

Gas-based power stations run at full steam amid demand revival

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Thermal power stations running on gas, which were in a beleaguered state, are generating close to 10 gigawatt (Gw), the highest in several years.

Pushed by the directive of the Ministry of Power, such thermal power stations are running at an optimal rate of at least 50 per cent.

This has pushed up the power sector's demand for gas, which was muted for the past several years.

Earlier this year, the ministry gave directives to gas-based power stations to "mandatorily" run during summer.

Of the 24,150 Mw of gas grid-connected power generation capacity in the country, 14 Gw has no domestic gas supply and the balance is working at a sub-optimal level due to the limited quantity of domestic gas.

But with the directive, gas units are now running at a plant load factor of 40-50 per cent by sourcing both domestic and imported liquefied natural gas (LNG). India's largest power generator, NTPC, is leading with close to 3 Gw. Others are Torrent Power, GMR Infra, and state-owned units in Tamil Nadu and Andhra Pradesh. Tamil Nadu is running gas units of 230 Mw and officials say they are dependent on only domestic gas.

An email query sent on Monday to GMR Power, Torrent Power, and



IEA said India's natural gas demand may grow 7% in 2024

Urban Infra remained unanswered till press time. Unlike coal, a gas-based thermal power station can be switched on and off instantly, thereby helping the grid operators to step up supply when power demand goes up.

"Gas generation with 101 million units (almost 15 Gw in seven hours) is supporting peak-hour shortages where rates on exchanges are hovering between ₹10 and ₹13 per unit for high-cost power. Since gas power generation requires minimal ramp-up or ramp-down, and rates are almost at parity with coal-based power, it is the best strategy of the Ministry of Power to keep peak shortages minimum at 0.065 per cent, which used to be 3-4 per cent some six-eight years back," said Rajiv Goyal, chief executive officer and whole-

time director, EKI Power Trading.

Gas demand shoots up

In India's supply chain of natural gas, gas-based power is now one of the sectors contributing to the rise in demand. For domestic gas producers like Reliance Industries Ltd (RIL), demand from gas-based power plants is providing an added push. In an investor call in April, top executives of RIL noted demand in the Indian market had made a big comeback.

The executives listed gas-based power demand as one of the sectors that contributed to the revival, others being city gas distribution, fertilisers, and refineries. For gas suppliers such as GAIL India, demand from India's gas-based power plants is also changing the market mix. Executives of the company in a recent call with investors noted a change in the sector-wise supply for natural gas.

India's natural gas demand is expected to grow by 7 per cent in 2024 due to increased industrial and power-sector demand, International Energy Agency (IEA) officials said on Wednesday. Most of the rise in consumption has been attributed to rising demand from fertiliser and power generation. India imported 25 per cent more LNG in the first three months of 2024, as compared to the same period of 2023, the IEA has said.

India relies on imports for up to 50 per cent of its gas demand.

With inputs from Shine Jacob

India's energy challenge as global climate threat grows



Sanjeev Ahluwalia

Top Union government officials have been unusually busy, even as their political bosses are engaged in the quinquennial political survival game, over the last two months. Tasked by their political superiors to chart what the new government should do once in office, they have cooked up a storm of new initiatives and regulations to undergird the action plans of the new government. One such is a directive from the Central Electricity Authority that no coal plants should be retired till 2030. This is reassuring for the domestic coal industry and miners. But it does not align with decarbonisation or capital preservation objectives. It also illustrates the need for an agreed plan for undergirding a staged energy transition — by 2030, 2047 and Net Zero by 2070.

The cheapest way to reduce GHG emissions is to constrain the amount of energy used. India cannot do that yet because its development needs would get compromised. The second option is to decarbonise as quickly as possible. This option is limited by capital availability constraints and the paucity of ready-to-go, reasonably priced technology beyond solar and wind power. Both vary with the time of day and season. Integrating higher levels of either into grid supply can happen only once reasonably priced electricity storage devices (gigawatt scale batteries or alternatives) which charge when supply is surplus and discharge when supply is low, become available. Green hydrogen, the great new hope, for decarbonising industry, heavy freight and shipping is even further away.

