

Australian Energy

ASX Australian Energy Products Fact Sheet | Version 1 - October 2021

ASX's Australian Energy product suite includes Australian Electricity and Australian Natural Gas.

ASX offers a range of future and options products across Australia's National Electricity Market, as well as futures on Australian Natural Gas.

Australian Electricity Market

The National Electricity Market (NEM) is one of the world's longest interconnected power systems and supplies around 80% of Australia's electricity consumption.

It is an interconnected grid including the state grids of New South Wales (NSW), Queensland (QLD), Victoria (VIC), and South Australia (SA), with Tasmania (TAS) connected to the other NEM regions via an undersea inter-connector to Victoria. Futures and options contracts are listed on the 4 major regions (NSW, QLD, VIC and SA).

The NEM is Australia's wholesale electricity pool market and is managed by the Australian Energy Market Operator (AEMO). AEMO manage the dispatch of electricity into the market and publish the pool price for each region within the NEM. In each region, retailers purchase power from AEMO and generators sell power to AEMO at the common pool clearing price for their region. The spot pool price range is from -\$1000/MWh to \$15,100/MWh. Free real-time spot market data is available on AEMO's website.



ASX Electricity Futures Contracts Products:

- > Base Load Futures
- > Peak Load Futures
- > Base Load \$300 Cap Futures
- > Options over Base Load Futures (Average Rate & Yearly Strips)

Australian Natural Gas

AEMO operates a number of wholesale gas markets within Australia. These include Victoria's Declared Wholesale Gas Market (DWGM) and the Gas Supply Hub (GSH) at Wallumbilla in Queensland.

ASX Australian Gas Futures Contracts Products:

- > Victorian Wholesale Gas
- > Wallumbilla Natural Gas

Key Features of ASX Australian Energy

- > **Cash settled** ASX electricity futures and options are cash settled Contracts for Difference (CFD) against the regional reference nodes in the NEM. Cash settlement enables non-physical participants to participate in the market without having to own the physical commodity.
- > **Range of products** 80+ Australian Electricity contracts, offering a suite of tools relevant to the market including Futures, Cap Futures and Options.
- > **Inter-commodity spreads** trading spreads between regions and \$300 cap vs. base future spreads.
- > **Renewable energy** The NEM is quickly evolving with rapid uptake of renewable energy with strong growth in solar and photovoltaic generation.
- > **Variable tick size and value** tick size and value vary depending on the length and size of the contract traded.
- > **Attractive spread concessions for initial margins** available on correlated products such as the strip options and underlying quarter futures.

Opportunities for generators and retailers:

- > **Manage price risk** protect your business against price fluctuations and take greater control of the prices you pay or receive.
- > **Manage credit risk** trade on a market that is centrally cleared, with daily margin collection which helps ensure participants meet their obligations.
- > **Market maker arrangements** ASX offers market making incentives to promote liquidity in the electricity market.
- > **Manage basis risk** ASX Energy products are an efficient hedging and trading tool as they are cash settled against the NEM spot price.

Opportunities for speculators and traders:

- > **Unique Alpha** Australian electricity derivatives have an alpha that is almost completely uncorrelated with other financial markets including equities, foreign exchange or interest rates, creating a unique trading opportunity to diversify a broader portfolio.
- > **Access a liquid electricity market** Australia has one of the most liquid electricity markets in the world, trading 620% of underlying consumption in the NEM in FY21.
- > **Weather driven** Australian electricity futures are proxy weather instruments as they're highly driven by weather events.
- > **AUD denominated** for international traders looking for a diversified commodity portfolio.
- > **Unique \$300 Cap product** allows exposure to a strip of call options when the NEM spot price exceeds \$300.



Energy Trading Training

ASX provides face-to-face customer training products to help you understand our full suite of energy derivatives and their role in the energy market. Learn about their characteristics and risk profile to help you trade more effectively by contacting the ASX Energy Team.



Energy Market Data

ASX's online energy market data centre lets you access a central source of pricing data to identify market trends, liquidity and forward curve movements for more efficient price discovery. You can also access comprehensive historical and derived energy pricing data. Information includes daily settlement prices, open interest and daily closing snapshot files. Data is also downloadable as CSV files, enabling you to import data directly into your own system. Subscribe to ASX's online energy data centre at asxenergy.com.au.



