Distribution Utility Meet (DUM 2020)

DUM 2020, ISGF’s Annual Conference and Exhibition for Electricity Distribution Companies (DISCOMs), was held from 27 to 28 November 2020 on a Digital Platform this year. DUM 2020 was supported by Ministry of Power (MoP), Govt of India (GoI). It was jointly hosted by BSES Rajdhan Power Limited, BSES Yamuna Power Limited, Tata Power Delhi Distribution Limited; and the Tata Power Company Limited, Mumbai. United States Agency for International Development (USAID), New Energy and Industrial Technology Development Organization (NEDO) – Japan, The Electric Power Research Institute (EPRI), Florence School of Regulation (FSR); and Rocky Mountain Institute (RMI) joined DUM 2020 as Knowledge Partners.

As the world is struggling to cope with the new-normal and preparing for the next-normal, it is imperative that utilities do not make the same mistakes but learn from each other. DUM 2020 provided a platform for the DISCOM community to share each other’s experiences in dealing with Covid-19 challenges and efforts towards fast track automation and digitalization. Experts from leading utilities, industry and think-tanks from USA, Europe, Japan, Bangladesh and Sri Lanka participated in DUM 2020 and shared their experiences.

The key themes of DUM 2020 were Digitalization in DISCOMs; Policies and Regulations for the Digital DISCOMs; DISCOM Privatization Plan; DISCOMs after COVID-19; and 250 million Smart Meters. A Plenary Session on New Revenue Opportunities for DISCOMs was also held as part of the event. DUM 2020 was Powered by Amazon Web Services (AWS) with Technology Innovation Partner Accenture and Technology Partners Schneider Electric and RTI India. Exhibition organised with 3-D exhibition booths with several features that enhanced the experience of visitors to these booths as good as physical exhibition booths. Amazon Web Services (AWS), Accenture, BSES Yamuna; BSES Rajdhani; Tata Power - DDL;
and Tata Power Company Ltd, Mumbai; S&C Electric Company; isMobile; Schneider Electric; and many other DISCOMs and technology companies exhibited their projects and technologies at DUM 2020.

The dignitaries who participated in the inaugural ceremony of DUM 2020 were Karen Klimowski, Indo Pacific Coordinator & Acting Deputy Director, USAID /India; Kapil Mohan, Principal Secretary – Energy, Karnataka; Anshu Bhardwaj, CEO, Shakti Sustainable Energy Foundation; Ajay Kaul, Head – States and Local Governments, Amazon Web Services (AWS); Amal Sinha, CEO, BSES Rajdhani Power Ltd; and Praveer Sinha, MD, Tata Power Company Limited.

Following Whitepapers and Reports were released during DUM 2020 - Enhancing Customer Centricity in the Electricity Distribution Sector and Improving Resilience of Distribution Utilities by USAID; Serving a Digital-first India by Amazon Web Services; From Crisis to Conquest in Utilities by Accenture; and DG Set Replacement by Lithium-ion Batteries and Electric Cooking by ISGF.

The 5th edition of Distribution Utility Meet (DUM) will be held from 17 to 18 November 2021.
Appointments and Transfers

Amit Tomar, has been appointed as Managing Director, Madhya Pradesh Paschim Khestra Vitran Co. Ltd.

Sanjay Malhotra, IAS has been appointed as Chairman and Managing Director, REC Limited

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India Smart Grid Forum (ISGF), registered under Indian Societies Registration Act (Act XXI of 1860) is a Public Private Partnership initiative of Ministry of Power, Government of India for accelerated development of Smart Grid technologies in the Indian power sector.


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INDIA

Govt of India Prepares Bid Invitation Proposal for Advanced Chemistry Cell manufacturing

The NITI Aayog has issued a draft request for proposal (RfP) to prospective bidders who can manufacture advanced chemistry cells (ACCs) in the country. The draft notes that in the first stage, the technical bid will be evaluated on the basis of the value addition committed by the bidder and the scale of production. Winning bids are entitled to receive subsidy after they commit to set up an ACC manufacturing facility of minimum 5 GWh capacity and establish an ACC manufacturing facility with value-addition of minimum 25% at the mother-unit and a minimum of 60% across the spectrum.

Read More: https://www.indiasmartgrid.org/viewnews.php?id=4805

Telangana Drafts a Detailed Plan for Integration of Smart Grid Technology

The TSERC Smart Grid Regulations, 2020 aim to aid the integration of smart-grid technology to augment network visibility and access, enable optimal asset utilization, improve consumer service levels, and increase participation from transmission and distribution licensees across the electricity sector’s value chain. The smart grid process under its proposed regulations would include the formulation and implementation of smart grid programs, measuring their cost-effectiveness, monitoring, and reporting on their progress. The regulations also hope to boost customer engagement and participation while also conducting training and capacity building programs.

Read More: https://www.indiasmartgrid.org/viewnews.php?id=4801

Open Access Consumers can use Smart Meters as Interface Meters

The Central Electricity Authority (CEA), in a recent notification, said that in case of open access consumers connected to a distribution system, smart meters can be used as interface meters provided they comply with the recommended regulations. To fast track smart metering implementation and to ensure seamless operations, INR1.5 billion (~ USD 20.4 million) of funds are being infused for providing a common backend infrastructure facility (CBIF) to distribution companies (DISCOMs) for faster roll-out of smart meters in the country.

