

My distinguished colleagues Dr Montek Singh Ahluwalia ji, Shri Bharat Singh Solanki ji, Dr. R.K Pachauri, senior officers from the Central and State Governments, delegates, ladies and gentlemen,

I am delighted to welcome you all to today's function. We are here on the occasion of unveiling the guidelines of the Jawaharlal Nehru National Solar Mission. I am extremely grateful to all of you who have kindly agreed to be with us to witness and participate in what has been the result of many months of consultation, toil and effort.

On 11<sup>th</sup> January 2010, our government took a historic step when our Hon'ble Prime Minister Dr Manmohan Singh formally unveiled the Jawaharlal Nehru National Solar Mission. He then termed it as one of the major priorities of the second term of his government and expressed his sincere hope that the Mission would establish India as a global leader in solar energy, not just in terms of solar power generation but also in solar manufacturing and generation of this technology. Today we are gathered here to take the first step towards the operationalisation of the Mission. Even as we speak we are on way to redeeming the many of the pledges and promises we made in January this year.

As all of you are aware, the Solar Mission has three key components- the large grid connected plants, the smaller grid connected plants and the off-grid component. While the grid connected component is being formulated in close coordination with the Ministry of Power, the other two components are being dealt with by the Ministry of New and Renewable Energy. In the first phase of the Mission, the NTPC Vidyut Vyapar Nigam (NVVN) has

been given the responsibility of purchasing 1,000 MW of solar power from the project developers at a rate fixed by the Central Electricity Regulatory Commission. NVVN will sell solar power bundled with unallocated thermal power from NTPC stations to the States. This will help in reducing the burden of the States in purchasing solar power. This cannot be done without the fullest support of the Ministry of Power. In fact, the Ministry of power has a critical role to play in the entire Solar Mission and I must convey my sincerest gratitude to my colleague, Shri Shindeji who is abroad and could not be present today for his generous cooperation in operationalising the grid power component of the Mission. I am also thankful to Shri Solankiji for his support.

As all of you are aware, the Ministry had unveiled a migration policy under the National Solar Mission to give a head start to setting up grid-connected solar power plants. NVVN had invited applications from project developers who were at an advanced stage of preparedness. I am happy to share with you that NVVN, after a scrutiny of the applications, is now ready to announce the eligible developers and shall be formally issuing awards to them shortly. We hope to complete the formalities soon after the return of my colleague, Shri Shindeji.

I am aware that for many of you, the migration process is but one small step and that many of you are more than keenly awaiting the announcement of the guidelines of the main scheme for grid-connected solar power plants. I share your anxiety and concern. I am also aware of the opportunity cost of idle hands and idle brains simply awaiting the release of the policy guidelines. I wish to assure you that the officers of my Ministry are working closely with the Ministry of Power to finalise these

guidelines. I have instructed them to closely work with stakeholders and to facilitate the creation of an ecosystem that will encourage the growth of this nascent sector, reliably, quickly and at reasonable profit to you developers. I have said this before and I must reiterate it here - public policy must focus as much on the viability of an industry as it must target the welfare of the consumer. An army has never marched on an empty stomach and no industry that I know of-even in the public sector- has been able to indefinitely sustain itself without generating reasonable profits. I hope that the guidelines will facilitate the healthy unleashing of your entrepreneurial spirits and that the wait will have been well worth it. We hope to unveil the final guidelines next month.

The Solar Mission is however not grid-connected plants alone. Perhaps the greatest and often little realized potential of solar technology is to provide significant multipliers in our efforts for transformation of India's rural economy. There are a large number of areas in the country, which do not have access to electricity. Many others have basic access but face power shortages. Huge quantities of kerosene and diesel are used to meet their lighting and power requirements. Off-grid solar energy applications have a tremendous potential in reaching out to people in such rural and remote areas by providing basic energy services to them. The rapid spread of solar lighting systems; solar water pumps and other solar power-based rural applications can change the face of India's rural economy. We intend to significantly expand such applications through this Mission.

I have visited a number of villages in different parts of the country. In the remote villages of Gurez in Jammu and Kashmir, right on the border, I have seen for myself, how a basic home-lighting system can change the life of

people. On a recent visit to Uttarakhand, I was told by the Chief Minister, how a solar lantern in the hilly and border villages provides the basic energy access to the otherwise energy-deprived people. Merely by distributing solar lanterns in remote areas and to nomadic populations, we can light up over a million homes. Similarly 1 million streetlights can illuminate streets in over one lakh villages. What is more, all these efforts will also save the environment - 10 million lanterns can save 50 crore litres of kerosene in a year, which in turn can mitigate a potential subsidy bill of Rs. 1,000 to 1,500 crores in a year. Further, the huge entrepreneurial potentialities thrown up by the rapid adoption of these systems will create thousands of jobs as well as self-employment opportunities.

