

Generator Obligations in the National Electricity Market

Presentation to AGEG

By

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OVERVIEW

- Regulatory Framework in the NEM
- Generator Obligations under the NER
- Generator Obligations under State Specific Law (Jurisdictional Regulators)



Regulatory Framework

- National Electricity (SA) Act
- Sets out the National Electricity Market Objective

“To promote efficient investment in and efficient use of, electricity services for the long term interests of consumers of electricity with respect to price, quality, reliability and security of supply of electricity and the reliability, safety and security of the National Electricity System”

- National Electricity Law a Schedule to the Act



Regulatory Framework

- Ministerial Council on Energy
- Australian Energy Market Commission
- Australian Energy Regulator
- NEMMCO
- Jurisdictional Regulators



Regulatory Framework

Ministerial Council on Energy

- Determines a high level policy to apply to the NEM
- Can direct the AEMC to carry out a review and make recommendations on policy to be incorporated into the National Electricity Rules
- Can initiate a rule change



Regulatory Framework

Australian Energy Market Commission

- The Rule maker and Rule developer
- Regard to NEM Objective
- Regard to MCE statements of Policy/Principle
- Manage the rule change process



Regulatory Framework

Australian Energy Market Commission

- The National Electricity Rules are made for the purpose of regulating
 - The operation of the NEM
 - The operation of the National Electricity System (safety, security and reliability - Reliability Panel)
 - The activities of NEM participants
- AEMC publishes the Rules



Regulatory Framework

Australian Energy Regulator

- Enforces the NEL
- Economic regulatory powers-Transmission pricing
- Compliance monitoring role (eg, generator rebidding)



Regulatory Framework

National Electricity Market Management Company

- Operates and administers the wholesale market
- Responsible for maintaining power system, security and reliability (eg load shedding/restoration)
- Coordinates system planning & augmentation
- Registers participants in the NEM



Regulatory Framework

Jurisdictional Regulators

- ESCOSA, ESV, IPART, QCA, TER
- Established under specific state laws
- Overlapping “jurisdiction” in areas of technical safety and operation of electrical system
- Grant generation licences and use licence conditions to co-regulate



Generator Obligations

Registration

- A person must not engage in the activity of owning, controlling or operating a generating system connected to the interconnected transmission and distribution system unless
 - A person is a Registered participant
 - Subject of a derogation (exemption) or otherwise exempt by the Rules

Sec 11 NEL



Generator Obligations

- Civil Penalty
 - Natural person – fine of \$20,000 and \$2,000 per day during which breach continues
 - Body corporate – fine of \$100,000 and \$10,000 per day during which breach continues
 - Rebidding- fine \$1,000,000 plus \$50k per day during which breach continues

Section 58 NEL



Generator Obligations – Chapter 2 NER

- Categories of Generator (Registered Participant) are:
 - Scheduled
 - Non Scheduled
 - Market Generator
 - Non Market Generator
 - Ancillary Services Generating Unit



Generator Obligations – Chapter 2 NER

Registration – Scheduled or Non Scheduled Generator

- If you own, control or operate a generating system you must register with NEMMCO as a Generator (unless exempt)
- Either as Scheduled or Non Scheduled
- Capable of meeting or exceeding performance standards set out in Schedule 5.2 as part of Connection Agreement

Rule 2.1 & 2.21



Generator Obligations – Chapter 2 NER

Registration - Scheduled Generator

- Have a name plate rating of greater than 30 MW
- Must operate in accordance with central dispatch process operated by NEMMCO
- Capable of meeting or exceeding performance standards set out in Schedule 5.2 as part of Connection Agreement

Rule 2.2.2



Generator Obligations – Chapter 2 NER

Registration - Non Scheduled Generator

- Have a name plate rating of less than 30MW
- The physical and technical attributes of generating plant not suitable for central dispatch
- Output intermittent (eg. wind farms)