Read More: https://www.indiasmartgrid.org/viewnews.php?id=4802

Central Regulator Introduces Amendments to Trading License Regulations

The Central Electricity Regulatory Commission (CERC) has issued amendments to its previous regulations for the payment of fees for electricity trading. The regulations will come into effect from April, 2020. According to the notification, Category III and IV licensees under trading license regulations, 2009, will pay the annual license fee as applicable for Category V licensee under the 2020 regulations. The central Commission also added a new clause, which states that the trading license will be granted provided that the trading margin from either of the parties to the banking transaction is not in the negative (less than zero).

Read More: https://www.indiasmartgrid.org/viewnews.php?id=4803

No Registration Fee or Road Tax for first 200,000 Electric Two-Wheelers in Telangana

The Government of Telangana has released its new Electric Vehicle (EV) and Energy Storage Policy for 2020-2030, announcing subsidies, policy measures, and other incentives to turn the state into an EV and energy storage system (ESS) development and manufacturing hub. Its primary goals are to make the state an attractive investment avenue in the sector, promote research, development, and manufacturing, and speed up the adoption of EVs and ESS in the state. Under the policy, the first 200,000 electric two-wheelers, 20,000 electric three-wheelers, 5,000 electric four-wheel commercial passenger vehicles, 10,000 electric three-wheel goods e-carriers, 5,000 private electric four-wheelers, 500 electric buses, and electric tractors would be eligible for a 100% exemption on road taxes and registration fees.

Read More: https://www.indiasmartgrid.org/viewnews.php?id=4804

All DISCOMs to Comply with Energy Conservation Act to Cut Electricity Losses

The Ministry of Power (MoP) issued a notification to cover all distribution companies (DISCOMs) under the purview of the Energy Conservation (EC) Act, 2001, to help reduce
electricity losses and bring transparency. The DISCOMs will be governed under various provisions including, energy accounting and auditing, the appointment of an energy manager, identification of energy losses category-wise, and implementation of energy conservation and efficiency measures. This will facilitate energy accounting and auditing as a mandatory activity for all the DISCOMs leading to the actions towards reducing losses and increase the profitability of DISCOMs.

Read More: https://www.indiasmartgrid.org/viewnews.php?id=4806

No Transmission Charges for Solar Projects Powering EV Charging Stations in Rajasthan

The Rajasthan Electricity Regulatory Commission (RERC) has issued regulations for determining tariffs for renewable energy-based power sources for 2020 which included a 100% exemption of intra-state transmission and wheeling charges for solar power projects supplying power to electric vehicle charging stations. This exemption is applicable for the first ten years from setting up electric vehicle charging stations. This exemption applies to projects with an individual plant capacity of a maximum of 25 MW and for the total capacity of 500 MW.

Read More: https://www.indiasmartgrid.org/viewnews.php?id=4807

Delhi DISCOMs Launch Solarization Program to Promote Rooftop Solar in Delhi

The BSES Rajdhani Power Limited (BRPL) and BSES Yamuna Power Limited (BYPL) have expanded the solar city program by launching ‘Solarize Safdarjung’ and ‘Solarize Kakardooma’ projects in Delhi. Under the program, consumers are offered premium, customized and non-subsidized (no Central Financial Assistance) solar solutions, including imported components, easy financing options, extended warranty, and additional annual maintenance services among others under the capital expenditure (CAPEX) model. These are in addition to the existing rooftop solar programs being offered by BSES, wherein consumers can opt for solar under both the CAPEX and the RESCO models and avail of applicable government subsidies.

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MNRE Raises Solar Capacity Addition Targets for KUSUM

The Ministry of New and Renewable Energy (MNRE) has ramped up the targets of the Pradhan Mantri Kisan Urja Suraksha evam Utthan Mahabhiyan (PM-KUSUM) program. The program now hopes to achieve an enhanced solar capacity target of 30.8 GW by 2022 from the earlier 25.75 GW. The MNRE also reduced the amount of central financial assistance (CFA) that will be provided under the program to INR 340.35 billion (~USD 4.61 billion) from INR 344.22 billion (~USD 4.66 billion) previously. These scaled-up targets will be executed in 2020-21.

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INTERNATIONAL

UK to Invest £12 Billion Towards a Green Industrial Revolution

The United Kingdom Government announced a ten-point plan including electric vehicles, hydrogen production, offshore wind, green finance and innovation, carbon capture, usage and storage etc. for a green industrial revolution to advance the country towards net-zero emissions. Under the plan, the government will provide funding worth £12 billion (~USD 15.96 billion) for its implementation and create up to 250,000 new green jobs.

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California Regulator Approves Fare-Based Autonomous Vehicle Services

The California Public Utilities Commission (CPUC) approved last week two new autonomous vehicle (AV) programs — one for “drivered” companies and the other for driverless — that will allow companies to accept compensation on fare-based shared AV trips for the public. Whereas under the “drivered” program, transportation charter party carrier (TCP) permit-holders are authorized to add test AVs to their existing passenger fleets, but only with test operators present. Under the driverless program, TCP permit-holders with a testing permit for driverless vehicles can run passenger AV service with a remote operator, pending the submission of a Passenger Safety Plan to outline protections under driverless operations.

