



Weekly News

14 February 2025

Richards Bay LNG gets go-ahead, helps fuel 6 GW of power projects

South Africa's Transnet National Ports Authority (TNPA) has signed a 25-year operator agreement with Zululand Energy Terminals (ZET) to develop the country's first LNG import terminal at Richards Bay's South Dunes precinct. The venture will help Eskom and independent power producers to develop at least 6,000 MW of gas-fired power projects.

ZET, a joint venture between Vopak Terminal Durban and Transnet Pipelines, was chosen last year as the preferred bidder to develop, build, and operate the LNG terminal at the deep-water KwaZulu-Natal port.

Initially, Richards Bay LNG terminal is meant to handle at least 2 million tonnes of LNG annually, though TNPA said there was potential to expand throughput beyond 5 mtpa over the concession period. The facility's first phase, due operational by 2028, will include a Floating Storage Unit (FSU) and an onshore re-gasification system.

Set to bring R7 billion investment to the Port of Richards Bay, the terminal will serve as a strategic gateway for LNG imports, TNPA chief executive Phyllis Difeto emphasized. This development aligns



Port of Richards Bay in northern KwaZulu-Natal

with South Africa's broader energy strategy to introduce at least 6,000 MW of gas-fired power capacity, driven by both Eskom and independent power producers in KwaZulu-Natal.

Beyond Richards Bay, TNPA also aims to attract LNG developers to Saldanha in the Western Cape and Ngqura in the Eastern Cape, strengthening South Africa's commitment to expand dispatchable

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Europe needs to pay more for flexible LNG as stocks draw down

The TTF needs to price higher at around €57/MWh for the balance of 2025 – if European buyers want to succeed in attracting flexible LNG cargoes, as inventories are depleting fast. Reduced Norwegian pipeline gas flows could propel up TTF prices, analysts warn, as Europe lost its ability to further minimise power-sector gas demand.

“Both our price forecast and market price suggest the TTF will remain above the top of the coal-gas fuel-switching range while cold and low-wind weather is increasing the call on thermal generation,” Energy Aspects commented. Only above that price level, will Europe be able to eliminate price-sensitive LNG demand from Asia to be able to refill storage.

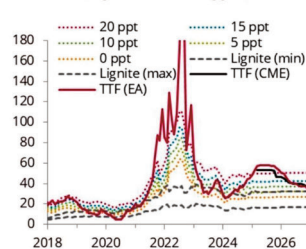
Quest to price out non-EU demand

Modelling by Energy Aspects shows that TTF pricing around €65–100/MWh would already price out

most of the discretionary demand in non-European markets. Lower LNG send-out rates since the beginning of winter led to a high stock drawdown, but the latest rally in TTF prices has seen several cargoes to be diverted from Asia. Not least due to

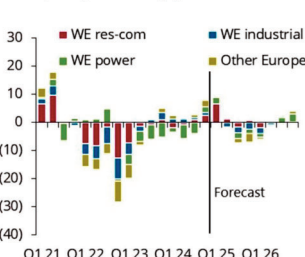
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TTF vs coal-gas fuel-switch triggers, €/MWh



Source: Bloomberg, LSEG, ICE, ECB, Energy Aspects

European gas demand y/y, bcm



Note: Western Europe comprises Belgium, Germany, France, the Netherlands, the UK, Spain and Italy
Source: System operators, ENTSOG, DESNZ, Energy Aspects

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generation – notably fast-ramp and efficient gas-to-power infrastructure.

Financing arranged

International Finance Corp (IFC), part of the World Bank, back in 2019 made a \$2 million cost-sharing commitment to Transnet to develop a floating storage and regasification unit (FSRU) at the Port of Richards Bay with a view to supply fuel to

independent power projects.

