new type 4 meter where a retailer is proposes to replace it under a "new meter deployment".

Proposed new clause 59A in the Draft NERR Rule seeks to give effect to this by providing that a retailer who seeks to undertake a "new meter deployment" must first permit a small customer affected by the deployment to "opt out" of having its meter replaced, in accordance with a notification process set out clause 59A.

'New Meter Deployment' is effectively defined to mean the replacement of existing meters by a retailer, **other than** where the replacement is:

- » at the request of the customer;
- » a "**maintenance replacement**"; or
- » as a result of a metering installation malfunction.

The effect of this proposed definition and clause 59A (when read together) is that the customer's right to "opt out" will not apply where the replacement can be described as a "maintenance replacement".

There is a potential difficulty with this (from a customer's and a DNSP's perspective), in that the currently proposed definition of "*maintenance replacement*", does not operate with sufficient certainty to ensure that a customer's right to 'opt out' is not potentially undermined. More specifically:

- » 'Maintenance Replacement' is effectively defined as the replacement of an existing meter, based on the results of "sample testing" of a meter population carried out in accordance with Chapter 7 of the NER:

- which indicates that it is necessary or appropriate, in accordance with good electricity industry practice, to replace the meter; and
 - the details of which have been provided to the retailer.
- » The difficulty with this is that Chapter 7, as currently drafted (and contrary to the impression created by the commentary in paragraph C2.2.3 of the Draft Determination), does not in fact contain any clear provisions governing sample testing of a meter populations.⁴⁷

ENA recommendation

If "sample testing" is going to be used as the basis for determining what will be considered a "maintenance replacement" and thereby excluded from small customers' rights to opt out of having their existing meters replaced, then much clearer provisions need to be included in the NERR. NER Chapter 7 itself does not refer to sample testing as explicitly as implied in the NERR. ENA recommend that the AEMC improve the drafting in the NERR to use terms utilised in the NER Chapter 7. Whilst the LNSP is in the metering Coordinator role they need to be able to meet the requirements against their meter asset management plan for sample testing and requirements under the National Measurement Act.

APPLICATION TO VICTORIA

As is acknowledged by the AEMC in the draft determination, the relevance and application of the metering rule change provisions differs in Victoria due to the rollout of advanced meters under the Victorian Government AMI program.

Highest priority for the ENA and the Victorian distribution businesses are the following key issues:

- » Delivery of customer benefits enabled by investment in the AMI services;
- » Ensuring recovery of investment by Victorian distribution businesses, and

⁴⁷ Clause 7.6.4 deals briefly with retention of testing records and makes mention of "sample testing" records in this context, but otherwise no provisions governing sample testing are set out at all in chapter 7. The current metrology procedures established by AEMO contain some technical requirements relating to sample testing plans, but the operation of these is not at all clear from a legal perspective.

- » Safeguarding continuity of delivery of network benefits enabled by the AMI investment.

ENA is aware of and supports the combined submission by the Victorian network businesses to the AEMC draft determination covering the particular issues of concern to the jurisdiction which has almost completed their advanced meter rollout.

Consequently, this ENA submission will only address the cost recovery issue for Victorian ENA members identified within the ENA legal review.

Currently, Victorian DNSP cost recovery in relation to AMI services is regulated under:

- » The AMI Cost Recovery Order which covers:
 - the determination of DNSP charges for DNSP provision of AMI related services, up until 31 December 2015; and
 - the determination by the AER of exit fees payable to DNSPs (if a retailer takes over as responsible person) and a restoration fees (if the LNSP takes back that role), in accordance with provisions set out in the Order.
- » A transitional provision in clause 11.17.6 of the NER which effectively provides (among other things) that:
 - AMI metering services provided by DNSPs under the AMI Cost Recovery Order are not subject to regulation under AER distribution determinations under chapter 6 of the NER, until regulation of charges for these services under the AMI Cost Recovery Order ceases; and
 - any exit or restoration fees set out in the AMI Cost Recovery Order are to be regulated as alternative control services on the same basis as set out in the Cost Recovery Order.

This transitional provision currently expires on 1 January 2021.

The combined effect of the above regulatory instruments (as they currently apply), in terms of DNSP cost recovery, is that:

- » Cost recovery for DNSP provision of AMI services under the AMI Order in Council will cease on 31 December 2015, after which cost recovery for these services provided by DNSPs will be regulated by the AER under determinations made under NER chapter 6 (the AER currently proposes these services be regulated as alternative control services).
- » Exit fees payable to DNSPs: the AER will continue to determine these exit fees under the current AMI Cost Recovery Order, until the expiry of the above NER transitional provision on 1 January 2021, when they will be regulated by the AER under chapter 6.

In order for the Victorian distribution businesses to ensure they are able to sufficiently recover their costs associated with the investment they have made on the roll out of AMI services in accordance with the regulatory obligations imposed upon them in Victoria, it is essential that their cost recovery for these services is put beyond doubt.

ENA recommendation

Cost recovery for rollout of AMI investments in Victoria must be ensured.

LNSP METERING COORDINATORS - TRANSITIONAL ARRANGEMENTS

The Draft Determination states that as a transitional measure, LNSPs who are currently the responsible persons for existing type 5 or 6 metering installations will:

- » become the Metering Coordinator for these metering installations (upon commencement of the proposed changes to NER Chapter 7); and
- » continue in this role for a connection point until a new Metering Coordinating is appointed by the FRMP or the services provided by the LNSP cease to be classified by the AER as direct control services.

Transitional provisions to give effect to this are included in Draft NER clause 11.78.7. The effect of these provisions is that:

- At least 3 months prior to the effective date of commencement for the changes to Chapter 7, the LNSP for a type 5 or 6 installation must provide the FRMP with a standard set of terms and conditions to act as Metering Coordinator. These must comply with the requirements set out in clause 11.78.7.
- Unless the LNSP and FRMP agree on other terms prior to the effective date, then on and from that date the LNSP will be deemed appointed as Metering Coordinator by the FRMP on the LNSP's standard terms and conditions.
- Any such appointment or deemed appointment of the LNSP as Metering Coordinator will automatically terminate on the earlier of the LNSP's services for that metering installation ceasing to be classified as Direct Control Services by the AER or the appointment of another Metering Coordinator by the FRMP.

There appear to be the following practical difficulties with these transitional provisions, creating legal uncertainty for LNSPs (as well as FRMPs and customers):

- a) **Removal of DNSPs type 5 and 6 meters on termination:** this is not addressed. It should be clear that the FRMP must not to interfere with or remove the LNSPs meter without the LNSPs consent, if a new FRMP does not wish to engage the LNSP.
- b) **LNSPs right to terminate:** similarly, the issue of termination by the LNSP is not addressed. The LNSP should have clear rights to terminate for un-remedied defaults, particularly any un-remedied payment defaults or where the meter is being interfered with or damaged in any way.

We note that (under clause 11.78.7(f)) an LNSP is potentially free to include clauses to the above effect as additional terms in the standard terms and conditions offered to the FRMP. However, clause 11.78.7(f) expressly provides that any such additional terms must be consistent with clause 11.78.7(d), which effectively requires that any terms so included must not "prevent, hinder or otherwise impede" the FRMP from appointing another Metering Coordinator. To provide certainty, clause 11.78.7 should be amended to make it clear that reasonable additional clauses to the effect outlined above, will not be considered as "preventing, hindering or impeding" a change of Metering Coordinator.

Also, it is not clear what is intended to happen if the transitional appointment is terminated for any reason and the customer does not agree to a replacement type 4 meter being installed. For example, if the FRMP is replaced by a new FRMP (i.e. a new retailer) then it would seem that:

- 1) This must necessarily bring an end to the LNSP's transitional appointment as Metering Coordinator under the clause 11.78.7 - because the FRMP, the subject of the transitional arrangement, will cease to be the FRMP.
- 2) That transitional appointment does not carry across to the new FRMP. So, if the new FRMP does not wish to install a replacement type 4 meter (or the customer elects to "opt out" of any attempted type 4 meter deployment by the FRMP under the proposed Draft NERR changes), then the FRMP will then have to negotiate a new appointment of the LNSP (as a Metering Coordinator) for the existing type 5 or 6 meter under proposed new clause 7.6.
- 3) However, the LNSP is under no obligation to continue offering services as a Metering Coordinator for its existing type 5 or 6 meter and any replacement meter must be a type 4 meter (under Draft NER clause 7.8.3).

ENA notes that this creates a potential conundrum for the retailer when the LNSP has declined to continue to offer the service.

LNSPS ACCESS TO THEIR EQUIPMENT

The AEMC has proposed NER clause 7.15.2, setting out provisions for the Metering Coordinator to keep metering installations secure and to restrict access to them.

ENA notes that this provision as it is currently drafted could result in unintended restriction of access by networks to their equipment.

ENA recommendation

Given:

- a) the proximity that a metering installation necessarily has to LNSP operated equipment and LNSP wiring (to which the metering installation is connected);
- b) the likely proximity of the metering installation to LNSP network devices; and
- c) the LNSP's need to ensure it maintains access to its own equipment, wiring and network devices, to satisfactorily discharge its obligations under the NERL and under jurisdictional specific network safety and technical responsibilities,

clause 7.15.2 should include amendments to make it clear that the Metering Coordinator must ensure access is provided at all times to LNSPs in respect of any LNSP equipment, wiring or devices:

- i. to which the metering installation is connected; or
- ii. which is co-located within any facility within which the metering installation is housed or located.

COVERAGE OF TNSPS

ENA notes that the draft rule specifically identifies that the requirement to appoint a Metering Coordinator will also apply to transmission connection points. It further notes that the Financially Responsible Market Participant (FRMP) may request that the TNSP offer to act as the Metering Coordinator⁴⁸.

This effectively captures TNSPs within the rule change with full Metering Coordinator obligations, without consideration or investigation of the relevance of these obligations to the TNSP actions and responsibilities at these points in the electricity system.

ENA notes the following points, which indicate the need to review application of Metering Coordinator status to TNSPs in these circumstances:

- » Transmission Type 4 metering installations are typically associated with auxiliary supply arrangements at transmission substations and there is no operational requirement for remote disconnection or reconnection through the meter.
- » The relocation of the existing clause 7.2A to the new Part H clause 7.17 and the changes made to clause 7.17.1 will introduce a requirement for Transmission Network Service Providers (TNSPs) who are Metering Coordinators to use the B2B e-Hub for B2B Communications. There is currently no requirement for TNSPs to use the B2B e-Hub and they are effectively exempted from the requirements contained within the existing clause 7.2A.

These B2B requirements exist to support the efficient transfer of customers between retailers in the retail or distribution segment of the market and are not used in the transmission or wholesale market segment. The majority of TNSPs (those who are not also Distribution Network Service Providers) currently do not have B2B software and systems, which would need to be developed and add significant cost for complying with requirements that do not apply to the current operation of the wholesale market.
- » Clause 7.10.6(a) makes the Metering Coordinator responsible for ensuring that metering data is provided to AEMO for all trading intervals where the metering installation is capable of remote acquisition of metering data.

However, clause 7.5.1 makes AEMO responsible for the collection and processing of metering data, and delivery of processed data where the Metering Coordinator is a TNSP.

Further, clause 7.5.1 states AEMO must permit the Financially Responsible Market Participant (FRMP) to appoint the Metering Data Provider who will perform these data responsibilities. The TNSP who is engaged as the Metering Coordinator in these circumstances does not have any commercial or contractual arrangements with the FRMP engaged MDP.

- » Transmission metering configurations are located within transmission substations and are often required to be integrated with other primary and secondary devices. These devices are commonly used for other critical services which allow the TNSPs to operate the network. This raises certain issues when dealing with third party Metering Coordinators. Clause 7.8.6(b)(2) and 7.8.6(c)(2) of the draft rules requires Local Network Service Providers (LNSPs) and Metering Coordinators to not remove, damage or render inoperable network devices at or adjacent to metering installations. It is possible that interactions within the metering installation may impact parts of the transmission network which are not directly adjacent to the installation due to the high level of device integration within a transmission substation described above.
- » Due to the nature of transmission metering there will always be some requirement to connect to the transmission Connection Point within the substation. The draft rule will therefore necessitate interactions between Metering Coordinators and transmission businesses in order to fulfil its role. This impacts the following areas:
 - Personal Safety: Physical access into and the ability to conduct work in transmission substations needs to be limited to those with appropriate qualifications to help ensure the safety of all staff in substations.
 - System stability: As there is a direct link between metering installations and the transmission network it is very important that each metering installation design suits the substation configuration it is installed in.
 - Operational: Whilst performing the Metering Coordinator role there may be outages of high voltage equipment. These outages will have a direct impact on power flows through the transmission system and will need to be coordinated with the TNSP.
- » Currently metering assets for some TNSPs are included within the Regulatory Asset Base (RAB). Charging for

⁴⁸ AEMC, *ibid*, pp. 102-103

these assets and related metering services is done through the existing Transmission Use of Service (TUOS) pricing mechanisms. When dealing with third party Metering Coordinators who appoint their own Metering Providers either new metering assets need to be installed or existing metering assets need to be transferred out of the RAB. This would result in a shift of asset ownership and a portion of related metering service costs from the TNSP to an external party.

ENA Recommendations

TNSPs operating as 'Metering Coordinators' at transmission connection points must be differentiated from Metering Coordinators (not TNSPs) operating at other locations.

Transmission metering should be excluded from the proposed rule change, as competition is not intended or feasible to operate at this point in the electricity system.

LOAD MANAGEMENT

The AEMC draft determination acknowledges the need to maintain currently operating load management services and retention of load management devices, including the directives that Metering Coordinators are not able to damage or remove any network devices without network agreement.

The determination notes the issues relating to potential impacts of synchronised load switching but declines to address them as it considers that such load management related issues extend beyond metering and will be managed in the context of new energy products and services review by the COAG Energy Council⁴⁹

ENA remains concerned that this issue is generally widely recognised but no clear indication has been given on where and how any necessary remedial measures will be considered and put in place.

ENA considers that this remains a critical timing and coordination issue between processes underway.

ENA Recommendation

ENA considers that the AEMC should include a requirement in the determination and rule that Metering Coordinators shall only switch load in accordance with jurisdictional requirements and procedures to ensure network stability and maintain quality of supply to customers.

⁴⁹ AEMC, Draft Determination, op.cit. pp. 145-148

ENA submission to AEMC: Appendix A

Our ref: PLI\YHO\02 3003 2230
Partner: Peter Limbers
Direct line: +61 2 9258 6486
Email: peter.limbers@ashurst.com
Contact: Yun Ho, Lawyer
Direct line: +61 2 9258 6145
Email: yun.ho@ashurst.com

Ashurst Australia
Level 36, Grosvenor Place
225 George Street
Sydney NSW 2000
Australia

GPO Box 9938
Sydney NSW 2001
Australia

Tel +61 2 9258 6000
Fax +61 2 9258 6999
DX 388 Sydney
www.ashurst.com

22 May 2015

Susan Streeter
Director, Future Networks
Energy Networks Association
Level 1, 110 Giles Street
KINGSTON ACT 2604



Dear Susan

Review of AEMC Metering Contestability Rule Change

You have asked us to advise on the potential impact on Network Service Providers (**NSPs**) of the AEMC's recently released **Draft Determination** and **Draft Rule Changes** for each of the following:

- the National Electricity Amendment (Expanding Competition in Metering and Related Services) Rule 2015 (the **Draft NER Rule**); and
- the National Electricity Retail Amendment (Expanding Competition in Metering and Related Services) Rule 2015 (the **Draft NERR Rule**).

Set out below is our advice on:

- Some specific rule changes proposed by the AEMC which potentially exposing NSPs to increased risk and which they may not be in a position to effectively manage. In some instances (indicated below) we consider that the changes proposed by the AEMC may in fact exceed their legislative rule making power.
- Some other specific rule changes proposed by the AEMC which we suggest require some drafting changes to improve clarity of meaning and remove uncertainty around some of the new roles or responsibilities which NSPs (and others) are required to undertake under the Draft Rule Changes.

1. **DRAFT RULE CHANGES EXPOSING NSPS TO RISKS THEY MAY BE UNABLE TO EFFECTIVELY MANAGE**

Set out below is a summary of those of the AEMC's Draft Rule Changes which expose NSPs to increased risks which they may be unable to effectively manage, together with some suggested amendments we recommend the ENA seek from the AEMC to alleviate these risks. In **Appendix 1** attached to this advice, we set out our more detailed analysis of these changes and the risks they pose to NSPs.

AUSTRALIA BELGIUM CHINA FRANCE GERMANY HONG KONG SAR INDONESIA (ASSOCIATED OFFICE) ITALY JAPAN PAPUA NEW GUINEA
SAUDI ARABIA SINGAPORE SPAIN SWEDEN UNITED ARAB EMIRATES UNITED KINGDOM UNITED STATES OF AMERICA

Ashurst Australia (ABN 75 304 286 095) is a general partnership constituted under the laws of the Australian Capital Territory and is part of the Ashurst Group. The Ashurst Group has an office in each of the places listed above.
234906120.04

- (a) **LNSPs prevented from remotely disconnecting and reconnecting small customers:** the Draft NER Rule effectively prevents NSPs in their capacity as Local Network Service Providers (**LNSPs**) from remotely disconnecting or reconnecting premises themselves, requiring them to instead negotiate "access" to this service from the Metering Coordinator.

This presents the following problems:

- (i) It seems quite doubtful to us that the the AEMC has the legislative power to make such a change. This is because the National Energy Retail Law (**NERL**) places direct responsibility on distributors to supply, energise, de-energise and re-energise customers as a fundamental part of the "customer connection services" they must provide under the NERL. It seems doubtful that the AEMC's rule making powers under the National Electricity Law (**NEL**) or the NERL empower the AEMC to make rules for disconnecting customers which are inconsistent with and contrary to the express statutory requirements of the NERL.
- (ii) Even if these rule changes are legally valid (which, as indicated above, we consider to be doubtful) then these provisions potentially render distributors unable to perform, or unable to avoid breaching, their NERL and the National Energy Retail Rules (**NERR**) de-energisation, re-energisation and supply interruption obligations.

We therefore recommend NSPs seek amendments to the Draft NER Rule to entitle LNSPs to remotely disconnect and reconnect customers (see (b) below) and to the Draft NERR Rule, seeking that distributors be relieved from liability where premises are de-energised or re-energised by someone other than the distributor (or without the distributor's authorisation).

Also, Draft NERR Rule clause 106(A)(6) should be amended to make it clear that retailers should not themselves be entitled to directly de-energise and re-energise a customer's premises.

- (b) **Access to Metering Coordinator services and NSP use of network devices:** under Draft NER Rule clause 7.8.6, LNSPs may install their own network devices. However, LNSPs may only use these devices for "operating or monitoring" their networks and are prohibited from using them to remotely reconnect or disconnect a metering installation.

If LNSPs are unable to use their network devices for this purpose, then new Draft NER Rule clause 7.8.6 may be of limited, if any, real use to LNSPs as a viable means of ensuring they have access to disconnection and reconnection of load, for load control purposes at customer premises across their networks.

We therefore suggest the ENA consider seeking that Draft NER Rule clause 7.8.6(c) be amended to allow LNSPs to use network devices to remotely disconnect and reconnect customer load and that the definition of "network device" be amended as set out at the end of section 2 of the **Appendix 1** attached.

- (c) **LNSPs physical access to its own network devices and its own equipment:** Draft NER Rule clause 7.15.2 sets out provisions for the Metering Coordinator to keep metering installations secure and to restrict access to them. These provision should be amended to require the Metering Coordinator to ensure that access is provided at all times to LNSPs in respect of any LNSP equipment, wiring or devices.