Read More: https://www.indiasmartgrid.org/viewnews.php?id=4811

Nigerian Government to Launch Electricity Scheme for 5 Million Households

The Federal Executive Council (FEC) has approved the establishment of an Economic Sustainability Committee (ESC) as part of a plan to provide electricity for 5 million households that lack access to the national grid. The programme tagged, ‘Energy for All’, is aimed at providing five million solar connections to various locations throughout the country, in collaboration with state governments. The ESC is further expected to attract investment of solar panel manufacturers into Nigeria, and will also encourage private sector financing for off-grid solar energy projects.

Read More: https://www.indiasmartgrid.org/viewnews.php?id=4812

Exemption applicable for solar power project for supplying power to electric vehicle charging stations either under captive route or through open access

The consumer’s excess solar power will be purchased by the distribution companies (DISCOMs) at the rates specified by the Delhi Electricity Regulatory Commission

The government anticipates three times more investment from the private sector to support the new plan

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The government anticipates three times more investment from the private sector to support the new plan
Commission Approves € 150 Million Romanian Scheme to Support Investments in District Heating Systems

The European Commission has approved, under EU State Aid rules, a Romanian scheme to support the construction and/or upgrade of district heating systems, based exclusively on Renewable Energy Sources (“RES”) in Romania. The scheme will support investments to support the construction or and/or modernisation of a series of district heating generation installations and distribution networks and will foster the switch from fossil fuel energy production to heat generation based on renewable resources.

Read More: https://www.indiasmartgrid.org/viewnews.php?id=4813

Botswana Launches Net Metering Scheme for Rooftop PV

Botswana’s Ministry of Mineral Resources, Green Technology and Energy Security (MMGE) has launched net metering scheme for rooftop PV systems. The scheme is being supported by the United States Agency for International Development (USAID) and is expected to allocate 10 MW of installed PV power in the first 12 months. The program was developed as a means of creating an enabling environment for end users who can generate their own electricity and sell to Botswana Power Corporation (BPC).

Read More: https://www.indiasmartgrid.org/viewnews.php?id=4814

Indian’s Meghalaya State to Modernize Grid with $132.8 Million Asian Development Bank (ADB) Loan

The ADB has approved a $132.8 million loan to finance 24X7 Power for All Meghalaya, a grid modernisation project unveiled by the Indian government and Meghalaya state government. The ADB loan will be used to improve power quality and upgrade the distribution network with the aim to provide uninterrupted, quality, reliable, and affordable power supply to all electricity consumers. Under this project, 23 substations will be constructed and 45 substations will be renovated and modernized. Up to 2,214 kilometers of distribution lines will be installed and up to 180,000 electromechanical meters will be replaced with smart meters. The loan will be supplemented by a $2 million grant from ADB’s Japan Fund for Poverty Reduction. The project will help develop a distribution sector road map and a financial road map for the Meghalaya Power Distribution Corporation Limited (MEPDCL).

Read More: https://www.indiasmartgrid.org/viewnews.php?id=4816

Eskom Announces New 10-Year Transmission Development Plan

Eskom shared its Transmission Development Plan (TDP) for the period 2021 to 2030 with various stakeholders during a public forum hosted online. The plan calls for a significant increase in transmission infrastructure over the next 10 years. This plan aims to increase the transmission infrastructure by approximately 5,650 km of HV lines and 41,595 MVA of transformer capacity in the next 10 years.

Read More: https://www.indiasmartgrid.org/viewnews.php?id=4815
India and Rest of South Asia to Invest US$25.9 Billion in Smart Grid Infrastructure

South Asia is set to become a leading destination for smart grid infrastructure investment over the next decade. Dominated by India, the region will invest US$25.9 billion to modernize its power sector over the period 2020-2029. Smart metering will account for the majority of investment but other segments such as grid automation and battery storage will also see significant development. India’s central government is targeting a nationwide rollout and is utilizing every policy lever available to make smart metering an appealing option for Indian states, nearly all of which suffer from high transmission and distribution losses. India’s domestic manufacturing capacity is ramping up to meet demand, although it remains to be seen if Chinese and other vendors are needed to meet the country’s targets.

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SMART METERING

Europe and North America to Install 204.6 Million Smart Water Meters by 2025

The total number of utility smart water meters – including both AMI and AMR – will grow from 132.4 million units in 2019 to 204.6 million units in 2025. The installed base of water utility advanced metering infrastructure (AMI) endpoints in Europe and North America amounted to 46.1 million units in 2019. The installed base of AMI endpoints is forecasted to grow at a compound annual growth rate (CAGR) of 15.0% to reach 106.8 million units in 2025.