ASX24

ASX Trade 24 is ASX's proprietary electronic trading platform, giving you access to trade ASX's suite of energy derivative contracts. Its purpose built for easy access to a full suite of trading order management functionalities that offer more flexibility in how you trade. The ASX24 market can be accessed through a registered Clearing Participant. For more information on accessing ASX24, please contact the ASX Energy Team.

For more information on ASX's Energy products please visit asxenergy.com.au, www2.asx.com.au, watch these [videos](#).

Data Vendor Access Codes

Australian Electricity

Base Load Electricity

	NSW	VIC	QLD	SA
MONTH FUTURES				
ASX Trade24 Code	EN	EV	EQ	ES
Bloomberg	WLLA<CMDTY>	VLLA<CMDTY>	QLLA<CMDTY>	SLLA<CMDTY>
Refinitiv	0#YMN:	0#YMV:	0#YMQ:	0#YMs:
QUARTER FUTURES				
ASX Trade24 Code	BN	BV	BQ	BS
Bloomberg	EWA<CMDTY>	EVA<CMDTY>	EZA<CMDTY>	EUA<CMDTY>
Refinitiv	0#YBN:	0#YBV:	0#YBQ:	0#YBS:
STRIPS				
ASX Trade24 Code	HN	HV	HQ	HS
Bloomberg	H1A<CMDTY>	H2A<CMDTY>	H3A<CMDTY>	H4A<CMDTY>
Refinitiv	0#YBNFS:-	0#YBVFS:-	0#YBQFS:-	0#YBSFS:-

Peak Load Electricity

	NSW	VIC	QLD	SA
QUARTER FUTURES				
ASX Trade24 Code	PN	PV	PQ	PS
Bloomberg	AWA<CMDTY>	AOA<CMDTY>	ABA<CMDTY>	AUA<CMDTY>
Refinitiv	0#YPN:	0#YPV:	0#YPQ:	0#YPS:
STRIPS				
ASX Trade24 Code	DN	DV	DQ	DS
Bloomberg	N1A<CMDTY>	N2A<CMDTY>	N3A<CMDTY>	N4A<CMDTY>
Refinitiv	0#YPNFS:-	0#YPVFS:-	0#YPQFS:-	0#YPSFS:-

Base Load \$300 Cap Electricity

	NSW	VIC	QLD	SA
QUARTER FUTURES				
ASX Trade24 Code	GN	GV	GQ	GS
Bloomberg	GNA<CMDTY>	GPA<CMDTY>	GOA<CMDTY>	GRA<CMDTY>
Refinitiv	0#YGN:	0#YGV:	0#YGQ:	0#YGS:
STRIPS				
ASX Trade24 Code	RN	RV	RQ	RS
Bloomberg	HNA<CMDTY>	HVA<CMDTY>	HMA<CMDTY>	HKA<CMDTY>
Refinitiv	0#YGNFS-:	0#YGVFS-:	0#YGQFS-:	0#YGSFS-:

Electricity Options

	NSW	VIC	QLD	SA
AVERAGE RATE OPTIONS OVER BASE LOAD CALENDAR QUARTER FUTURES				
ASX Trade24 Code	BN	BV	BQ	BS
Bloomberg	EWA<CMDTY>	EVA<CMDTY>	EZA<CMDTY>	EUA<CMDTY>
Refinitiv	0#2YBNmy+	0#2YBVmy+	0#2YBQmy+	0#2YBSmy+
CALENDAR YEAR BASE LOAD ELECTRICITY STRIP OPTIONS				
ASX Trade24 Code	HN	HV	HQ	HS
Bloomberg	H1Zy<CMDTY>OMON	H2Zy<CMDTY>OMON	H3Zy<CMDTY>OMON	H4Zy<CMDTY>OMON
Refinitiv	0#2YHNmy+	0#2YHVmy+	0#2YHQmy+	0#2YHSmy+
FINANCIAL YEAR BASE LOAD ELECTRICITY STRIP OPTIONS				
ASX Trade24 Code	HN	HV	HQ	HS
Bloomberg	H1My<CMDTY>OMON	H2My<CMDTY>OMON	H3My<CMDTY>OMON	H4My<CMDTY>OMON
Refinitiv	0#2YHNmy+	0#2YHVmy+	0#2YHQmy+	0#2YHSmy+



Australian Gas

Victorian Wholesale Gas

	MONTH FUTURES	QUARTER FUTURES
ASX Trade24 Code	GJ	GK
Bloomberg	{WGCA Comdty DES<GO>}	{WGDA Comdty DES<GO>}
Refinitiv	0#YGJ:	0#YGK:

Wallumbilla Natural Gas

	QUARTER FUTURES	STRIP
ASX Trade24 Code	GX	GY
Bloomberg	AGSA COMDTY	AGYA COMDTY
Refinitiv	0#YGX:	0#YGXY-

Contract Specifications for Australian Electricity

Individual contract specifications can be found in [Schedule 1 of the ASX24 Operating Rules](#).