Rule 2.2.3



Generator Obligations – Chapter 2 NER

Market Generators

- Generators that export or sell all their generation to the pool (Scheduled or Non Scheduled)
- Paid by NEMMCO the spot price for each trading interval
- Trading interval is 30 minutes made up of six 5 minute “bids” which are averaged out over the half hour
- Must purchase electricity at the connection point from the spot market and pay NEMMCO



Generator Obligations – Chapter 2 NER

Non Market Generators

- Schedule generators who's sent out energy is purchased in its entirety by a local retailer or customer
- Not scheduled by NEMMCO

Rule 2.2.5



Generator Obligations – Chapter 2 NER

Ancillary Services

- Market generators that wish to provide ancillary services must be classified (registered) with NEMMCO
- Ancillary services include
 - Frequency control
 - Voltage control
 - System restart
- Automatically/dynamically adjusted by NEMMCO
- Paid spot price following dispatch by NEMMCO

Rule 2.2.6



Generator Obligations – Chapter 2 NER

Registration as Market Participant

- Occurs upon registration as a Market Generator
- Only participate in the market category registered
- Must satisfy prudential requirements in Chapter 3
- Satisfy NEMMCO can meet requirements of Jurisdictional Regulator
- Pay the prescribed (participant) fee

Rule 2.4



Generator Obligations – Chapter 2 NER

Registration as Intermediary

- Generator can apply for exemption from requirement to register
- Another generator “intermediary” may register instead
- Intermediary must provide written consent
- Intermediary must have systems and processes to perform bidding, dispatch role
- NEMMCO must register



Generator Obligations – Chapter 5 NER

Connection

- Generators must plan and design facilities to comply with:
 - Performance standards
 - Connection Agreement
 - System Standards
- Submit an application to connect
- Enter into Connection Agreement per Rule 5.3

Rule 5.2.5



Generator Obligations – Chapter 5 NER

Connection

- A five step process
 - Connection enquiry
 - Response to connection enquiry
 - Application for connection
 - Offer to connect
 - Connection Agreement

Rule 5.3



Generator Obligations – Jurisdictional Regulators

- Electricity Act 1996 SA confers powers on Regulator of licensing, pricing, monitoring, safety and technical standards (technical regulator)
- Cant operate generating plant in SA unless licensed
- Need to be a “suitable person”
 - Honesty and integrity
 - Financial, technical and HR capability
 - Officers and major shareholders have a record of honesty and integrity in prior commercial dealings