Given the uncertainties associated with new clean technologies, doubling down on energy efficiency — reducing the amount of energy used for a unit of

work — is a win-win option. Another important metric is least-cost energy transition since India is not capital abundant. At present, the policies do not dovetail around a commonly agreed “energy and capital-use efficient” action plan. To be sure, there are fora for inter-ministerial consultation. But different ministries work within their own mandates. These are, unsurprisingly, tailored to what suits the mammoth energy public sector enterprises under them.

What, for instance, is the plan for cooking energy? Cooked food is central to Indian tastes and habits. ICMR advisories also propagate the health advantages of own-cooked food over processed or packaged food. Electricity is the most efficient option for cooking. At present, its use is limited to refrigerate cooked food, heat up cooked food quickly in microwaves and boil water for tea or coffee. But cooking is mostly done on Liquefied Petroleum Gas (LPG) or Pressurised Natural Gas (PNG) fired stoves. In villages biomass is a cheaper but noxious fuel and clean biofuel or compressed bio gas only at the pilot stage. Unlike the reliable supply of LPG or piped PNG (only partially available in a few big cities), electricity supply is not reliable enough for households to make the switch.

The near-term prospects of reliable electricity are low given the choke point of parlous distribution utilities, many owned by state governments, and all regulated by them. Distribution revenues do not match expenses because line loss of electricity is high due to ageing network assets, poor commercial management of billing and collections and the politically driven regulatory caps on retail electricity tariffs. Union and state governments have yet to create a common incentive for efficiency enhancement

What is the plan for cooking energy? Cooked food is central to Indian tastes and habits. Electricity is the most efficient option for cooking. But cooking is mostly done on LPG and PNG.

in distribution, though a fourth Union government financial support package is operational.

Within the Union government, siloed policy formulation by the ministry of power (for electricity) and the ministry of petroleum and natural gas (for LPG and PNG), drive rapid but independent expansion of their supply networks per customer demand — a market-based approach — but with the downside of stranded electricity assets (transmission lines to nowhere) or gas assets (underused gas pipelines) being created.

Another example is the planning regulations for city development and the design of buildings, which falls under the ministry of housing and urban affairs in the Union government and counterpart ministries in state governments. The latter regulate municipalities and towns which implement urban planning regulations. Energy demand emanates from transport, cooking, and lighting. Energy efficiency in lighting is a success story, driven by the decline in prices from a global scaling-up of energy efficient LED bulbs and the government policy support to market these nationally.

LEDs are several times more efficient than the “latus”, or incandescent bulbs, used earlier. They consume a fifth of the electricity for a given unit of illumination and are cheaper to use.

Sadly, the energy savings from LED bulbs is being wasted as building regulations encourage horizontal rather than vertical spread of buildings. In New Delhi, for plotted houses side setbacks have been eliminated and front and back setbacks minimised to suit developers because the built-up area gets increased. But encouraging growth of low rise,

row houses, built end to end and back to front in which lights must be turned on to see anything even during day, comes at the expense of energy efficiency, which would suggest optimisation of natural light via appropriately sized setbacks.

If the built-up area, inconsistent with the circularity principles of Mission LiFE, continues to embed carbon, it seriously cripples energy transition efforts over the next five decades. Policy support and tax disincentives should drive homeowners in low-density, low-rise neighbourhoods looking for more space, to pool land and build high-rises with common utility services — access roads, parks, drains, water and electricity supply, sewage disposal and “walk to” commercial centres, with sufficient diversity and depth, to service daily needs, locally.

Transit-oriented city development with dense vertically arrayed habitations, at nodal points along mass transit systems, like Metros, supported by last-mile buses, is the only future-consistent way to lower the energy expended in transport. Until cities are designed to discourage private transport by making public transport attractive, safe, and cost-effective, urban energy efficiency gains will not materialise. Once again, as in electricity retail supply, short-term ministerial and inter-governmental objectives dominate policymaking. State governments treat municipalities like subaltern pools of influence who must be kept constrained and dependent on state government largesse, rather than a third level of government which is to implement the change.