Please note that individual contract specifications do change from time to time and this document is not a substitute for the [ASX24 Operating Rules](#). In the case of any discrepancies, the ASX24 Operating Rules apply.

ASX Australian Electricity – Base Load Monthly Futures

Underlying Commodity:	Electrical energy bought and sold in the New South Wales, Victoria, South Australia and Queensland wholesale electricity pool markets conducted by the Australian Energy Market Operator (AEMO).
Contract Unit:	1 Megawatt of electrical energy per hour based on a base load profile. Where the base load profile is defined as the Wholesale Electricity Pool Market base load period from 00:00 hours Monday to 24:00 hours Sunday over the duration of the Contract Month. For example: the size (in Megawatt hours) of each contract month will vary depending on the number of days and base load hours within the quarter, as follows: <ul style="list-style-type: none"> • A 28 day contract month will equate to 672 Megawatt hours; • A 29 day contract month will equate to 696 Megawatt hours; • A 30 day contract month will equate to 720 Megawatt hours; • A 31 day contract month will equate to 744 Megawatt hours.
Price Quotation:	Prices are quoted in Australian dollars per Megawatt hour.
Contract Months:	January, February, March, April, May, June, July, August, September, October, November, December, between 4 to 6 months ahead.
Commodity Code:	<ul style="list-style-type: none"> • EN: NSW Base Load Month Electricity Futures • EV: VIC Base Load Month Electricity Futures • EQ: QLD Base Load Month Electricity Futures • ES: SA Base Load Month Electricity Futures
Minimum Price Movement:	Minimum price fluctuations of \$0.01 per Megawatt hour.
Tick Size:	Tick size for a \$0.01/MWh price fluctuation: <ul style="list-style-type: none"> • A 672 MWh contract month has a tick size of \$6.72; • A 696 MWh contract month has a tick size of \$6.96; • A 720 MWh contract month has a tick size of \$7.20; • A 744 MWh contract month has a tick size of \$7.44.
Trading Hours:	10:00am – 4:00pm ¹
Last Trading Day:	The last Business Day of the Contract Month. On this day, trading terminates at 4:00pm ¹
Cash Settlement Day:	The Cash Settlement Day of the Contract shall be the fourth Business Day after the expiry of the Contract Month.
Cash Settlement Price:	The Cash Settlement Price is calculated by taking the arithmetic average of the Wholesale Electricity Pool Market base load spot prices on a thirty minute period before 1 October 2021 and a five minute period on and from 1 October 2021, over the Contract Month, rounded to the nearest cent. A provisional Cash Settlement Price will be declared on the first Business Day after expiry of the Contract and shall be later confirmed on the third Business Day after expiry.

Cash Settlement Process: Upon the fourth Business Day after the expiry of the Contract, the Contract will be cash settled at the Cash Settlement Price confirmed on the third business day of the Contract Month. The final settlement price is rounded to the nearest cent. All bought and sold contracts in existence as at the close of trading in the Contract Month shall be settled by the ASX Clear (Futures) at the Cash Settlement Price.

Cash Settlement Value: The Cash Settlement Value is the Cash Settlement Price multiplied by the number of Megawatt hours (MWh) in the underlying Contract Month.

¹ Trading hours: Australian Eastern Standard Time / Australian Eastern Daylight Time.

ASX Australian Electricity – Base Load Calendar Quarter Futures

Underlying Commodity: Electrical energy bought and sold in the New South Wales, Victoria, South Australia and Queensland wholesale electricity pool markets conducted by the Australian Energy Market Operator (AEMO).

Contract Unit: 1 Megawatt of electrical energy per hour based on a base load profile. Where the base load profile is defined as the Wholesale Electricity Pool Market base load period from 00:00 hours Monday to 24:00 hours Sunday over the duration of the Contract Quarter. For example: the size (in Megawatt hours) of each contract quarter will vary depending on the number of days and base load hours within the quarter, as follows:

- A 90 day contract month will equate to 2,160 Megawatt hours;
- A 91 day contract month will equate to 2,184 Megawatt hours;
- A 92 day contract month will equate to 2,208 Megawatt hours.

