Renewable Energy – policies and challenges

-Developers perspective

-Raghunath Mahapatra

CSE - Annual South Asian Media Briefing on Climate Change, 2013
18 September 2013
WELSPUN GROUP

- One of the fastest emerging Indian conglomerates with revenues of over $3.5 billion
- Diversified business interests with leadership position in each business
- Welspun Corp, the flagship company of the group is the world’s largest steel pipe producer
- Key Markets
  - 80% export to US, Europe, Latin America, Middle East
- International Setup
  - Christy, UK
  - Sorema, Portugal
  - Textile facility in Mexico
  - Office in Manhattan-NY, Huston-US
  - Pipe facility in Arkansas, US
  - Pipe Facility in Saudi Arabia
WELSPUN RENEWABLE ENERGY

- AMONG TOP RENEWABLE ENERGY IPPS IN INDIA

Only business group in India to win largest capacities in both JNNSM – I & II

- Pioneer in Renewable energy space

- Has won maximum capacity allocation...

- Won “The most innovative power producers in Asia” award for the 15 MW solar power project at Anjar
  - Welspun Energy Limited (WEL) has been recognized as one of the most innovative power producers in Asia for its 15 MW solar power project at Anjar (Gujarat)

- ...at low tariff – demonstrates its ability to beat competition and continue to realize growth

- Operational
- Construction

![Operational vs Construction Chart]

- Median tariff
- Minimum tariff
- Maximum tariff

![Tariff Chart]
Welspun Renewables: Solar
- Large Business Conglomerates with substantial Renewable Energy Plans
- Proven track record in timely project execution
- Focus on Solar and wind energy
- Strong in-house technical and engineering team

Operational Capacity (131 MW)
- Gujarat 15 MW
- Gujarat 5 MW
- Gujarat 30 MW
- Andhra Pradesh 5 MW
- Rajasthan 5 MW
- Rajasthan 50 MW
- Rajasthan 20 MW Wind

Capacity under construction (265 MW)
- 130 MW in MP
- Maharashtra 20 MW
- 17 MW in Karnataka
- 32 MW in Punjab
- 66 MW in Tamilnadu

OUR PROJECTS
PROVEN RECORD – FASTER EXECUTION

Punctuality

- Faster project execution
  - 15 MW Gujarat – 6 months
  - 5 MW Andhra Pradesh - 4 months
  - 5 MW Gujarat –3 months
  - 5 MW Rajasthan - 2.5 months

No Cost Overruns

- Project implemented within budgeted costs without any cost overrun

Team Experience

- Excellent engineering, procurement and project management

Capacity Utilization

- All existing plants are operating at CUF around 20%
PROVEN RECORD – PERFORMANCE EXCELLENCE

- All operational projects performing better than estimated and designed generation

- Best daily generation for our operational projects
  - Gujarat 5 MW Project: 26.44%
  - Rajasthan 5 MW: 26.64%
  - Gujarat 30 MW: 24.72%
  - Rajasthan 50 MW: 22.60%
SOLAR TARIFF – TRENDS IN INDIA

KPMG Solar Grid Parity Estimation in India

TRENDS IN TARIFF

JNNSM taking Solar power toward Grid parity
POLICY ENABLERS

- Robust policy – JNNSM, State policies
  - Financial incentives
  - Tariff policies etc.

- Structural framework
  - Dedicated ministries
  - Dedicated nodal bodies at center and state
  - Structured and integrated process
POLICY CHALLENGES

- Allow SEBs to claim RECs for the purchase of RE power beyond the RPO limit
  - RPO target – 15% from RE projects by 2022
  - Solar RPO – 0.25% in 2012-13; to be increased by 3% per annum
    - Strict enforcement of RPO obligations by states
    - Promote REC bilateral trading
    - Resourceful states should be allowed to take REC beyond the RPO target

- Restriction on Solar plant CUF
  - With evolving solar technology, CUF restriction in the PPAs is an obstacle
    - Restriction on upper CUF to be taken off

- Reverse bidding – location agnostic
- Local content requirement
- Accelerated depreciation
FINANCING RENEWABLE – INDUSTRY IMPERATIVES

- Very short project duration (PPA to COD)
- Front loaded expenses
- Rapid growth needs
  - Locking in equipment supplies
  - Higher fund velocity
  - Reduced FC duration (PPA to FC)
- Sector nascence
  - Experience
  - Expertise
  - Reality check yet to be done
FINANCING RENEWABLE – CHALLENGES FACED

**Policy and regulatory**

- Common sector definition i.e. thermal = renewables
  - Sector exposure limits

**Lenders**

- Risk perception and analysis
  - Developer, project, vendor and contract, asset, off-taker
  - Payment security
- Understanding of the sector (nascence)
- Experience of wind
- Tenure mismatch – takeout finance enabling
- Gearing (70:30 or ?)
A CASE STUDY – NEEMUCH, MP

- Capacity 130 MW AC, 150 MW DC
- State policy – aligned with JNNSM
- Land – free allocation by government
  - Collateral – leasing
- Financing
  - Risk appetite
  - Multiple lenders (Risk appetite, sectoral cap)
- Evacuation
  - Forest
  - ROW
  - Documentation
THANK YOU