The FSRU is intended to unlock a backbone of the country's natural gas network to deliver fuel to several LNG-led independent power projects (IPPs). Though coal is still king in South's Africa's power mix, the government plans to retire nearly 10-GW of supercritical coal units. To replace this lost capacity, it seeks to realize up to 4 GW of gas-fired IPPs

Private-sector investors, selected through a tender, are also vetted build and operate the so-called Richards Bay Natural Gas Network (NGN) for 15 to 20 years. The project will help get LNG delivered to new markets in the Eastern Cape and Western Cape provinces through the ports of Ngqura and Saldanha Bay respectively, with the LNG to be transported to various markets by rail and road. ■

German gov' urged to extend electricity subsidies

Industry association BDI wants the new German government – following the February 23 snap election – to extend subsidies for energy-intensive companies and lower electricity prices, both at national and EU level. 'Carbon Contracts for Difference' are also desirable to help industries shoulder the additional expenses of switching to more sustainable production.

In October, fifteen companies in Germany were awarded support guarantees in the first round of the so-called 'climate contracts, better known as CCfDs. Now the industry is asking for more.

Risk of overburdening

The EU's 2040 climate target, soon to be debated in the European Parliament, must not overburden the industry, BDI said, stressing: "EU state aid regulations must not stand in the way of relief from rising prices, grid charges and levies."

Lower electricity prices should be ensured through an "ambitious renewables build-out", spurred by accelerated approval

procedures for power stations and electricity grids. BDI said it favours a "vigorous" expansion of the hydrogen and CO2 capture and storage infrastructure.

In recent weeks, plans for mass layoffs at the carmaker VW, industry supplier Bosch and steelmaker Thyssenkrupp made headlines, feeding fears of terminal industry decline. Arguments about the right way forward in industry decarbonisation was also a reason for the break-up of the coalition government in early November.

CCfDs may avert offshoring

Decarbonisation comes at a cost that may force energy-intensive industries to off-shore parts of their production. Deindustrialisation would be the consequence, putting skilled jobs at risk. To avoid that, BDI wants a new government to stronger implement 'Carbon Contracts for Difference (CCfD)' – a scheme which helps companies bridge the additional costs of decarbonising, e.g. by switching to sustainable fuels, also using EU funds.

In analogy to the use of feed-in premiums or tariffs to attract investments in renewable energy, a CCfD may be granted to an investor e.g. a steel company or a chemical company willing to decarbonise its transform its production processes. Again similar to RES, this could happen through a competitive tendering process.

Quest to delay climate neutrality

An ailing economy and weakening industrial base have become the focus of German political parties. Future industrial policies, in fact, are a key talking point in the run-up to the election. BDI head Siegfried Russwurm questioning whether Germany should stick to its official target of reaching climate neutrality by 2045, given that the EU as a whole was aiming for 2050 and China for 2060.

Though the 2045 target is still "technologically possible," but BDI latest report warns that the government's timeline for implementation has been becoming "less realistic each day." ■

Gas to Power Journal

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tightening JKM-TTF spreads.

Eight cargoes have been counted this month to date, carrying 0.5 million tons of LNG and expect European send-out to increase by 1.4 billion cubic meters (bcm) over bal-Q1 2025.

"However, this doesn't change our expectations that European inventories will drop to 35 bcm (32% full) by end-March, 28.6 bcm lower year-on-year," analysts said. "Consequently, we are particularly bullish over Sum-25 and see further upside risk to prices."

Supply squeeze triggers price rally

Disruptions in LNG supply and Norwegian gas field outages have caused the latest price rally. Floods in Malaysia reduced

tanker loadings at Petronas' 29.3 million tons per annum (mtpa) Bintulu KBF facility, and there is a risk that Indonesia will cut back on supply this summer. The government in Jakarta warned it may delay up to 50 cargoes to meet rising domestic demand.

Norwegian pipeline gas, a stable source of gas supply for Northern Europe, is flagging due to field outages. Though most outages are short-term, analysts noted a two-month outage at 4.2 mtpa Hammerfest LNG export plant in the second quarter of 2025 is bound to tighten the balance by 0.8 mt, or 1.1 bcm week-on-week.

Reduced flow of Norwegian pipeline gas is likely to push up TTF prices for northern European buyers to be able to attract additional spot LNG cargoes to meet demand. ■

Trump admin' focusses on expanding new baseload power gen

The U.S. Department of Energy (DOE) will prioritize expanding baseload and dispatchable power generation to meet rising electricity demand. Energy Secretary Chris Wright outlined in a new directive that the Trump administration wants to eliminate regulatory barriers to accelerate the build-out of reliable energy sources and strengthen the power transmission grid.

