



MADHYA PRADESH POWER TRANSMISSION COMPANY LIMITED

STATE LOAD DESPATCH CENTRE, Nayagaon, Rampur, Jabalpur

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Jabalpur, dtd: 04.09.2015

To

As per Distribution list

Sub: Record note of discussion of the meeting held on 24th August 2015 at SLDC, Jabalpur.

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Please find enclosed herewith record note of discussion of the meeting held on 24th August 2015 at SLDC, Jabalpur for information and necessary action.

Encl – As above.

Sd/-
Chief Engineer
SLDC MPPTCL Jabalpur

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Distribution List

A. RE Developers / Generators –

1. M/s ALFA INFRAPROP PVT. LTD. 6th Floor, Civic Centre, Near Naigaon Cross Road, Dasturwadi, Dadar(E), Mumbai-400014,INDIA. Fax:022-42429997, Email Id – Sanjay.Shah@alfainfraprop.com
2. M/s Welspun Solar MP Pvt. Ltd., C-11, Sector-65, Noida-201301. (U.P), Fax No. 0120-4128330, Email Id – neeraj_agrawal@welspun.com.
3. NTPC Ltd., E-1/72, Arera Colony, Bhopal – 462016, M.P. Fax : 0755-2421268.
4. M/s Wind World India, B-58, Second Floor, Near Chetak Bridge, Kasturba Nagar, Bhopal – 462023. Fax No. 0755-2600770, Email- ashish.shukla@windworldindia.com.
5. M/s IL&FS Energy Development Co. Ltd., 1st Floor, Corporate Office Tower, Ambience Mall Complex, Ambience Island, NH-8, Gurgaon-122001, Fax: 0124-4716120., [Email-anil.sah@ilfsindia.com](mailto:anil.sah@ilfsindia.com)
6. M/s Inox Wind Infrastructure Services Ltd, Plot No.17, Section-16A, Noida-201301 (UP), Fax:0265-2310312, Email-vishal.goyal@inoxrenewables.com / kumar.arvind@inoxwind.com.
7. M/s DJ Energy Private Limited, A-2, East of Kailash, New Delhi-110065, Corporate Office: 102, "E1 Tara", Hiranandani Gardens, Powai, Mumbai-400076, Fax: 022-25703360, Email-Kapil.sharma@continuumenergy.in, gautam.chopra@continuumenergy.in
8. M/s Marut-Shakti Energy India Ltd., Energy Tower, 64-B Sector, Kasturba Nagar, Bhopal-462023 (MP), Fax: 0120-6149610, Email- manojdixit@gfl.co.in
9. M/s Betul Wind Farm Limited (A UTL Group Company), # 19/6, Ashokapuram School Road, Industrial Suburb, Yeshwantpura, Bangalore-560022, Fax: 080-23572795, Email- sridhar.a.r@powerdepc.com
10. M/s ReNew Solar Energy (TN) Private Limited, 138, Ansal Chambers II, Bikaji Cama Place, Delhi-110066, Fax: 0124-4896672, Email- info@renewpower.in, parag@renewpower.in
11. M/s WAANPEEP Solar Pvt. Ltd., 602, Western Edge-I, Western Express Highway, Borivali (E), Mumbai-400066, Fax: 022-66444400, Email- info@waaneep.com, kamalmarwah@waneep.com.
12. M/s FinnSurya Energy Pvt. Ltd., Unit No.8-12, Ground Floor, World Trade Centre, Baber Road, New Delhi-110001, Fax: 091-9560221117, Email-fortum.india@fortum.com
13. M/s SEI L'VOLTA Private Limited, Menon Eternity, 10th Floor, New No. 165, Old No. 110, St. Mary's Road, Alwarpet, Chennai (Tamil Nadu) Fax- 044-42923838, Email-info@sunedison.com
14. M/s Orange Mamathkheda Wind Private Limited, 310B, 3rd Floor, D21 Corporate Park, Sector 21, Dwarka, New Delhi-110075, Email-account@orangepowergen.com
15. M/s Gamesa Wind Turbine Pvt. Ltd., The Futura, Block-B, 8th Floor, No. 334, Rajiv Gandhi Salai, Sholingnallur, Chennai-600119, Fax: 044-30060661, Email – mzafarkhan@gamesacorp.com
16. M/s Clean Solar Power (Dhar) Pvt. Ltd., Unit No. 89/1101 A, Hemkunt Chambers, Nehru Place, New Delhi-110019, Email-info@herofutureenergies.com.
17. M/s Jamgodrani Wind Farms Pvt.Ltd., 115-B, Trade Centre, South Tukoganj, Indore- 52001, Contact – Mr. S. Basant, M- 09446427882, Email – sathesshbasant@gmail.com
18. M/s Ujaas Energy Limited, 701, NRK Business Park, Vijay Nagar Square, Indore-452010, Fax: 0731-4715344, Email-info@ujjas.com
19. M/s Waaree Engineers Pvt. Ltd., 602, Western Edge-1 Off Express Highway, Borivali (East), Mumbai (MS)-400066, Fax: 022-66444400. email: vijayjain@waaree.com
20. M/s Suzlon Energy Ltd. 215-A, Basant Vihar, Behind Satya Sai School, Vijay Nagar, Indore. Email – deepesh_sankwa@suzlon.com.
21. M/s Vivaan Solar Pvt. Ltd., Bansal Kothi, Nehru Colony, Thatipur, Gwalior – 474011, fax- 07514014414, Email - amit.verma@vivaansolar.com
22. M/s ACME Solar Energy Pvt. Ltd, Village - Bagheli, Tehsil - Khilchipur, Distt. Rajgarh (Biora), Anil Modh, M-09179005332, Fax - 0124-7117001, Email - anil.modh@acme.in
23. M/s Focal Energy Solar Three India Pvt. Ltd., Surya Khedi-Choti Patlasi, Tehsil Sitamau, Distt: Mandasaur (MP). Email: pritesh.kadiya@gmail.com
24. M/s Suzlon Energy Ltd. 3, Triupati Nagar, Opp. Sun City Colony, Sailana Road, Ratlam (M.P.).
25. Shri Atulya Kumar Naik, Addl. GM (Power Systems), Solar Energy Corporation of India, D-3, 1st Floor, Wing-A, Religare Building, District Centre, Saket, New Delhi -110017, Fax No. 011-71989244, Email – corporate@seci.gov.in

