

News for the month of January 2016...

ISA Headquarters & its interim Secretariat inaugurated



Prime Minister Shri Narendra Modi and French President Mr. Francois Hollande jointly laid the foundation stone of International Solar Alliance (ISA) Headquarters and inaugurated the interim Secretariat of ISA at National Institute of Solar Energy (NISE) in Gurgaon on 25th January 2016. They both travelled by Metro to inaugurate interim Secretariat of ISA.

On the occasion Hon'ble Prime Minister Modi said "India has an ancient tradition of living in harmony with Mother Nature; emphasising respect for environment and preserving it."

ISA, an initiative of Hon'ble Prime Minister Modi, is an alliance of 121 solar resource rich countries lying fully or partially between the Tropic of Cancer and Tropic of Capricorn. It was jointly launched by him and Mr. Hollande on November 30 2015 year on the sidelines of the 21st Conference of Parties in Paris and representatives from around 70 countries including more than 30 Heads of States.

Shri Upendra Tripathy, IAS, Secretary, Ministry of New and Renewable Energy said Government of India will support the alliance for five years by providing land and \$30 million for this purpose. A piece of land measuring 5 acre had been offered for this purpose in the National Institute of Solar Energy campus in Gurgaon. The alliance comprising 121 solar-resource-rich countries is working together with the objective of increasing the use of solar energy globally.

In addition, Government of India has offered training support for ISA member countries at the National Institute of Solar Energy and also support to ISA member countries for demonstration projects for various solar energy applications.

In order to develop programme of activities of ISA, discussions have also been held with ISA countries resident diplomatic missions, United Nations, World Bank, Exim Banks, New Development Bank, United Nations Asia Pacific Centre for Technology Transfer, and the corporate sector.

<http://isolaralliance.com/>

Call for aggressive measures for meeting targets



The falling trend of international crude oil prices is making economics of concentrated solar heating (CSH) systems challenging. Unless alternative measures to compensate like increase in subsidy, low cost of finance are not effected the CSH systems will fail to attract investors. These opinions were expressed by manufacturers present during the 5th meeting of Project Steering cum Advisory Committee on UNDP-GEF Concentrated Solar Heat Project. The meeting was chaired by Upendra Tripathi, IAS, Secretary, Ministry of New and Renewable Energy (MNRE)

The UNDP-GEF programme on CSH envisages 45,000 m² of installed in around 90 industries and commercial establishments. It will result in saving of 3.15 million liters of fuel oil reduction of 39,200 tonnes of CO₂ per year. Until December 2015 the target had crossed the halfway mark and another 15 months are left for completion of the programme.

Upendra Tripathi Chairman, suggested the financial support being made available under UNDP GEF project may be enhanced from 15 to 20% which could later be brought down to present level after the oil prices coming to the level of 2014. The UNDP official informed that he will confirm on this change after discussing with higher authorities in UNDP. He urged the manufacturers to go aggressive and help realise the target of 45,000 m² set under the programme. He also informed that MNRE would work out a scheme for extending financial support to banks so as to make cost of finance lesser by 2-3% from the existing commercial rates. These measure will to a greater extent should help counterbalance the long payback period occurring owing to almost 50% reduction in fuel oil prices as compared to couple of years back.

The meeting also discussed possible ways to involve all concerned Ministries which will find use of solar thermal heating beneficial. Suitable policies can be framed so as to inspire industrial/commercial organisations to consider implementing the CSH systems. Officials at MNRE would work out the details.

Solar Thermal Federation of India (STFI) suggested to introduce solar heating obligation (SHO) of 5% in industrial and commercial establishments on similar grounds of Solar Purchase Obligation as mandated to electric utilities. This will help the market boost as there is a direct savings of fossil fuel.

Dr. A.K. Singhal in his report mentioned that to realise the target the awareness and capacity building will be enhanced so as to reach maximum beneficiaries in the ensuing months. He further informed material and component specifications of various types of concentrating solar thermal systems that will help BIS in making standards.

<http://www.mnre.gov.in>

ISRO gets Solar Steam Cooking Systems



Indian Space Research Organization have set up the first solar steam cooking system using two parabolic dishes each of 16m² area on the roof of their kitchen. The indirect steam cooking system is integrated to the existing fossil fuel fired set-up ensuring availability of steam at all times. The solar steam cooking system is expected to save up to 60% of the fuel used presently.