Price Quotation: Prices are quoted in Australian dollars per Megawatt hour.

Contract Months: March, June, September, December, up to the next 4 calendar years and 3 financial years or 3 calendar years and 4 financial years.

Commodity Code:

- BN: NSW Base Load Quarter Electricity Futures
- BV: VIC Base Load Quarter Electricity Futures
- BQ: QLD Base Load Quarter Electricity Futures
- BS: SA Base Load Quarter Electricity Futures
- HN: NSW Base Load Electricity Strip Products
- HV: VIC Base Load Electricity Strip Products
- HQ: QLD Base Load Electricity Strip Products
- HS: SA Base Load Electricity Strip Products

Minimum Price Movement: Minimum price fluctuations of \$0.01 per Megawatt hour.

Tick Size: Tick size for a \$0.01/MWh price fluctuation:

- A 2,160 MWh contract month has a tick size of \$21.60;
- A 2,184 MWh contract month has a tick size of \$21.84;
- A 2,208 MWh contract month has a tick size of \$22.08.

Trading Hours: 10:00am – 4:00pm¹

Last Trading Day: The last Business Day of the Settlement Month. On this day, trading terminates at 4:00pm¹

Cash Settlement Day: The Cash Settlement Day of the Contract shall be the fourth Business Day after the expiry of the Contract Quarter.

Cash Settlement Price: The Cash Settlement Price is calculated by taking the arithmetic average of the Wholesale Electricity Pool Market base load spot prices on a thirty minute period before 1 October 2021 and a five minute period on and from 1 October 2021 over the Contract Quarter, rounded to the nearest cent. A provisional Cash Settlement Price will be declared on the first Business Day after the Last Trading Day of the Contract and shall be later confirmed on the third Business Day after the Last Trading Day.

Cash Settlement Process: Upon the fourth Business Day after the expiry of the Contract, the Contract will be cash settled at the Cash Settlement Price confirmed on the third business day after the Last Trading Day of the Contract Quarter. The final settlement price is rounded to the nearest cent. All bought and sold contracts in existence as at the close of trading in the Contract Quarter shall be settled by the ASX Clear (Futures) at the Cash Settlement Price.

Cash Settlement Value: The Cash Settlement Value is the Cash Settlement Price multiplied by the number of Megawatt hours (MWh) in the underlying Contract Quarter.

¹ Trading hours: Australian Eastern Standard Time / Australian Eastern Daylight Time.

ASX Australian Electricity – Peak Load Calendar Quarter Futures

Underlying Commodity: Electrical energy bought and sold in the New South Wales, Victoria, South Australia and Queensland wholesale electricity pool markets conducted by the Australian Energy Market Operator (AEMO).

Contract Unit: 1 Megawatt of electrical energy per hour based on a peak load profile. Where the peak load profile is defined as the Wholesale Electricity Pool Market peak load period from 07:00am hours to 10:00pm hours Monday to Friday (excluding Public holidays and any other days determined by ASX) over the duration of the Contract Quarter.

For example: the size (in Megawatt hours) of each contract quarter will vary depending on the number of peak days and peak hours within the quarter, as follows:

- A 59 day contract quarter will equate to 885 Megawatt hours;
- A 60 day contract quarter will equate to 900 Megawatt hours;
- A 61 day contract quarter will equate to 915 Megawatt hours;
- A 62 day contract quarter will equate to 930 Megawatt hours;
- A 63 day contract quarter will equate to 945 Megawatt hours;
- A 64 day contract quarter will equate to 960 Megawatt hours;
- A 65 day contract quarter will equate to 975 Megawatt hours;
- A 66 day contract quarter will equate to 990 Megawatt hours;

Price Quotation: Prices are quoted in Australian dollars per Megawatt hour.

Contract Months: March, June, September, December, up to the next 4 calendar years and 3 financial years or 3 calendar years and 4 financial years.