B. STATE DEPARTMENTS / UTILITIES -

1. The Managing Director, M.P Urja Vikas Nigam Ltd., Urja Bhawan, Link Road No. 2, Shivaji Nagar, Bhopal.
Email – mdurjanigam@rediffmail.com.
2. The Director (Comml), MPMKVVCL, Nishtha Parisar, Bijalee Nagar, Govindpura, Bhopal. Fax: 0755-580611.
3. The Chief General Manager (Comml), M.P. Power Management Co. Ltd., Jabalpur
4. The Chief Engineer (Plg & Design), MPPTCL, Shakti Bhawan, Jabalpur.
5. The Chief Engineer (T&C), MPPTCL, Shakti Bhawan, Jabalpur.
6. The Chief Engineer (Comml.), O/o MD, MPPaKVVCL, GPH Compound, Polo Ground, Indore, Fax: 0731-2423300
7. The Chief General Manager (Comml.), MP Poorv Kshetra Vidyut Vitaran Co. Ltd., Jabalpur. Fax No. 0761-2660128.
8. The Chief General Manager (PM), M.P. Power Management Co. Ltd., Jabalpur.

Record note of discussion of the Meeting held on 24th August 2015
at SLDC Jabalpur.

A meeting was held on 24th August 2015 in the Conference Hall of SLDC, MPPTCL, Jabalpur to discuss the regulatory requirements to be fulfilled by wind & solar generators / developers for integration with the grid. The meeting was attended by State Department officers and wind & solar generators / developers as detailed in Annexure-1.

In his opening remark, the Chief Engineer, SLDC Shri P.A.R Bende welcomed the participants to the meeting. He stated that the power sector is experiencing continuous growth at fast rate in RE generation capacity. He informed that though this rapid growth is ensuring our efforts towards saving environment, the integrated power system is experiencing some challenge of grid deviations due to sudden RE generation variations. In order to address these issues to ensure grid security, the Regulators have started paying attention on the issue of RE forecasting, scheduling & imbalance settlement and telemetry. He expressed view that there is a strong need to discuss and resolve the issues, within the regulatory framework, to address the problem the load dispatchers are facing and move forward with positive commitments.