The solar steam generating system comprises of automatically tracked parabolic concentrators with steam header/ tank assemblies and receivers and instrumentation like pressure gauges and temperature indicators, steam separators, steam traps etc.

An average 125 daily meals are consumed at ISRO. Most of the food cooked for meals requires steam hence the system was found to be ideal. The generated steam is also utilized for boiling of milk. Any additional steam generated is also utilized for washing of utensils.

According to Dharmendra Gor of Taylormade Solar Solutions Pvt. Ltd who have supplied the system, availability of roof area was a challenge. The shape of the terrace was such that water storage tank needed to be placed outside the terrace which would increase the piping cost and other expenses. Suitable engineering modifications were formulated to satisfaction of the system requirement and the project is successfully working.

ISRO has also benefitted with the subsidy provided under the central government and UNDP- GEF schemes

The authorities at ISRO have expressed satisfaction and plan to consider more systems for their other canteens in future.

<http://www.isro.gov.in>

UNDP-GEF program assures support to NDDDB



UNDP-GEF has assured full support from the Ministry of New and Renewable Energy (MNRE), government of India to National Dairy Development Board (NDDDB) for developing projects on Concentrating Solar Technologies.

The dairy industry has several processes that require either hot water above 85 °C as well as steam generation and can be fulfilled using solar concentrators or non-imaging systems.

MNRE will provide financial assistance for preparation of Detailed Project Report (DPR) of maximum Rs. 1 lakh per DPR. The report should cover DNI availability at respective site, present arrangement & requirements for process heat application, fuel consumption, space availability for CST installation, photographs of sites, type & size of CST suitable, its integration with existing arrangement, cost and fuel savings, investment required, payback etc. The proposals received will be processed on fast track mode and there won't be any delay in sanctioning and release of financial support subject to fulfilment of all requirements

According to Mumbai based rating and research firm, India Ratings & Research Pvt. Limited (Ind-Ra), the dairy business in India will touch \$89 billion in 2015-16 fiscal year. The milk production is expected to increase to 151 million tonnes by 2015-16 fiscal year from 138 million tonnes in 2013-14 fiscal year. It will register a growth of over 15% in future owing to increasing demand.

<http://www.nddb.org/>

<http://www.mnre.gov.in>

<http://www.cshindia.in>

CERC notifies benchmark costs for concentrated solar thermal power



केन्द्रीय विद्युत विनियामक आयोग
CENTRAL ELECTRICITY REGULATORY COMMISSION



Central Electricity Regulatory Commission (CERC) has notified the Benchmark Capital Cost Norm for Solar PV power projects and Solar Thermal power projects applicable during FY 2016-17. In exercise of powers under Regulation 5 of RE Tariff Regulations, the Commission vide Order dated 31st March, 2015, determined the Benchmark Capital Cost Norm for Solar PV power projects for the year 2015-16 (Petition No. SM/005/2015 - Suo-Motu) at Rs. 605.85 lakhs/MW, and for Concentrated Solar Power (CSP) projects at Rs. 12 crores/MW.

Solar Thermal technologies use systems of mirrored concentrators to focus direct beam solar radiation to receivers that convert the energy to high temperatures for power generation. There are four commercially available CSP technologies:

- a) Parabolic Trough
- b) Central Receiver Tower
- c) Dish Engine
- d) Linear Fresnel

So far, three solar thermal power projects, spanning two of the four technologies above, have been commissioned, namely:

1. Godavari Green Energy Ltd, 50 MW, Rajasthan
2. MEIL Green Power Ltd, 50 MW, Andhra Pradesh
3. Rajasthan Sun Technique Energy Pvt Ltd, 100 MW, Rajasthan

Other projects for which PPAs were signed under National Solar Mission have been experiencing delays due to various reasons.

Since the CSP technologies have not seen economies of scale yet, and based on industry interactions, the Commission proposes to retain benchmark capital cost of Solar Thermal power projects at INR 12.0 Crore / MW for FY 2016-17. Detailed break-up component wise was however not mentioned in the release.

<http://www.cercind.gov.in/2015/orders/SO17N.pdf>

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