AMI endpoint shipments in the European and North American water sectors will grow from a total of 6.2 million units in 2019 to 14.2 million units in 2025. North America today constitutes the leading market for both AMR and AMI solutions and accounted for more than 70% of all installed AMI endpoints in Europe and North America in 2019. While most endpoints in North America will be deployed in smaller projects, growth in the next few years will to a large extent also be driven by massive rollouts of smart water meters by cities such as Philadelphia, Louisville, Austin, Fort Worth and Columbia by utilities such as SUEZ, Veolia, Thames Water and Anglian Water in Europe.

Proprietary radio frequency (RF) technologies have been practically unrivalled for AMI communications in North America while a mix of proprietary RF and EN 13757-based technologies have dominated in Europe.

Veolia’s recent commitment to roll out 3 million LoRaWAN-connected smart water meters across France by 2029 is one of the early examples of large-scale adoption of LoRaWAN within water AMI in Europe.

Read more: https://www.indiasmartgrid.org/viewnews.php?id=4819

Smart Metering to Dominate South Asia’s $25.9 Billion Smart Grid Market

South Asia is set to become a leading destination for smart grid infrastructure investment over the next decade. Dominated by India, the region will invest $25.9 billion to modernise its power sector over the period 2020-2029, according to a new study released by Northeast Group. Although smart metering will account for the majority of investment, other segments such as grid automation and battery storage will also see significant development. The smart grid market is seeing early growth even as the region continues to cope with the fallout from the global pandemic and ongoing geopolitical tensions between China and India.

India’s central government is targeting a nationwide rollout and is utilising every policy lever available to make smart metering an appealing option for Indian states, nearly all of which suffer from high transmission and distribution losses.

Read more: https://www.indiasmartgrid.org/viewnews.php?id=4820

Open Access Consumers can Use Smart Meters as Interface Meters

The Central Electricity Authority (CEA), in a recent notification, said that in case of open access consumers connected to a distribution system, smart meters can be used as interface meters provided they comply with the recommended regulations.

Interface meters are used for accounting and billing of electricity connected at the point of interconnection between electrical systems of generating company, licensee, and consumer directly connected to the interstate transmission system (ISTS) or intrastate transmission system or a distribution system.

The government plans to replace all existing electricity meters with smart prepaid meters starting in April 2019. The process of switching over is to be completed in three years. The program will be implemented by the Energy Efficiency Services Limited (EESL). EESL has already installed over 1.2 million smart meters in India to date under the Ministry of Power’s (MoP) Smart Meter National Program (SMNP). EESL also claimed that it enabled DISCOMs to generate a billing efficiency of 95% through the use of its smart meters during the lockdown, resulting in a 15-20% average increase in monthly revenue per consumer.

Read more: https://www.indiasmartgrid.org/viewnews.php?id=4821

Israeli Cybersecurity Start-Up to Secure Indian Smart Meters from Cyberattacks

Israeli cybersecurity startup NanoLock Security signed a partnership with Genus Power Infrastructures, an India-based company that installs more than 100,000 smart meters a month worldwide and operates over one million connected edge metering devices. NanoLock Security developed a solution that protects smart metering infrastructure from cyberattacks, theft and fraud. The solution also provides a managed security service for utilities and smart-city customers that reduces operational costs, especially in remote rural areas. The startup already is working with service providers and utilities in Israel, Italy, Japan, The Netherlands, Spain, Singapore, Switzerland and United States. NanoLock is headquartered in Israel with offices in the US, Europe and Japan.
The smart meter market is booming, but so too are the potential cyberthreats. Utilities and smart-city solutions providers are confronting new attacks all the time and any connected device could be the entry point for attackers. This collaboration with Genus Power brings a novel and viable protection to critical infrastructure providers for smart meters and other connected devices at the edge, reducing operational cost, especially for remote and rural areas.

Read more: https://www.indiasmartgrid.org/viewnews.php?id=4822

**ELECTRIC VEHICLES**

Hyundai Plans to Launch 10 New Hybrid, PHEV and Electric Vehicles by 2022

Hyundai Motor plans to expand its electrified, eco-focused vehicle lineup in the next two years. The Korean carmaker has announced that it will offer 10 new models by the end of 2022, which will include seven SUVs. Most of the new vehicles Hyundai plans to launch in the next two years will be electric or hybrid versions of existing models as well as a few all-new models. Among the 10 new vehicles, Hyundai plans to come up with five hybrid, two plug-in hybrid, three electric and one fuel cell vehicles. The new line-up will also feature all-new models such as the Hyundai Ioniq 5 and Hyundai Ioniq 6. The two upcoming Ioniq models will be electric vehicles.

Read More: https://www.indiasmartgrid.org/viewnews.php?id=4823

McDonald’s Installs 200 Electric Vehicle Charging Stations in Italy

McDonald’s Italia will install 200 charging points for electric vehicles inside the 100 McDonald’s car parks across Italy. The fast-food chain has partnered with Enel X to transition towards electric mobility and to underline the importance of a sustainable footprint. The JuicePole and JuicePump charging stations will be installed inside the car parks of McDonald’s restaurants and will offer a new service to customers, allowing two vehicles to be charged simultaneously with available power of up to 22 kW in AC for the JuicePoles and at least 50 kW in DC for the JuicePumps. With the latter, an average of about 30 minutes will be sufficient to “charge up” with electrical energy.