Commodity Code:

- PN: NSW Peak Load Electricity Futures
- PV: VIC Peak Load Electricity Futures
- PQ: QLD Peak Load Electricity Futures
- PS: SA Peak Load Electricity Futures
- DN: NSW Peak Load Electricity Strip Products
- DV: VIC Peak Load Electricity Strip Products
- DQ: QLD Peak Load Electricity Strip Products
- DS: SA Peak Load Electricity Strip Products

Minimum Price Movement: Minimum price fluctuations of \$0.01 per Megawatt hour.

Tick Size:	<p>Tick size for a \$0.01/MWh price fluctuation:</p> <ul style="list-style-type: none"> • A 885 MWh contract month has a tick size of \$8.85; • A 900 MWh contract month has a tick size of \$9.00; • A 915 MWh contract month has a tick size of \$9.15; • A 930 MWh contract month has a tick size of \$9.30; • A 945 MWh contract month has a tick size of \$9.45; • A 960 MWh contract month has a tick size of \$9.60; • A 975 MWh contract month has a tick size of \$9.75; • A 990 MWh contract month has a tick size of \$9.90.
Trading Hours:	10:00am – 4:00pm ¹
Last Trading Day:	The last Business Day of the Contract Quarter. On this day, trading terminates at 4:00pm ¹
Cash Settlement Day:	The Cash Settlement Day of the Contract shall be the fourth Business Day after the Last Trading Day of the Contract Quarter.
Cash Settlement Price:	The Cash Settlement Price is calculated by taking the arithmetic average of the Wholesale Electricity Pool Market peak load spot prices on a thirty minute period before 1 October 2021 and a five minute period on and from 1 October 2021 over the Contract Quarter, rounded to the nearest cent. A provisional Cash Settlement Price will be declared on the first Business Day after the Last Trading Day of the Contract and shall be later confirmed on the third Business Day after the Last Trading Day.
Cash Settlement Process:	Upon the fourth Business Day after the Last Trading Day of the Contract, the Contract will be cash settled at the Cash Settlement Price confirmed on the third business day after the Last Trading Day of the Contract Quarter. The final settlement price is rounded to the nearest cent. All bought and sold contracts in existence as at the close of trading in the Contract Quarter shall be settled by the ASX Clear (Futures) at the Cash Settlement Price.
Cash Settlement Value:	The Cash Settlement Value is the Cash Settlement Price multiplied by the number of Megawatt hours (MWh) in the underlying Contract Quarter.

¹ Trading hours: Australian Eastern Standard Time / Australian Eastern Daylight Time.

ASX Australian Electricity – Base Load Calendar Quarter \$300 Cap Futures

Underlying Commodity:	Electrical energy bought and sold in the New South Wales, Victoria, South Australia and Queensland wholesale electricity pool markets conducted by the Australian Energy Market Operator (AEMO).
Contract Unit:	<p>1 Megawatt of electrical energy per hour based on a base load profile. Where the base load profile is defined as the Wholesale Electricity Pool Market base load period from 00:00 hours Monday to 24:00 hours Sunday over the duration of the Contract Quarter.</p> <p>For example: the size (in Megawatt hours) of each contract quarter will vary depending on the number of days and base load hours within the quarter, as follows:</p> <ul style="list-style-type: none"> • A 90 day contract quarter will equate to 2,160 Megawatt hours; • A 91 day contract quarter will equate to 2,184 Megawatt hours; • A 92 day contract quarter will equate to 2,208 Megawatt hours.
Price Quotation:	Prices are quoted in Australian dollars per Megawatt hour.
Contract Months:	March, June, September, December, such that sufficient Calendar Quarters are always available for market up to the next 4 calendar years and 3 financial years or 3 calendar years and 4 financial years.

