



Government of Rajasthan

DEVELOPMENT OF SOLAR PARK &

RAJASTHAN SOLAR POLICY

(ADB CONFERENCE)

APRIL 24, 2012 , Jodhpur

and

A presentation by

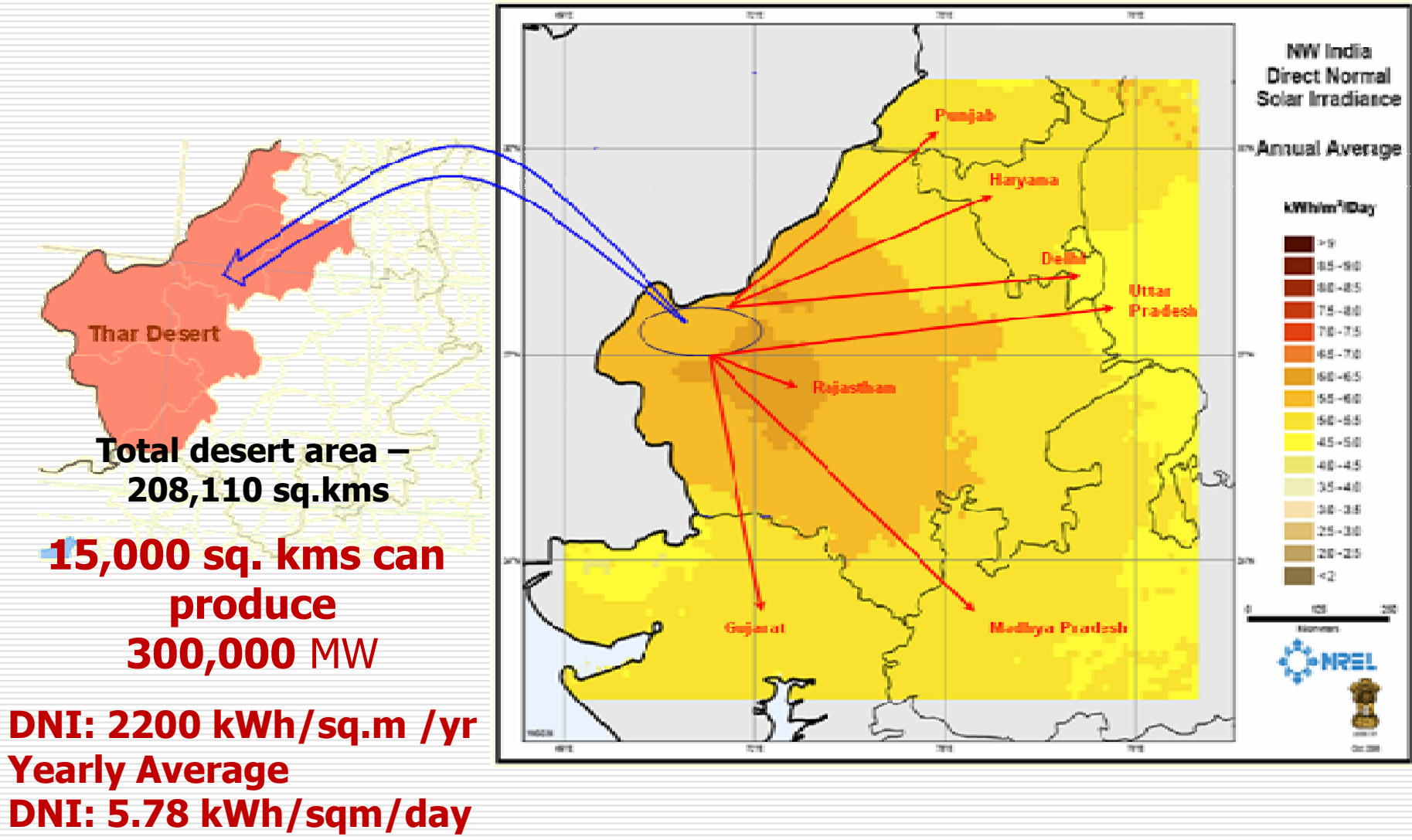
M M VIJAYVERGIA

DIRECTOR (TECHNICAL) RREC JAIPUR

Solar Power Potential in Rajasthan

- ❑ Among the best solar radiation in the world.
 - ❑ Solar Radiation : 6.0– 7.0 kWh/ Sq m/day
 - ❑ Maximum number of sunny days (>325)
 - ❑ Largest State of India having area 3,42,269 sq. km.
 - ❑ Availability of desert unutilized land
 - Rajasthan Desert is similar to Desert in California, Nevada, Colorado and Arizona.
 - Around 208,110 Sq. km (60% of total area)
 - 15000 sq. km desert land can produce 300 GW
-

Solar Power Potential in Rajasthan (contd.)



Rajasthan Solar Energy Policy-2011

- ❑ Government of Rajasthan has issued Rajasthan Energy Solar Policy, 2011 in April-2011 with following strategy :-
 - Leveraging maximum benefit from policies of National Solar Mission.
 - Develop Solar Power Plants for meeting RPO of Rajasthan.
 - Develop Solar Power Plants for meeting RPO of other States.
 - Direct sale to other States through open access.
 - Sale through National Solar Mission mechanism.
 - Sale through REC (Solar) Mechanism.
-

Salient Features : - Targets & Schemes

A. GRID INTERACTIVE SOLAR POWER GENERATION

□ State to leverage maximum capacity under National Solar Mission & Other Schemes:

- Projects Capacity already Connected to Grid and Generating Power 200 MW
 - Projects already under execution through various schemes of NSM & other : More than 700 MW
 - Maximum allocation from 350 MW under Batch- 2, NSM Phase-1 295 MW 24 projects
 - Efforts to get Maximum capacity from Phase-2 of NSM
-