Read More: https://www.indiasmartgrid.org/viewnews.php?id=4824

India’s Energy Efficiency Services Limited (EESL) to Invest $5 Million in Thailand’s Electric Vehicle Manufacturer

India’s EESL would invest in SWAG EV, an EV manufacturer in Thailand, in a bid to drive convergence an emerging concept bringing together electric mobility, renewable energy, and carbon finance. SWAG is an e-mobility player that aims to expand the use of electric motorbikes while contributing to increasing power grid flexibility. SWAG’s plan envisages using e-bikes with swappable batteries, most of which will be charged by solar power, helping our fight against climate change. This project will serve as the basis for implementation in India and eventually worldwide. EESL’s initial $5 million investment was conceptualized by SHIFT Asia, a carbon finance-platform designed and operated by the South Pole to mobilize climate finance for e-mobility. This will help Thai utility companies enhance the power grid’s flexibility to manage renewable energy generation and reduce the grid’s load during peak time.

Read More: https://www.indiasmartgrid.org/viewnews.php?id=4825

Over 3,000 Electric Vehicles get Registered in Delhi

Over 3,000 electric vehicles have been registered in the national capital since the launch of the Delhi government’s new electric vehicle policy. Delhi will be the first state where electric vehicles are now being replaced by petrol and diesel vehicles at a rapid pace. This will help reduce pollution in Delhi to a great extent as it seeks to replace diesel-petrol vehicles with electric vehicles on the roads of Delhi. Under the new policy, subsidies have also been made more accessible, so that those purchasing new vehicles can get timely financial benefits. The Arvind Kejriwal-led government also provided relief in terms of road tax and registration fees. Meanwhile, new charging stations are being set up every 3 kilometers in the city to encourage e-vehicles.

Read More: https://www.indiasmartgrid.org/viewnews.php?id=4826

**ENERGY STORAGE**

Britain’s Biggest Battery Project so far Goes Live in Grid-Balancing Markets

The UK’s biggest battery storage project so far has been acquired by London Stock Exchange-listed battery storage investor Gresham House Energy Storage Fund and is already participating in numerous grid services markets. Gresham House stated it has completed its investment in the 50MW / 75MWh Thurcroft battery storage site in South Yorkshire, which is in northern England. The asset has been acquired from Gresham House DevCo and Noriker Power, with Gresham House having acquired a 5% stake in the latter in 2019. The Thurcroft asset was acquired from the two developers for a total enterprise value of £32.5 million (US$42.32 million), plus up to £0.75 million of deferred contingent consideration. It becomes Gresham House’s 11th operational utility-scale battery storage project, bringing the total portfolio to 265MW. It is expected that Gresham House’s completion of the acquisition of another asset, the 50MW Wickham battery storage site, is to occur shortly.

The dynamic fluctuations in power on the National Grid during lockdown, and the unassailable rise of wind and solar installations, have sharpened the focus on the need for fast-acting, flexible storage at scale. Thurcroft is also set to be used in the wholesale markets, as well as tender to provide frequency response ancillary services to the grid.

Read more: https://www.indiasmartgrid.org/viewnews.php?id=4827
Zinc Battery Storage Provider EOS Signs Agreement for >1GWh of Projects with Developer Hecate Energy

Eos Energy Storage has signed an agreement to deploy more than 1GWh of its aqueous zinc chemistry battery energy storage systems worth around US$250 million with US-based project developer Hecate Energy. Eos designs, integrates and manufactures energy storage systems based around its proprietary battery chemistry, which plates and replates zinc on the batteries’ electrodes, and claims the technology provides low-cost, medium to long-duration energy storage with minimal degradation of battery cells for a 15 to 30-year lifetime using abundant raw materials.

In addition to having delivered large-scale solar and wind in three countries for customers that include Google, Hecate Energy has created a dedicated energy storage division, called Hecate Grid, in partnership with InfraRed Capital Partners. As with its renewable’s projects, Hecate will develop, build, own and operate assets in the utility-scale segment.

The technology provider recently claimed big wins with agreements to deploy 1.5GWh of systems for customers in Texas and California and a partnership to work on a few megawatts-worth microgrid projects in Africa, while the company is targeting becoming publicly-listed in the near future through a business combination transaction with special purpose acquisition company B Riley Principal Merger Corp.

Read more: https://www.indiasmartgrid.org/viewnews.php?id=4828

Thermal Energy Storage System Goes Online at IIT Kanpur

The thermal energy storage system with a 775 tonnes-of-refrigeration heat rate is installed at IIT Kanpur’s Centre for Environmental Science and Engineering building. It is part of an urban pilot under a joint Indo-US project called UI-ASSIST on Smart Grid and Storage Technology. The project, led by IIT Kanpur, is being funded by the Department of Science and Technology. Under this project, five demonstration pilot units are being set up in rural, semi-urban, and urban/institutional settings. The thermal storage system is based on the latest concept of using a phase-change material with a Brine solution as coolant, which takes low-cost energy during the off-peak period to achieve the coolant temperature up to -4 degree Celsius. The stored energy is withdrawn to support the air-conditioning load during peak period to the tune of 77.5 TR for 10 hours. The technology reduces the air-conditioning load and minimizes the peak electricity demand in the system.