- (d) **Small customer's right to opt out of replacement of its existing meter:** Draft NERR Rule clause 59A gives the customer this right where its retailer is undertaking a "new meter deployment". However, this right will not apply to a "maintenance replacement". This presents a potential difficulty for customers and LNSPs, because the definition of "maintenance replacement" does not operate with sufficient certainty to prevent a customer's right to 'opt out' being bypassed by the retailer. The definition cross refers to "sample testing" of meter populations under National Electricity Rules (**NER**) Chapter 7, but there are no clear provisions governing this in Chapter 7. Clearer provisions are required in NER Chapter 7 to ensure sample testing populations are appropriately and transparently selected.
- (e) **LNSPs as type 5 and 6 metering coordinators - transitional arrangements:** the transitional terms and conditions on which LNSPs will be deemed to be appointed (by Financially responsible Market Participants (**FRMPs**)) as Metering Coordinators for existing type 5 and 6 installations (under Draft NER Rule clause 11.78.7), do not address LNSP rights relating to termination of the appointment or removal and non-interference with meters. To provide more certainty for LNSPs, consideration should be given to seeking changes to make clear that reasonable clauses dealing with these matters may be included in the LNSPs transitional terms and conditions.
- Also, it is not clear what is intended to happen if the transitional appointment is terminated (for example on change of retailer/FRMP) and the customer does not agree to a replacement type 4 meter being installed. Probably the intention here is that it is then up to the new FRMP to try to engage the LNSP to continue as Metering Coordinator under a new appointment under Draft NER Rule clause 7.6.6, which LNSPs are free to agree or not agree to at their discretion. But the position could be clearer.
- (f) **Distributor to effect supply interruptions and provide such assistance as the Metering Coordinator may reasonably require:** these requirements in proposed new Draft NERR Rule clause 91A potentially present some real legal difficulties for distributors, in terms of potentially conflicting with existing jurisdictional statutory rights and obligations of distributors relating to technical and safety requirements for connection of customer installations to networks, as well as statutory protections relating to interference with distributor equipment and infrastructure. Clause 91A should therefore be made expressly subject to compliance with all relevant jurisdictionally based requirements, failing which the clause may well be beyond the AEMC's power and the scope of distributors' and Metering Coordinators' rights and obligations under clause 91A will be wholly uncertain.

2. **DRAFT RULE CHANGES REQUIRING DRAFTING CLARIFICATIONS**

Set out below is a summary of those of the AEMC's Draft Rule Changes which we consider require some drafting changes to improve clarity and remove uncertainty for NSPs and others. In **Appendix 2** attached we set out our more detailed analysis supporting these drafting changes.

- (a) **Metering Coordinator acting as its own Metering Provider and Metering Data Provider:** Draft NER Rule clauses 7.3.2(a) and (d) should be amended to make clear that the Metering Coordinator can itself act as the Metering Provider and/or Metering Data Provider.

- (b) **Metering Coordinators' obligation to install type 4 meters for small customers:** Draft NER Rule clause 7.8.8(a) and Schedule 7.5 appear to leave open the option of either a type 4, 5 or 6 meter being installed at any small customer connection point. To avoid confusion, clause 7.8.8(a) should be made subject to the clause 7.8.3 requirement for Metering Coordinators to install type 4 installations for any new or replacement installations for small customers. There also appears to be some incorrect cross referencing in Table S7.4.3 (see section 2 of Appendix 2).
- (c) **Access to remote disconnection services in emergencies:** AEMO, LNSP and Metering Coordinator obligations relating to emergency procedures under Draft NER Rule clause 7.8.5, should be made subject to the load shedding and system security requirements of NER Chapter 4 and Part 8 of the NEL, to avoid uncertainty and inconsistency between these parties obligations under each.

If you wish to discuss any aspect of our advice further, please let us know.

Yours faithfully



Ashurst Australia

**APPENDIX 1:
DRAFT RULE CHANGES EXPOSING NSPs TO RISKS**

1. REMOTE DISCONNECTION AND RECONNECTION OF SMALL CUSTOMERS

The Draft NER Rule effectively provides that:

- (a) Remote disconnection and reconnection are services that are to be provided by Metering Coordinators via new type 4 metering installations which must be installed for all new or replacement meters for small customers (clause 7.8.3).
- (b) The Local Network Service Provider and the Financially Responsible Market Participant for a connection point will be entitled to access those services from the Metering Coordinator (clause 7.3.2(h)(i)(ii)), subject to agreeing commercial terms with the Metering Coordinator (clause 7.6.1(a)(b)).
- (c) The LNSP is prohibited from using its own Network Devices to undertake its own remote disconnection or reconnection services (clause 7.8.6(c)(ii)).

The above provisions, taken together, essentially prevent LNSPs from remotely disconnecting or reconnecting premises themselves, requiring them to instead negotiate "access" to this service from the Metering Coordinator.

There are a number of difficulties with this from an LNSP's perspective. Some of these have previously been raised by NSPs with the AEMC. The AEMC has sought to address some of these concerns in the Draft Determination and the Draft NER Rule by introducing a new provision allowing DNSPs to install their own Network Devices at or adjacent to the Metering Coordinator's metering installation, for the purposes of monitoring or operating the NSP's network (clause 7.8.6).

However, a number of key difficulties remain with these provisions which are not satisfactorily addressed by new clause 7.8.6. These difficulties are outlined in paragraphs 1.1 to 1.3 below.

1.1 Legal validity of the proposed changes

It seems to us that there is a real question about the AEMC's legal power to make some of the proposed rule changes described above. We say this for the following reasons:

- (a) the NERL clearly provides that electricity supply for premises, including energisation, de-energisation and re-energisation of premises, form part of the "customer connection services" which are required to be provided to customers by distributors, under customer connection contracts as regulated by the NERL¹. This is also reflected in the NERR, in their current form, which impose directly upon distributors extensive requirements for the energisation, de-energisation, and re-energisation of customer premises, as part of the customer connection services they must provide². Extensive obligations are also imposed directly upon them in relation to interrupting supply from their networks to customer premises³.

The NERR allows the retailer to "arrange" energisation, de-energisation and re-energisation, where (for example) the customer has breached its retail agreement,

¹ See the definition of "customer connection services" in section 3 NERL and section 66 NERL.

² See NERR Part 6, Division 3 and 4.

³ See NERR Part 4, Division 6.

by notifying the distributor⁴. However it is clear that the responsibility for actually performing the energisation, de-energisation or re-energisation or any interruption to supply, for any reason, rests squarely with the distributor. This is consistent with the NERL allocation of this role to the distributor as a fundamental part of its "customer connection service".

- (b) Schedule 1 of the NEL (see clauses 10, 27 and 29) does provide that the content of the NER made by the AEMC can address disconnection of customer loads, as well as metering of electricity and the regulation of persons providing metering services. However, these provisions would not empower the AEMC to make NER rules relating to disconnection of customers and the metering of customers which are inconsistent with (or would effectively prevent or prejudice compliance with) the express statutory de-energisation and re-energisation obligations placed on distributors under the NERL.
- (c) The NERL and NERR provisions described in (a) above place clear responsibilities directly upon the distributor to supply, energise, de-energise and re-energise customers. Retailers can arrange this by requesting that the distributor do it, but it is the distributor who has the clear obligation to undertake these tasks and has imposed upon it clear obligations relating to notification and other matters which it must observe in undertaking these tasks.
- (d) Accordingly, in our view, there is real doubt as to the AEMC's legislative power to make the Draft NER Rule changes to Chapter 7 described above, to the extent that they:
- prohibit the LNSP from remotely disconnecting and re-connecting customers and allow only the Metering Coordinator to undertake these tasks;
 - only allows the LNSP access to this service where the Metering Coordinator (effectively at its sole discretion) agrees to provide this service to the LNSP (on terms satisfactory to the Metering Coordinator); and
 - thereby prevent the LNSP from itself remotely disconnecting small customers, contrary to its clear obligation and responsibility to directly undertake the "de-energisation" and "re-energisation" of customers as part of its "customer connection service" under the NERL.

Accordingly, there would be real doubt as to the validity of these changes if they are made by the AEMC.

- (e) The legal validity of Draft NERR Rule clauses 104(2), 106A(2) and (3) would also be doubtful, to the extent that they contemplate or allow the retailer to arrange for someone other than the distributor (such as a Metering Coordinator), to arrange de-energisation or re-energisation without any involvement of or authorisation by the distributor.

1.2 **Exposure of DNSPs to risk of breach of their de-energisation, re-energisation and supply interruption obligations under the NERR**

If the proposed Draft NER Rule provisions described above are within the AEMC's legislative power and would be legally valid if made (and, as indicated above, there is real doubt about this), then these provisions would potentially place distributors in a position

⁴ See for example existing NERR clauses 19(2) as well as clauses 111, 112 and 119(1)(a).

where they may be unable to perform, or unable to avoid breaching, their NERL and NERR obligations relating to de-energisation, re-energisation and supply interruption to premises. We say this for the following reasons:

- (a) As seen above, distributors have strict obligations under the NERL and the NERR which place direct responsibility on them for de-energising, re-energising and interrupting supply to premises. These obligations apply whether de-energisation, re-energisation or interruption is undertaken remotely or physically.
- (b) So, for example, any remote de-energisation undertaken by the Metering Coordinator:
 - (i) at the retailer's request, for which the retailer fails to notify the distributor;
 - (ii) by the Metering Coordinator at its own instigation (for example, for metering installation repair or maintenance); or
 - (iii) through the Metering Coordinator's faulty operation of the remote disconnection switch,

would necessarily amount to both a "de-energisation" and a "supply interruption" under the NERL and the NERR, which has not occurred (or been notified to the customer) in accordance with the requirements of the NERR, potentially exposing distributors to breach of their customer connection contracts and breach of the NERR.

Distributors should not be left in a position of continuing exposure to these risks under the NERL and NERR and without any means of preventing such an unauthorised breach or of mitigating their exposure.

Accordingly, if the AEMC determines that Metering Coordinators should be allowed to undertake remote de-energisation and re-energisation, then it seems to us that NSPs should seek, that the AEMC:

- (1) include an additional NERR provision relieving DNSPs from liability to customers and from responsibility for compliance with relevant de-energisation and interruption provisions under the NERR, where premises are de-energised or re-energised by someone other than the distributor (or without the distributor's authorisation); and
- (2) includes an amendment to proposed NER clause 7.8.6(c) in relation to the LNSP's permitted uses of network devices, as set out at the end of paragraph 2 below (for the reasons there set out).

1.3 **Retailer undertaking de-energisation in its own right**

Retailers should not themselves be entitled to directly de-energise and re-energise a customer's premises. Accordingly, Draft NERR Rule clause 106(A)(6) should be amended to delete the words "if the premises were de-energised by a retailer" and replace them with "if the de-energisation of the premises was arranged by a retailer".

2. ACCESS TO METERING COORDINATOR SERVICES AND NSP USE OF NETWORK DEVICES

In the Draft Determination, the AEMC:

- (a) notes the concerns previously raised by NSPs about the lack of certainty for NSPs obtaining access to services provided by a Metering Coordinator; and
- (b) indicates that in response to this concern, the AEMC has included a new provision entitling LNSPs to install their own network devices at or adjacent to the Metering Coordinators metering installation (ie new Draft NER Rule clause 7.8.6). This is intended (among other things) to provide NSPs with a credible threat of "by passing" the Metering Coordinator's services, if the Metering Coordinator will not agree to terms with the DNSP (see section 4.8.4 and relevant parts of Annexure D of the Draft Determination).

While the inclusion of this clause is a step in the right direction, it seems to us that it will not really address the problems raised by NSPs, due to the restrictions that are then placed on LNSP use of network devices under proposed clause 7.8.6(c). As indicated above, under this clause, an LNSP must **not**:

- (1) use a network device except in connection with the "operation or monitoring of its network"; and
- (2) (without limiting (1) above) use the device to reconnect or disconnect a metering installation via remote access.

We understand that one of the most important services (if not the most, important service) which an LNSP needs access to (via either the Metering Coordinators metering installation or, failing this, from its own network device) is precisely the ability to remotely disconnect or interrupt the whole or part of the load supplied to premises. We understand this is important to enable an LNSP to:

- (c) ensure it can comply with its de-energisation and supply interruption responsibilities under the NERL and NERR (as outlined above);
- (d) ensure it is able to comply with its network, customer connection and customer installation technical and safety obligations under jurisdictional legislation; and
- (e) have access to reliable load control arrangements, to enable it to have options to manage and defer network investment and offer load (and time of use) differentiating network tariffs.

So if NSPs are unable to use their network devices for these purposes, then the main (supposed) purpose of the AEMC allowing them to have a network device in the first place (ie to "by-pass" the Metering Coordinator, if terms can't be agreed) is frustrated.

The AEMC has expressed the view that the above prohibition in proposed clause 7.8.6 should not prevent an LNSP from using a network device for "load control" for (ie remotely disconnecting) some load within a customer's premises. However even if that is correct (which is not clear), it doesn't allow the LNSP to "control" the whole of the load at premises (i.e. by interrupting all of it by remote disconnection and reconnection) at the premises connection point.

Hence, clause 7.8.6 in its current form will be of limited, if any, real use to LNSPs as a viable means of ensuring they are able to reliably have access to controlled load services at customer premises.

We therefore suggest that the ENA submit to the AEMC that:

- (f) clause 7.8.6(c) be amended to allow LNSPs to use their network devices to remotely disconnect and reconnect customer load at connection points, via (or separately from) the metering installation of the Metering Coordinator; and
- (g) the definition of "Network Device" be amended as follows (amendments are marked up):

"network device

An item of apparatus or equipment associated with the provision or the monitoring of *network services* which may include ~~circuits breakers switching devices, measurement, protection~~ and control equipment and which may be housed within a facility that was previously used by the relevant *Local Network Service Provider* as a *metering installation*."

3. **ENSURING LNSPS HAVE ACCESS TO THEIR OWN NETWORK DEVICES, LNSP EQUIPMENT AND WIRING**

Draft NER Rule clause 7.15.2 sets out provisions for the Metering Coordinator to keep metering installations secure and to restrict access to them.

Given:

- (a) the proximity that a metering installation necessarily has to LNSP operated equipment and LNSP wiring (to which the metering installation is connected);
- (b) the likely proximity of the metering installation to LNSP network devices; and
- (c) the LNSP's need to ensure it maintains access to its own equipment, wiring and network devices, to satisfactorily discharge its obligations under the NERL and under jurisdictional specific network safety and technical responsibilities,

clause 7.15.2 should include amendments to make it clear that the Metering Coordinator must ensure access is provided at all times to LNSPs in respect of any LNSP equipment, wiring or devices:

- (a) to which the metering installation is connected; or
- (b) which is co-located within any facility within which the metering installation is housed or located.

4. **SMALL CUSTOMER RIGHT TO OPT OUT OF REPLACEMENT OF ITS EXISTING METER**

The Draft Determination states that small customers will have the right to opt out of having their existing meters replaced with a new type 4 meter where a retailer is proposes to replace it under a "new meter deployment".

Proposed new clause 59A in the Draft NERR Rule seeks to give effect to this by providing that a retailer who seeks to undertake a "new meter deployment" must first permit a small customer affected by the deployment to "opt out" of having its meter replaced, in accordance with a notification process set out clause 59A.

'New Meter Deployment' is effectively defined to mean the replacement of existing meters by a retailer, **other than** where the replacement is:

- at the request of the customer;
- a "**maintenance replacement**"; or
- as a result of a metering installation malfunction.

The effect of this proposed definition and clause 59A (when read together) is that the customer's right to "opt out" will not apply where the replacement can be described as a "maintenance replacement".

In our view there is a potential difficulty with this (from a customer's and a DNSP's perspective), in that the currently proposed definition of "maintenance replacement", does not operate with sufficient certainty to ensure that a customer's right to 'opt out' is not potentially undermined. More specifically:

- (a) 'Maintenance Replacement' is effectively defined as the replacement of an existing meter, based on the results of "sample testing" of a meter population carried out in accordance with Chapter 7 of the NER:
 - (i) which indicates that it is necessary or appropriate, in accordance with good electricity industry practice, to replace the meter; and
 - (ii) the details of which have been provided to the retailer.
- (b) The difficulty with this is that Chapter 7, as currently drafted (and contrary to the impression created by the commentary in paragraph C2.2.3 of the Draft Determination), does not in fact contain any clear provisions governing sample testing of a meter populations.⁵
- (c) If "sample testing" is going to be used as the basis for determining what will be considered a "maintenance replacement" and thereby excluded from small customers' rights to opt out of having their existing meters replaced, then much clearer provisions need to be included in Chapter 7 of the NER itself to ensure that sample populations for testing are appropriately and transparently selected by Metering Coordinators (at the behest of their appointing retailers) as a basis for determining which existing type 5 and 6 meters should be replaced, without the customer being afforded the right to opt out of their replacement.

5. **LNSPS AS TYPE 5 AND 6 METERING COORDINATORS - TRANSITIONAL ARRANGEMENTS**

5.1 **The position proposed by the AEMC**

The Draft Determination states that as a transitional measure, LNSPs who are currently the responsible persons for existing type 5 or 6 metering installations will:

- become the Metering Coordinator for these metering installations (upon commencement of the proposed changes to NER Chapter 7); and

⁵ Clause 7.6.4 deals briefly with retention of testing records and makes mention of "sample testing" records in this context, but otherwise no provisions governing sample testing are set out at all in chapter 7. The current metrology procedures established by AEMO contain some technical requirements relating to sample testing plans, but the operation of these is not at all clear from a legal perspective.

- continue in this role for a connection point until a new Metering Coordinating is appointed by the FRMP or the services provided by the LNSP cease to be classified by the Australian Energy Regulator (**AER**) as direct control services.

Transitional provisions to give effect to this are included in Draft NER Rule clause 11.78.7. The effect of these provisions is that:

- At least 3 months prior to the effective date of commencement for the changes to Chapter 7 of the NER, the LNSP for a type 5 or 6 installation must provide the FRMP with a standard set of terms and conditions to act as Metering Coordinator. These must comply with the requirements set out in clause 11.78.7.
- Unless the LNSP and FRMP agree on other terms prior to the effective date, then on and from that date the LNSP will be deemed appointed as Metering Coordinator by the FRMP on the LNSP's standard terms and conditions.
- Any such appointment or deemed appointment of the LNSP as Metering Coordinator will automatically terminate on the earlier of the LNSP's services for that metering installation ceasing to be classified as Direct Control Services by the AER or the appointment of another Metering Coordinator by the FRMP.

5.2 Potential difficulties with the AEMC's proposed position

There appear to be the following practical difficulties with these transitional provisions, creating legal uncertainty for LNSPs (as well as FRMPs and customers):

- Removal of DNSPs type 5 and 6 meters on termination:** this is not addressed. It should be clear that the FRMP must not interfere with or remove the LNSP's meter without the LNSP's consent, if a new FRMP does not wish to re-engage the LNSP.
- LNSPs right to terminate:** similarly, the issue of termination by the LNSP is not addressed. The LNSP should have clear rights to terminate for un-remedied defaults, particularly any un-remedied payment defaults or where the meter is being interfered with or damaged in any way.

We note that (under clause 11.78.7(f)) an LNSP is potentially free to include clauses to the above effect as additional terms in the standard terms and conditions offered to the FRMP. However, clause 11.78.7(f) expressly provides that any such additional terms must be consistent with clause 11.78.7(d), which effectively requires that any terms so included must not "prevent, hinder or otherwise impede" the FRMP from appointing another Metering Coordinator. To provide certainty, clause 11.78.7 should be amended to make it clear that reasonable additional clauses to the effect outlined above, will not be considered as "preventing, hindering or impeding" a change of Metering Coordinator.

Also, it is not clear what is intended to happen if the transitional appointment is terminated for any reason and the customer does not agree to a replacement type 4 meter being installed. For example, if the FRMP is replaced by a new FRMP (i.e. a new retailer) then it would seem that:

- This must necessarily bring an end to the LNSP's transitional appointment as Metering Coordinator under the clause 11.78.7 - because the FRMP, the subject of the transitional arrangement, will cease to be the FRMP.