Generator Obligations – Jurisdictional Regulators

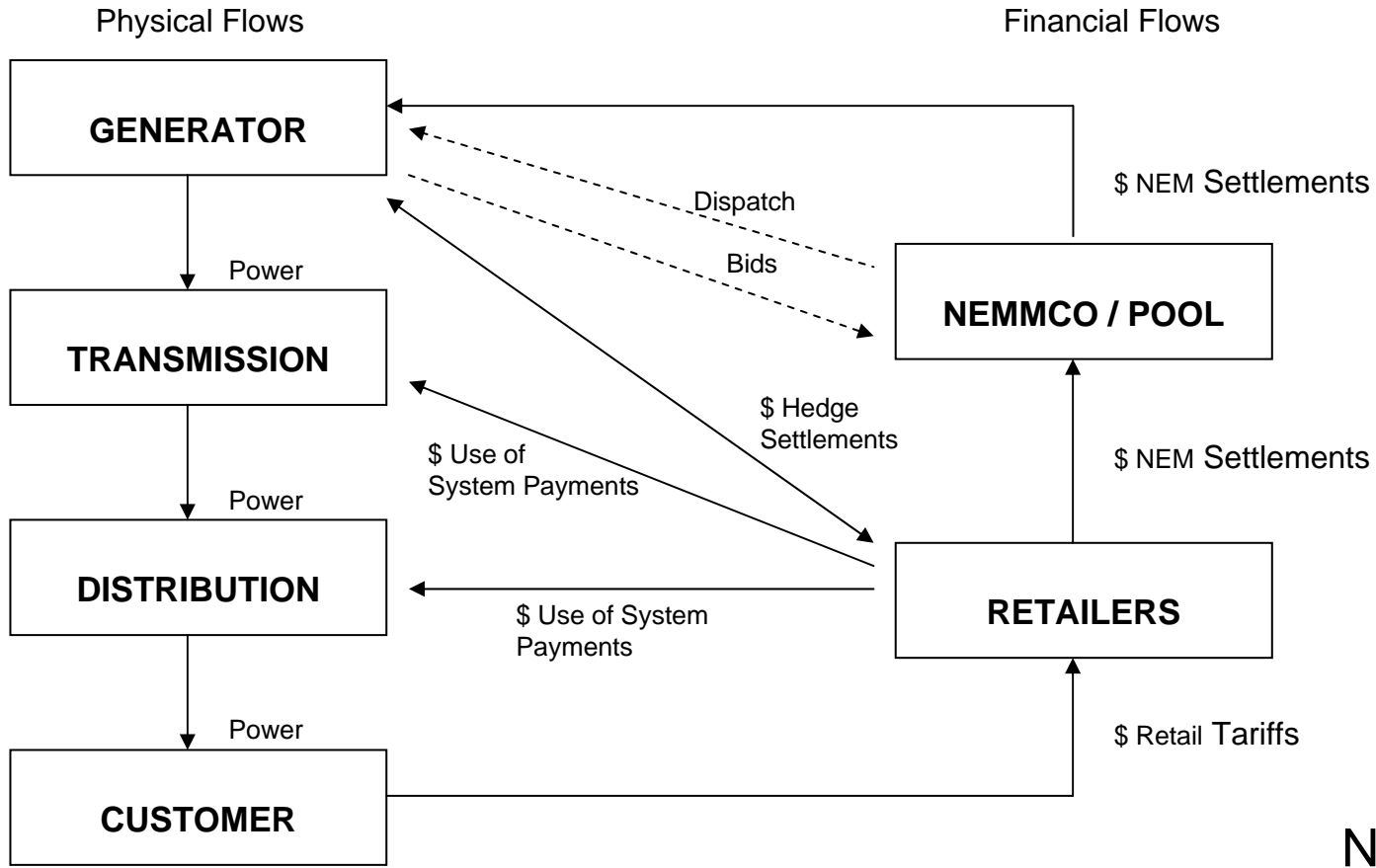
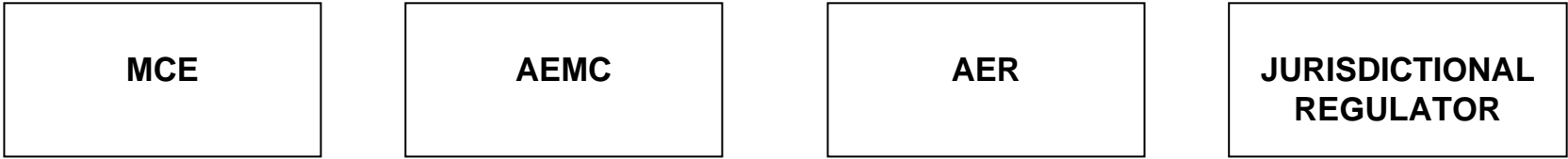
- Licence conditions require compliance with industry codes/guidelines
- Typical licence conditions are
 - Compliance with directions of system controller
 - Plant compatibility with transmission network
 - Prepare safety, reliability and technical management plan relating to generating plant
 - Annually update and audit against the plan



Generator Obligations – Jurisdictional Regulators

- Provide ESIPC information about generating capacity
- Comply with all applicable laws and establish and maintain all legal compliance programs
- Comply with Transmission Code
 - Consult with TNSP on plant design and equipment as part of Connection Agreement
 - Provide voice data communications equipment at connection point
 - Comply with Switching Manual





END