Commodity Code:	<ul style="list-style-type: none"> • GN: NSW Base Load Quarterly \$300 Cap Electricity Futures • GQ: QLD Base Load Quarterly \$300 Cap Electricity Futures • GV: VIC Base Load Quarterly \$300 Cap Electricity Futures • GS: SA Base Load Quarterly \$300 Cap Electricity Futures • RN: NSW Base Load \$300 Cap Electricity Strip Products • RQ: QLD Base Load \$300 Cap Electricity Strip Products • RV: VIC Base Load \$300 Cap Electricity Strip Products • RS: SA Base Load \$300 Cap Electricity Strip Products
Minimum Price Movement:	Minimum price fluctuations of \$0.01 per Megawatt hour.
Tick Size:	<p>Tick size for a \$0.01/MWh price fluctuation:</p> <ul style="list-style-type: none"> • A 2,160 MWh contract quarter has a tick size of \$21.60; • A 2,184 MWh contract quarter has a tick size of \$21.84; • A 2,208 MWh contract quarter has a tick size of \$22.08.
Trading Hours:	10:00am – 4:00pm ¹
Last Trading Day:	The last Business Day of the Contract Quarter. On this day, trading terminates at 4:00pm ¹
Cash Settlement Day:	The Cash Settlement Day of the Contract shall be the fourth Business Day after the Last Trading Day of the Contract Quarter.
Cash Settlement Price:	<p>The Cash Settlement Price = $(C - (300 \times D)) / E$, where:</p> <ul style="list-style-type: none"> • C = the sum of all base load spot prices for the Region in the Calendar Quarter greater than \$300. • D = the total number of base load spot prices for the Region in the Calendar Quarter greater than \$300. • E = the total number of base load spot prices for the Region in the Calendar Quarter. <p>The relevant base load spot price for the region shall be:</p> <ul style="list-style-type: none"> • where the Year/Quarter/Month/Week ends before 1 October 2021, the thirty minute base load spot price for the region; and • where the Year/Quarter/Month/Week commences on or after 1 October 2021, the five minute base load spot price for the region. <p>A Provisional Cash Settlement Price will be declared on the first Business Day after the Last Trading Day of the Contract and shall be later confirmed on the third Business Day after the Last Trading Day.</p>
Cash Settlement Process:	Upon the fourth Business Day after the expiry of the Contract, the Contract will be cash settled at the Cash Settlement Price confirmed on the third business day after the Last Trading Day of the Contract Quarter. The final settlement price is rounded to the nearest cent. All bought and sold contracts in existence as at the close of trading in the Contract Quarter shall be settled by the ASX Clear (Futures) at the Cash Settlement Price.
Cash Settlement Value:	The Cash Settlement Value is the Cash Settlement Price multiplied by the number of Megawatt hours (MWh) in the underlying Contract Quarter.

¹ Trading hours: Australian Eastern Standard Time / Australian Eastern Daylight Time.

ASX Australian Electricity - Base Load Calendar Year Strip Options

Description:	Options on Calendar Year Base Load Futures Strip Products
Underlying Commodity:	1 Megawatt of electrical energy per hour on a base load profile for the respective states (NSW, QLD, VIC and SA) over the duration of a Calendar Year.

Contract Years:	Options available on 3 Calendar Year Strip Futures Products up to three years ahead.
Commodity Code:	<ul style="list-style-type: none"> • HN: NSW Base Load Strip Options • HV: VIC Base Load Strip Options • HQ: QLD Base Load Strip Options • HS: SA Base Load Strip Options <p>Note: a June “M” expiry denotes a Financial Year strip Option and a December “Z” expiry denotes a Calendar Year Strip Option</p>
Price Quotation:	Prices are quoted in Australian dollars per Megawatt hour.
Minimum Price Movement:	Minimum price fluctuation is \$0.01 per Megawatt hour.
Trading Hours:	10:00am – 4:00pm ¹
Exercise Prices:	Set at intervals of \$1.00 per MWh. New option exercise prices created as the underlying futures contract price moves.
Contract Expiry:	Options will cease trading at 12:00pm on the Last Trading Day. The Last Trading Day shall be the day 6 weeks prior to the day immediately preceding the commencement of the first Contract quarter for the underlying strip. If this day is not a business day or is recognised in the underlying regions as a Public Holiday then the following business day will be the expiry day.
Settlement Method:	<p>Options may be exercised on any business day up to and including the day of expiry. In-the-money options are automatically exercised at expiry.</p> <p>Buyers may exercise in, at and out-of-the-money option positions held, by lodging a notice of manual exercise with ASX Clear (Futures) no later than 12:30pm on the day of expiry.</p>
Formula For Determining Futures Quarterly Prices Resulting From Strip Option Exercise:	<p>Upon exercise, the holder will receive four base load calendar quarterly futures positions at prices equivalent to the option strike price, after applying the current curve ratio determined from the previous business day’s settlement price of the four quarterly futures contracts underlying the relevant Strip Futures Product, as outlined below:</p> $FP = A \times B / C$ <ul style="list-style-type: none"> • FP = Price allocated to each futures contract in the strip resulting from exercised Strip Option. • A = The previous day’s Daily Settlement Price for the Contract Quarter for each individual futures contract in the strip. • B = Exercise Price. • C = Previous Day’s Implied Strip Price, calculated as follows: $\text{Implied Strip Price} = F / G$ <ul style="list-style-type: none"> • $F = a + b + c + d$ <ul style="list-style-type: none"> – a = Q1 previous day’s Daily Settlement Price x MWh for Q1 – b = Q2 previous day’s Daily Settlement Price x MWh for Q2 – c = Q3 previous day’s Daily Settlement Price x MWh for Q3 – d = Q4 previous day’s Daily Settlement Price x MWh for Q4 • G = Total number of MWh of all four Futures Contracts in the strip • The underlying electricity futures contract with the longest dated expiry will be further adjusted up or down in increments of \$0.01/MWh to the extent that such adjustment will achieve a more accurate implied Exercise Price, as calculated to 4 decimal places.