- (d) That transitional appointment does not carry across to the new FRMP. So, if the new FRMP does not wish to install a replacement type 4 meter (or the customer elects to "opt out" of any attempted type 4 meter deployment by the FRMP under the proposed Draft NERR changes), then the FRMP will then have to negotiate a new appointment of the LNSP (as a Metering Coordinator) for the existing type 5 or 6 meter under proposed new clause 7.6.
- (e) However, the LNSP is under no obligation to continue offering services as a Metering Coordinator for its existing type 5 or 6 meter and any replacement meter must be a type 4 meter (under Draft NER Rule clause 7.8.3).

If the intention is to just leave all this as a matter for the new FRMP and the LNSP to negotiate and try to reach agreement on under new clause 7.6.6 and if DNSPs are satisfied with this position, then from an LNSP perspective probably no further change is required.

It is, however, something which NSPs should consider and form a view about. If they would prefer to have greater clarity around the issue, then it is something they may wish to bring to the AEMC's attention.

6. **METERING COORDINATOR AND DISTRIBUTOR TO ASSIST AND COOPERATE**

A new clause 91A has been included in the Draft NERR Rule, the effect of which is to require a distributor to (among other things) effect a supply interruption and provide such assistance as the Metering Coordinator may reasonably require, to enable the Metering Coordinator to install, monitor, repair or replace a meter.

It seems to us that there are potentially some real legal difficulties with including such a provision in the NERR. More specifically:

- (a) We understand that installing a meter will generally require close interaction with the distributor's own equipment and wiring, which forms part of the distributor's infrastructure. For example, installing a meter will often require a supply interruption (involving the operation of a distributor equipment) as well as the disconnection or reconnection of the metering equipment to the distributor's wires, equipment and infrastructure.
- (b) The connection, disconnection and reconnection of customer installations and metering installations to a distributor's equipment and infrastructure is an area the subject of separate, detailed technical and safety regulation, under separate legislation operating in each jurisdiction. More specifically, in each Jurisdiction distributors are given:
 - (i) statutory rights and obligations relating to technical and safety requirements for the connection of customer installations and metering installations to their networks; and
 - (ii) statutory protections which make it an offence to interfere with a distributor's electricity equipment and infrastructure.
- (c) So the rights and obligations of distributors and Metering Coordinators under proposed new NERR clause 91A, will therefore necessarily need to be expressly subject to compliance with all relevant jurisdictionally based technical and safety requirements. So at the very least, such an express proviso should be included in this clause, failing which:

- (i) at worst, proposed clause 91A may be substantially beyond power and inoperative; or
- (ii) at best, the scope of what distributors are obliged to do and Metering Coordinators are entitled to expect under the clause, will be wholly uncertain.

**APPENDIX 2:
DRAFT RULE CHANGES REQUIRING DRAFTING CLARIFICATIONS**

1. METERING COORDINATOR ACTING AS ITS OWN METERING PROVIDER AND METERING DATA PROVIDER

The Draft Determination states that a Metering Coordinator can choose to also become accredited as a Metering Provider or a Metering Data Provider. This presumably means that a Metering Coordinator (assuming it obtains the relevant accreditations) can act as its own Metering Provider and Metering Data Provider for its own Metering Installations.

To ensure that a Metering Coordinator is clearly entitled to do this, Draft NER Rule clauses 7.3.2(a) and (d) should be amended to make it clear that the Metering Coordinator can itself act as the Metering Provider and/or Metering Data Provider. This option is currently allowed for the responsible person under the corresponding clauses in the current version of Chapter 7 of the NER (see clauses 7.2.5(a)(i) and (c)(i)).

2. METERING COORDINATORS' OBLIGATION TO INSTALL TYPE 4 METERS FOR SMALL CUSTOMERS

The Draft Determination clearly indicates that type 4 metering installations (meeting the minimum services specification) must be installed by the Metering Coordinator for any new or replacement metering installations being installed for small customers.

This is reflected in new clause 7.8.3 of the Draft NER Rule.

However, by contrast, clause 7.8.8(a) and Schedule 7.5 appear to leave open the option of type either a type 4, 5 or 6 meter being installed at any small customer connection point. To avoid confusion, clause 7.8.8(a) should be made subject to clauses 7.8.3 and 7.8.4.

Additionally, the requirement in the third column of Table S7.4.3 (of Schedule 7.4 4) that types 4 and 5 metering installations must both "meet the requirements of clause 7.10.6(d)" appears to be incorrect, as clause 7.10.6(d) applies only to type 4A metering installations.

3. ACCESS TO REMOTE DISCONNECTION SERVICES IN EMERGENCIES

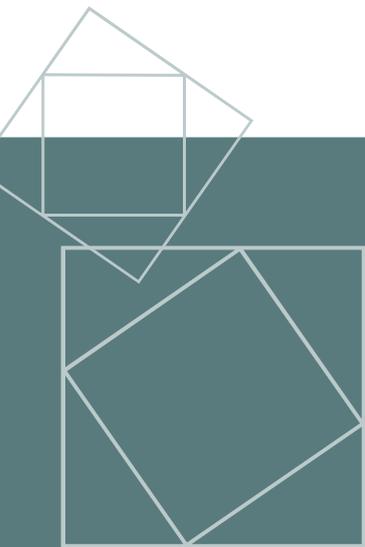
Clause 7.8.5 of the Draft NER Rule, provides that a Metering Coordinator must ensure that access to a metering installation, services provided by it and energy data held in it are managed in accordance with "**emergency priority procedures**" established by AEMO in the event of an emergency condition.

The Draft Determination explains that these requirements are intended to address situations where it might not be possible for the Metering Coordinator, Metering Provider or Metering Data Provider to process all service commands in line with its performance requirements during emergency conditions. This is intended to provide DNSPs with greater certainty that they can rely on the services they have negotiated with the Metering Coordinator when managing a network security issue during an "**emergency condition**".

Proposed clause 7.8.5(b) requires AEMO to establish the "emergency priority procedures" setting out the criteria for determining when an emergency condition is present and which metering installations are affected and which services the Metering Coordinator may be required to prioritise at the request of a LNSP. The LNSP must comply with the procedures when issuing any service prioritisation request to a Metering Coordinator under the procedures.

It seems to us that, to avoid uncertainty and inconsistency with the load shedding and system security requirements of NER Chapter 4 and Part 8 of the NEL, the proposed new clause 7.8.5 should make clear that:

- (a) Any emergency priority procedures developed by AEMO under section 7.8.5(b) must be consistent with, and made in, accordance with any procedures developed under the load shedding regime set out in Part 8 of the NEL and clause 4.3.2(h) of the NER.
- (b) The Metering Coordinator's and LNSP's obligations under clause 7.8.5 must also be subject to the load shedding and system security requirements of Chapter 4.



Economic review of AEMC draft metering rules

Report for the Energy Networks Association

25 May 2015

Farrier Swier Consulting

Level 7, 330 Collins Street, Melbourne
Victoria 3000 Australia

Telephone 613 9612 1900

Facsimile 613 9612 1999

www.farrierswier.com.au



Disclaimer

This report has been prepared by Farrier Swier Consulting Pty Ltd (FSC) for the Energy Networks Association. This report is supplied in good faith and reflects the knowledge, expertise and experience of the consultants involved. The report and its observations are subject to various assumptions and limitations referred to within the report, and supporting papers. Any reliance placed by a recipient of the report upon its projections is a matter for the recipient's own commercial judgement. FSC accepts no responsibility whatsoever for any loss occasioned by any person acting or refraining from action as a result of reliance on the report.

Table of Contents

1.	Introduction	8
1.1	Background	8
1.2	Our approach	9
1.3	Structure of this report	9
2.	The AEMC draft rule and the demand for network services	11
2.1	Overview of AEMC draft rule	11
2.2	Categories of services provided by advanced meters	11
2.3	Network services and network solutions	12
3.	Economic questions	13
3.1	Relationship specific investments in vertical supply chain	13
3.1.1	Market power	13
3.1.2	Network service agreements	14
3.1.3	Potential market power problems with network service agreements	14
3.2	Aligned incentives needed for effective contracting and coordination	15
3.2.1	Incentives for contracting	15
3.2.2	Incentives for Retailer and DNSP to cooperate with prospective Metering Coordinators	15
3.3	Potential effect of differences in Metering Coordinator cost functions	16
4.	Light handed regulation	18
4.1	Insights from light handed regulatory regimes	18
4.2	Insights from best practice regulation	20
5.	Network Services Provider – Metering Coordinator contracting	21
5.1	Assessment of market power in DNSP – Meter Coordinator contracting process	22
5.1.1	Mitigating factors identified by AEMC	22
5.1.2	Other incentive and market power concerns	24
5.1.3	Assessment of AEMC analysis on market power	28
5.2	Proposed 3 year review of need for access regulation	29

5.2.1	AEMC position	29
5.2.2	Our assessment is that more is needed	29
5.3	Recommendations to address concerns about DNSP access to network services	31
5.4	Light handed regulatory options	31
5.4.1	Regulation to promote cooperation between parties	32
5.4.2	Regulation targeting different phases of negotiating process	32
5.4.3	Using the market start date and a readiness review to drive cooperation	38
5.5	Recommendations	39
6.	Ensuring continuity of network services	41
6.1	The nature of the problem	41
6.2	Specific circumstances of the problem and solution	42
6.3	Outcomes sought, desired regulatory approach, regulatory design principles	42
6.3.1	Outcomes expected from network services continuity regulation	43
6.3.2	Desired regulatory approach for network services continuity regulation	43
6.3.3	Recommended regulation design principles	44
6.3.4	Discussion of regulatory design principles	44
6.3.5	Option evaluation criteria	45
6.4	Assumptions about network services contract parties	46
6.4.1	Contractual and regulatory options	46
6.4.2	Regulation through multilateral arrangements will be required in the future	46
6.4.3	Initial regulation should focus on bilateral arrangements	47
6.5	Possible targets of regulation	47
6.5.1	Notification step	47
6.5.2	Other possible targets	48
6.5.3	Screening of options	48
6.6	Options for network services continuity regulation	49
6.6.1	Option 1 – Regulate Metering Coordinator appointment	49
6.6.2	Option 2 – Regulate process for making a network service agreement	49
6.6.3	Dispute resolution options	51

6.6.4	Time limits	52
6.7	Evaluation and recommendation	52
6.7.1	Evaluation analysis	53
6.8	Description of rules for Option1 and Option 2C	55
6.8.1	Common provisions	55
6.8.2	Detailed content of Option 1 - Consent to new Metering Coordinator appointment	55
6.8.3	Detailed content for Option 2C - novation or assignment	56
6.8.4	Outstanding content issues	57
7.	Metering Coordinator churn - certainty of access terms and conditions	58
7.1	Background	58
7.2	Purpose and legal form of framework agreements	58
7.3	Assessment of framework agreements in New Zealand and UK	59
7.3.1	New Zealand	59
7.3.2	Great Britain	60
7.4	Observations and next steps	61
7.4.1	Ensuring continuity of network services	61
7.4.2	Other observations	61
7.4.3	Next steps	63
	Appendix A – Review of light handed regulatory frameworks and regimes	64
	Appendix B – The market power problem: infrastructure services and holdout situation	67
	Appendix C – Assessment of regulatory options used in other light handed regulation regimes	69
	Appendix D – Framework agreements in New Zealand	71
	Appendix E – Framework agreements in Great Britain	73

Summary

The application of competition policy to Australia's energy markets has positively affected choices for customers for energy services. The AEMC's vision for competitive metering reform emphasises consumer choice and the development of a competitive metering market. However, there are other dimensions to promoting the long term interest of electricity consumers – this objective is also promoted by increased efficiency of distribution networks through application of new network control and management services which require access to secondary and value added metering services (**network services**).

This report considers three particular aspects of the AEMC's draft rules for competitive metering: Distribution Network Service Provider (**DNSP**) – Meter Coordinator contracting for network services; unmanageable commercial risks for DNSPs from a lack of network services continuity when an uncontracted Meter Coordinator is appointed; and the potential role of framework agreements in managing churn of Metering Coordinators and advanced meters. Where there are problems, this report proposes light handed regulatory solutions that would better promote the long term interest of consumers.

Once appointed, the Metering Coordinator will be a monopoly supplier of network services. While the AEMC has identified theoretical mitigating factors, ultimately it is uncertain whether in practice these factors will limit market power to the level expected in a workably competitive market.

Our analysis identifies additional market power concerns and potential incentive problems in the proposed market arrangements. There are unaddressed subtleties and practicalities of the processes for identifying the services that DNSPs require, Retailer incentives, and the potential control of Retailers over contracting timelines. Problems are exacerbated where a DNSP faces complex planning challenges, such as where network solutions require a certain density of meters to be available. One key market power problem is the potential for **holdout** where a new Metering Coordinator is appointed in place of one with whom a DNSP has contracted for network services, and where the DNSP has made related network investments.

As the AEMC notes there is uncertainty about the potential for exercise of market power by Retailers and Metering Coordinators that may affect network services contracting. In our view, some form of regulation is warranted to address these problems. We *disagree* with the AEMC that a three year review is appropriate or adequate to deal with the uncertainty. Moreover the AEMC's proposals do not deal with potential misaligned incentives.

Our key recommendations in relation to DNSP and Metering Coordinator contracting for network services are:

- **Create a credible fall back regulatory mechanism** – The threat of regulation is ineffective unless it is credible and capable of swift implementation. The AEMC should create the ability to extend, by an administrative act, a pre-defined

negotiate/arbitrate regime to apply to Metering Coordinators and access seekers including DNSPs involved in negotiating for network services. This extension must be capable of easy implementation, i.e. by and administrative act, and not by a Rule change.

- **Utilise the market start date and a readiness review to drive cooperation** – By administrative actions: establish governance arrangements and allocate resources for reform implementation, and a market and systems readiness review; commission a market and systems readiness review, with review components that include satisfactory negotiation of contracts for network services. Also, amend the NER to create a market start deferral mechanism.
- We also recommend simple light handed regulatory measures to define expected outcomes, better align incentives, and provide sufficient time for negotiation.

We recommend exploring two regulatory options to ensure continuity of network services where there is a churn of Metering Coordinator. Broadly, these involve the appointment of a new uncontracted Metering Coordinator being subject to the relevant DNSP's consent, and assignment of relevant previous contractual obligations to the new Metering Coordinator.

In relation to possible framework agreements as contemplated by the AEMC, there may be a future role - or need - for multilateral arrangements to deal efficiently with a range of issues associated with Metering Coordinator churn. The appropriate scope, purpose and legal form of such arrangements is unclear at this time. In our view, an unregulated framework agreement is *not* adequate to ensure the continuity of network services.

1. Introduction

1.1 Background

On 26 March 2015 the Australian Energy Market Commission (**AEMC**) published its draft rules and draft rule determination¹ (the **draft determination**) which has the overarching objective of promoting competition in the provision of metering and related services in the National Electricity Market (**NEM**).

The AEMC draft determination provides that a Metering Coordinator for provision of metering services at a connection point is appointed by the Financially Responsible Market Participant (**FRMP**). Further, the draft rule provides that the Metering Coordinator need only provide services at the minimum services specification. Other services including secondary services and valued added services (**network services**) will be agreed commercially with retailers and network businesses. The proposed start date for the new rules is 1 July 2017.

The AEMC does not propose to introduce access regulation for metering services to manage potential competition issues. Instead, it recommends a review three years after the new Chapter 7 rules commence, to assess the need for access regulation at that time.

The Energy Networks Association (**ENA**) has sought our independent economic advice on three aspects of the draft rules:

1. How the cooperative contracting processes envisaged by the AEMC for the Distribution Network services Provider (DNSP), Retailer and Metering Coordinator will work in practice; and in what circumstances a Metering Coordinator may be able to exercise significant market power in its negotiations with a DNSP over the terms of long-term network services contracts
2. The potential for inefficient outcomes from a lack of continuity in network services if an uncontracted Metering Coordinator is permitted to enter a metering market where a DNSP has already contracted network services and invested in related network solutions
3. Issues arising from a churn in Metering Coordinators and/or advanced meters and the realistic potential for framework agreements proposed by the AEMC to manage those issues.

For the first two issues, the ENA has sought our advice on potential problems that may arise with the AEMC position. Where problems exist, the ENA has asked us to assess

¹ AEMC draft determination, National Electricity Amendment (Expanding competition in metering and related services) Rule 2015; National Energy Retail Amendment (Expanding competition in metering and related services) Rule 2015

light handed regulatory solutions that better promote the long term interest of consumers².

1.2 Our approach

We have drawn on best practice regulation analysis to:

- Be clear about the problem
- Undertake a systematic assessment of feasible policy options to address the identified problem (but with a focus on light handed regulation options)
- Seek to identify the option that generates the greatest net benefit for the community
- Use appropriate techniques to assist in evaluating options.

The time available for preparing this report has been limited. While we have attempted to be transparent and systematic in our analysis, we have necessarily exercised judgments to focus quickly on the most feasible options, and to make recommendations. We have not attempted any quantitative or cost-benefit analysis.

1.3 Structure of this report

Section 2 summarises relevant aspects of the AEMC draft determination and draft rules, categories of metering services that could be provided by advanced meters, and the network services and network solutions that can provide benefits to consumers.

Section 3 analyses the economic questions that have arisen in this review. It discusses relationship specific investments in vertical supply chain, market power and the role of network service agreement; the need for aligned incentives for effective contracting and coordination for network service agreements; and the efficiency implications of Metering Coordinator cost functions.

Section 4 discusses light handed regulation, using insights from other light handed regulatory regimes and best practice regulation to develop regulatory design principles.

Section 5 considers a Metering Coordinator's ability to exercise market power in negotiations with DNSPs over the terms of long-term network services contracts. In this section, we make firm recommendations for necessary regulatory and administrative measures that the AEMC and industry should implement.

² That is, the National Electricity Objective (NEO) set out in section 7 of the National Electricity Law (NEL) as follows:

“The objective of this Law is to promote efficient investment in, and efficient operation and use of, electricity services for the long term interests of consumers of electricity with respect to: (a) price, quality, safety, reliability and security of supply of electricity; and (b) the reliability, safety and security of the national electricity system.”



Section 6 discusses unmanageable commercial risks for DNSPs from a lack of network services continuity when an uncontracted Meter Coordinators are appointed. It outlines possible regulatory measures to address this risk.

Section 7 tests the potential for framework agreements as proposed by the AEMC to manage churn of Metering Coordinators and/or meters. It draws on international experience to offer observations on how (and when) some form of framework arrangement should be developed for the NEM.

2. The AEMC draft rule and the demand for network services

2.1 Overview of AEMC draft rule

The AEMC draft rules set out the following arrangements³.

1. The Metering Coordinator for provision of metering services at a connection point is appointed by the Financially Responsible Market Participant (FRMP) which in general will be a Retailer.
 - a) This position to be reviewed in three years, at which time the right to appoint the Metering Coordinator may be shifted to the customer.
2. The Metering Coordinator will register with AEMO for that role.
3. All new and replacement meters installed at small customer connection points must meet a new minimum services specification (see below).
4. The Metering Coordinator's responsibilities are as follows:
 - a) As is currently the case with the Responsible Person, the Metering Coordinator will arrange for the:
 - installation of meters
 - provision and maintenance of the metering installation, and
 - collection, processing and delivery of metering data.
 - b) All new and replacement meters installed at small customer connection points must meet a new minimum services specification.
 - c) As the Responsible Person does today, the Metering Coordinator will engage:
 - a Metering Provider to carry out the installation and maintenance of the metering installation, and
 - a Metering Data Provider to provide metering data services.

2.2 Categories of services provided by advanced meters

The AEMC draft determination defines three categories of services that could be provided by advanced meters:

- **Primary services** are those should form part of any minimum services specification.

³ These descriptions are drawn from the text of the draft determination, and the proposed new Chapter 7 of the NER.