2. A presentation indicating regulatory requirements to be fulfilled by wind & solar generators for integration with the grid and guidelines to be followed for registration, installation of ABT meters alongwith AMR facility, forecasting & scheduling and commissioning of telemetry was given by SLDC. The copy of the presentation was also sent to all the participants through email.

3. SLDC informed that wind & solar Generators getting connectivity with MP Grid shall have to comply the following regulatory requirements before commissioning of the project.

- i. Deposition of registration fee of ₹ 5000/- for registration with SLDC.
- ii. Data Acquisition System facility for transfer of telemetry data to SLDC/Sub LDC (Nearest Control Centre) in accordance with SLDC guidelines.
- iii. Confirmation of installation of ABT meters of 0.2s accuracy class with AMR facility for data downloading at SLDC duly certified by MPPTCL or Discoms or both as the case may be.
- iv. Single line diagram indicating the connectivity with the grid duly certified by MPPTCL or Discoms.

- v. Copy of connection agreement with Discom or MPPTCL
- vi. Commissioning report of project by MPPTCL or Discoms.
- vii. Information regarding sale of power to MPPMCL / Third party sale or to any other state (Copy of PPA & LTA).

SLDC requested MPPTCL and Discoms to furnish the commissioning report to SLDC after commissioning of the project.

4. SLDC explained the registration process to wind & solar generators and also clarified that if the generators are connected at different locations / feeders with the grid, then they have to do separate registration with SLDC for different locations. Further, SLDC requested the wind & solar generators / developers to check their registration and in case they are not registered then they have to immediately registered with SLDC by depositing ₹ 5000/- in SLDC account and submitting the form. All the wind & solar generators agreed for the same.

5. SLDC informed that wind & solar generators / developers shall have to provide ABT meters of 0.2s accuracy class and of open protocol conforming to IS:15959 with AMR facility at the interface points for the purpose of energy accounting. The ABT meters with AMR facility are required to be integrated with AMR system for data downloading at SLDC. Further, SLDC pointed out that the following wind & solar generators are not integrated with AMR system despite repeated pursuance by SLDC as such their data is not being downloaded through AMR system installed at SLDC.

- i. Wind World-III (Retadi Hill) connected at 132KV Chapda.
- ii. NTPC Solar 50MW connected at 220KV Rajgarh.
- iii. Focal Solar 30MW connecetd at 132KV Sitamau.
- iv. Betul Wind Farms 49.5MW connected at 132KV Gudgaon.

SLDC requested the above generators / developers to take immediate measures for integration with AMR system at SLDC. The generators / developers have assured to resolve the issues related with integration of ABT meters with AMR system.

6. SLDC informed that all the wind generators with collective capacity of 10 MW and above and solar generators with collective capacity of 5MW and above is required to forecast their generation on day ahead basis and can revise their schedules in accordance with regulatory

provisions. SLDC also pointed out that following wind & solar generators are not forecasting their generations despite repeated pursuance by SLDC.

- i. Mahuriya Suzlon-I 15MW connected at 132KV Susner.
- ii. Mahuriya Suzlon-II 15MW connected at 132KV Susner.
- iii. Ahirwadiya Suzlon-III 15MW connected at 132KV Agar.
- iv. New Suzlon-I Jaora 14.4MW connected at 132KV Jaora.
- v. DJ Energy 58MW Wind connected at 220KV Daloda.
- vi. Marut-Shakti 44MW Wind connected at 132KV Suwasra.
- vii. Jamgodrani wind 30MW connected at 220KV Dewas.
- viii. Wind World is giving the combined forecast for Wind World –I(15.2MW), II(14.4MW) & IV(14.4MW) (connected at 132Kv Agar & Susner).
- ix. Vivan Solar 12.65MW connected 132KV Makdone.

No representative from M/s Suzlon Energy Ltd. and M/s Vivan Solar has attended the meeting despite written and telephonic request made by SLDC. However, other developers / generators have assured to start the forecasting within a week.