Reference Price for Option Exercise: The previous day's Daily Settlement Price of the underlying Calendar Year Base Load Strip Futures Product.

¹ Trading hours: Australian Eastern Standard Time / Australian Eastern Daylight Time.

ASX Australian Electricity – Base Load Financial Year Strip Options

Description:	Options on Financial Year Base Load Futures Strip Products
Underlying Commodity:	1 Megawatt of electrical energy per hour on a base load profile for the respective states (NSW, QLD, VIC and SA) over the duration of a Calendar Year.
Contract Years:	Options available on 3 Financial Year Strip Futures Products up to three years ahead.
Commodity Code:	<ul style="list-style-type: none"> • HN: NSW Base Load • HV: VIC Base Load • HQ: QLD Base Load • HS: SA Base Load <p>Note: a June "M" expiry denotes a Financial Year strip Option and a December "Z" expiry denotes a Calendar Year Strip Option</p>
Price Quotation:	Prices are quoted in Australian dollars per Megawatt hour.
Minimum Price Movement:	Minimum price fluctuation is \$0.01 per Megawatt hour.
Trading Hours:	10:00am – 4:00pm ¹
Exercise Prices:	Set at intervals of \$1.00 per MWh. New option exercise prices created as the underlying futures contract price moves.
Contract Expiry:	Options will cease trading at 12:00pm on the Last Trading Day. The Last Trading Day shall be the day 6 weeks prior to the day immediately preceding the commencement of the first Contract quarter for the underlying strip. If this day is not a business day or is recognised in the underlying regions as a Public Holiday then the following business day will be the expiry day.
Settlement Method:	Options may be exercised on any business day up to and including the day of expiry. In-the-money options are automatically exercised at expiry. Buyers may exercise in, at and out-of-the-money option positions held, by lodging a notice of manual exercise with ASX Clear (Futures) no later than 12:30pm on the day of expiry.
Formula For Determining Futures Quarterly Prices Resulting From Strip Option Exercise:	<p>Upon exercise, the holder will receive four base load calendar quarterly futures positions at prices equivalent to the option strike price, after applying the current curve ratio determined from the previous business day's settlement price of the four quarterly futures contracts underlying the relevant Strip Futures Product, as outlined below:</p> $FP = A \times B/C$ <ul style="list-style-type: none"> • FP = Price allocated to each futures contract in the strip resulting from exercised Strip Option. • A = the previous day's Daily Settlement Price for the Contract Quarter for each individual futures contract in the strip. • B = Exercise Price. • C = Previous Day's Implied Strip Price, calculated as follows: <p>Implied Strip Price = F/G</p> <ul style="list-style-type: none"> • F = a + b + c + d

- a = Q3 previous day's Daily Settlement Price x MWh for Q3
- b = Q4 previous day's Daily Settlement Price x MWh for Q4
- c = Q1 previous day's Daily Settlement Price x MWh for Q1
- d = Q2 previous day's Daily Settlement Price x MWh for Q2
- G = Total number of MWh of all four Futures Contracts in the strip
- The underlying electricity futures contract with the longest dated expiry will be further adjusted up or down in increments of \$0.01/MWh to the extent that such adjustment will achieve a more accurate implied Exercise Price, as calculated to 4 decimal places.

Reference Price for Option Exercise: The previous day's Daily Settlement Price of the underlying Financial Year Base Load Strip Futures Product.

¹ Trading hours: Australian Eastern Standard Time / Australian Eastern Daylight Time.