- **Secondary services** may be included in a minimum services specification if advanced meters were rolled out on a non-competitive basis as part of a rollout mandated by a jurisdiction.
- **Value added services** are those that do not meet the above criteria and should not be included in the minimum services specification, but could be negotiated.

2.3 Network services and network solutions

DNSPs may be interested in gaining access to secondary services and/or value added services. These are referred to as **network services** in this report.

Network services would be used by DNSPs to implement **network solutions** that provide economic benefits including for customers.

We understand that in Victoria where advanced meters have been installed, DNSPs are beginning to use metering information and associated network services⁴ to generate benefits for customers. These benefits include: enhanced meter outage notification for wide area faults and single premises faults; demand response initiatives (e.g. supply capacity control, including control of air-conditioning and photovoltaic generation devices); and collection of more detailed 5 minute data to enable network benefits, such as assisting with detection and location of high resistance joints, meter bypass, neutral integrity, phase identification and phase balancing.

⁴ Noting that such services currently are vertically integrated within the DNSP that provides and operates AMI meters under the Victorian government's mandated smart meter rollout.

3. Economic questions

This section poses three relevant economic questions that have arisen in the course of our review. They are:

- What are the implications for market power given relationship-specific investments in a vertical supply chain? (Section 3.1)
- Are there appropriate and aligned incentives to ensure efficient contracting for network services? (Section 3.2)
- If there are differences in individual Metering Coordinators' cost functions, do those differences affect efficiency? (Section 3.3)

The implications of these issues are discussed in section 5 and 6.

3.1 Relationship specific investments in vertical supply chain

Many of the issues addressed in this report can be characterised in economic terms as involving 'relationship specific investments' in a vertical supply chain. Section 3.1.1 discusses market power in a vertical supply chain. Section 3.1.2 discusses long term network services agreements.

3.1.1 Market power

Market power refers to the ability of a firm (or group of firms) to raise and maintain price above the level that would prevail under competition. The exercise of market power can lead to reduced output and loss of economic welfare. Where firms can exercise market power then economic regulation (including light handed regulation) can be established to mitigate these adverse impacts.

One subset of misuse of market power relates to third party access to infrastructure with natural monopoly characteristics. Much of the discussion and analysis of economic regulation is about access to infrastructure services.

A second subset of misuse of market power relates to the provision of goods or services within a vertical supply chain. A Metering Coordinator's investment in additional network services, and a related DNSP investment in network solutions, is an example of such services provided within a vertical supply chain. These are also known in economics as *relationship specific investments*.

This means that the ongoing economic value provided by network services and a network solution are interdependent. The value of each is only maintained if both continue to be available and operate. If one service is removed or impaired, then the other service has reduced or zero value.

This relationship specific investment problem could have been handled through vertical integration of metering and related network solutions within a single business (the

DNSP). However, the policy decision in the Power of Choice reforms is to force vertical separation of metering from the rest of the DNSP business.

In vertically separated supply chains, long-term contracts must be entered at the time when relationship-specific investments are made. Well-designed long term contracts can promote economic efficiency and prevent either party exercising market power.

3.1.2 Network service agreements

The AEMC considers that a DNSP will acquire the network services it needs as follows:⁵

A DNSP may, with the cooperation of the Metering Coordinator and the relevant retailer, as the Financially Responsible Market Participant, choose to help fund the installation of advanced meters in its network area and secure access to the services provided by these meters by entering into long-term contracts with Metering Coordinators.

In this report, we call these long-term contracts ‘**network services agreements**’.

If a DNSP cannot negotiate a satisfactory arrangement with the Metering Coordinator to access the services enabled by advanced meters, the draft rule allows DNSPs to continue to use their existing network devices or install new network devices for the purpose of operating or monitoring the provision of services by Metering Coordinators.⁶

3.1.3 Potential market power problems with network service agreements

There are two potential market power problems that could arise with network service agreements.

Firstly, prior to entering into a network service agreement, a Metering Coordinator may be able to exercise significant market power. If this is the case, then the price of network services might be excessive, and/or the level of investment in network solutions may be inadequate compared to what would be expected in a workably competitive market. This problem and the potential solutions are discussed in section 6.

Secondly, once a DNSP has entered into network service agreements with the relevant Metering Coordinator, the rules provide that a new Metering Coordinator could be appointed by FRMP. The new Metering Coordinator would not have a network service agreement in place with the local DNSP; but such an agreement may be necessary to support existing network solutions. This circumstance creates the potential for

⁵ AEMC draft determination, page 70

⁶ *Ibid*, at page 238

inefficient outcomes through a lack of continuity in ongoing provision of network services. This problem and the recommended solution are discussed in section 6.

3.2 Aligned incentives needed for effective contracting and coordination

3.2.1 Incentives for contracting

The AEMC proposes not to regulate the commercial negotiations between DNSPs and Metering Coordinators for agreement of the terms and conditions of network service agreements.

A precondition from micro economic theory is that for an unregulated negotiation to promote economic efficiency, the incentives for the seller and the buyer must be aligned.

Relevantly, the seller must have the prospect of being economically better off from discovering and meeting the needs of the buyer. **It is unclear whether a Metering Coordinator affiliated with a retailer will have incentives to discover and meet the needs of a DNSP.** This point is discussed in section 5.1.2.

3.2.2 Incentives for Retailer and DNSP to cooperate with prospective Metering Coordinators

An implication of the AEMC proposal, but which is not explored in the draft determination, is that the Retailer as the FRMP and the DNSP will cooperate and effectively coordinate their respective dealings and negotiations with prospective Metering Coordinators in an orderly way.

Micro economic theory suggests that two parties would have incentives to cooperate in their dealing with a supplier if they would both be economically better off from doing so.

It is unclear what incentives exist for a Retailer and DNSP to cooperate. They each have different drivers and incentives. A Retailer creates economic value competing with other Retailers to attract customers in the retail market, or through selling metering services through an affiliated Metering Coordinator.

If the profit potential for a Retailer from selling network services through an affiliated Metering Coordinator was relatively high, then it would have incentives to cooperate with a DNSP in entering into mutually beneficial network service agreements.

But if the profit potential from other strategies (such as competing for customers in the retail market) was high then there is no clear incentive for a Retailer to cooperate with a DNSP to assist it in entering a network service agreement with the Metering Coordinator.

3.3 Potential effect of differences in Metering Coordinator cost functions

Conceptually, each Metering Coordinator will have a cost function as shown in Figure 1. This shows that a Metering Coordinator can provide the minimum service (MS) at a cost of C_{MS} , Network Services 1 (NS1) can be added for a total cost of C_{NS1} and Network Services 1 and 2 can be added for a total cost of C_{NS2} .

Figure 1
Metering Coordinator Cost Function

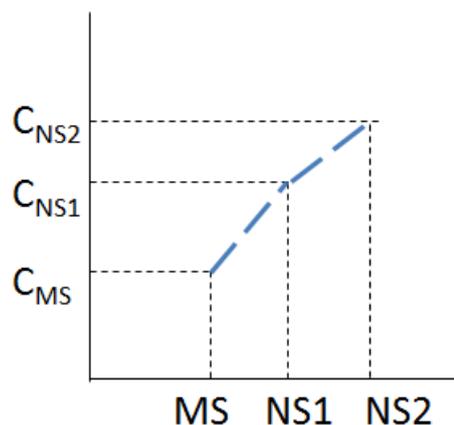
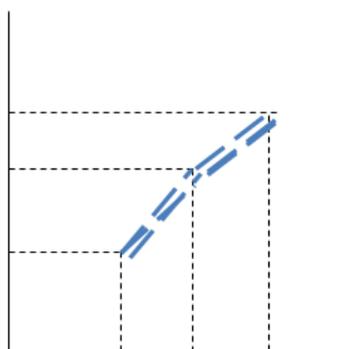


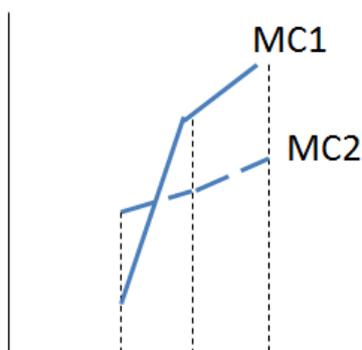
Figure 2 shows a situation where the cost function for every Metering Coordinator is approximately the same. In this case the long term interest of consumers will not be affected by the choice of Metering Coordinator by the Retailer.

Figure 2
Metering Coordinators have similar cost functions



But now consider the situation where the cost functions are materially different as shown in Figure 3.

Figure 3
Metering Coordinators have different cost functions



MC1 has a lower cost for minimum services but a significantly higher cost for network services than MC2. A Retailer has a clear incentive to select MC1 because it has the lowest cost for minimum services, and an incentive not to select MC2. However MC2 has a significantly lower total cost for all three services. Assuming that network services 1 and 2 are beneficial to customers (because of the associated network solutions) the Retailer's choice of MC1 will leave consumers worse off.

We understand that Landis + Gyr⁷ at a recent AEMC forum suggested that the current draft rule created incentives for meter suppliers to focus on competing strongly to supply the market for minimum services, even though in their view the incremental costs of additional meter functionality was likely to be small. This supports the suggestion that competition to minimise the price of supply the services demanded by Retailers could drive Metering Coordinators' costing and pricing strategies.

However we do not have detailed information on Metering Coordinators' cost functions, or if there were differences, whether overall they would have a material economic impact. This question may warrant further investigation. The regulatory implications are discussed in the context of particular market and incentive problems and solutions in later sections of this report.

⁷ Adrian Clark, CEO Landis+GyrAustralia and New Zealand, AEMC Forum – Metering Business Perspective

4. Light handed regulation

For the issues considered in sections 5 and 6 of this report, the ENA asked us to consider light handed regulatory solutions that could address identified problems, and promote the long term interest of consumers.

This section outlines what we mean by light-handed regulation. Section 4.1 discusses insights from light-handed regulatory regimes, and sets out relevant design principles used elsewhere. Section 4.2 discusses related insights from best practice regulation.

4.1 Insights from light handed regulatory regimes

There has been a long history in Australia and New Zealand of using light-handed regulation to mitigate the exercise of market power in infrastructure services, going back over 25 years. Examples of light handed regulation include the regimes adopted for Australian Airports, Australian light regulation natural gas pipelines access, and for New Zealand telecommunications and electricity networks in the 1980's and 1990's.

Appendix A describes relevant experiences with light-handed regulation. It draws on the AEMC discussion of the spectrum of regulatory options⁸, an ACCC research paper on light handed regulation⁹, and various source documents describing specific light handed regulatory regimes. Our review suggests at least six potential reasons why policy makers adopt light handed regulation regimes. These are set out in Table 1 and assessed for potential relevance to addressing problems with DNSP – Metering Coordinator contracting (section 5) and network services continuity regulation (section 6).

Table 1 – Relevant design principles from review of light handed regulatory regimes

Reasons for adopting light handed regulation	Relevant to addressing problems with DNSP – Metering Coordinator contracting?	Relevant to network services continuity regulation?
Maximise use of commercial process - the participants in an industry will generally know more about relevant issues and problems and are often best placed to arrive at solutions then is a regulator	Yes	Yes
Minimise the costs of regulation - the costs of heavier handed regulation options relative to the benefits are considered too high	Yes	Yes

⁸ Section E.4.3, AEMC draft determination

⁹ *Alternative approaches to regulation: an economic analysis of light-handed regulation*, Simon Cowan, Paper prepared for the Australian Competition and Consumer Commission Regulatory Conference, Surfers' Paradise, 6 July 2007.

Reasons for adopting light handed regulation	Relevant to addressing problems with DNSP – Metering Coordinator contracting?	Relevant to network services continuity regulation?
Uncertainty over the need or approach for regulation - in the early stages of reform it may be unclear as to what regulatory problems may emerge, whether they justify regulation and what are the best forms of regulation. Light-handed regulation may provide a starting point for further regulatory development if required.	Yes	Yes
Strengthen countervailing market power – where an entity has a moderate level of market power, and other parties have a degree of countervailing market power then the latter can be strengthened through a light handed regulation.	Yes	No ¹⁰
Threat of regulation – In some regimes (New Zealand in 1980's - 1990's) light-handed regulation regimes relied on a threat of further regulation (which may be explicit or implicit).	Yes – threat of regulation could potentially play a role	No
Business or sector too small for market power problem to be material – There may be substantial market power but the costs of setting up a full regulatory regime are not justified.	No – metering services and use of them by DNSPs assessed as significant.	

Relevant insights that arise for this review are:

- In the early stages of reform it may be unclear what regulatory problems may emerge. Light-handed regulation often accommodates the concept of evolution, i.e. it enables the extent of regulation to be increased (or decreased) only as or when evidence of the need for regulation becomes clear; and it provides better information on the best form of regulation.
- A common form of light handed regulation is to establish a monitoring regime to support evolution and help determine whether further regulation is warranted.
- Some design principles that have guided development of light handed regulatory regimes are relevant to consider here. These are:
 - Maximising the use of commercial processes
 - Minimising the cost of regulation for both the regulator and affected parties
 - Accepting that not all problems and risks will necessarily be addressed

¹⁰ See Appendix B. An uncontracted metering coordinator has a high level of high market. Therefore strengthening the countervailing market power of a DNSP is not feasible approach

4.2 Insights from best practice regulation

Other relevant design principles drawn from best practice regulation¹¹ are to:

- draw on existing frameworks, processes and decision makers where possible (to promote administrative efficiency, stakeholder understanding and acceptance)
- ensure regulation fits seamlessly with other laws and regulations.¹²

¹¹ Best Practice Regulation: A Guide for Ministerial Councils and National Standard Setting Bodies, Council of Australian Government's 18 November 2014; The Australian Government Guide to Regulation, 2014 available at http://cuttingredtape.gov.au/sites/default/files/documents/australian_government_guide_regulation.pdf

¹² See for example, The Victorian Guide to Regulation, updated December 2014, which refers to the need for "compatibility with other laws and regulations".

5. Network Services Provider – Metering Coordinator contracting

The AEMC envisages that a DNSP will acquire network services as follows:¹³

A DNSP may, with the cooperation of the Metering Coordinator and the relevant retailer, as the FRMP choose to help fund the installation of advanced meters in its network area and secure access to the services provided by these meters by entering into long-term contracts with Metering Coordinators.

This section considers how this process may work in practice, and then examines the circumstances where a Metering Coordinator may have the ability and incentive to exercise market power in its negotiations with DNSPs over the terms of network services contracts.

As the AEMC notes there is uncertainty about the potential for exercise of market power by Retailers and Metering Coordinators that may affect network services contracting. However our analysis raises valid concerns about market power *and* incentive problems. In our view some form of regulation is warranted to address these problems.

We *disagree* with the AEMC that a three year review is appropriate or adequate to deal with the uncertainty. More over the AEMC does not deal with potential misaligned incentives.

This section uses a best practice regularity approach to analyse market power and incentive problems, explores possible solutions and make firm recommendations on regulatory and administrative actions in section 5.5.

Approach and structure of this chapter

Section 5.2 assesses ability and incentives for the exercise of market power in relation to the DNSP - Metering Coordinator contracting process. The AEMC's reasons¹⁴ for *not* regulating access to Metering Coordinator services are assessed in section 5.1.1. In section 5.1.2 we examine practical issues associated with cooperation identified in our review, and conclude that a range of potential concerns exists, some of which warrant further investigation. Section **Error! Reference source not found.** summarises our conclusions on the extent of market power concerns. Section 5.2 discusses the AEMC's recommendation not to regulate access to Metering Coordinator services, and to undertake a review after three years. Section 5.3 then sets out our recommended

¹³ Page 70 of the draft rule determination

¹⁴ See Appendix E of the draft determination

approach to addressing concerns about DNSP access to network services. Section 5.4 discusses and evaluates potential light handed options for regulation to address the concerns about DNSP access to network services. Section 5.5 sets out our recommendations and conclusions.

5.1 Assessment of market power in DNSP – Meter Coordinator contracting process

5.1.1 Mitigating factors identified by AEMC

The AEMC recognises a number of possible risks to the effectiveness of competition,¹⁵ including that Metering Coordinators may be able to restrict access to metering services and products by *not* providing metering services on reasonable terms and conditions or at efficient prices. The AEMC identified the following factors that could mitigate these risks:

1. The DNSP will be a monopsony buyer and have countervailing power.
2. For some network services, DNSPs will not need access to services at all connection points.
3. DNSPs may either retain existing network devices or install new network devices.
4. DNSPs may face competition from Retailers or other third parties for some of the services they require.

These factors are assessed below.

NSP is a monopsony buyer

The AEMC states that¹⁶:

...the ability of a Metering Coordinator to exercise market power may be constrained by ...[t]he bargaining power of DNSPs as the only potential party interested in particular services. This will incentivise Metering Coordinators to negotiate with DNSPs and provide services at reasonable cost.

and¹⁷

Services such as voltage or power quality data are unlikely to be of interest to any other parties. If a DNSP decides not to purchase these services, the Metering Coordinator will have no alternative buyers.

¹⁵ Page 261 of the draft rule determination

¹⁶ Pages 68 and 69 of the draft rule determination

¹⁷ At page 261

The willingness of a DNSP to pay for a metering service will be capped by the value the DNSP can achieve from obtaining that service. This will be affected by the relevant AER price determination (including whether any funding is allowed by the AER and the incentives created by the regulatory framework), and potentially, expectations about subsequent AER price determinations. This means that there will always be some upper limit on the price a DNSP is prepared to pay for a service.

There are two concerns our review has identified:

- Metering Coordinators may keep cost information confidential, and it may not be possible for a DNSP to understand actual efficient costs.
- The strategic drivers for a Metering Coordinator that is affiliated to a Retailer are not clear. It *could* have commercial incentives to offer network services demanded by the DNSP. However, it could also have conflicting incentives to act in alignment with its affiliated Retailer's business strategy (for example, to roll out low cost basic advanced meters quickly to maximise market share in the advanced metering market).

NSPs may not need to access information at all connection points

The AEMC states that for some services DNSPs will not need access to services at all connection points in order to operate the network effectively. We agree in theory that this could be a relevant factor that creates countervailing market power, but its relevance depends on the factual situation in a specific case.

Energia¹⁸ states that most network benefits require a certain minimum level of penetration to operate at all, and then increase at some rate as the accuracy of the information improves. Energia state that the benefits from demand management are likely to arise from around the 70% penetration level or greater due to the high number of potential participants required to generate a sufficient response. Other network benefits, such as theft identification, require virtually all loads to be metered before leakage can be detected with any accuracy.

Option to retain or install other network devices

The AEMC states that DNSPs will have the option of either retaining existing devices or installing new network devices. This allows them a credible threat to bypass the services of a Metering Coordinator if they consider the price charged by that Metering Coordinator is too high.

¹⁸ Section 8.1.4 *Review of the Potential Network Benefits of Smart Metering* prepared by Energia for the Energy Networks Association, May 2014

Again, we agree in theory that this could be a relevant factor that promotes countervailing market power, but its relevance depends on the facts in a specific situation. The associated costs and practical technical questions will determine whether retaining existing devices or installing new network devices is a meaningful negotiating position to achieve reasonable price outcomes.

If the cost of installing another network device is only moderately above the marginal cost of provision by the Metering Coordinator service, then such a competitive response would be consistent with the outcome expected in a workably competitive market. But if the marginal cost difference is significant and the Metering Coordinator can materially mark up the service price to the cost of the alternative, then installing another network device would be economically inefficient for customers, and inconsistent with a workably competitive market.

Finally we understand that if new network devices are installed, it may be important that these devices can interoperate seamlessly with existing equipment.¹⁹ This may create constraints on the option of installing other network devices.