Read more: https://www.indiasmartgrid.org/viewnews.php?id=4829

RENEWABLE ENERGY AND MICROGRIDS

Australia State Unveils $23 Billion Energy Roadmap in Renewables Push

Australia’s New South Wales (NSW) state said it would shift toward renewable energy from coal and aimed to lure A$32 billion ($23.3 billion) of private investment into the sector in the next decade. Australia’s most populous state said it would cut red tape and speed up approvals for businesses to invest in renewable energy projects, with four of its five coal-fired power plants expected to close in the next 15 years. The plans would create close to 10,000 jobs and aimed to bring 12 gigawatts (GW) of wind and solar power and 2 GW of storage, such as pumped hydro, online by 2030. Most Australian states support greater use of renewable energy but the federal government has refused to match other developed countries in setting a target for net zero carbon emissions by 2050. Instead, Canberra says zero emissions will be reached sometime after 2050. Australia is so far well short of meeting its Paris accord target of cutting carbon emissions by 26% to 28% from 2005 levels by 2030.

Read more: https://www.indiasmartgrid.org/viewnews.php?id=4831

World’s Largest Renewable Energy Project Proposed for North-West Australia Ditches Electricity in Favour of Ammonia Exports

In spite of securing environmental approvals, a multinational renewable energy corporation seeking to build Australia’s largest wind and solar power generator in the world has abandoned plans to send electricity to Singapore via thousands of kilometres of undersea cables. Instead of using the planned plant, situated in the North West Australian desert, the Asian Renewable Energy Center now hopes to generate ammonia for export instead of electricity. The company’s change of direction comes just days after it received the green light last month from the West Australian Environmental Protection Agency for the Singapore project — which would have involved running four, 3,000-kilometre-long, high-voltage transmission cables under the sea. Under the latest proposed change, the size of renewable energy production will be expanded up to 26 gigawatts — more than a third of Australia’s current total power-generation capacity. This massive output would be generated from up to 1,743 wind turbines, each 290 metres tall, covering 668,100ha, and a sea of 18 600 MW solar panel arrays, covering 1,418ha of land.

Read more: https://www.indiasmartgrid.org/viewnews.php?id=4832

Italy’s Snam Takes First Steps into India with Hydrogen and Gas Deals

Italy’s Snam, the operator of Europe’s largest natural gas transmission network announced multiple green energy partnerships with Adani group, Indian Oil and Greenko, paving way for its entry into the Indian market. Snam’s agreement with the Adani group envisages exploration of the hydrogen value chain in India and internationally, as well as the development of biogas and biomethane, and of low-carbon mobility. The Italian energy firm has also signed a non-binding agreement with Adani Gas Ltd to set up a jointly controlled CNG compressor-manufacturing facility in India, relying on the technology of Cubogas, a Snam4Mobility company. Adani Gas is a joint venture company of Adani and France’s Total. The compressors will be installed in existing refuelling stations and in those under development. Snam has also entered into an agreement with Greenko, one of the largest renewable companies in India, to collaborate on the study of hydrogen production methods from
Microgrid Funding Opportunities Arise as Maryland Emerges as Key State for Development of Hybrid Power

One Maryland district, Montgomery County, planned to improve the durability of public facilities and avoid similar events through the development of microgrids in response to a weather-related devastation caused earlier this year. Two microgrids integrating solar generation, combined heat and power systems (CHP), energy storage, and advanced controllers were developed by Montgomery County. The first hybrid project, located at the Public Safety Headquarters, incorporates 2 MW of solar PV, an 800 KW CHP system, electric vehicle charging stations, and a cybersecurity system. Another, sited at the Montgomery County Correctional Facility, pairs a 240 KW CHP system with existing generators and a cybersecurity system. Both of the Montgomery County microgrids were built in a public-private partnership with Duke Energy Renewables and Schneider Electric.

Following Montgomery County’s lead, the Maryland Energy Administration (MEA) launched Resilient Maryland, a grant program aimed at supporting microgrid project development, accelerating technology advancement, and driving growth in the adoption of microgrid and other distributed energy resource systems across the State of Maryland.

Read more: https://www.indiasmartgrid.org/viewnews.php?id=4836

SMART CITIES

NEC India to Take Part in Indian Smart City Project

NEC Corporation India has been selected by Saharanpur Smart City Limited (SSCL) as the master system integrator for implementation of the integrated command and control centre and smart components in this major smart city project in Uttar Pradesh, India. A first for NEC India in the state of Uttar Pradesh, the scope of the project comprises design, supply, installation, commissioning, testing and operations and management of pan-city smart solutions. This also includes the setting-up of an integrated command and control centre integrated traffic management system, environmental sensors, e-governance kiosks, city GIS platforms, and more at locations designated by the Saharanpur Municipal Corporation (SMC). The Saharanpur Smart City project is expected to be completed by September 2021.