ASX Australian Electricity – Base Load Calendar Quarter Average Rate Options

Description:	Average Rate Options over Base Load Calendar Quarter Electricity Futures
Underlying Commodity:	1 Megawatt of electrical energy per hour on a base load profile for the respective states (NSW, QLD, VIC and SA) over the duration of a Calendar Quarter.
Contract Quarters:	March, June, September, December, up to 6 calendar quarters ahead.
Commodity Code:	<ul style="list-style-type: none"> • BN: NSW Base Load Options • BV: VIC Base Load Options • BQ: QLD Base Load Options • BS: SA Base Load Options
Price Quotation:	Prices are quoted in Australian dollars per Megawatt hour.
Minimum Price Movement:	Minimum price fluctuation is \$0.01 per Megawatt hour.
Trading Hours:	10:00am – 4:00pm ¹
Exercise Prices:	Set at intervals of \$1.00 per MWh. New option exercise prices created as the underlying futures contract price moves.
Contract Expiry:	Options will cease trading at 4:00pm on the Last Trading Day of the underlying Calendar Quarter.
Declaration Date:	The day and time at which the final Settlement Price of the underlying Base Load Calendar Quarter Electricity Futures Contract is declared.
Reference Price for Option Exercise:	In accordance with the final Settlement Price of the underlying futures contract as determined on the Third Business Day after the Final Trading Day.
Method of Option Exercise:	On the Third Business Day after the Final Trading Day all in-the-money options are automatically exercised into the underlying futures contract and cash settled. Deny Automatic Exercise Requests are not permitted. Exercise Requests for out-of-the-money options and/or at-the-money options are not permitted.

¹ Trading hours: Australian Eastern Standard Time / Australian Eastern Daylight Time.



Contract Specifications for Australian Gas

ASX Victorian Wholesale Gas Futures

Contract Unit:	One hundred (100) Gigajoules (GJ) of natural gas per day over the period of a Calendar Quarter.
Price Quotation:	AUD per GJ of natural gas per day
Contract Months:	March / June / September / December sufficient to support two calendar and two financial years ahead.
Commodity Code:	<ul style="list-style-type: none">• GX: Victorian Gas Quarterly Futures• GY: Victorian Gas Strip Product
Minimum Price Movement:	Prices are quoted in dollars and cents per GJ. The minimum fluctuation is \$0.01.
Trading Hours:	8.30am - 4.00pm ¹ (For period from second Sunday in March to first Sunday in November) 8.30am - 4.00pm ¹ (For period from first Sunday in November to second Sunday in March)
Last Trading Day:	Last Business Day of the Calendar Quarter ¹
Settlement Day:	The fourth Business Day following the Final Trading Day.
Settlement Method:	Cash Settled

¹ Trading hours: Australian Eastern Standard Time / Australian Eastern Daylight Time.

ASX Wallumbilla Natural Gas Calendar Month Futures

Contract Unit:	One hundred (100) Gigajoules (GJ) of natural gas per day over the period of a Calendar Month.
Price Quotation:	AUD per GJ of natural gas per day
Contract Months:	January / February / March / April / May / June / July / August / September / October / November / December, between 4 to 6 months ahead.
Commodity Code:	GJ
Minimum Price Movement:	Prices are quoted in dollars and cents per GJ. The minimum fluctuation is \$0.01.
Trading Hours:	10:00am - 4.00pm ¹
Last Trading Day:	Last Business Day of the Calendar Month ¹
Settlement Day:	The first Business Day following the Final Trading Day.
Settlement Method:	Cash Settled

¹ Trading hours: Australian Eastern Standard Time / Australian Eastern Daylight Time.



ASX Wallumbilla Natural Gas Calendar Quarter Futures

Contract Unit:	One hundred (100) Gigajoules (GJ) of natural gas per day over the period of a Calendar Quarter.
Price Quotation:	AUD per GJ of natural gas per day
Contract Months:	March / June / September / December, up to the next 4 calendar years and 3 financial years or 3 calendar years and 4 financial years.
Commodity Code:	GK
Minimum Price Movement:	Prices are quoted in dollars and cents per GJ. The minimum fluctuation is \$0.01.
Trading Hours:	10:00am - 4.00pm ¹
Last Trading Day:	Last Business Day of the Calendar Quarter ¹
Settlement Day:	The first Business Day following the Final Trading Day.
Settlement Method:	Cash Settled

¹ Trading hours: Australian Eastern Standard Time / Australian Eastern Daylight Time.



Further enquiries/Training enquiries:

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