5.1.2 Other incentive and market power concerns

Our review identified other incentive and market power concerns that may affect the ability of DNSPs to acquire the services they need:

1. **Incentives** - Weak or misaligned incentives for Retailer cooperation
2. **Complex planning** - DNSP planning for the required network services is complex
3. **Assurance** - Do DNSPs have adequate assurance of the Metering Coordinator's capability to provide the network services?
4. **Coordination** - How will the Retailer and DNSP respectively coordinate their individual contracting processes (and ensure these fit seamlessly with other obligations and processes)?

These factors are discussed below.

¹⁹ "It is in the interests of all parties that equipment from multiple manufacturers interoperates seamlessly within customers' premises so that equipment does not have to be replaced, adding cost and creating disturbance for customers." UK Government Response to the Consultation on the second version of the Smart Metering Equipment Technical Specifications, Part 2, 1 July 2013

Weak or misaligned incentives to encourage Retailer cooperation to support DNSPs acquiring network services

As noted the AEMC envisages that the DNSP, Retailer, and relevant Metering Coordinator will cooperate to enable the DNSP to procure the network services it requires (subject to the costs of the network services being proportionate to the overall benefits).

This cooperation must occur for the AEMC model to work, and for DNSPs to be able to acquire the network services they need. The AEMC does not explore in the draft determination whether the necessary incentives for the parties to cooperate exist. The question of the adequacy of incentives for cooperation is a separate question from questions of Metering Coordinators' market power.

We agree that there are commercial incentives for a DNSP and a fully independent commercial Metering Coordinator to cooperate. However an independent Metering Coordinator could still exercise market power. An independent commercial Metering Coordinator will have incentives to offer the network services demanded by the DNSP.

As discussed in section 3.2.1 a Retailer may not have aligned incentives to cooperate with a DNSP.

Planning for provision of network services is complex

We understand that DNSPs' planning to determine their demand for network services can be complex and in some cases will require coordinated negotiation with all or most prospective Metering Coordinators. For example:

- Some network services provided by advanced meters will not be of value unless a certain density of meters is available – this could require coordinated negotiation of network service agreements with every potential Metering Coordinator.
- In other cases, the networks may require network services in specific parts of the network. Again this may require complex negotiations with most or all Metering Coordinators.

These challenges draw attention to the practical commercial process and timeframes for undertaking such negotiations, where it is the Retailer who may be in control of the process.

For example, the draft rule does not prevent Retailers contracting with Metering Coordinators at different times. Where a high density of meters is required, will the DNSP be able to commence the contracting process with all Metering Coordinators before they are all appointed? Or would it need to wait until the last one is appointed, so as to have certainty on network services costs? And as discussed above, what incentives do Retailers have to organise their contracting in a way that enables the DNSP to undertake its contracting with Metering Coordinators efficiently?

These planning challenges highlight:

- the importance of an orderly process for early engagement and information provision between DNSPs and Metering Coordinators
- the need for adequate time for negotiating a network services agreement after a DNSP is advised that a Retailer intends to appoint a Metering Coordinator (see below).

Where network services require a high rate of penetration to provide value, a regulatory mechanism may be needed to support simultaneous DNSP negotiations with multiple Metering Coordinators *before* they commence providing services to Retailers. This question warrants further investigation.

Difficulty for DNSP to assess capability of Metering Coordinators

In a workably competitive market (involving complex technologies) it is normal commercial practice that a buyer of a service will undertake assurance activities to ensure that a potential supplier has adequate technical and financial capability to provide the services it needs. Typically a buyer will only contract with pre-qualified parties that meet a minimum capability standard.

The effect of the draft rule is that a DNSP may be unable to gain such assurance. The DNSP must contract with the Metering Coordinator selected by the Retailer; the Retailer itself can be changed readily by the Metering Coordinator and a new Metering Coordinator appointed.

It is theoretically possible that a Retailer could select (or establish its own) MC that lacks sufficient technical or financial capability to provide the network services demanded by a DNSP, or will expose the DNSP to unmanageable risk. The reasons for this include:

- Retailers may be interested in a narrower range of services than DNSPs; and
- Retailers have no obvious incentive to undertake assurance or manage supplier performance risks for services other than the ones they are contracting for.

These are not the standard incentives expected in a workably competitive market. In a workably competitive market, the party making a key supply decision has some incentives to meet the needs of the relevant customers.

We are not aware of any investigation of this point; we suggest it warrants further evaluation. (See section 5.4.2.)

Early engagement – identifying potential Metering Coordinators

The first step in any supplier contracting process (after assurance checks) is early buyer – seller engagement.

In a workably competitive market all qualified Metering Coordinators that may potentially operate in a DNSP's area would be expected to engage early with the DNSP in relation to potential supply of network services. This process would run in parallel with the Retailer's engagement/selection/negotiation process.

As noted, an independent commercial Metering Coordinator would have incentives for early engagement with the DNSP.

However, it is unclear that a Metering Coordinator affiliated with a Retailer will have an incentive to engage with the DNSP. This will depend on the perceived profitability of different commercial strategies. If a Retailer commercial strategy to quickly roll out advanced meters with minimum functionality is more profitable (e.g. because it is more timely and less risky) than a strategy to sell network services to the DNSP, then the early engagement expected in a workably competitive market may not occur.

To the extent that the AEMC has drawn on the New Zealand experience in developing this aspect of its model, we note that New Zealand networks have little demand for network services.

In our view this issue warrants further investigation by the AEMC before finalising the rule change.

Coordination of Retailer and DNSP contracting processes

Parties are free (and should be encouraged) to pursue whatever commercial process they wish. However, from a regulatory analysis perspective, it is unrealistic to expect that a DNSP or a Metering Coordinator would wish to enter into a contingent commercial agreement in advance of, or simultaneously with the negotiation of a retail metering services agreement. Negotiating a contingent contract with multiple Metering Coordinators will be more complex with higher transactions costs for all parties than waiting until the Retailer has appointed the Metering Coordinator. Also, Retailers may keep their contractual negotiations with Metering Coordinators confidential until finalised.

The best assumption on the contracting process expected in a workably competitive market is the following sequence of events:

1. Retail metering services contract agreed, followed by
2. Network services agreement negotiation.

Retailer power to determine DNSP-Metering Coordinator negotiating process and timeframes

In a workably competitive market, it is normal commercial practice for a buyer and supplier of a service to be able to make their own commercial decisions on a sensible process and timing for contractual negotiations within the overall market context. The timing and process for undertaking negotiations is a matter of mutual agreement.

The AEMC draft rules empower the Retailer to determine or strongly influence the DNSP - Metering Coordinator contracting timeframes.

For example, there is no limitation in the draft rule on a Retailer including contractual provisions in the Retailer metering services agreement that in effect requires the roll out

of advanced meters to commence immediately when a change in Metering Coordinator is triggered. Nor is there any limit on a Retailer appointing its own Metering Coordinator affiliate which is aligned with the Retailer strategy (say to rapidly roll out low cost basic meters).

In order to optimise the total (retailer and network) metering service and make commercial decisions, the Metering Coordinator could insist on finalising the network service agreement immediately /very quickly. This would limit the DNSP's countervailing market power and may lead to outcomes not consistent with workable competition. In other words, the DNSP may be faced with a very limited bargaining timeframe and a "take it or leave it" offer.

In this way, the power provided to the Retailer to select the Metering Coordinator and determine the terms of the retail metering services agreement could translate into increased market power for the Metering Coordinator.

5.1.3 Assessment of AEMC analysis on market power

Once appointed, the Metering Coordinator is a monopoly supplier of network services. While the AEMC has identified theoretical mitigating factors, ultimately it is uncertain whether in practice these factors will limit market power to the level expected in a workably competitive market.

Moreover we have identified additional market power concerns and potential incentive problems in the proposed market arrangements. There are unaddressed subtleties and practicalities of the processes for identifying the services that DNSPs require, Retailer incentives, and the potential control of Retailers on the contracting timelines.

We note:

1. **Complex DNSP planning affects outcomes** - Planning for provision of network services can be complex, creating significant challenges for DNSP coordinating with multiple Metering Coordinators.
2. **Potential weak or conflicting incentives for cooperation** - There may be weak incentives on Retailers to cooperate with DNSPs to ensure DNSPs can acquire the network services they need. The incentives of a Retailer-affiliated Metering Coordinator to meet DNSP needs are unclear.
3. **Metering Coordinator assurance issues** - There may be concerns with the potential inability for DNSPs to undertake assurance of Metering Coordinator capability.
4. **Retailers influencing timing** - Retailers potentially have the power to determine or strongly influence the DNSP – Metering Coordinator contracting process and timelines. Retailers' contractual requirements may in practice mean DNSPs face a limited timeframe and "take it or leave it offer".
5. **No transparency on costs** - In commercial negotiations, Metering Coordinators may seek to keep cost information confidential such that DNSPs are unable to understand efficient costs.

In addition the AEMC's analysis is silent on the critical issue of continuity of network services following Metering Coordinator churn. This is considered in section 6.

5.2 Proposed 3 year review of need for access regulation

5.2.1 AEMC position

The AEMC's draft determination concludes that the costs of introducing access regulation to manage the potential emergence of competition issues are likely to outweigh the benefits at this time. The AEMC is concerned that the risk of arbitrated outcomes under a negotiate/arbitrate mechanism may significantly diminish incentives for investment.

The AEMC proposes not to regulate access to Metering Coordinator services at market start, and recommends a review of the need for access regulation three years after the new Chapter 7 of the NER commences, when the market has had time to develop. There is an implied threat of regulation if justified upon review.

5.2.2 Our assessment is that more is needed

Our assessment of the AEMC's approach identified three questions:

- Is the policy outcome sought by the AEMC sound, and adequate?
- Could a negotiate/arbitrate mechanism significantly diminish incentives for investment?
- Will a three year review and the threat of future regulation be effective measures to mitigate competition concerns?

Adequacy of policy outcomes sought – incentivising investment

The AEMC considers and rejects a number of regulatory options, largely on the basis that the anticipated costs and risks of regulation would exceed the benefits.

In its comments on a possible negotiate/arbitrate mechanism, the AEMC expresses concern that existence of access to arbitration, and the arbitrated outcomes, may significantly diminish incentives for investment in advanced metering. It states:

A negotiate/arbitrate mechanism could also undermine the development of a market in metering services by introducing substantial uncertainty. Investors in advanced meters could face a risk that they may be required by a third party

*arbitrator to share this infrastructure, or the services it provides, at prices lower than those envisaged when the original business case for the investment was developed.*²⁰

and

*....may discourage genuine commercial negotiation. A third party seeking access to metering services may consider it can always achieve a better outcome by raising a dispute and going to arbitration.*²¹

While incentives for investment in advanced metering are important, we consider that the long term interest of consumers are not necessarily promoted *only* by high levels of investment in advanced metering *per se*.

Rather, the long term interests of consumers is also promoted through maximising the *quality* of investment in advanced metering and related services. This will be achieved in part through providing incentives for investment in network services and related network solutions that promote increased network efficiency.

Effect of negotiate/arbitrate on incentives for investment

The AEMC asserts that the costs and risks of a negotiate/arbitrate mechanism at market start would outweigh the benefits.

We accept the principle that regulation should not be imposed unless there is a material problem to be addressed, and that the regulatory solution should be a proportionate response to that problem.

Where our analysis differs from the AEMC is the importance we place on the current uncertainty associated with market power and incentives in the new proposed new market.

A three year review is not effective

In practice, it takes some time for stakeholders to make decisions on rule change applications following a review, and further time for the AEMC to undertake its rule change process. Therefore the timeframe for any new rules becoming effective following a review could be at least four years or more from market start.

We consider there is high probability that it will be too late to take regulatory action *ex post* if, over the next three to four years:

- the detriments from any significant market power and incentive problems become embedded in long term network service agreements; and

²⁰ Page 274 of the draft rule determination

²¹ Page 273 of the draft rule determination

- advanced meter roll outs are well under way, that are not optimally efficient (in the long term interests of consumers).

The form of any future regulation that might result from the review is not clear. Though the AEMC has not explicitly proposed the review to create a threat of regulation, it may be perceived as having this result. In our experience, the threat of regulation is a poor tool to influence behaviour unless it is credible, and the regulatory framework is in place to enable swift implementation.

Therefore we consider that the proposed three year review and implied threat of regulation (where the form of that regulation is yet to be defined) are unlikely to be effective in addressing any actual competition or incentive problems that may emerge.

5.3 Recommendations to address concerns about DNSP access to network services

Box 1 sets out our recommended approach to addressing concerns about DNSP access to network services, drawing on the analysis above.

Box 1 - Recommend actions to address concerns about DNSP access to network services

1. Change the policy outcomes sought. They should promote an *appropriate quality of investment*, not *any* investment per se, and encompass incentives for efficient investment in network services and related network solutions, that support the NEO.
2. In the short term, explore the issues discussed in section 5.1.2 above. Where material problems are confirmed, develop targeted measures to address them (see below)
3. Do **not** rely on a three year review and threat of future regulation.
4. Consider light handed *ex ante* regulatory mechanisms that balance:
 - concerns about the costs and risk of access to arbitration at this time, with
 - the objective of efficient investment in the long-term interest of consumers including promoting an appropriate quantity and quality of investment in advanced metering *and* network services.

These measures can be implemented in the final rule determination, or in a second round of Chapter 7 rule changes.

5.4 Light handed regulatory options

Having established that there are material concerns that warrant action, this section canvasses potential options to address them. In line with best practice, this section canvasses options quite broadly, both regulatory and non-regulatory.

The options are organised as follows:

1. Regulation to promote cooperation between the parties
2. Regulation targeted at different phases of the negotiating process
 - Phase 1 - Early engagement through to the Retailer selecting its preferred Metering coordinator
 - Phase 2 - From notification of preferred Metering Coordinator to final network service agreement
3. Using an industry readiness review (before market start) to encourage timely cooperation, assess outcomes, and trigger additional access regulation if needed.

5.4.1 Regulation to promote cooperation between parties

As discussed, the AEMC model relies on DNSPs, Metering Coordinators and Retailers cooperating to meet DNSPs' needs. There is no obvious incentive for a Retailer and DNSP to cooperate, and the commercial incentives for a Retailer-affiliated Metering Coordinator are unclear. In our view effective cooperation is unlikely without additional guidance.

Option 1.1 – Set objectives to promote cooperative behaviour

A regulatory instrument (likely the Rules) would describe expectations, by:

- Setting out the outcomes sought from the cooperative process for establishing network service agreements
 - i.e. DNSPs should be able to gain access to network services on fair and reasonable terms; and
- Encouraging the Retailer, DNSP and Metering Coordinator (when appointed) to consult, cooperate, allow reasonable time, and negotiate in good faith.

A stronger regulatory option would be to make these outcomes enforceable (either directly, or through binding dispute resolution).

Our assessment is that Option 1.1 can be developed as light handed, nonintrusive regulation. Depending on the extent of prescription and enforcement, the regulatory benefits could outweigh the costs.

5.4.2 Regulation targeting different phases of negotiating process

A useful way to identify regulatory options is to work through sequentially each step of the process for developing and agreeing network services as contemplated by the AEMC, and identify points where market power could be exercised, or other problems could emerge. This approach suggests dividing the process into two phases.

- Phase 1 - Early engagement through to the Retailer selecting its preferred Metering Coordinator.

- Phase 2 – Retailer notification (to the DNSP) of its preferred Metering coordinator through to finalisations of a network service agreement between the DNSP and new Metering Coordinator.

A number of regulatory options are identified within each phase.

Phase I - Early engagement through to Retailer selection of MC

Assurance of metering coordinator capability

A key feature of the draft rule is the inclusion of a minimum services specification, which will apply to all new and replacement metering installations installed at a small customer's connection point. This is expected to provide greater opportunity for innovation to help deliver customers and third parties the services that they want at a lower cost and in a technology-neutral manner. The AEMC states that:

*The minimum services specification, coupled with specified service levels and performance standards, provides a **starting point for parties to negotiate access** to services that benefit their customers.²²*

One precondition for there being a workable starting point for negotiations is that a Retailer selects (or establishes its own) Metering Coordinator that has sufficient managerial, technical and risk management capability to provide the additional network services required by a DNSP.

If a Metering Coordinator does *not* have these capabilities, then arguably no amount of commercial negotiation would be able to address these shortcomings.

As discussed in section 3.2.1 it is not clear that the Retailer as the decision-maker appointing a Metering Coordinator has sufficiently strong incentives to select a Metering Coordinator that has the capabilities to provide network services.

Additional regulation may be warranted if:

- objective analysis²³ indicates a material risk that a Metering Coordinator could be appointed that does *not* have the necessary capacity to provide network services; and
- the DNSP alternatives of installing a separate device are excessively costly.

²² Section 4.6 AEMC draft determination

²³ The suggested analysis required could be in two stages. Firstly, analysis could be undertaken of the network services likely to be demanded by the DNSPs, and expert technical evaluation undertaken of any additional capability that Metering Coordinators would require to provide these services beyond the minimum specification service. If technical analysis indicates potential issues, then investigation might be required of the actual capability of potential Metering Coordinators.

The outcome of such regulation would preclude a Retailer from appointing a Metering Coordinator which lacked reasonable technical capability to provide network services needed by the DNSP. Such regulation should not affect the underlying costs of metering and related technology decisions agreed through negotiations; to this extent, it would be consistent with the AEMC policy intent. Also, the Retailer should be indifferent, paying only the costs for the minimum services it wishes to procure from the Metering Coordinator.

We note, however, that such regulation could increase the barriers to entry for Metering Coordinators, given the potentially higher costs of ensuring sufficient technical, managerial and risk management capability. Arguably such costs are consistent with the AEMC policy intent to enable commercial decisions to drive investment in network services, and to allow customer choice.

We also note in section 3.3 that there may be material differences in cost functions of different Metering Coordinators.

If investigation demonstrates that this is a material issue, then it may be appropriate to extend any regulated assurance process to also consider the likely total costs of Metering Coordinator services.

Promoting effective early engagement

Given that it is unclear whether a Retailer-affiliated Metering Coordinator will have sufficient incentives to engage early in discussions with the DNSP, that engagement could be supported through regulation of some sort.

Option 2.1 – Regulate to promote effective early MC-DNSP engagement

Regulation could require a Retailer-nominated Metering Coordinator to contact the DNSP and consult on the services that the DNSP requires.

Our assessment is that Option 2.1 can be developed as light handed, nonintrusive regulation. The benefits of this measure are likely to far exceed the costs.

Ensuring reasonable time for DNSP - Metering Coordinator negotiation

As discussed above, the AEMC draft rules enable a Retailer to determine or to strongly influence the DNSP - Metering Coordinator contracting timeframes.

Option 2.2 – Regulate to compel notice and time-bound opportunity for DNSP and Metering Coordinator negotiation

Regulation could require a Retailer to:

- notify the DNSP when it has selected its preferred Metering Coordinator; and
- allow a reasonable period of time (to be specified) after the provision of notice for the DNSP and Metering Coordinator to agree the terms of a network service agreement.

Option 2.2 should not create significant costs compared to the benefits. It seeks to replicate processes expected in a workably competitive market for parties to undertake reasonable negotiations, and counter-balances the power provided to the Retailer under the draft rule to determine the timing for negotiations.

Phase 2 - Notification of preferred Metering Coordinator to concluded network service agreement

This phase involves the process of negotiation and finalisation of a network service agreement. We have developed a range of regulatory options that could apply in this phase, set out below ranging least to most intrusive.

- Option 3.1 Unregulated commercial negotiation
- Option 3.2 Provide a forum where the DNSP can escalate concerns
- Option 3.3 Constrained rights for the DNSP to seek directions from a decision maker that promote a more balanced commercial negotiation
- Option 3.4 Regulation compelling Metering Coordinators to negotiate with DNSPs, and to have in place appropriate dispute resolution arrangements
- Option 3.5 A statutory-based negotiate and arbitrate model.

Each option is discussed below.

Option 3.1 No regulation of commercial negotiation

Commercial negotiations could follow the regulatory measures discussed in 5.4.1 (if implemented), but would otherwise be unregulated, with only the threat of future regulation if subsequent reviews indicated a market failure.

