

SESI Newsletter

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SESI Delegation Meets Dr. Farooq Abdullah, Hon'ble Union Minister for New and Renewable Energy



(L to R) Shri Jagat S Jawa, DG, SESI, Dr. Farooq Abdullah, Hon'ble Union Minister for New and Renewable Energy, Shri Ajay Prakash Shrivastava, President, SESI and Shri Raghvendra Aggarwal, Member of the Governing Council, SESI

Recently a SESI delegation called on the Hon'ble Union Minister for New and Renewable Energy Dr. Farooq Abdullah. The delegation comprising of Shri Ajay Prakash Shrivastava, Shri Prafulla Pathak, Shri Raghvendra Aggarwal both members of the Governing Council, SESI and Shri Jagat S Jawa, DG, SESI requested Dr. Abdullah for confirming his participation in International Congress on Renewable Energy (ICORE)-2011 and the Trade Show being organized jointly by SESI & Tezpur University on 2-4 No-

vember, 2011 at Tezpur University as Guest of Honor on 2nd November, 2011. The delegation also made a strong appeal to Dr. Abdullah to write to Hon'ble Prime Minister of India to be the Chief Guest for which SESI had already made a formal request to the PMO.

Dr. Abdullah agreed to request Dr. Manmohan Singh, for gracing the occasion in the above event since Dr. Manmohan Singh was a Rajya Sabha Member from Assam. However, Dr. Abdullah advised SESI to be in touch with PMO in the matter.

President SESI Participates in National Energy Summit



Dr. B. Bhargava, Director, MNRE and Shri Ajay Prakash Shrivastava, President, SESI at National Energy Summit organized by NASEBA

Shri Ajay Prakash Shrivastava, President, SESI and President Maharishi Solar Technology Pvt. Ltd., and Dr. B. Bhargava, Director, MNRE, participated as an Invited Speakers in National Energy Summit organized by NASE-

BA during 21-22 July, 2011 at Hotel Grand, New Delhi. On the request of NASEBA, SESI supported the above event and also some SESI Members participated in this Conference on complimentary basis.

India's first renewable energy based smart mini-grid system commissioned

India has commissioned a first of its kind Renewable Energy Based Smart Mini-Grid System at TERI Retreat in Gurgaon. A Smart Mini-Grid (SMG), or Micro-Grid, is an intelligent electricity distribution network, operating at or below 11 KV, where the energy demand is effectively and intelligently managed by diverse range of Distributed Energy Resources (DERs) such as solar PV, micro-hydro power plants, wind turbines, biomass, small conventional generators such as diesel gensets etc in combination with each other through smart control techniques.

Dr. Farooq Abdullah urges North Eastern States to maximize use of Renewable Energy

Union New and Renewable Energy Minister Dr. Farooq Abdullah reviewed the implementation of renewable energy policies and programmes in the northeastern states at a meeting in New Delhi. The meeting was attended by the Chief Minister of Meghalaya and the Power Ministers of other northeastern states, senior officials from the New and Renewable Energy Ministry and the state governments. It was informed during the meeting

Vice President (West), SESI Gives Presentation in Inter Solar North America



Shri Rabindra Satpathy, Vice President (West), SESI and President, Solar Energy Group, Reliance Industries participated as an Invited Speaker in Intersolar North America conference held on 12-14 July, 2011 at San Francisco, USA. During the above event, Shri Satpathy made a presentation on Indian Solar PV Market – An Update which was very well received.

that out of 4965 remote villages to be electrified/ illuminated through renewable energy systems in the region, 3841 villages have been provided solar lights.

Godawari Power gets financing for solar thermal plant in India

Godawari Power & Ispat Ltd., one of the seven companies that won licenses to build India's first solar-thermal plants, has arranged funding for its project from the Bank of Baroda. The Raipur, Chhattisgarh-based developer won project financing for its planned 50-megawatt solar plant in Rajast-

han state. Godawari Power said that it planned to invest 7 billion rupees (\$157 million) in the project.

GE plans to grow in India, focusing on latest technology

GE India, world's leading provider of technology and equipment for power, healthcare and aviation, is betting big on the Indian power market with the opening up of new wind turbine plant in Pune.