Read More: https://www.indiasmartgrid.org/viewnews.php?id=4837

Continental Establishes Second Smart City Mobility Hub in Columbus

Columbus, Ohio, has deployed a second Smart City Mobility and Transportation Hub designed to help improve traffic flow, reduce pollution and increase safety at two intersections in the city. Currently in its first phase of development, automotive technology company Continental’s Columbus hub is comprised of two intersections with vehicle and pedestrian traffic made intelligent by integrating Continental sensors, connectivity, and intelligent software into the infrastructure. Columbus is focused on improving the lives of its residents through responsive, innovative and safe mobility solutions. In the future, Continental claims the system will be able to detect and broadcast object data information, including intersection traffic participants, to connected vehicles and pedestrians.

Read More: https://www.indiasmartgrid.org/viewnews.php?id=4838

Abengoa is Awarded the First Large Scale Hybrid Microgrid with Flow Batteries in Africa

Abengoa, the international company that applies innovative technology solutions for sustainability in the infrastructures, energy and water sectors, has been selected to construct a hybrid microgrid power plant by the leading vanadium energy storage solutions provider in the African market, Bushveld Energy. Specifically, the company will be responsible for the engineering, supply and construction of a plant integrated by an energy storage system using Vanadium Redox Flow Batteries (VRFB BESS), with a capacity of 1MW / 4MWh, and a 3.5 MW solar photovoltaic plant. This will be located at Vametco Alloys mine, owned by Bushveld Minerals in the North West province of South Africa and will allow it to increase its energy autonomy. The VRFB BESS system will be provided by Enerox Holdings Limited, a Bushveld subsidiary.

In addition, the plant will be the first commercial-scale hybrid project with vanadium flow batteries in the continent and the first MW scale hybrid power plant for a mine in South Africa. This project is part of Bushveld’s strategy to develop and promote the role of vanadium in the growing global energy storage market through VRFB BESS, following an overall trend toward long duration storage, as well as to improve the stable power supply on the African continent.

Read More: https://www.indiasmartgrid.org/viewnews.php?id=4835

Indian Renewable Energy Development Agency Ltd Eyes INR 2.4k crore Revenue in FY21

State-owned Indian Renewable Energy Development Agency Ltd (IREDA) is eyeing Rs 2,406 crore revenue in the current financial year. IREDA has signed a memorandum of understanding (MoU) with the Ministry of New and Renewable Energy (MNRE) for setting key targets for the year 2020-21. The MoU was signed by MNRE Secretary Indu Shekhar Chaturvedi and IREDA CMD Pradip Kumar Das on 10th November 2020. The government has set a revenue target of Rs 2,406 crore under excellent rating along with various performance-related parameters such as operating profit as percentage of revenue from operations, PAT (profit after tax) as a percentage of average net worth, loan disbursement, overdue loan etc, as per the MoU.

IREDA has financed more than 2,700 renewable energy projects in India with cumulative loan disbursements of Rs 57,000 crore, and has supported the green power capacity addition of 17,259 MW in the country.

Read More: https://www.indiasmartgrid.org/viewnews.php?id=4834

Emission reduction of 114,000 tons of CO2 over 20 years anticipated, thereby supporting decarbonization of the region

Renewables, on the design of hydrogen-ready infrastructure and on potential final applications in both industry and transport, including fuel cell mobility.

Read more: https://www.indiasmartgrid.org/viewnews.php?id=4833

PRADEEPRAJ
Fetch. AI and Datarella Launch Blockchain-Based Smart City Parking Space Management Trial in Germany

Cambridge-based artificial intelligence lab Fetch.ai and industrial distributed ledger blockchain solutions company Datarella GmbH announced the launch of their smart city trial for parking spaces in Munich, Germany. The smart city trial will launch in Connex Buildings and will use multi-agent blockchain-based AI services to provide smart mobility solutions in its commercial real estate properties in its city center. Fetch.ai has created a network of smart agents using its AI system with what it calls Autonomous Economic Agents. Through this system, Fetch.ai and Datarella hope to help Munich reduce total pollution in the city and thus reach emissions goals for 2021 and beyond.

Read More: https://www.indiasmartgrid.org/viewnews.php?id=4839

STANDARDS AND CYBER SECURITY

DOE, USA Releases Plan for Improving Cybersecurity in Renewable Energy, Manufacturing, Buildings, and Transportation Research and Development

The U.S. Department of Energy (DOE) recently released the Office of Energy Efficiency and Renewable Energy (EERE) Cybersecurity Multiyear Program Plan (MPPP) to guide cybersecurity research and development (R&D) for EERE technologies. In alignment with the U.S. Department of Energy Cybersecurity Strategy and DOE’s Office of Cybersecurity, Energy Security, and Emergency Response (CESER) efforts, EERE will accelerate cybersecurity R&D to strengthen EERE technologies and systems that are critical to renewable energy, manufacturing, buildings, and transportation—all of which are increasingly interconnected and vulnerable to cyber-attack.

Read More: https://www.indiasmartgrid.org/viewnews.php?id=4792

Purdue, Indiana Joins National Manufacturing Cybersecurity Collaboration

Purdue University’s Center for Education and Research in Information Assurance and Security (CERIAS) is joining the national Cybersecurity Manufacturing Innovation Institute (CyManII) to improve cybersecurity and energy efficiency for American manufacturing. Purdue joins 24 universities in the effort, which will develop tools, technologies and guidance for securing manufacturing, supply chains, factory automation and information, and for manufacturing workforce development. Purdue is one of five founding university members of CyManII; the University of Texas at San Antonio will lead the $110 million national effort. The effort is being funded by the U.S. Department of Energy.