The department vowed it will use its legal authority to approve and build new energy infrastructure while eliminating regulatory barriers that delay projects. "We must permit and build energy infrastructure and remove barriers to progress, including federal policies that make it too easy to stop projects and far too difficult to complete them," Wright stated

when signing his first Secretarial Order on February 5.

Eager to guarantee stable baseload power supply, the DOE said it will focus on adding reliable energy sources rather than restricting them. Wright criticized net-zero policies for increasing costs, threatening grid stability, and undermining energy security. Instead, the Trump administration will take

steps to support power generation technologies that ensure affordability and reliability.

New nuclear has shifted up on the political agenda: The DOE promised it will actively promote next-generation nuclear technology, working to accelerate its deployment

and facilitate international exports. "The department will work diligently and creatively to enable the rapid deployment and export of next-generation nuclear technology," Wright affirmed.

Enhancing grid reliability is yet another focus area. To that end, the DOE will "exercise all lawful authorities" to strengthen the U.S. power grid, including improving the transmission system to support growing electricity demand. "This is an imperative as we consider current and anticipated load growth on our nation's electric utilities," Wright said.

Streamlining the permitting is a prerequisite for attracting private investment which is why DOE is working on improving the permitting process to encourage private-sector investments in energy infrastructure. "The department will identify and exercise its legal authorities to expedite the approval and construction of reliable energy infrastructure," Wright vowed. ■



US Department of Energy (DOE) headquarters

Waha hub prices plunge on soaring Permian production

Spot prices at Waha Hub, a U.S. regional gas trading point in West Texas, were below zero for 42% of trading days in 2024 as dry gas production from the Permian Basin outpaced available pipeline takeaway capacity. Only the October start-up of Matterhorn Express Pipeline, capable to carry 2.5 bcf/d of gas to the Texan coast, helped clear bottlenecks and made prices recover.

Since mid-November the price at the Waha Hub has been more than zero, data from Natural Gas Intelligence shows.

Sustained U.S. gas production, high inventories and mild winter temperatures caused a real-term fall in prices across most major gas trading hubs in the Lower 48 states:

- Inflation-adjusted natural gas prices in the Northeast at Algonquin Citygate and Eastern Gas South averaged 32 cents per million British thermal units (MMBtu) and 6 cents/MMBtu lower in 2024, respectively,
- while western prices at Northwest Sumas and SoCal Citygate have been \$2.51/MMBtu and \$4.55/MMBtu lower, respectively.

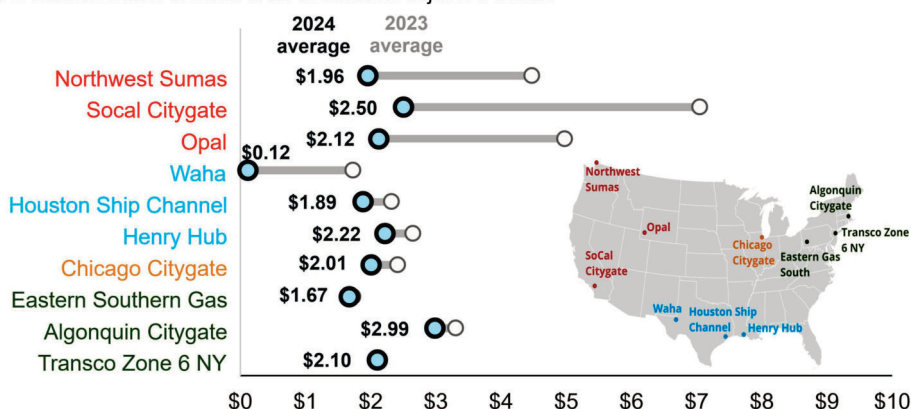
Warm winter temperatures, particularly in the Northeast and Midwest – the largest consumers of natural gas for space heating

– regional natural gas storage levels remained above the five-year (2019–23) average for most of last year.