Gujarat's wind power capacity grows 500 pc in six years

With 2,175 Mw, the state holds 15.36 per cent of India's total wind power generation capacity. In what can be called as a quantum leap for Gujarat's renewable energy sector, the wind power generation capacities have seen a sharp increase since 2006 from 338 Megawatt (Mw) to 2175.5 Mw in 2011. The share of Gujarat in the country's total wind power generation capacities has jumped from mere 6.32 per cent in 2006 to a respectable 15.36 per cent in 2011. While Gujarat has shown a growth of over 545 per cent in wind power capacities in past six years, the country's wind power generation capacities have grown by 165 per cent from 5341 Mw in 2006 to 14,158 Mw by March 2011.

KPCL launches 5 mw solar photo voltaic plant

Karnataka Power Corporation Ltd (KPCL), the state-owned power producer, launched its fourth five mw solar photo voltaic plant at Shivana-

samundram in the district, which is one of the oldest hydro power stations in the country. For the first time in the country, KPCL with Bharat Heavy Electricals Limited (BHEL) as an executing company laid the foundation stone for the five MW solar photo voltaic plant under the Jawaharlal Nehru National Solar Mission at a cost of 65 crore.

NTPC to set up 100 MW wind power project in Karnataka

The National Thermal Power Corporation (NTPC) plans to set up a 100 MW wind power project in Bagalkot district of Karnataka with an estimated investment of ` 600 crore. The wind power project to be set up Guledagudda of Bagalkot district will be NTPC's second and largest such plant. The company also signed a power purchase agreement with five energy supply companies in Karnataka with plans to sell the power at ` 5.30 per unit. The current estimated potential for wind energy in the State is about 14,000 MW and the government has initiated steps to generate 1,766 MW. The state grid drew about 1,300 MW of wind energy as on June 28, 2011. State government was looking at more power coming NTPC's projects in Karnataka and Andhra Pradesh. The state is expected to get 600 MW from NTPC's Pudimadka power plant in Andhra Pradesh and 180 Mw from Simhadri power plant second stage in the next few months. NTPC is India's largest power company with a current capacity of 34,194 MW and plans are to become 75,000 MW company by 2017. The upcoming wind power project in Bagalkot is expected to save more than 1,50,000 tonnes of CO2 emissions in a year.

Solar developers scrapping thermal for photovoltaic

Developers of solar thermal power plants are scrapping plans to use steam technology in favor of ever-cheaper solar panels that are easier to finance and could help assuage concerns about the systems' environmental impact. So far this year, at least four California projects, representing about 1,850 megawatts of power generation, have elected to change most or all of their technology to photovoltaic solar panels, which turn sunlight directly into electricity, from concentrating solar power, or CSP, which uses heat to create steam that powers a generator.

GreenVolts receives funding for concentrating solar power system

GreenVolts Inc., a closely held developer of concentrating solar power systems, received about \$39 million in venture capital financing. The financing will be used to build equipment for projects that include a 1-megawatt plant at Arizona Western College.

Spain suspends subsidies to 360 solar-power installations

Spanish regulators suspended subsidies to operators of 360 solar-energy systems, bringing to 1,919 the number of rooftop and open-field projects punished for not proving they qualified for above-market prices. The National Energy Commission's latest sanctions conclude the investigation of 8,185 power projects suspected of not meeting requirements. The owners failed to prove their photovoltaic parks and rooftop systems were capable of producing

power by the Sept. 30, 2008, deadline to deserve earning the highest consumer-subsidized rate. That tariff is 47.5 euro cents (69 U.S. cents) a kilowatt-hour, or more than nine times the current spot price paid to round-the-clock operators of fossil fuel power plants. Spain's government is trying to reduce aid for many of the nation's renewable-energy plants as a way to lower electricity costs for businesses and homes and help the economy emerge from its worst slump in 60 years.

Govt to invite bids for ` 30 bn solar power projects in August

The government will invite bids for ` 3,000-crore solar power projects with a capacity of 300 mw under the National Solar Mission in the first week of August. The projects would be awarded by the end of this year and the power purchase agreements would be signed in January 2012. In the first round of bidding, the government had awarded 30 solar photovoltaic (pv) projects of 5 mw each having a total capacity of 150 mw and seven solar thermal projects of 470 mw. It had received applications for developing 1,740 mw of PV projects, compared to the target of 150 mw in the first batch of Phase-I. For solar thermal, it received applications for developing 1,000 mw, against 500 mw. The government is looking to increase the size of the projects from 5 mw and may allot higher capacity to the project developers. Currently, companies not being able to arrange the funding by a stipulated date must forfeit their permits and bank guarantees. The government is mulling to tweak this by bringing in the condition of imposing a partial penalty in such condition and give more time to developers to arrange funding for the projects. Instead of forfeiture of bank guarantees, the government wants to

provide slight leeway to companies to arrange funding during the construction of the project. The MNRE may get the approval for the changes to be made in the guidelines by the end of this month.