Salient Features : TargetsContd

D. Solar power projects For direct sale of power to Discoms of Rajasthan

- SPP connected at 33 kV & above
 - Phase-1 up to March 2013 - 200 MW
 - Phase-2 during 2014-17 - 400 MW
 - 50 MW SPV & 50 MW CPV Plants along with equivalent MW capacity of conventional power
 - Solar Plants connected at 11 kV
 - 1 MW SPP 50 Nos. - 50 MW.
 - ❖ Various Bid documents available on RREC website
 - ❖ Selection by Tariff based competitive bidding process
-

Salient Features : Targets ...contd

- For promotion of Manufacturers in the state
 - Allocation of 200MW capacity of Solar Power plant to establish 500 MW per annum capacity Manufacturing facility of SPV.
 - Manufacturing Process should involve:
 - a) For Crystalline 1) Wafers to cell & (2) Cell to Modules. Or
 - b) Thin film
 - More than 25MW to-less than 50 MW per annum Manufacturing capacity of SPV: Allocation of 10MW Solar Power Plant
 - More than 50 MW per annum Manufacturing capacity : Allocation of 20MW Solar Power Plant .
-

Salient Features : Targets ...contd

- - ❖ Bid documents Under finalisation
 - ❖ Selection by Tariff based competitive bidding process
 - E. Setting up of Solar Power Plants of unlimited capacity for meeting RPO of Other States
 - Sale power through RE (Solar) Certificate mechanism
 - For captive use or sale of power to 3rd party/States other than Rajasthan.
 - M/s Dhanu Solar Power Ltd. implementing 40 MW SPV Plant Already completed
-

Facilities & Concessions

❑ Land for Solar Power Plant

- Land bank for establishing solar power plants in Jaisalmer, Jodhpur, Bikaner, Barmer, Jalore, Nagaur and Churu available
- Allotment of Govt land at 10% of Market rate.
- Purchase of private land from shall be allowed in excess of ceiling limit
- Conversion to industrial use shall be 10% of charges leviable for industrial purpose.

❑ Water Allocation

- Allocation of 58 cusec water from IGNP Canal for Development of Solar thermal Plants
-

Facilities & Concessions..... contd

- ❑ Clear mandate for the development of adequate infrastructure by STU to evacuate Solar Power
 - ❑ Transmission Line from Solar Power Plant to STU GSS shall be laid down.
 - By STU for projects selected for direct sale to DISCOM under GoR Policy.
 - By the project developer under NSM, Open Access, REC Mechanism & other schemes for sale of Power to parties other than DISCOM of Rajasthan.
 - ❑ RVPN implementing new Power Evacuation Network for Solar Power costing Rs. 2900 crores having 400kV GSS at Jodhpur and Jaisalmer Solar Parks associated transmission lines.
-

Development of Solar Parks

- ❑ Development of Solar Parks (>3000 MW) capacity in **Jaisalmer**, **Bikaner**, **Barmer** and **Jodhpur** districts in various stages.
- ❑ A **special purpose vehicle (SPV)** , a subsidiary company of RREC, will develop Solar Parks.
- ❑ **Clinton Foundation signed MoU** with **GoR** in **Jan 10** for setting up 3000 MW Solar Park(s).
- ❑ **ADB** has helped in preparation of Project Report .
- ❑ **For Jodhpur solar park:** being developed first , Govt land identified: **5000 Hcts in zone 1** & **2500 Hcts. in zone 2&3** each
- Setting up of solar equipment manufacturing units will be allowed by providing incentives.

Development of Solar Parks as Solar Policy

- ❑ Water Allocation made and New Transmission System works initiated.
- ❑ To create R&D hub with focus on improving efficiency.
- ❑ Establishment of an industrial set-up involving both domestic and foreign participation
- ❑ 'Rajasthan Solar Development Company Ltd (RSDP)' has been created for development of Solar Parks.
- ❑ RSDP to formulate Policy and Rules in respect of Land allotment, selection and qualification of firms, grid connectivity and infrastructure plans, sharing of development cost by the developers and management of Solar Parks.

Development of Solar Parks ...cont.

- Jodhpur Solar Park
 - 10000 Hectors Govt land Set-apart at Bhadla , Phalodi
 - Survey and Soil Testing Work of phase-1 (3000 hectare) completed.
 - Survey and Soil Testing Work of additional phase-2&3 (5000 hectare) completed .
 - Master plan for 800 Hecter finalised out of 3000 Hect under Phase-1 developed.
 - Plots marked and demarcation will be made at site in June 2012
 - Detailed Project Report finalised .
-

Development of Solar Parks ...cont.

- Jodhpur Solar Park
 - Land allotment rules formulated .
 - Process selection and qualification of firms started,
 - 400/220kV GSS at Bhadla Already under construction will be ready by December 2012 to receive power .
 - connectivity and infrastructure plans made
 - sharing of development cost by the developers and management of Solar Parks finalised .
 - Construction of roads will be started in June and will be completed in December 2012.
-

Rajasthan International Solar Hub - Expected Achievements

15

- ❑ Installation of minimum 1500 MW solar power plants by 2013-14 in the State with an investment of 15000 crores.
 - ❑ Creation of manufacturing hub of production capacity of minimum 500 MW per annum in SPV sector by 2013-14 resulting in an investment of 2000 crores.
 - ❑ Installation of additional 3000 MW of Solar Power Plants in the State between 2014-15 to 2017-18 with an additional investment of Rs. 20,000 crores.
 - ❑ Development of large Solar Parks at Jodhpur & Jaisalmer.
 - ❑ Generation of large scale employment in desert areas of Rajasthan.
-

Thank You

For details Pl see our website
www.rrecl.com

For enquiry , pl email
mm_vijayvergia@yahoo.co.in