Read More: https://www.indiasmartgrid.org/viewnews.php?id=4794

Denmark Holds First Cross-Sector Cybersecurity Drill on 19 November

The Danish Energy Authority has announced a successful cyber attack drill on 19 November, lasting eight hours. It involved cooperation by various authorities and organisations as well as the six critical civilian sectors, namely telecommunications, energy, finance, health, transport and maritime. The Centre for Cyber-Security worked intensively to prevent the dummy attack and limit damage. Ministry for Climate, Energy and Utilities Dan Jorgensen said that the exercise proves that concerted cybersecurity efforts can keep Denmark secure. The Energy Authority said the simulation was the first of its kind in the country.

Read More: https://www.indiasmartgrid.org/viewnews.php?id=4795

Carbon Management Standard Accreditation First for HS2 in UK

HS2 has said that it has become the first UK transport sector client – and only the second in the world – to achieve the global carbon management standard PAS 2080. HS2 environment director Peter Miller revealed last month that the organisation was on the verge of achieving the standard, which recognises an organisation’s plans to reduce carbon through design, construction and operation.

PAS 2080 is a global specification developed by the Construction Leadership Council’s Green Construction Board with the British Standards Institute to create a framework for evaluating and managing carbon across the whole infrastructure value chain.

Read More: https://www.indiasmartgrid.org/viewnews.php?id=4796

Wipro’s Annual State of Cybersecurity Report Finds Increasing Adoption of AI in Cybersecurity to Tackle Advanced Adversaries

Wipro today released its annual State of Cybersecurity Report (SOCR) that presents changing perspectives of cybersecurity globally. The report provides fresh insights on how Artificial Intelligence (AI) will be leveraged as part of defender strategies as more organizations lock horns with sophisticated cyberattacks and become more resilient. There has been an increase in R&D with 49% of the worldwide cybersecurity related patents filed in the last four years being focused on AI and Machine Learning (ML) application. Nearly half the organisations are expanding cognitive detection capabilities to tackle unknown attacks in their Security Operations Center (SOC).

Read More: https://www.indiasmartgrid.org/viewnews.php?id=4797

DISRUPTIVE TECHNOLOGIES

National Association of Regulatory Utility Commissioners (NARUC) reports says AI can enhance natural gas delivery

The primer from the US regulatory non-profit is aimed to improve awareness of artificial intelligence tools and practices, with a focus on the potential to enhance natural gas utility performance. It zeroes in on the three most common challenges being faced. These are ageing distribution infrastructure, excavator damage to underground infrastructure and customer participation in energy efficiency programmes.

Read More: https://www.indiasmartgrid.org/viewnews.php?id=4840

Many Big Businesses are Using AI to Cut their Climate Impacts: Research from Capgemini’s Research Institute

According to new research from Capgemini’s Research Institute, which surveyed 800 industry executives from different large businesses across these sectors. Some 48% of respondents said that their organisation had implemented AI in recent years, with the aim of reducing emissions, improving resource efficiency or generating more low-carbon power. The average outcome of AI projects was found to be a 13% reduction in emissions and an 11% improvement in energy efficiency. Where the AI was used for resource efficiency, an average waste reduction on 12% was realised. Taking past results into account and factoring in the likely scaling up of AI in the near future, Capgemini Research Institute calculated that the average business in this cohort could cut emissions by a further 16% over the next three-to-five years using AI-enabled technologies.

Read More: https://www.indiasmartgrid.org/viewnews.php?id=4841
ANNOUNCING India Smart Utility Week (ISUW 2021)

India SMART UTILITY Week 2021
7th INTERNATIONAL CONFERENCE AND EXHIBITION ON SMART ENERGY AND SMART MOBILITY FOR SMART CITIES
02 - 05 March 2021 on Digital Platform

Event Structure of ISUW 2021

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ISGF Innovation Awards 2021 | 5th March 2021

- Best Smart Grid Project in India by Utility/Technology Company
- Supporting Measures for Rooftop by DISCOM
- Smart Technology
- Innovative EV Design (4W/ 3W/ 2W) and EV/EVSE Rollouts of the Year
- Adoption of Emerging Technology by a Utility
- Smart Start-up of the Year
- Smart Incubator of the Year
- Best Survival Effort, Business Continuity and Innovation during Crisis Periods (COVID-19/ Natural Calamity) – Utility
- Best Survival Strategy and Innovation for Business Continuity for Utilities during Crisis Periods (COVID-19/ Natural Calamity) – Industry
- Best Business Growth and Innovation amongst previous years ISGF Innovation Award Winners

Contact us for details: awards@isuw.in | Apply before 20th January 2021 at https://forms.gle/x3rEc2mu3ysY9m3h9
Program under finalization

ISUW 2021 Participation Opportunities

For Participation in ISUW 2021 as Sponsor, Exhibitor and Delegate please contact: ronkini.shome@indiasmartgrid.org

For more information about ISUW 2021, please visit www.isuw.in