In the time and target bound global transition to a decarbonised economy, high levels of embedded carbon from assets being created now, present a serious risk, not only for India — a front-runner to grow into becoming the third largest economy by 2047 — but also for the success of global efforts to limit, if not reverse, catastrophic climate change.

The writer is adviser, Observer Research Foundation



Tax on natural gas will lead to faster adoption: Oil secy

Tax on natural gas remains key to increasing the use of natural gas in the economy, and the government is 'cautiously optimistic' about bringing the fuel under the goods and services tax regime in 2024-25, Petroleum Secretary Pankaj Jain said on Wednesday. Speaking at an online seminar on India's Natural Gas and LNG Sectors, Jain said bringing natural gas under the ambit of the GST regime would accelerate the shift towards natural gas.

BS REPORTER

एमजी मोटर, एचपीसीएल ने इलेक्ट्रिक वाहन चार्जिंग ढांचे के विस्तार के लिए साझेदारी की

एजेंसी ■ नई दिल्ली

एमजी मोटर इंडिया ने देश में इलेक्ट्रिक वाहन (ईवी) चार्जिंग बुनियादी ढांचे के विस्तार के लिए हिंदुस्तान पेट्रोलियम कॉर्पोरेशन लिमिटेड (एचपीसीएल) के साथ साझेदारी की है। एमजी मोटर इंडिया ने बुधवार को बयान में कहा कि इस समझौते के तहत वह एचपीसीएल के साथ मिलकर देशभर के प्रमुख राजमार्गों और शहरों में 50केडब्ल्यू60 केडब्ल्यू डीसी फ़ास्ट चार्जर लगाएगी। वाहन कंपनी ने कहा कि यह साझेदारी ईवी उपयोगकर्ताओं को लंबी दूरी और अंतर-शहर आवागमन के दौरान ईवी चार्जर की



उपलब्धता बढ़ाने पर केंद्रित है। एमजी मोटर इंडिया के मुख्य वृद्धि अधिकारी गौख गुप्ता ने कहा, भारत में एचपीसीएल का विशाल नेटवर्क और महत्वपूर्ण उपस्थिति यह सुनिश्चित करेगी कि देशभर में मौजूदा और संभावित ईवी उपयोगकर्ताओं को हमारे चार्जिंग समाधान तक सुविधाजनक पहुंच प्राप्त हो। एचपीसीएल के मुख्य महाप्रबंधक

(हाईवे स्टिलिंग) राजदीप घोष ने कहा कि कंपनी के पास 22,000 से अधिक पेट्रोल पंप का राष्ट्रव्यापी नेटवर्क है और वह ग्राहकों को हरित ईंधन उपलब्ध करवाकर एक पर्यावरण अनुकूल भविष्य के लिए प्रतिबद्ध है। उन्होंने कहा कि इसके अलावा, एचपीसीएल का लक्ष्य दिसंबर, 2024 तक 5,000 ईवी चार्जिंग स्टेशन स्थापित करना है।

खोदाई में गैस पाइपलाइन तोड़ने पर मामला दर्ज

गुरुग्राम, वरिष्ठ संवाददाता। जेसीबी से मिट्टी की खोदाई के दौरान गांव हयातपुर में गैस पाइपलाइन को तोड़ दिया गया। गैस लिकेज की सूचना पर कंपनी के कर्मचारी मौके पर पहुंचे और पाइपलाइन को ठीक किया। वहीं, पुलिस ने कंपनी के गार्ड की शिकायत पर मामला दर्ज कर लिया है।

एचसीजी कंपनी के पेट्रोल गार्ड धर्मवीर सिंह ने पुलिस को दी शिकायत में बताया कि मंगलवार को जीएमडीए से गांव हयातपुर में गैस पाइपलाइन लिकेज की सूचना मिली थी। इस पर

वह कंपनी के सुपरवाइजर विवके और अनेश के साथ मौके पर पहुंचे। वहां पर देखा कि पाइपलाइन से गैस निकल रही है। पाइपलाइन को ठीक किया गया। इससे बड़ा हादसा टल गया।