At Henry Hub, the U.S. benchmark gas

trading point in Erath, Louisiana, spot gas prices averaged \$2.22/MMBtu in 2024, the lowest average annual price in inflation-adjusted dollars ever reported. ■

Annual natural gas spot prices at select trading hubs (2023–2024)
per million British thermal units in inflation adjusted dollars



Data source: Natural Gas Intelligence

Note: Prices are adjusted for inflation based on the December 2024 Consumer Price Index.



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Japan's LNG demand set to jump as renewables build-out slows

LNG demand in Japan's power sector is expected to rise by more than 10% to about 74 million tons by 2040, the government forecasts factoring in a slowing build-out of renewables. Unless wind and solar power expands substantially, or the cost of hydrogen, ammonia or CCS falls sharply, Japan's gas demand is bound to increase.

These are the results of modelling by METI, Japan's Ministry of Economy, Trade and Industry whose division director Yuya Hasegawa outlined the significance of a potential 10% rise of LNG demand for regas capacity utilisation and downstream gas infrastructure.

Japan's huge dependency on energy imports makes it vulnerable to price swings. Australia, Malaysia and the United States are the largest LNG suppliers to Japan – yet Canada is waiting in wings: Shell-led LNG Canada, the country's first export terminal, has begun testing and pre-commissioning activities as operators prepare to start up the C\$40 billion terminal in mid-2025.

The terminal will process up to 2 billion cubic feet per day (bcd/d), or 11% of Canada's current gas production, limiting available volumes for export into the United States. According to EIA figures, Canada exported about 8 bcd/d of gas by pipeline to its southern neighbour in 2023, compared with an average of 7.5 bcd/d over the previous five years.

Satisfying LNG Canada's pull could take years

Upstream companies in Western Canada have, however, been able to increase production by just up to 0.5 bcd/d year-on-year, indicating there will be a temporary gap in supply for both US and eastern Canadian markets once LNG Canada begins full operations, warned Jamie Heard, vice president of capital markets at Tourmaline Oil. In his view, "it's going to take – up to four years – to satisfy the pull that LNG Canada by itself is providing to the market."

In the short-run, analysts are not worried: LNG Canada will help clear the significant volumes of gas in

storage in Canada and also in the US, as imports of Canadian pipeline gas are bound to decrease – particularly as tariffs by US President Trump will hit the North American energy trade, leaving more natural gas available to be liquefied and shipped from British Columbia across the Pacific to key demand markets in Asia.



Futtsu LNG terminal and power plant at Tokyo Bay

Indonesia to add 15 GW gas power capacity on Java by 2034

Baseload electricity supply on Indonesia's Java island will get a boost by the planned addition of around 15 GW gas-fired power gen capacity until 2034. The government's new 10-year plant, locally known as RUPTL, plans for an additional 71 GW of new capacity with 70% of it from wind and solar power – complemented by flexible gas gensets.

To fuel new gas power stations, Indonesia's national oil company Pertamina plans to build an onshore regas terminal on Java near Cilacap refinery, one of seven refineries in Indone-

sia. The proposed regas terminal will supply 111 million cubic feet per day (mmcf/d) of gas for 20 years to the refinery for use in an onsite gas-fired power station.

The Java gas-fired IPP, developed and owned by Pertamina (40%), Marubeni (40%) and Sojitz (20%), started commercial operation at the end of March 2024. The project is intended to be developed in multiple stages, designated to add to an overall generating capacity of 1,760 MW.

Dispatchable backup power capacity help underpin

Java's shift to green energy. The government's aim is to boost the contribution of renewable energy sources from around 12% to around 35% in 2034, deputy Enterprise Minister Kartika Wirjoatmodjo told a forum. Planned for development is 17 GW of solar power capacity, combined with battery storage, and some 16 GW of hydro power as well as 5 GW of geothermal energy.

Still, some 5 GW of new coal-fired capacity is expected to proceed through the permitting process and is meant to start operations by 2034. "We will still continue some of the remaining projects on coal, but this is just closing up on the previous plan,"

The Indonesian government banned the development of new coal-fired power plants in 2022, except for those already in the pipeline and those co-located with refineries and heavy industry as long as they make strides to mitigate emissions.