Next thing in wind energy: stealth turbines

Wind turbines that do not interfere with radar systems used by aircraft may soon become a commercially viable option for the wind energy industry, Danish turbine manufacturer Vestas said. Vestas said it successfully tested in Britain a full-scale "stealth" rotor on a turbine, paving the way for wind power plants to be located near military installations, airports and other radar systems without interfering with their operations.

Nearly 200 MW of wind energy coming up in Tamil Nadu, Gujarat

In order to meet a portion of India's huge energy requirement, a leading EPC in power sector is setting up two major wind-based generating and transmitting units of 115 MW and 75 MW each in Tamil Nadu and Gujarat at cost of ` 1,000 crore. Stating this, Techno Electric and Engineering Company Limited (TEECL) said while the commissioning of the 115 mw project near Rameswaram in Tamil Nadu was scheduled to be completed by September with the completion of the last phase of 30 mw unit, work for the 75 MW unit near Kutch in Gujarat in two phases would begin in October. While the Tamil Nadu project would cost the state exchequer ` 675 crore, about ` 450 crore would be spent for the Gujarat project within the next 12 to 16 months. The entire technology for commissioning of both the projects

was developed by TEECL, while the equipment for wind power were being supplied by Suzlon, one of the largest global players in that segment.

European solar sector feels heat from China

A \$1.2 billion write-down by solar equipment maker REC highlighted the pain being inflicted by aggressive Chinese competition and may herald wider consolidation in the sector and flattening of prices. REC produces equipment across the supply chain from slices of raw, solar-grade silicon, called wafers, to finished solar panels.

Solar energy being promoted in Manipur

In an endeavor to promote the usage of solar energy, the Manipur Renewable Energy Development Agency (MANIREDA) has set a target for providing 10,000 solar water heaters under the Jawaharlal Nehru National Solar Energy Mission. The agency recently organized a one-day workshop on solar thermal system that laid stress on the need to use solar and wind energy to meet the power shortage in the region. MANIREDA aims to set up solar water heaters, lights, cells, biogas plants and windmills in the region in pursuit of this goal. The heaters that have a capacity of 100 litre per day, cost around 25,000 each, 75 per cent of which will be provided by central and state subsidy. This will help save 75-megawatts of power and prevent carbon emission of 1.5 tonnes in a five-year period. It also aims to spread awareness among people about the benefits of renewable energy. MANIREDA is the nodal agency for formulating policies and programmes, for popularising the applications of various non-conventional and renew-

able source of energy in Manipur. The agency has set up biogas plants, distributed solar cells, lighting systems, wind-solar hybrid energy system in villages of the hill districts of Manipur where electricity has not reached. Under Manireda, a 200 KW solar power plant was set up recently at Moreh, 165-gram panchayats were electrified and 5736 solar street lighting sets with a capacity of 444 Kilowatts were distributed. MANIREDA not only helps in setting up the solar plants but also trains villagers in preventive maintenance of these installations.

Suzlon gets 100 MW order from OGPL for ` 6.5 bn

Suzlon Energy Limited, the world's fifth largest wind turbine manufacturer, has won an order from Chennai-based Orient Green Power Company Limited (OGPL), for over 100 megawatts (MW) of wind power projects for ` 650 crore. These projects are scheduled to be commissioned by June 2012; with 50.4 MW of capacity coming online in Gujarat by May 2012, and the remaining 50.4 MW in Karnataka by June 2012. Orient Green Power Company Limited, is the country's largest diversified, independent renewable energy company, with a primary focus on wind energy and over 198 MW of wind assets already operational. It is focused on creating a sustainable portfolio of renewable energy assets comprising of primarily wind, biomass and hydro-power.

Israel aims to generate 10 pc of electricity with renewable energy

The Israeli Cabinet approved a plan to generate 10 percent of the country's electricity using renewable energy sources by 2020.

African Development Bank, Denmark set up \$57 mn energy fund

The African Development Bank signed an agreement with Denmark to establish a 300-million Danish krone (\$57 million) sustainable energy fund for Africa.