The AEMC expects this option to work, *without* regulatory measures to promote cooperation; this provides a counterfactual against which to evaluate the other options.

In our assessment, the likelihood of this option succeeding is unclear, and desired policy outcomes may be at risk. Success would be significantly more likely if suggested earlier regulatory interventions (in section 5.4.1) were implemented; and if the threat of regulation was credible, and capable of being implemented simply and quickly.

Option 3.2 Provide a forum where DNSPs can escalate concerns

There could be an agreed industry forum, possibly with some regulatory basis, where a DNSP could **escalate concerns for debate**.

This option recognises the current uncertainty about the extent of market power concerns. It would enable *actual* issues encountered to be objectively assessed based on the specific context and evidence.

This option would address the AEMC concerns regarding the risks associated with arbitration at this time. It also provides real evidence to inform any future assessment of the need for additional regulation to address market power concerns or address incentive problems.

Option 3.3 Constrained rights for DNSPs to seek directions

There could be an industry expert or panel where a DNSP could **escalate concerns for direction and guidance**.

Regulation would create a constrained right for DNSPs to seek directions from an agreed decision maker, that promotes a more balanced commercial negotiation. Directions would be binding on the Metering Coordinator. An example would be the right for a DNSP to seek a direction for a Metering Coordinator to provide reasonable cost information.²⁴

Options 3.2 and 3.3 could be applied jointly.

Option 3.4 Compel MCs to negotiate with DNSPs, offer dispute resolution

This option draws on elements of the framework for negotiated distribution and transmission services in chapters 6 and 6A of the NER. Under this option, regulation would compel Metering Coordinators to:

- negotiate in good faith with DNSPs in relation to network services, and
- have in place appropriate, published dispute resolution arrangements.

²⁴ The types of information may be similar to some categories listed in the approved negotiation framework provisions for distribution and transmission network services providers in the NER. See for example clauses 6.7.5(c) and 6A.9.5(c) of the Rules.

The process for dispute resolution would provide that all disputes as to the terms and conditions of access for provision of negotiated network services are to be dealt with in accordance with the Metering Coordinator's published arrangements.

Our assessment is that this option could play a role for non-pricing aspects of commercial disputes.

However it is not an effective tool to deal with monopoly pricing and a negotiate/arbitrate model is preferable. Concern with monopoly pricing is an economic regulatory issue that requires a well-designed framework with clear principles, fair and predictable processes, and accountable decision makers.

Option 3.5 – A statutory-based negotiate and arbitrate model

The elements of a negotiate and arbitrate framework are set out in the draft rule determination. A statutory-based negotiate and arbitrate model, would provide:

- an obligation on Metering Coordinators to offer network services²⁵
- the right for DNSPs to request services from the nominated Metering Coordinator
- an obligation on the Metering Coordinator to negotiate in good faith to supply those services if it is able
- access to arbitration if the DNSP and Metering Coordinator are unable to reach agreement, and
- both parties bound by the arbitrator's decision.

It is an appropriate regulatory mechanism to address monopoly pricing and other access disputes. This option is familiar to all stakeholders with existing mechanisms in the rules that could be drawn on or modified to apply.

Evaluation of options for Phase 2

We do not support the AEMC's option of no regulation to support commercial negotiations (Option 3.1). It will be too late to take regulatory action 'ex post', if over the next three to four years the detriments from significant market power and weak incentives become embedded in network service agreements. Advanced meter roll outs may be well progressed locking in inefficient network solutions that are not in the long term interest of consumers.

At this time we support providing for a negotiate and arbitrate model (option 3.5) but not activating the provisions. We believe that the regulatory framework should be put in

²⁵ Note that for a negotiate/arbitrate model to work this obligation would have to relate to network services and not minimum services.

place *now* to allow this model to be adopted by a simple administrative act in the future, if required (i.e. the ‘credible threat of regulation’). This is discussed further below.

We also recommend consideration of the following options:

Option 3.2 Provide a forum where a DNSP can escalate concerns for debate; and

Option 3.3 Constrained rights for a DNSP to seek directions and guidance.

5.4.3 Using the market start date and a readiness review to drive cooperation

The market commencement date of 1 July 2017 proposed by the AEMC creates an opportunity to drive cooperation. This cooperation will occur if all of the following circumstances apply:

1. There are adequate incentives for market participants to achieve a certain start date, and not face deferral. Our assessment is that there are strong incentives for Retailers and Metering Coordinators, and some (albeit weaker) incentives for DNSPs²⁶.
2. An objective independent industry readiness review is conducted before market start. The review must incorporate an assessment of the readiness of systems and processes, etc. as well as satisfactory negotiation of commercial agreements for network services between DNSPs and a sufficient number of registered/prospective Metering Coordinators.
3. The regulatory framework enables an entity (probably, the COAG Energy Council, acting on advice from an independent readiness reviewer) to defer the market commencement date if the market is not ready.
4. An assessment is made at that review point of the effect of and market power and incentives problems on Metering Coordinator-DNSP contracting, and the fall back regulatory threat can be activated if warranted.

²⁶ If the date is not achieved, DNSPs and retailers will have continuing obligations to purchase and provide meters and metering services for the mass market.

Option 4 – Readiness review, ability to defer start date, credible threat of regulation

The components of this option are:

- By administrative actions:
 - **establish governance arrangements and allocate resources** for reform implementation, and a market and systems readiness review
 - **commission a market and systems readiness review**, with review components that include satisfactory negotiation of contracts²⁷ for network services
- In the NER:
 - **Deferral mechanism** - Include a mechanism to allow the COAG Energy Council to defer the competitive metering market start date
 - **Create regulatory fall back** - Create the ability to extend, by an administrative act negotiate/arbitrate provisions to apply to Metering Coordinators and access seekers including DNSPs involved in negotiating for network services

Our assessment is that this option: assists with reform implementation; is consistent with light handed regulation; allows regulation to evolve as and when the need is clear; is likely to significantly improve the incentives on Retailers and Metering Coordinators to cooperate with DNSPs to achieve better long term outcomes for customers.

5.5 Recommendations

Our recommendations to improve the effectiveness of the DNSP-Metering Coordinator contracting process are as follows:

1. **Create a credible fall back regulatory mechanism** – The threat of regulation is ineffective unless it is credible and capable of swift implementation. The AEMC should create the ability to extend, by an administrative act a pre-defined negotiate/arbitrate regime to apply to Metering Coordinators and access seekers including DNSPs involved in negotiating for network services. This extension must be capable of easy implementation, i.e. by an administrative act, and not by a Rule change.
2. **Utilise the market start date and a readiness review to drive cooperation** – We recommend adopting Option 4 in its entirety. This means by administrative actions: establishing governance arrangements and allocating resources for reform implementation, and a market and systems readiness review; commissioning a market and systems readiness review, with review components that include

²⁷ Noting that rather than bilateral contracts, there could also be voluntary industry codes, or framework agreements of the type contemplated by the AEMC, established and accepted by participants.

satisfactory negotiation of contracts for network services. Also, amend the NER to create a market start deferral mechanism.

3. **Regulation to describe objectives and outcomes** - Include in regulatory instruments (possibly the NER) objectives and expected outcomes of the process for establishing network services agreements. These would include cooperation and consultation by Retailers, DNSPs and Metering Coordinators (when appointed), allowing reasonable time, and negotiating in good faith.
4. **Regulation to promote effective early Metering Coordinator-DNSP engagement** - Create a regulatory obligation for a Retailer-nominated Metering Coordinator to contact the relevant DNSP and consult on the services that the DNSP requires.
5. **Regulation to compel time-bound opportunity for negotiation** - Create a regulatory obligations for a Retailer to notify the relevant DNSP when it has selected its preferred Metering Coordinator, and allow a reasonable period of time (to be specified) after the provision of notice for the DNSP and Metering Coordinator to agree the terms of a network services agreement.
6. **Explore guidance forums** - Explore and develop the concept outlined in Option 3.2 which provides a forum to enable actual issues encountered to be objectively assessed based on the specific context and evidence of this paper.
7. Explore **constrained rights for DNSPs to seek directions** - Explore and develop the concept outlined in Options 3.3 which provides for a regulation which would create a constrained right for DNSPs to seek directions from an agreed decision maker, that promotes a more balanced commercial negotiation. Directions would be binding on the Metering Coordinator.

6. Ensuring continuity of network services

This section addresses the potentially inefficient outcomes where a new uncontracted Metering Coordinator is appointed by a Retailer, where a DNSP already has network service agreements in place, and has committed to investing in network solutions (which are dependent on continuous provision of those network services). It outlines possible regulatory measures to address this risk.

The measures outlined in section 5 above cannot assist with the particular problems that arise in these circumstances.

6.1 The nature of the problem

The appointment by a Retailer of an uncontracted Metering Coordinator could result in:

- the new Metering Coordinator *not* providing the required network services to enable ongoing provision of a network solution; or
- the new Metering Coordinator using its market power to require payment for network services at well above the efficient cost. In economics this is called a holdout problem (See Box 2).

Box 2 - The Holdout Problem

The holdout problem is a particular type of market power problem. Well-known examples of hold out problems occur in land markets and sovereign debt defaults.

The concept is illustrated by the problem of land aggregation²⁸. Say a developer wishes to assemble a number of land holdings to build a significant project (for example, a shopping centre). Individual landowners, knowing their land is essential to the completion of the project, can hold out for prices in excess of their opportunity costs. That is, individual owners, realising that they can impose substantial costs on the developer by not selling, can seek prices well in excess of an economically efficient market value for their land.

The holdout problem arises in public sector land developments and is dealt with by governments legislating to allow compulsory land acquisition. Such legislation provides that where assembly of land for the purpose of a project is assessed as being in the public interest (e.g. for a motorway) then the necessary land can be compulsorily acquired by the state, with landowners being paid a reasonable market value.

Farrier Swier Consulting, 2015

As discussed in section 2.3, DNSPs will consider investing in network solutions that make use of certain types of network services. Network solutions typically will require investment by the DNSP (for example in IT and communications systems or other equipment). A DNSP's normal business case evaluation would consider the various

²⁸ The Holdout Problem, Urban Sprawl, and Eminent Domain, Thomas J. Miceli and C.F. Sirmans

risks associated with the network solution including the ongoing continuity of the network service and certainty on pricing over the life of the investment.

The prospect of a future (churned) Metering Coordinator not providing network services or pursuing a holdout strategy potentially creates an unmanageable commercial risk for DNSP. If this risk is considered likely and has a material impact on the business case, then the **DNSP may not make the investment**.

Therefore the ability of uncontracted Metering Coordinators to be appointed in the future is likely to **undermine incentives for DNSP investment in efficient network solutions** that are dependent on continuity of network services, to the detriment of the long term interests of consumers.

In addition, allowing holdout to occur may result in **excessive prices for network services being charged by an uncontracted Metering Coordinator with excess costs ultimately falling on consumers**.

6.2 Specific circumstances of the problem and solution

In the AEMC's proposed competitive metering market, the specific circumstances where the holdout problem arises are as follows:

- A DNSP has already entered into network service agreements with existing Metering Coordinator(s) and these services are being supplied (or in the future, will be supplied following the roll out of sufficient advanced meters).
- The DNSP has invested (or intends to invest) in related network solutions, the ongoing value of which depends on continuity in provision of the agreed network services.
- A FRMP decides to (or may in future decide to) appoint a Metering Coordinator that does not have an agreement with the DNSP (Uncontracted Metering Coordinator) and under the draft rules has no obligation to provide network service.

An effective solution to this problem is characterised by the DNSP being indifferent to whether a new previously uncontracted Metering Coordinator is appointed because the new network service agreement has the same or similar terms to its existing network service agreements.

6.3 Outcomes sought, desired regulatory approach, regulatory design principles

This section sets out the outcomes expected from network services continuity regulation, and regulation design principles that are consistent with light handed and best practice regulation.

6.3.1 Outcomes expected from network services continuity regulation

As an initial matter we understand that the *Competition and Consumer Act 2010 (Cth)* would not be effective in preventing an uncontracted Metering Coordinator from exercising market power. A specific regulatory solution is required.

When considering new rules, the AEMC must assess whether the rules are likely to contribute to achieving the National Electricity Objective (NEO).

Any regulation of Metering Coordinators may create some barriers to entry into the network services market. The challenge is to develop regulation that is clearly justified and effective, while minimising those barriers.

Box 3 describes the desired outcomes from network services continuity regulation.

Box 3 - Outcomes expected from network services continuity regulation

Network services continuity regulation should:

1. Promote efficient investment in and operation of networks by ensuring that DNSPs have ongoing commercial and technical continuity for provision of related network services
2. Be designed to minimise barriers to entry for Metering Coordinators

These outcomes promote achievement of the NEO.

Ensuring the commercial and technical continuity of network services would reduce the risks of DNSPs incurring commercial losses when investing in network solutions, and thereby promote efficient investment in such solutions. Efficient network solutions create benefits for customers for example, through improved services to customers, lower network investment costs, improved network reliability, and improvements in power quality.

By promoting competition in the provision of metering and related services, the AEMC's draft rules are expected to promote the NEO. Minimising barriers to entry for an uncontracted Metering Coordinators supports this objective.

These may be inherently competing outcomes; a regulatory solution will need to strike a reasonable balance between them.

6.3.2 Desired regulatory approach for network services continuity regulation

The preferred form of regulation should be effective in achieving the expected outcomes and be 'light handed'. Our review of light-handed regulation was discussed in section 4.1. Specific insights that arise from this review relevant to the design of network services continuity regulation are:

- The high degree of market power that an uncontracted Metering Coordinator is likely to have renders some forms of light-handed regulation inappropriate.
- A variety of regulatory approaches are used in light-handed regulation regimes. The only feasible regulatory option to consider for network services continuity regulation would be a negotiate-arbitrate framework (see **Appendix C**).

6.3.3 Recommended regulation design principles

Drawing on the literature on light handed regulation and best practice regulation, we recommend the regulatory design principles set out in Box 4.

Box 4 - Recommended regulatory design principles for network services continuity regulation

- Minimise the cost of regulation for both the regulator and affected parties
- Maximise use of commercial processes
- Where a DNSP has an affiliated Metering Coordinator, avoid this creating a barrier to entry for the uncontracted Metering Coordinator
- Draw on existing frameworks, processes and decision makers where possible.
- Ensure regulation fits seamlessly with other laws and regulations

6.3.4 Discussion of regulatory design principles

Each of the regulatory design principles is discussed below.

Minimise costs of regulation

The form of regulation should be relatively simple and have low transactions cost for the regulator to develop, apply and enforce. It should also have low compliance costs for the regulated entities.

Maximise use of commercial processes

As noted, we envisage that where network services continuity regulation is applied, a DNSP will already have long term agreements in place with one or more Metering Coordinators for provision of network services.

This principle (maximise use of commercial processes) suggests a preference if possible for a regulatory solution that provides commercial flexibility for the DNSP and Metering Coordinator to negotiate, provided the desired outcome (commercial certainty for the DNSP) can be achieved.

Where a DNSP has an affiliated Metering Coordinator, avoid this creating a barrier to entry for the uncontracted Metering Coordinator

Where a DNSP has an affiliated Metering Coordinator providing network services then consideration may need to be given to whether the actual or (implied) terms and conditions are commercially reasonable. If the terms and conditions of the network service agreement between the DNSP and its affiliated Metering Coordinator were highly favourable to the DNSP, and the DNSP was able to insist that the uncontracted Metering Coordinator matches these terms then this may represent a barrier to entry.

Draw on existing frameworks processes and decision makers where possible

As discussed further below, where a regulatory solution involves a dispute resolution process, then ideally this should be the existing dispute resolution process in the National Electricity Rules.

Ensure regulatory solution fits seamlessly with other laws

Design and implementation of network services continuity regulation should fit seamlessly with party's roles and responsibilities under existing laws and regulation. We have not considered this aspect in detail at this conceptual stage.

6.3.5 Option evaluation criteria

In subsequent sections we develop and evaluate specific network services continuity regulation options. Option evaluation criteria are set out in Box 5. These criteria reflect the outcomes expected from network services continuity regulation (Box 3) and the regulatory design principles (Box 4).

Box 5 - Regulatory option evaluation criteria

1. Are implementation costs reasonable?
2. Are costs and risks to the parties fair and reasonable?
3. Does the option maximise scope for negotiation, to enable flexibility?
4. Does the option promote the expected outcomes, i.e.:
 - a) Continuity of network services for DNSPs
 - b) Minimising associated barriers of entry for uncontracted Metering Coordinators into the network services market?

6.4 Assumptions about network services contract parties

Under the AEMC approach, network services continuity regulation must focus on network service agreements entered into between a DNSP and a new Metering Coordinator appointed by the FRMP for a particular connection point.

In order to develop regulatory options, we have had to assume the likely form of network service agreement that may require some regulatory intervention. We suggest that, at least initially, regulation should focus on bilateral arrangements between a LNSP and an uncontracted Metering Coordinator, rather than multilateral arrangements across the sector. This reasoning is outlined below.

6.4.1 Contractual and regulatory options

Conceptually, the terms and conditions applying to the provision of network services could be set out in bilateral agreements, or in multilateral instruments. The associated aspects of the arrangements that might be the subject of regulatory intervention will differ, depending on this choice.

For example:

1. **Bilateral agreements** will involve many points of interaction between a DNSP and a Metering Coordinator including consultation, negotiation, and entering into agreements, with associated processes and contract content being potential targets of regulation.
2. **Multilateral arrangements**, potentially involving DNSPs, Metering Coordinators and Retailer/FRMPs, might entail:
 - a. Model network service agreements (non-binding)
 - b. An industry-developed network services code of conduct (non-binding)
 - c. An industry developed network services code of conduct, together with regulation to make the code binding on market participants.

We note that, in theory, the framework agreements contemplated by the AEMC to deal with Metering Coordinator churn could assume any of the above forms. This is a much broader issue than continuity regulation, and one that warrants industry and policy debate. Section 7 of this discusses some of the relevant issues.

6.4.2 Regulation through multilateral arrangements will be required in the future

In our view some type of multilateral arrangement for standardising certain aspects of network service agreements will in time become essential. Multilateral arrangements that bind all parties will assist in minimising the transaction and coordination costs

associated with developing and administering at least some basic or minimum aspect of network service agreement. A series of different bilateral network service agreements between a DNSP and various Metering Coordinators would seem to be costly and complex to manage.²⁹

The scope of a multilateral agreement or arrangement could not only deal with technical and commercial continuity of network services, but a range of other issues also, including churn of Metering Coordinators and meters (which is discussed in the next section on framework agreements).

If or when these developments occur, the best form of network services continuity regulation (if any) should be reviewed. It is beyond the scope of this report to explore such options further at this stage.

6.4.3 Initial regulation should focus on bilateral arrangements

At this early stage in the evolution of new competitive metering rules, we recommend assuming bilateral arrangements as the basis for regulatory interventions. In the short term, before multilateral arrangements emerge, bilateral arrangements provide the only certain basis for any network services continuity regulation.

6.5 Possible targets of regulation

Having assumed that the initial regulatory process should focus on bilateral agreements, a decision then needs to be made on ‘target’ for regulation, that is, which behaviours, actions, processes or decisions should be subject to regulation.

This section systematically analyses the options.

6.5.1 Notification step

The first step is a regulatory requirement for the FRMP to notify a DNSP that it proposes to appoint a new uncontracted Metering Coordinator to a connection point.

A FRMP has the right to appoint an accredited Metering Coordinator. Therefore, the trigger for any regulatory process is the decision by a FRMP that it wishes to appoint a Metering Coordinator who is not currently contracted to provide network services to the relevant DNSP.

We consider that such a notification requirement is reasonable and consistent with light-handed regulation. There are likely to be other practical technical, commercial and perhaps regulatory reasons why such notification is required. The details of this

²⁹ See section 7.1 for indicative matters that suggest the need for transparent, common regulation, rather than contracts.

notification requirement should ideally fit seamlessly with other such requirements. As such, regulation may be in the form of a binding protocol or similar instrument.