There are many more applications than merely solar home lights or street lights. My Ministry has recently sanctioned a project to Rajasthan to provide solar power to every single *panchayat* in the State by installing 1.12 kW capacity solar systems at each of 9,168 *Bharat Nirman Rajeev Gandhi Sewa Kendras*. I would like to request the Ministry of Rural Development to expand this programme to cover Panchayats in other States as well. Similarly, I would request Ministry of Telecommunications and Information Technology to consider the possibility of using the solar power to run the CSCs all over the country. Yet another area of application could be telcom towers, which are currently using diesel to provide uninterrupted power services. The use of solar energy to power these systems can considerably mitigate the use of diesel especially during the daytime. As telecom tower companies have been working closely with the Department of Telecommunications, I would again like to request the Ministry to consider launching a major programme through the Department

of Telecommunication to expand this activity. We are ready to help in this endeavour.

Feeding power to LT or 11 KV grid is yet another important application, which can help our villages and our industry by providing additional power for rural applications such as irrigation pump sets or even meet the unmet power requirement in the daytime. There are substantial losses as electricity flows from points of generation to distribution. Feeding of power at consumption points would not only help reduce these losses but also help strengthen grid and its performance and supply electricity to the consumers. Therefore, under the Solar Mission, we have decided to encourage setting up of 100 MW capacity of rooftop and other small grid connected solar power plants in the first phase itself.

Some of these plants have already been set up. Tomorrow I am scheduled to travel to Kolar near Bangalore to inaugurate one such plant - a 3 MW capacity solar PV power plant. I am informed that this plant will primarily feed power to about 140 agricultural pumps of about 10 HP capacity and other loads during the daytime. We should multiply such plants to help our villages. I would like to request the States to encourage setting up of such plants. While my Ministry has now finalized the guidelines to effectively implement the schemes on 11 KV grid connected solar power plants, the States too need to come out with their own downstream policies to promote tail-end plants.

The guidelines that we have released today are meant to tap into the diverse and enormous potential of solar energy in all applications-rural, industrial as well as urban. The guidelines are flexible, simple and market

friendly. Taken together, these guidelines seek to address four critical areas – access to rural households for lighting and daily power requirements; reduction in consumption of kerosene and diesel; energy demand management through solar thermal systems and improvement of efficient transmission by feeding power at consumption points. We have attempted to make the process demand-driven, market-based and user-benefit oriented. We have tried to establish additional channels to facilitate direct contact between users and the supplier of solar energy products. Thus there is a broadening of the market and reach. These guidelines provide enough opportunities to manufacturers, system integrators, energy supply companies and also the financial institutions to create a sustained interest within the investor community through viable business models. Flexibility is an integral feature of this scheme. I hope these guidelines will help us to reach a larger number of potential users.

However, I would also like to add here that flexibility on part of the Ministry entails and obligates greater responsibility on part of the other stakeholders including the state governments. Therefore, it is equally important that projects are prepared to meet the specific needs of the users, there is emphasis on innovation and cost-reduction and that quality and reliability of the products is maintained at all costs. Manufacturers must create additional channels to quickly reach out the people and provide them not only good quality reliable products but efficient after sales services also. This will require a large number of technicians to be trained in installation and servicing of solar energy systems. State agencies must start a process of capacity building and ensure that trained technicians are available so that solar energy systems can be easily maintained. My Ministry will help them wherever they run into any technical or financial

constraints. The states too must play their part- for example in devising a facilitative regulatory regime.

We have made a modest beginning today. But we must not get carried away by the adulation of our own sounds. There are plenty of challenges still to be tackled. The present cost of solar energy systems is relatively high. Although capital subsidies and soft loans will make them affordable in the short run, yet only long term solution can be a declining cost curve. For that we need accelerated research, advanced manufacturing and economies of scale. These alone can build the virtuous spiral that will help us attain grid parity before the end of the mission.

For centuries, the sun has been worshipped as the ultimate source of energy. Today, there is a real opportunity to transform this legend to reality. From rooftop solar power in urban agglomerations during peak demand hours to megawatt size grid-connected power plants to small decentralized and off grid solutions in remote rural communities- the opportunities in solar power are immense. The Ministry, in its facilitative role, has created an enabling ecosystem for promoting newer business models, technical as well as market innovations as well as for promoting basic and applied research. It is for the entrepreneurs and stakeholders to rise to the challenge. My vision is to see that every Indian has access to clean energy reliably and affordably. The Jawaharlal Nehru National Solar Mission has provided us this opportunity. I seek your co-operation to take advantage of the opportunities and make India a global leader in solar energy.

Thank You