सुनित ने जेसीबी से मिट्टी की खोदाई के दौरान पाइपलाइन को तोड़ा गया है। जेसीबी से मिट्टी की खोदाई के दौरान मकान में डालने के समय पाइपलाइन क्षतिग्रस्त हो गया। वहीं, जांच अधिकारी ने बताया कि मामला दर्ज कर लिया गया है और जांच शुरू कर दी है।



गैस की लाइन क्षतिग्रस्त, केस

गुरुग्राम। सीएनजी गैस लाइन को क्षतिग्रस्त करने पर पुलिस ने केस दर्ज कर लिया है। हरियाणा सिटी गैस कंपनी के गार्ड धर्मवीर ने पुलिस को दी शिकायत में बताया कि 28 मई को जीएमडीए से सूचना मिली कि गैस लाइन को किसी ने क्षतिग्रस्त कर दिया है। सूचना मिलने पर सुपरवाइजर विवेक और अनेश के साथ हयातपुर के पास पहुंचा। मौके पर पाइप से गैस निकल रही थी। पूछताछ में पता चला कि सुनीता नामक महिला जेसीबी से मिट्टी की खुदाई करा रही थी। इसी दौरान पाइप लाइन टूटी। पुलिस ने केस दर्ज कर लिया है। ब्यूरो

प्राकृतिक गैस को जीएसटी में लाने से तेजी से बढ़ेगी स्वीकार्यता

शुभायन चक्रवर्ती
नई दिल्ली, 29 मई

अर्थव्यवस्था में प्राकृतिक गैस के इस्तेमाल बढ़ाने में प्राकृतिक गैस पर लगने वाले कर की व्यवस्था की अहम भूमिका है। पेट्रोलियम सचिव पंकज जैन ने बुधवार को कहा कि सरकार 2024-25 में इसे वस्तु और सेवा कर (जीएसटी) के दायरे में लाने को लेकर आशान्वित है।

भारत के प्राकृतिक गैस और एलएनजी सेक्टरों पर इंटरनैशनल एनर्जी एजेंसी और पेट्रोलियम मंत्रालय की ओर से आयोजित ऑनलाइन सेमीनार में बोलते हुए जैन ने कहा कि प्राकृतिक गैस को जीएसटी के दायरे में लाने से प्राकृतिक गैस की ओर जाने की रफ्तार को गति मिलेगी।

जैन ने कहा, 'गैस पर लगने वाला कर हमारे लिए बड़ी चुनौतियों में से एक है। प्राकृतिक गैस पर घरेलू कर को लेकर अभी भी काम चल रहा है। इससे प्राकृतिक गैस का इस्तेमाल प्रभावित हो रहा है।' उन्होंने कहा कि चालू वित्त वर्ष के दौरान जीएसटी के मामले के समाधान को लेकर सरकार आशान्वित है। उन्होंने कहा, 'हम संघीय प्रणाली वाले देश हैं। ऐसे में राज्यों के साथ बातचीत करनी होती है और उन्हें प्रेरित करके एक मंच पर लाना होता है। इस पर हम लोग काम कर रहे हैं। हम सावधानीपूर्वक आशान्वित हैं कि हम 2024-25 के दौरान ही कुछ समाधान निकाल लेंगे। अगर हम ऐसा करने में सक्षम होते हैं तो आप पाएंगे कि कम स्वच्छ ईंधन से प्राकृतिक गैस की तरफ न सिर्फ नैतिक आधार पर जाएंगे, बल्कि इसका आर्थिक मतलब भी होगा।'

कोई समय सीमा न देते हुए सचिव ने कहा कि सरकार इस पर काम कर रही है। जैन ने कहा कि, 'यह ऐसा है, जिस पर हम अनुमान लगा रहे हैं। इस साल के दौरान हम संभवतः उल्लेखनीय प्रगति कर पाएंगे।' प्राकृतिक गैस इस समय जीएसटी के दायरे से बाहर है। इस पर लगने वाले करों में केंद्रीय उत्पाद शुल्क, राज्य वैट, केंद्रीय बिक्री कर शामिल है, जो ईंधन पर लग रहा है।