View of Jawa1 gas-fired IPP

GE to modernize 12 power plants in Iraq by summer 2025

GE Vernova will help boost Iraq's power gen infrastructure by agreeing to modernize 46 gas turbines installed at 12 power stations. The upgrades are expected to add over 500 MW of electricity to the national power grid within summer 2025 to reign in Iraq's crippling electricity shortages.

Modernization works will focus on a series of assets – Ninawa, Al Diwaniyah, Hilla, Karbala, Shat Al Basra, Najibiya, Samawa, Dhiqar, Al Khairat and Al Haidariya. All the above power stations already transitioned from heavy fuel oil (HFO) to natural gas, with a capacity increase of approximately 260 MW. The other plants, and related turbines, are meant to be modernized within the summer of 2025, with an

expected additional increase in capacity of some 250 MW.

Advanced Gas Path (AGP) upgrades have already been installed at Al Mansouriya, Al-Quds and Dhiqar power plants, which increased their power gen capacity by 6%. An MXL2 upgrades was carried out on 13E2 gas turbines powering Al Mansouriya power plant, leading to a similar 6% boost in output. These efficiency gains will enable Iraqi utilities to generate more electricity using the same amount of fuel.

"These diverse projects will advance our goals of expanding electricity generation and enhancing energy reliability, particularly during peak demand periods," said Eng. Ziyad Ali Fadhil, Iraq's Minister of Electricity.

Maintenance project have already been completed at multi-

ple Iraqi power plants with 3.7 GW combined as part of services and upgrade agreements. As for distribution, GE completed and commissioned five 132-kV substations across Iraq and a sixth substation, Al Rasafa Center, was energized in mid-November 2024, more than two months ahead of schedule. ■



Wärtsilä launches 46TS engine with improved power output



Wärtsilä 46TS engine

Finnish engine maker Wärtsilä has launched its next-generation engine with improved engine efficiency (over 51%) and improved output. The 46TS generates 23.4 MW/unit, meaning that fewer engines are needed to achieve large plant sizes.

Rapid response to fluctuations with even faster ramp-up time, at 2 minutes, and no minimum up- or down-time requirements make the engine well suited to balance renewable energy. Modular plant installation with factory-tested modules facilitate significant savings in total installed cost.

"The energy transition cannot be achieved by renewable power alone – we need flexible, highly efficient engines to support wind and solar power during times of low generation. The flexible 46TS engine offers exactly that, expanding our existing technology offering to balance renewables and operate cost-effectively on baseload power," said Wärtsilä Energy's president Anders Lindberg.

The Wärtsilä 46TS is designed with sustainable fuels in mind, to ensure that when they become readily available the engine help deliver zero-carbon power systems. ■

Ansaldo-led consortium wins Terna tender for synch' condensers

Temporary Grouping Competitors (TGC), formed by Ansaldo Energia and infrastructure developer Lucente Mario, has won two lots of a public tender announced by the Italian electricity grid operator Terna. The order, worth approximately €300 million, is for five synchronous condensers designed to enhance grid stability and facilitate the massive integration of renewable energy sources.

Ansaldo Energia scope of supply includes the design, supply, commissioning, maintenance, and service activities of five synchronous condensers of 250 MVAR each, to be installed and commissioned within the next 5 years. The deal will bring the number of grid stabilization plants in Italy, operated by Ansaldo equipment to 13, with a total of 15 synchronous condensers.

Commenting on the tender award, Ansaldo Energia VP Thermal New Units, Stefano Gianatti said: "This project confirms our commitment to ensuring the stability of the electricity grid in the face of the increasing spread of renewable energy plants, which by their very nature are subject to discontinuity and non-programmability of the electricity supplied.

Synchronous condensers are a vital resource to facilitate the energy transition: they allow the re-

active power exchanged with the grid to be constantly and very accurately regulated to improve voltage profiles. This contributes to the grid's short-circuit power.

Grid inertia is also provided by synchronous condensers in a bid to stabilise the grid and avoid sudden voltage or frequency changes. A 'flywheel system', based on an Ansaldo-built vacuum chamber that minimizes losses caused by air friction, helps increase the inertia of the rotating system and minimises mechanical losses. ■



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