Elia joins Marubeni, Google in backing Atlantic wind project

Elia System Operator NV, Europe's fourth largest electric-grid operator, is investing in a \$5.5 billion power transmission project off the U.S. Atlantic coast that will link 6,000 megawatts of offshore wind farms. The undersea power lines off the coasts of New Jersey, Delaware, Maryland and Virginia will be developed in five segments. The company acquired a 10 percent stake in the first segment and 5 percent of the remaining segments, without saying how much it invested. Tokyo-based trading company Marubeni Corp. and Zug, Switzerland-based clean energy investor Good Energies are also backing the project, and Google Inc. is providing 42 percent of the pre-construction equity. The Federal Energy Regulatory Commission in May granted a 12.6 percent return on equity for the project, less than the 13.6 percent sought by the developers.

Pakistan set to approve \$1 bn plan to boost wind energy production

Pakistan is ready to approve a Norwegian company's request to build a 150-megawatt wind farm, the first part of a \$1 billion plan that could boost by a third the announced capacity for clean-energy power plants. Pakistan

is seeking to diversify its energy supplies away from oil and gas and boost electricity production. The nation has a power deficit of 3.6 gigawatts a day, or more than the output of two nuclear reactors, triggering 12-hour blackouts that cause riots and close factories in cities nationwide. The Alternative Energy Development Board is willing to allow a project proposed by NBT AS, a Lysaker-based clean energy company that plans to build the facility in the Sindh province "wind corridor" north of Karachi. Pakistan has almost 1 gigawatt of projects under construction or with financing agreed and 498.5 megawatts more of wind programs announced. Only 6 megawatts of wind energy facilities are operating in the nation. It's the ninth-poorest in the Asia-Pacific region with a 2009 gross domestic product per capita of \$2,609.

Vast wind energy proposal could kill endangered birds

The Obama administration is evaluating a plan to allow a 200-mile corridor for wind energy development from Canada to the Gulf of Mexico that would allow for killing endangered whooping cranes. The government's environmental review will consider a permit sought by 19 energy developers that would permit turbines and transmission lines on non-federal lands in nine states from Montana to the Texas coast, overlapping with the migratory route of the cranes.

Canadian Solar targets '12 module shipments above 2 GW

Canadian Solar Inc is aiming to ship more than 2 gigawatts of solar modules in 2012, a target that would represent a 60 percent increase from the midpoint

of its 2011 forecast. The company's production last year of more than 800 MW, had put Canadian Solar among the top six largest module manufacturers. He confirmed that the company was planning on shipping 1.2 GW to 1.3 GW of modules this year. Ontario, Canada-based Canadian Solar has most of its manufacturing in China.

Suzlon's Repower may bid for 10 bn-euro France wind project

Repower Systems SE, the German unit of Suzlon Energy Ltd., is in talks with partners to bid for a 10 billion-euro project in France to build offshore wind farms.

Tata BP Solar commissions 1 MW plant for the cooperative sector

Tata BP Solar India Ltd, a joint venture of Tata Power and BP Solar, has installed and commissioned a megawatt scale solar power plant in the cooperative sector under the Rooftop and Other Small Solar Power Generation Plant scheme administered by IREDA under the Jawaharlal Nehru National Solar Mission (JNNSM). This project is owned and developed by Dr Babasaheb Ambedkar Sahakari Sakhar Karkhana Ltd (BASSKL), Arvindnagar, Osmanabad in Maharashtra. This project uses 4400 number of crystalline silicon modules of 230 Watts each spread out over an area of 4.5 acres. These modules will generate electric current when solar radiation falls on them. The solar power plant will generate 1.56 million units of electricity per year. Tata BP Solar has also taken the contract to provide the Operation and Maintenance (O&M) services to the plant for the first 10 years after commissioning. The plant is de-

signed to run for 25 years. Tata BP Solar has been able to secure a number of EPC contracts in the IREDA- run scheme and is currently executing around 15 such projects in different parts of India including Tamil Nadu, Andhra Pradesh, Maharashtra, Chattisgarh, Orissa, Jharkhand and Uttarakhand. The JNNSM is a flagship project of the Indian government to mainstream the use of solar energy and has galvanised the industry by setting out an ambitious target of installing 20000 MW of grid-connected solar power generation capacity by 2022 in addition to 2000 MW of off grid solar power.