6.5.2 Other possible targets

We identified four options for targets for regulation that, *prima facie*, could facilitate the desired outcomes.

Regulation could be targeted at:

1. the **process of appointment** of an uncontracted Metering Coordinator by the FRMP
2. the **making of a network service agreement**
3. the **content** of a network service agreement
4. the **actual network services**.

6.5.3 Screening of options

High level screening helped to identify those options that *prima facie* appear feasible and most consistent with ‘light handed regulation’. This screening analysis is shown in Table 2. The first two options were identified as worth developing further.

Table 2 – Screening potential targets for regulation

Target of regulation	Initial assessment of option	Develop further?
Metering Coordinator appointment process	Potentially feasible Appears consistent with regulatory design principles for low cost regulation, and supporting commercial negotiation Warrants developing in further detail.	Yes See description in next section
Making of a network service agreement i.e. the processes associated with negotiating agreements	Potentially feasible May be consistent with principles for low cost regulation, and supporting commercial negotiation Warrants developing in further detail. See next section	Yes See description in next section
Content of network service agreement i.e. any stipulated objectives or content of a network service agreement	Potentially feasible Appears to involve significant regulatory cost, possibly disproportionate to the benefits, at this time May be an option for future evolution	No
Actual Network Services i.e. the service standards that must be provided in network services agreements	Potentially feasible Targets the actual services provided (or standards) Seems likely to involve significant regulatory cost that are disproportionate to the benefits, at this time May be an option for future evolution	No

6.6 Options for network services continuity regulation

This section develops further detail of the two feasible options outlined in the previous section.

6.6.1 Option 1 – Regulate Metering Coordinator appointment

This regulatory option is targeted at the Metering Coordinator appointment process.

The only type of regulation that we identified which would fit with this option is a targeted regulatory requirement that:

- the FRMP appointment of an uncontracted Metering Coordinator is subject to a DNSP's consent; and
- the DNSP's consent must not be unreasonably withheld.

This option should be drafted so that the provision of consent is clearly linked to the desired outcome (see Box 3). Legal drafting of the conditions for consent would ensure they were broad enough to achieve the desired outcome, but no broader than is required to minimise their use as a barrier to entry.

This option would provide flexibility for negotiation to take account of unique circumstances of the Metering Coordinator, the actual needs of the DNSP (which may have evolved with greater understanding) and innovation in the market.

6.6.2 Option 2 – Regulate process for making a network service agreement

This section develops the concept of regulation targeted at the making of a network services agreement between the DNSP and the uncontracted Metering Coordinator.

From an economic perspective, we identified three theoretical variations of this option.

Each variation would compel the uncontracted Metering Coordinator to enter into an agreement that provides the same (or substantially the same) network services as those currently being provided to the DNSP through existing network service agreements. We note that each variation may require carefully drafted provisions to address situations where a) there has been non-performance or failure of the initial network services agreement including due to Metering Coordinator insolvency attributable to

unreasonable contract costs; or b) the DNSP's affiliated Metering Coordinator has been providing the network services.³⁰

The variations differ in the process for how the agreement would be determined. They are set out in a spectrum from light (flexible) to heavy handed (inflexible):

- Option 2A – New network services agreement must be on similar price and non-price terms as existing agreements.
- Option 2B – New network services agreement must lock in key price and non-price terms from earlier network services contracts.
- Option 2C – Compel the new Metering Coordinator to accept assignment or novation of the previous contract terms that existed at the relevant network supply point.

Option 2A - Similar price and non-price terms as existing agreements

This option would require the new network services agreement to be on similar price and non-price terms as the existing DNSP-Metering Coordinator agreement that applies at the relevant connection point.

In interpreting “similar terms and conditions” the parties (and any dispute resolution body) would be guided by the expected outcomes.

If possible, the new agreement terms and conditions would need to be the same or very similar where they materially affect the DNSP's commercial position (e.g. in relation to previous investments in network solutions); but could be different where this is not the case.

Such regulation may be difficult to draft and administer in practice, and may need a number of practical exceptions.³¹

This option provides flexibility for negotiation to take account of unique circumstances of the new Metering Coordinator, the actual needs of the DNSP at the time of churn (which may have evolved with greater understanding) and innovation in the market including Retailer and customer requirements.

³⁰ In these cases, the rule design would need to take account of whether the initial terms and conditions were commercially reasonable. Otherwise, the model could represent an unwarranted barrier to entry. These circumstances may be drafted as exceptions to rules that otherwise apply.

³¹ For example, where questions arise as to the reasonableness of the initial terms and conditions.

Option 2B - Lock in key price and non-price terms

This regulation would specify in sufficient detail the key price and non-price terms that must be carried over from previous agreements into the network service agreement between the DNSP and the new Metering Coordinator.

It is envisaged that the defined terms would be required to be carried over would be the price for the service and non-price terms that materially affect risk allocation (such as performance standards, warranties, etc.)

This regulation would be more complex to draft as it necessitates defining the key price and non-price terms. As with option 2A, it is likely to need a number of practical exceptions. However, this option would provide greater certainty than Option 2A and reduce the potential for disputes.

This option would provide less flexibility for negotiation to take account of unique circumstances of the new Metering Coordinator, the actual needs of the DNSP and innovation in the market including Retailer and customer requirements.

It would provide a high level of commercial certainty for a DNSP.

Option 2C - Assignment of previous contractual obligations for the supply point

Under this option a Retailer could not appoint a Metering Coordinator that does not agree to the novation or assignment of the existing contractual obligations of an incumbent Metering Coordinator.

This option recognises the role of the Retailer in appointing Metering Coordinators; and forces the Retailer to consider the impact of its selection on a DNSP's network solutions and ultimately, on customers.

This regulation could encourage the parties (DNSP and incoming Metering Coordinator and Retailer) to negotiate based on the DNSP having a right to continuity of its previous contractual rights and network services.

It is not clear how difficult this regulation would be to draft and administer, though it is assumed to be simpler than 2A or 2B. It will face the same practical challenges as other options in dealing with specific circumstances if questions arise about the commercial reasonableness of the initial network services agreement terms.

Subject to resolving this design issue, this option would provide a high level of commercial certainty to the DNSP.

6.6.3 Dispute resolution options

Options 1 and Option 2A and 2B would need to include provision for some form of dispute resolution to protect the uncontracted Metering Coordinator, (and potentially

also the FRMP that wishes to appoint the Metering Coordinator). Option 2C may also require provision for dispute resolution.

- Under Option 1 dispute resolution would assist a Metering Coordinator (and perhaps also the FRMP) who alleges that the DNSP is withholding consent unreasonably.
- Under Option 2 dispute resolution would be invoked where contract terms cannot be agreed.
- Under Option 2C dispute resolution may consider whether the actual (or implied) terms and conditions were commercially reasonable.

There are a number of options for dispute resolution that range between:

- Access to existing dispute resolution process under the rules (simpler, lower cost)
- A ‘bespoke’ dispute resolution or negotiate arbitrate process (potentially better targeted, but possibly with higher implementation costs).

6.6.4 Time limits

A common issue for each option is whether time limits should be imposed on the process, perhaps linked to triggering dispute resolution. On the one hand, there may be a concern that the DNSP could delay resolution unreasonably. On the other hand, in the early stages of developing these agreements, what constitutes a ‘reasonable time frame for negotiation’ may be unclear.

The question of timelines requires further consideration.

6.7 Evaluation and recommendation

We evaluated each option qualitatively against the option evaluation criteria (Box 5). The evaluation is set out in Table 3 in section 7.2 below.

We note the options have not had legal and stakeholder review.

On the basis of this evaluation, and without the benefit of legal review or stakeholder input, we recommend that option 1 and 2C be considered for further analysis.

Option 1 is relatively simple to draft but how the dispute resolution process might work in practice and the degree of certainty provided to for DNSPs for continuity of rights for network services is unclear.

Option 2C may be more complex to draft where a DNSP has an affiliated Metering Coordinator. Subject to being able to resolve this issue, this option would provide a high level of commercial certainty to the DNSP.

6.7.1 Evaluation analysis

Table 3 – Evaluation analysis

					How does option perform in promoting the desired outcomes?
Option	Implementation costs	Costs for parties	Scope for negotiation, flexibility	Continuity of network services for DNSP	Minimise barriers to entry for the uncontracted MC
Option 1. Regulation of Metering Coordinator appointment – DNSP consent required	Low Simple to draft	Medium – negotiation required; potential for disputes	High Flexibility allowed in negotiation	High? But subject to details of the rule and the effectiveness of the dispute resolution process	Reasonable subject to adequate definition in regulation and the effectiveness and dispute resolution process
Option 2 Regulate the content of network service agreement					
Option 2A - Agreement must be on similar terms and conditions as existing agreements	Medium Could be difficult to draft	Medium – negotiation required; potential for disputes	High Flexibility allowed in negotiation	High? This can only be determined once the rule has been drafted and reviewed in detail Less commercial certainty than options 2B and 2C because the outcome is less certain	Reasonable subject to adequate definition in regulation and the effectiveness and dispute resolution process
Option 2B - Agreement must lock in key terms and conditions from earlier network services contract	Medium Requires definition of key terms and conditions Likely to be difficult to draft	Low	Low	High	Unclear. Barriers to entry created if contract terms are unnecessarily inflexible, and there is no opportunity for negotiation



How does option perform in promoting the desired outcomes?

Option	Implementation costs	Costs for parties	Scope for negotiation, flexibility	Continuity of network services for DNSP	Minimise barriers to entry for the uncontracted MC
<p>Option 2C - Compel the Metering Coordinator to accept assignment or novation</p>	<p>Low General provisions may be relatively easy to draft. Exceptions may be more difficult Easier to apply where the initial network services agreement is made at arm's length</p>	<p>Medium - negotiation required. May be potential for disputes, depending on how the rule deals with circumstances that call into question the commercial reasonableness of the initial network services agreement</p>	<p>High Flexibility in negotiation based on DNSP retaining existing contractual rights</p>	<p>Very High</p>	<p>Low - provided rule design and administration ensures actual (or implied) terms are commercially reasonable</p>

6.8 Description of rules for Option I and Option 2C

This section provides a more detailed description of rules for Option 1 and Option 2C.

6.8.1 Common provisions

From an economic perspective, we suggest the following provisions would be common to both the DNSP consent option 1, and the assignment or novation option 2C. We caution that these suggestions should be tested and developed through legal review.

Table 4 – Suggested common provisions

Matter	Description
Regulation to be included in rules	We expect that regulation for both options would be included in the National Electricity Rules.
Application of the rule	Regulation would apply where: <ul style="list-style-type: none"> • A DNSP has an existing network service agreement in place with one or more Metering Coordinators; and • An FRMP proposes to appoint a Metering Coordinator for a connection point, but the new Metering Coordinator is not a party to an existing network service agreement with the relevant DNSP.
Outcomes sought	The outcomes sought from the rule for both options are to: <ul style="list-style-type: none"> • Promote efficient investment in and operation of networks by ensuring that DNSPs have ongoing commercial and technical continuity for provision of related network services. • Minimise barriers to entry for Metering Coordinators entering the network services market.
Rule design principles	Design principles used to develop the rule are: <ol style="list-style-type: none"> 1. Maximise use of commercial processes 2. Minimise the cost of regulation for both the regulator and affected parties 3. Where a DNSP has an affiliated Metering Coordinator, avoid this creating a barrier to entry for the uncontracted Metering Coordinator 4. Rely on evolution of regulation to address emerging problems 5. Draw on existing frameworks, processes and decision makers where possible. 6. Ensure regulation fits seamlessly with other laws and regulations.

6.8.2 Detailed content of Option I – Consent to new Metering Coordinator appointment

The suggested content of the rule for Option 1 is set out in Table 5.

Table 5 –Content for DNSP consent to new Metering Coordinator appointment

Term	Description
Notification	A FRMP that intends to appoint a Metering Coordinator must notify its intention to do so to the relevant DNSP.
Conditions for consent	If the DNSP <i>has existing</i> network service agreement(s) with one or more Metering Coordinators, then it may advise FRMPs in its network area that they require the DNSP’s consent before appointing a new Metering Coordinator. If the DNSP <i>does not have any</i> network service agreements with Metering Coordinators, then (under this rule) it must consent to the appointment of the new Metering Coordinator.
NSP to facilitate appointment of Metering Coordinator	The DNSP must take such actions as are reasonable to facilitate the appointment of the new Metering Coordinator, including provision of information and entering any necessary agreements between relevant parties (in particular to negotiate in good faith a network service agreement with the Metering Coordinator)
Consent not be withheld unreasonably	The DNSP must not unreasonably withhold its consent to the FRMP appointing a new Metering Coordinator. The grounds for the DNSP withholding consent would include if the DNSP and the Metering Coordinator are unable to agree on a network service agreement that is on similar terms to existing network service agreements to which the DNSP is party. Legal advice is required to narrow grounds for providing consent to the minimum necessary to achieve the outcomes.
Dispute resolution	Dispute resolution procedures should be available to the Metering Coordinator (and perhaps also) the FRMP if they consider the DNSP is acting unreasonably in withholding its consent.

6.8.3 Detailed content for Option 2C – novation or assignment

The suggested content of the rule for Option 2C is set out in Table 6. As noted, these provisions would require careful legal drafting to ensure their workability, and consistency with other parts of the NER.

Table 6 –Content of novation/assignment obligation

Term	Description
Notification	A FRMP that intends to appoint a Metering Coordinator must notify its intention to do so to the relevant DNSP.
Application of rule	If the DNSP <i>has existing</i> network service agreement(s) with one or more Metering Coordinators, then the rule applies If the DNSP <i>does not have any</i> network service agreements with Metering Coordinators, then the rest of the rule does not apply.
NSP to facilitate appointment of new Metering Coordinator	The DNSP must take such actions as are reasonable to facilitate the appointment of the new Metering Coordinator, including provision of information and entering any necessary agreements between relevant parties (in particular, to negotiate in good faith a network service agreement with the Metering Coordinator).
Assignment	Unless the parties agree otherwise, the terms of the network services agreement must include assignment of the previous contractual obligations that existed at the relevant supply point.

Term	Description
Exceptions	Exceptions or other provisions would be required to deal with situations where the commercial reasonableness of the initial network services agreement is questioned (e.g. due to the contract's non-performance; or affiliation of the Metering Coordinator and DNSP)
Dispute resolution	Dispute resolution procedures may be available to the Metering Coordinator, and perhaps also the FRMP There may be additional grounds for review where the commercial reasonableness of the initial network services agreement is questioned

6.8.4 Outstanding content issues

In developing the content of the detailed rules, there are likely to be many issues that arise for consideration and resolution.

Some content issues that we have identified are:

1. *The dispute resolution process.* In order to minimise regulatory implementation costs and stakeholder understanding, the preferred dispute resolution process would be the existing process available under the Rules. However, this proposition should be tested.
2. *FRMP access to dispute resolution.* Whether or not FRMPs should have rights to access dispute resolution.
3. *Time frames.* The rule may or may not include timeframes to avoid excessive delay and promote commercial certainty. Indicative time frames might address:
 - c) the maximum time between when the DNSP receives notification from the FRMP, and when it must either give or decline consent for the appointment of the new Metering Coordinator
 - d) the maximum time between when the DNSP declines consent and triggering a dispute

7. Metering Coordinator churn - certainty of access terms and conditions

7.1 Background

The AEMC envisages that DNSPs could enter into framework agreements with several Metering Coordinators to provide greater certainty about the terms and conditions of access where there is Metering Coordinator churn. The ENA asked us to assess the realistic potential for framework agreements, including international experience.

Our analysis suggests that the scope and purpose of the framework agreement proposed by the AEMC is unclear. Some characteristics of potential commercial arrangements lead to regulation in some form (code, procedures, rules, etc.) rather than a contract. These include where:

- decisions can affect people other than the contracting parties
- there is a public interest in the content and its enforceability (e.g. safety)
- preferable for technical and operational efficiency.

Section 6 highlights the inadequacy of an unregulated framework agreement to ensure the continuity of network services following churn of a Metering Coordinator.

Section 7.2 discusses the purpose and legal form of framework agreements as proposed by the AEMC. Section 7.3 discusses international experience and section 7.4 offers observations and possible next steps.

7.2 Purpose and legal form of framework agreements

The AEMC states that (emphasis added):

A concern that DNSPs have raised about accessing network-related services and functions through metering installations is that they could be subject to a significant degree of uncertainty and transaction costs if the Metering Coordinator changes at a connection point³².

...To address concerns regarding uncertainty and transaction costs, DNSPs could enter into framework agreements with several Metering Coordinators so that they have greater certainty about the terms and conditions of access they will have if there is churn in Metering Coordinators. The term 'framework agreements' is used in this context to refer to an agreement that sets out the price and non-price terms and conditions of access that will apply when a DNSP deals with a particular

³² Page 70 of the draft determination

Metering Coordinator at any site in its network. *These agreements are common in overseas markets.*³³

Apparently, the AEMC envisages that framework agreements would be separate from, but closely related to, any contracts entered into by a DNSP (to help fund the installation of advanced meters in its network area).

We note that it is important to distinguish between the purpose of a legal instrument and its legal form.³⁴ At this stage, it is more important to understand the need and purpose for the legal instrument, its main principles, and the impacts of underlying decisions that affect others. Once these are understood, decision can be made on the form of legal instrument.

7.3 Assessment of framework agreements in New Zealand and UK

The AEMC stated in its draft determination that framework agreements are common in overseas markets. Therefore, as an input into assessing the potential for framework agreements, we were asked to review relevant experience in New Zealand and Great Britain.

In the time available we have not been able to obtain any examples of framework agreements of the type contemplated. The ENA sought access to examples of framework agreements from the AEMC and was advised that it has no actual examples. The AEMC advised that it was relying on advice provided by people who operate in UK and NZ markets who have further advised that these are commercial in confidence agreements that are not publicly available.³⁵

The AEMC advice about framework agreements in Great Britain does not seem correct. The ENA was advised, and we have confirmed this point, that there is no need for framework agreements between network businesses and meter owners in the Great Britain metering arrangements.

7.3.1 New Zealand

The New Zealand model for competitive decisions about metering services is highly decentralised and relies heavily on voluntary agreements, with no industry specific economic regulation. The New Zealand experience is discussed in **Appendix E**.

³³ *Ibid*, at page 71

³⁴ For example, the legal form may be a contract, or code, or published standard terms and conditions, etc.

³⁵ Email advice from Susan Streeter, 22 April 2004

Currently, churn of meters does not appear to be a significant issue in New Zealand. We understand the NZ Electricity Authority actively discourages churn of meters, and very few meters have churned. We also understand that competition in the market for advanced metering services is focused on competition for long term contracts with Retailers.

Further we understand that there is little evidence of contracts for network services in the New Zealand market.

In our view, the New Zealand network sector lags behind Australia in its interest in implementing more sophisticated network control and management services.

Given this and the lack of significant meter churn, there seems to be little relevant learning about framework agreements so far from the New Zealand experience. There may however be useful insights from understanding the underlying process steps and risks arising from churn of advanced metering in New Zealand.

7.3.2 Great Britain

Great Britain has adopted a centralised approach to overseeing the metering market and meter data access market. It is very different from the decentralised AEMC draft rule approach. The Great Britain experience is discussed in detail in **Appendix F**. Key points are as follows:

- The Smart Energy Code (SEC)³⁶ is a multi-Party agreement which defines the rights and obligations of energy suppliers, network operators and other relevant parties involved in the end to end management of smart metering in Great Britain.
- The Smart Energy Code Company Limited (SECCo) has been established to facilitate the operation of the Smart Energy Code.
- All authorized parties (suppliers, network operators and certain other third parties) can access smart meters via a single recently established *Data Communications Company* (DCC).

The meaning of 'Framework Agreement' in the Great Britain context is given by Schedule 1 of the SEC which sets out a Framework Agreement between the "Original

³⁶ SEC version 4.2 18th March 2015 https://www.smartenergycodecompany.co.uk/docs/default-source/sec-documents/smart-energy-code-4.2/sec4.2_consolidated.pdf?sfvrsn=8

Parties”³⁷ and SECCo. The Framework Agreement is simply an agreement by which Original Parties and SECCo agree to give effect to, and to be bound by the SEC.

This was confirmed by advice to the ENA³⁸ that:

Network operators can access certain functions within all the smart meters connected to their electricity network via the DCC system. Given this, there is no need for a framework agreement between network operators and meter owners in the Great Britain.

We consider that, similar to New Zealand (and notwithstanding the different model) there may be useful insights gained from understanding at a high level the process steps, costs, and risks involved in churn of advanced meters in Great Britain.

7.4 Observations and next steps

If the AEMC draft rules are implemented, then it appears that at some point arrangements must provide appropriate certainty about the terms and conditions of access that apply where there is churn in Metering Coordinators. We call this a *framework arrangement*.³⁹

7.4.1 Ensuring continuity of network services

As discussed in section 6, regulation is necessary to ensure a DNSP has ongoing continuity of network services when an uncontracted Metering Coordinator is appointed by a Retailer. The AEMC assumption that commercial negotiations and framework agreements can and will suffice without regulation is incorrect.

A *framework arrangement* could include some or all aspects of continuity regulation but will need to bind all current and future Metering Coordinators. Alternatively continuity regulation could sit outside a framework arrangement (e.g. in an industry code or the Rules).

7.4.2 Other observations

The following are our key observations about progressing development of framework arrangements. They are set out in the approximate order in which they should be considered.

³⁷ The Original parties are the holders of Energy Licences that oblige them to be a party to, and to comply with, the Smart Energy Code.

³⁸ Email to the Australian ENA from the UK Energy Networks Association.

³⁹ Use of the term “arrangement” implies that there could be range of different possible legal instruments for giving effect to the arrangement other than an agreement. Once the details of the arrangement are clear then the appropriate legal instruments can be determined.

Assess priority - An important contextual question is the priority that should be given to addressing churn of Metering Coordinators, including the level of effort that is warranted in the short term, and how the market might evolve over time.

As noted, in New Zealand there is very little churn of Metering Coordinators. It is possible Australia will also experience low levels of Metering Coordinator churn in the early stages of the market (at least outside Victoria⁴⁰). This is because outside Victoria competition to roll out advanced meters would logically be focused on replacing accumulation meters that have reached the end of their economic life, and on providing advanced meter services to customers currently without advanced meters.

Churn may increase in the longer term as advanced meters are replaced, and potentially because of other factors (such as greater diversity in customer service offerings, reducing costs of advanced metering, etc.).

Scope possible content - When the final metering rules are determined, it may then be desirable to scope out the potential content of a framework arrangement. The content would be informed by process mapping each step for how a Metering Coordinator and associated physical meters would churn, and then assessing the risks and costs associated with each process step. This work should proceed in parallel with the development of protocols and procedures to support the new competitive metering rules.

Consider application - An important design question is whether a framework arrangement should be binding on all Metering Coordinators operating in a DNSP area. If a new Metering Coordinator is appointed that wishes to have materially different arrangements from others, then this could cause cost externalities - costs falling on others for which they are not responsible and cannot control. This suggests that the framework agreement will need to be either binding on all Metering Coordinators, or at least all those that could materially impact on others.

Governance - Another important design question is the appropriate level for decision making about the content and change process for framework arrangements. Separate framework arrangements could be developed for each DNSP. However there are likely to be efficiencies in developing at least jurisdictionally based framework arrangements⁴¹ and/or a national minimum arrangement, which could potentially be adapted by DNSPs to meet local conditions. Standardisation through national arrangements could help minimise transactions costs.

If there are jurisdictional or national arrangements, then there are different options for the decision-making processes and governance. These include a voluntary industry decision-making body; a new decision-making process supported by regulation; or

⁴⁰ In Victoria the DNSPs will be deemed Meter Coordinators at market start and therefore churn to Metering Coordinators with lower specification may be problematic in terms of continuity existing network solutions.

⁴¹ We note that Victoria will likely need different framework arrangements given its existing stock of advanced meters.

combining the functions another decision making body. In addition there is an option of oversight by an existing regulatory body.

Dispute provisions - A further design question is whether there may be disputes or conflicts of interest and if these are material, the appropriate arrangements to fairly manage these.

Fit-for-purpose instrument - Finally there is the question of the appropriate legal form of a framework arrangement. This will reflect the design decisions discussed above including whether a framework arrangement is binding on all Metering coordinators, the level and process for decision-making, and how any disputes or conflicts of interest are best managed.

7.4.3 Next steps

We have considered possible next steps if it is agreed that further work is warranted. We suggest a technical study to understand (to the extent possible) the main process steps, risks and costs involved in churning of Meter coordinators and meters based on:

- the final NER Chapter 7 metering rules; and
- the process steps, risks and costs of advanced metering churn in New Zealand and Great Britain.

Appendix A – Review of light handed regulatory frameworks and regimes

This appendix reviews light handed regulatory frameworks and regimes. The AEMC analysis of regulatory options in the draft discussion is discussed, followed by a review of four significant examples of light hand regulatory regimes that have applied in Australia and New Zealand.

AEMC analysis of the need for regulation

Section E 4.3 of the AEMC draft determination discusses a spectrum of regulatory options for introducing access regulation to metering services. These options range from ‘no regulation’ to increasingly heavy-handed options as shown in Figure 1.

Figure 1 – Spectrum of regulatory options⁴²



The AEMC analysis focuses on regulation of access to metering services to address potential market power concerns. It is not focused on the continuity of network services and the holdout problem.

Two relevant questions raised by the AEMC’s discussion of this topic are:

- What are the characteristics of market power in typical situations, such as infrastructure regulation, and what are the market power characteristics of the hold out problem? This is discussed in **Appendix B**.

⁴² Reproduces figure E.5 from the AEMC draft determination.

- Which of the regulatory options considered by the AEMC exist in other regulatory regimes, and which might be relevant to the design of network services continuity regulation? This is discussed in **Appendix C**.

Review of light handed regulatory regimes

Table 7 briefly summarises significant light-handed regulatory regimes in Australia and New Zealand.

Useful insights about the reasons why light-handed regulation for these industries was adopted are discussed in Appendix C.

The potential relevance of the regulatory options used in these regimes is discussed in Appendix D.

Table 7 – Summary of industries that have been subject to light handed regulation

Light handed regulation regime	Regulatory regime and types of regulation	Outcomes of light-handed regulation
Australian Airport 2002 – current	<ul style="list-style-type: none"> • No price control, • No right to arbitration • Monitoring regime: The ACCC prepares annual reports that monitor prices, financial performance, and quality of aeronautical and car parking services at five of Australia’s major airports.⁴³ • The intention of the ACCC’s annual airport monitoring report is to provide the Australian Government and the public with information on the performance of these airports.⁴⁴ 	<ul style="list-style-type: none"> • Regime introduced in 2002 and continues to the current time
Telecom New Zealand (TNZ) 1987 - 2000	<ul style="list-style-type: none"> • No control of prices, • Reliance on general competition law • No right to arbitration • Information disclosure⁴⁵ • Explicit government statement on threat of regulation⁴⁶ 	<ul style="list-style-type: none"> • Negotiations and legal actions between Clear Communications, a new entrant seeking access, and Telecom New Zealand took five years to be resolved. • After a review in 2000

⁴³ At the time the Federal Airports Corporation airports were privatised from 1997, price regulation and quality service monitoring were implemented for capital city and certain regional airports in recognition of the market power held by those airports, and the potential for exercise of that power. In 2002 following a recommendation by the PC, the price caps were removed and a monitoring regime put in place. ACCC *Submission to the Productivity Commission’s inquiry into the economic regulation of airport services, March 2011*

⁴⁴ ACCC Airport Monitoring Report 2013-14, April 2015.

⁴⁵ Telecom required to provide its operations and finances in order to inform access negotiations and assist the Government in identifying competition problems

⁴⁶ A statement from the Government that said that specific regulation might be introduced if the light-handed regime proved unsuccessful.

Light handed regulation regime	Regulatory regime and types of regulation	Outcomes of light-handed regulation
		the regime became more heavy-handed. A Telecommunications Commissioner, located in the competition authority, was established with the power to resolve disputes and set prices for interconnection, wholesale services and number portability
Electricity networks, New Zealand 1987 – early 2000s	<ul style="list-style-type: none"> • No control of prices • No right to arbitration • Information disclosure⁴⁷ • Implicit threat of further regulation 	<ul style="list-style-type: none"> • Government review of the sector in 2000 has led to progressively heavier handed regulation. • Industry specific regulator introduced in 2004
Light regulation of covered gas pipelines ⁴⁸	<ul style="list-style-type: none"> • No requirement for full access arrangement. • Negotiate / arbitrate framework • Must not engage in conduct to prevent or hinder access • Obligated to disclose gas supply information in certain circumstances • Subject to 'ring-fencing' requirements • Must comply with any AER regulatory information instrument about information reporting • Contracts with associates must not be entered into, varied or given effect to if they substantially lessen competition • Subject to rules relating to facilitating requests for access and information disclosure: 	<ul style="list-style-type: none"> • Has been effective. • No suggestions it should change.

⁴⁷ Electricity networks are required to provide information on range of matter including prices and measures of the company's financial and operational performance

⁴⁸ *Light regulation of covered pipeline services, A guide to the function and powers of the National Competition Council under the National Gas Law, Part C – Light regulation of covered pipeline services*
National Competing Council

Appendix B – The market power problem: infrastructure services and holdout situation

Table 8 compares the market power characteristics for the types of infrastructure businesses that have had light-handed regulation and the types of entities that have holdout power. The table compares the characteristics based on the following questions:

- What is the source of market power?
- What is the period of time (duration) over which market power can be exercised?

Table 8 – The market power problem: infrastructure services and in holdout situation

Type of entity	Examples	Source of market power	Duration of market power
Infrastructure business that have had light handed regulation	<ul style="list-style-type: none"> • Australian Airports and • Light covered gas pipelines • NZ Telecom (before 2000) • NZ Electricity Networks (before 2004) See Appendix 1	<ul style="list-style-type: none"> • Infrastructure services provided to other markets • Natural monopoly characteristics • Infrastructure service is costly to duplicate • Infrastructure owner may be subject to some countervailing power 	Market power persists It may be permanent or may slowly erode (or increase) due to market changes and technology.
Entity with holdout power	<ul style="list-style-type: none"> • Uncontracted metering coordinator - electricity network • Small land owner - Land aggregator • Sovereign bond holder - Sovereign government See section 8 of our Economic review report	<ul style="list-style-type: none"> • An entity is able to impose a significant cost on another entity, due to the nature of the rights held; and the effect that choices about exercise of those rights have on the other entity • Typically not infrastructure services • Do not have natural monopoly characteristics. 	Market power is temporary. The exercise of market power either prevents efficient transactions proceeding, or there is a negotiated solution and the market power is removed.

Observations

1. This analysis shows that the only common characteristic of these situations is that they both involve the exercise of market power (raising prices above the level that would prevail under competition). Otherwise the characteristics of market power are very different: the source of market power is different; and the duration of market power is different.



2. A Metering Coordinator could have a high level of market power. Therefore light-handed regulatory regimes based on the premise that an infrastructure owner has a moderate degree of market power, are not a relevant point of comparison.

Appendix C – Assessment of regulatory options used in other light handed regulation regimes

The only feasible regulation option used in other light handed regulatory regimes is a negotiate-arbitrate framework. The supporting analysis is outlined below.

Types of light handed regulation used in light handed regulatory regimes

The following types of light handed regulation discussed in the AEMC draft determination and/ or used in other light handed regulatory regimes are identified by the Appendix A:

- Negotiation/ arbitration framework
- Information disclosure
- Monitoring regime (e.g. price and service quality monitoring)
- Explicit threat of regulation
- Ring-fencing requirements
- Restrictions on associate contracts
- Rule preventing engaging in conduct to prevent or hinder access

Applicability of light-handed regulation options to holdout problem

Table 7 below evaluates the feasibility of light-handed regulatory options used in other light handed regulatory frameworks elsewhere to address the hold out problem discussed in section 6.

Table 9 -Evaluation of light-handed regulatory options used elsewhere

Regulatory option	Assessment	Evaluation	Comments
Negotiation/ arbitration framework	<input checked="" type="checkbox"/>	<ul style="list-style-type: none"> • Negotiation / arbitration framework could be an effective option • Already considered by AEMC 	<ul style="list-style-type: none"> • A negotiate / arbitrate framework is consistent with the focus on DNSPs and a Metering Coordinator entering into an agreement • Consistent with the emphasis on commercial negotiation in light handed regulation • It can work where both the DNSP and the Metering Coordinator have market power • It avoids the need for regulator to be involved and the costs of the

Regulatory option	Assessment	Evaluation	Comments
			negotiation and arbitration process are borne by the parties
Information disclosure	<input checked="" type="checkbox"/>	<ul style="list-style-type: none"> Does not address high level of market power held by an uncontracted Metering Coordinator 	<ul style="list-style-type: none"> Information disclosure and monitoring is effective in a situation where an infrastructure owner has a moderate level of market power and information disclosure can strengthening the countervailing bargaining power of access seekers Monitoring can assist government in policy making
Explicit threat of regulation	<input checked="" type="checkbox"/>	<ul style="list-style-type: none"> Does not address Metering Coordinator high level of market power 	<ul style="list-style-type: none"> Does not address uncertainty for DNSP ex ante investment decisions NSPs needed to know and understand the protections from hold out risk in advance
Ring-fencing requirements	<input checked="" type="checkbox"/>	<ul style="list-style-type: none"> Not relevant 	
Restrictions on associate contracts	<input checked="" type="checkbox"/>	<ul style="list-style-type: none"> Not relevant 	
Must not engage in conduct to prevent or hinder access	<input checked="" type="checkbox"/>	<ul style="list-style-type: none"> Not relevant 	<ul style="list-style-type: none"> Uncontracted Metering Coordinator is not providing third party access

Appendix D – Framework agreements in New Zealand

New Zealand is well progressed in rolling out advanced meters based on a competitive model. However, it appears that the development of more sophisticated network control and management services based on advanced metering services is at a very early stage in New Zealand.

We understand the main commercial drivers for rolling out meters are to reduce meter reading costs, enable remote connection and disconnection and to provide information to electricity users.⁴⁹ Improving the quality and reliability of the overall electricity network, and better management of network and reduced capex and opex has been mentioned as a reason why DNSPs (called lines companies in New Zealand) have an interest in advanced metering roll outs. However, at this stage there has been little practical progress in this area.

Low churn of smart meters

The New Zealand Commerce Commission⁵⁰ found limited examples of an advanced meter, once installed, being displaced by another advanced meter before the end of its life span. They state that the Electricity Authority actively discourages such displacement. The Commission notes:

The average life span of the advanced meters that are currently being deployed is between 10-15 years. Once these meters reach the end of their life cycle, it is likely that we will see another round of meter deployment as retailers look to replace these meters with new technology.

This suggest that churn of meters is not a relevant problem in New Zealand.

Access by networks to information

A recent submission from the New Zealand Electricity Networks Association concerning the current exercise to update and standardize use of system agreements states:

The availability of information about customer demand and consumption is changing rapidly with the installation of advanced entering systems. The Model

⁴⁹ NZ metering arrangements - lessons for Australia? Robert Reilly, Starta Consulting, AEMC Public Forum, Melbourne, 3 October 2012

⁵⁰ New Zealand Commerce Commission Determination, Vector Limited and Arc Innovations Limited [2014] NZCC 36 25 November 2014

Use of System Agreements does not include provision for distributes to access this information to inform efficient network management and planning decisions⁵¹

A New Zealand meeting services business manager contacted by the ENA states

... networks in New Zealand are still working on identifying exactly what they want from the installed smart meters. Most agreements between parties refer to networks having the right to data for network management purposes.

What exactly this entails is still very much work in progress, but will most likely include power quality, voltages, consumption for network management purposes (peak load, planning ...).⁵²

We note that there are a number of features about the New Zealand networks that suggest it will lag behind the Australian network industry in developing more sophisticated network control and management services; and also that some network management and control solutions that may have value in Australia may not have the same value in New Zealand. These differences include; the very low penetration to date of Household PV solar; the less peaky load shapes; and the wide spread use of hot water ripple control for load control.

Observation

New Zealand is well behind the Australian network industry in its interest in developing more sophisticated network control and management services.

Therefore there seems to be little practical learnings about framework agreements from the New Zealand experience.

⁵¹ Electricity Networks Association, *Submission to the Electricity Authority on More standardisation of use-of –system agreements*, 19 May 2014.

⁵² Email to Susan Streeter from a New Zealand Network Metering Services Business Manager, 21 April 2014

Appendix E – Framework agreements in Great Britain

The Great Britain has adopted a centralized model for managing access to data. This appears contrary to the AEMC view. The ENA was advised by the UK Energy Networks Association as follows

*In Great Britain all authorized parties (Suppliers, Network Operators, certain other third parties) will be able to access smart meters via the **Data Communications Company** (DCC) ⁵³*

Suppliers (who will be deploying the smart meters) are obliged to enroll those meters into the DCC service so that upon customer churn the gaining Supplier can continue to access the customer's smart meter and crucially the customer continues to receive the benefits of having a smart meter.

Network Operators are able to access certain functions within all the smart meters connected to their electricity network via the DCC system.

Given the above there is no need in GB for a framework agreement between Network Operators and meter owners (in GB these are called Meter Asset Providers or MAPs). Network Operators will always have access to the smart meters on their network via their interface with the DCC systems, and because Suppliers are obliged to deploy smart meters that conform to the SMETS2 technical specification we have confidence that all these meters will offer the same functionality and behave in the same way.

Outside of the deployment of Smart Meters there is a framework agreement that allows for meter operators/installers in GB to access and operate the DNOs service fuse to allow them to carry out their work (of installing or replacing meters).

Other than the above [we] are not aware of any other framework agreements between DNOs and MAPs.

The role of the DCC is

To provide communication services between smart meters and the business systems of energy suppliers, network operators and other authorized service users.

To achieve this, the DCC will put in place the shared data and communications infrastructure necessary for smart meters to:

Operate consistently for all consumers regardless of their energy supplier

⁵³ <http://www.smartdcc.co.uk/>

- *Provide smart metering data to network operators in support of smart grids*
- *Permit authorised third parties to provide services to consumers once they have granted permission to use their data, offering new routes for consumers to receive energy services and advice on how to reduce their energy usage.⁵⁴*

Key features of the DCC regulatory framework are set out in Box 6

Box 6 - Key features of the DCC regulatory framework

- The DCC operates subject to a License issued by government
- The DCC “First Enduring General Objective” is to carry on the Mandatory Business in the manner that is most likely to ensure the development, operation, and maintenance of an efficient, economical, co-ordinated, and secure system for the provision of Mandatory Business Services under the Smart Energy Code.
- The DCC “Second Enduring General Objective” is to carry on the Mandatory Business in the manner that is most likely to facilitate:
 - effective competition between persons engaged in, or in Commercial Activities connected with, the Supply of Energy under the Principal Energy Legislation;
 - such innovation in the design and operation of Energy Networks as will best contribute to the delivery of a secure and sustainable Supply of Energy under the Principal Energy Legislation; and
- the reduction (by virtue of benefits arising from the provision of Value Added Services) of the charges payable for Mandatory Business Services

Observation

Great Britain has adopted a centralised approach to overseeing the metering market and meter data access market. It is very different from the decentralised approach reflected in the AEMC’s draft rules.

⁵⁴ DCC Website <http://www.smartdcc.co.uk/>