Suzlon Energy FY12 guidance upbeat after Q1 net profit of ` 600 mn

Suzlon Energy sees growth in profits for the rest of the year as it boosts sales, cuts operating costs and executes orders from emerging economies to help the wind turbine maker maintain growth momentum after a difficult phase. The debt-ridden company is upbeat after an 80% rise in sales helped it post a net profit of ` 60 crore in the April-June quarter, recovering from a loss of ` 912 crore a year ago. This is the company's second consecutive profitable quarter after it reported a loss in every quarter since December 2009 due to low sales, high cost and interest burden.

Bipin Engineers to set up greenfield unit

The central government's ambitious National Solar Mission, under which 20,000 MW generation capacity is to be installed by 2022, has given a huge boost to the solar power sector. Targeting this opportunity, Bipin Engineers Pvt Ltd, a manufacturer of solar equipment, will set up a new manufacturing facility at

Warve, on the Pune-Bangalore highway. The new plant will manufacture solar flat plate collectors, ETC manifold and tanks, integrate solar power packs and small wind energy systems. The new plant will increase the production capacity of the company to 4000 solar collectors per month, from the current level of 1,000 collectors per month. The manufacturer is also expanding its dealer network, with plans to set up 100 dealerships in the next two years. Presently it has 40 dealerships across Maharashtra, M.P, Karnataka and Goa.

ABB India bags ` 16 crore order to supply solution for three PV solar power plants

ABB India has won orders worth Rs 16 crore to supply turnkey power and automation solution for three photovoltaic solar power plants with a combined capacity of 11 megawatts (MW) in India. The orders comprise of two 5 MW photovoltaic (PV) solar power plants and one 1 MW photovoltaic (PV) solar power plant. When completed in October this year, the plants will have an annual generating capacity of up to 17.6 Gigawatt-hours of electricity.

SunPower, Citi to finance solar lease projects

SunPower Corp and Citigroup have formed a new fund of \$105 million to enable the solar panel maker extend its lease to customers in eight states. A solar lease is a financing option that provides the use of a solar equipment in exchange for a monthly lease payment. Citi is contributing \$80 million to the fund that will expand the lease option's reach in Massachusetts, Arizona, California, Colorado, Hawaii, New Jersey, New York and Pennsylvania.

Organiser



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Tezpur University, Assam

Solar Energy Society of India organises



ICORE 2011

INTERNATIONAL CONGRESS ON RENEWABLE ENERGY (ICORE)

RENEWABLES: GROWTH THROUGH ACADEMIA-INDUSTRY INTERFACE

& **TRADE SHOW**

2-4 November, 2011, Tezpur University, Assam



ICORE 2011

Solar Energy Society of India (SESI) has been organizing conventions/conferences/ seminars since last over three decades at national/international level. During the period it has undergone profound changes and finally it has grown up to take up the challenge of organizing an annual event like ICORE (International Congress on Renewable Energy) thus bringing India at par with developed nations having international events on regular basis. The congress covers all the aspects of new and renewable energy thus providing excellent platform for all renewable energy researchers, academia, policy makers and industries of India as well as abroad. This year the ICORE 2011 is proposed to be held at Department of Energy, School of Engineering, Tezpur University, Tezpur from 2-4 November, 2011.

Important topics for Conference

- Solar PV Systems & Technology.
- Off Grid Applications of Solar PV.
- Solar Thermal systems & Technology.
- Tidal, Small Hydro and other renewable technologies.
- Employment Generation through Renewables
- Manufacturing and Equipment
- Biomass and bio-fuel-conversion technology.
- Policy and Programme Implementation on RE.
- Wind Energy
- Electrochemical energy conversion & storage.
- Hydrogen energy production & storage.
- Application of nano materials in energy systems.
- Energy, climate change and carbon trade.
- Renewable energy education capacity building & training.

Organized By :



For more information, please contact : **Mr. Jagat S. Jawa, Director General**

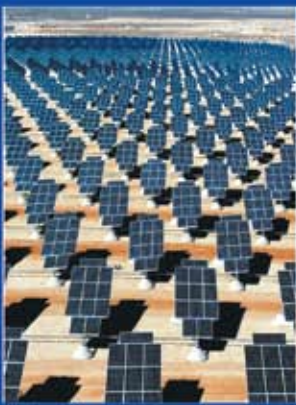
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- Project Design
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- Power Evacuation
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- Project Delivery