7. SLDC informed that Central Electricity Authority (CEA) is establishing a Renewable Energy Management Centre (REMC) at RLDC & SLDC level for aggregate forecasting of wind & solar energy at SLDC level. This could be done only if the wind & solar developers share the following information –

- i. Pooling station wise details of wind & solar generators.
- ii. Historical data of each pooling station connected to grid.
- iii. Providing telemetry data captured at the control centre of pooling stations. (For eg. Wind speed, temperature, pressure & radition etc. or information as required).

Chief Engineer, SLDC stated that initiative for starting the forecasting of wind generation at aggregate level is taken up with National Institute of Wind Energy (NIWE) and SLDC has requested the wind developers to furnish the information vide letter No. 2627 dated 28-07-2015. M/s Gamesa Renewable Pvt. Ltd. and M/s Orange Mamatkeda Wind Pvt. Ltd have submitted the details on 24th Aug 2015, however other developers have not submitted the details to SLDC. The developers present in the meeting assured to submit the same.

8. Solar Energy Corporation of India (SECI), M/s IL&FS Energy Development Co. Ltd., and M/s Hero Future Energies (Clean Solar) has requested SLDC to start the scheduling for sale

of power to other states. SLDC informed that at present no methodology is available as per the prevailing regulations for settlement of imbalance of solar generators for sale of power to inter-state and WRLDC has also expressed their difficulty for replacement of scheduled energy with actual, therefore scheduling & energy accounting of such generators is presently suspended. SLDC informed that CERC was requested to notify the regulations for sale of RE power to inter states entities so that scheduling and energy accounting could be commenced. SLDC also intimated that CERC is in a process of issuance of regulations for sale of power to inter state and the regulations are expected to come by Nov 2015.

9. SLDC informed that CERC has issued Framework on Forecasting, Scheduling and Imbalance Handling for Variable Renewable Energy Sources (Wind and Solar), CERC (Indian Electricity Grid Code) (Third Amendment) Regulations, 2015 and CERC (Deviation Settlement Mechanism and related matters) (Second Amendment) Regulations, 2015 vide notification dated 07.08.2015 for the regional entities and briefly explained the regulatory provisions of the regulations for wind & solar generators. SLDC have also informed that CERC is in a process of finalization and issuance of regulations for scheduling and deviation settlement for States embedded Wind & Solar generators. M/s IL&FS Energy Development Co. Ltd. & M/s Waaneep Solar Pvt. Ltd. have stated that solar power projects should be kept outside the purview of deviation settlement and no charges should be imposed on solar projects for deviation from schedule. SLDC stated that regulations are framed by the Commission and State Load Despatch Centre is only the implementing agency and hence the right forum to raise this issue is the Electricity Regulatory Commission.

10. SLDC informed that despite constant persuasion by SLDC, some of the renewable generating stations have not provided telemetry and even not responding to SLDC request. Accordingly SLDC has given three months time to arrange the telemetry. The three months time is also over and SLDC now may initiate suitable action for disconnection of renewable generating stations from grid who have not provided telemetry. The renewable generators / developers requested to provide some more time. Accordingly, it was agreed by all that telemetry shall be provided within two and half months from the date of meeting (i.e by 15th November 2015). Further, it was also agreed that renewable generating stations shall submit the telemetry scheme to SLDC within one month of meeting for approval so that telemetry scheme got commissioned by 15th November 2015. SLDC further clarified that this extension is given for the last time and if renewable generators fails to commission telemetry by 15th November, SLDC shall be free to initiate necessary action as per regulatory provisions including disconnection of generating station from the grid.

11. SLDC further pointed out that ensuring round the clock availability of telemetry after its commissioning is of utmost importance and necessary arrangement for ensuring 100% availability subsequent maintenance of telemetry like arrangement of sufficient spares for data acquisition equipments as well as data channel equipments/ AMC with OEMS , availability of backup of all configuration files, wiring diagrams etc is required to be maintained and details of contact person responsible for maintenance of telemetry is required to be informed by each renewable generating stations to SLDC for which all agreed. It was specifically informed by SLDC that telemetry of M/s ACME Ltd is not functioning since last four months and M/s ACME is not responding to SLDC request. M/s ACME representative informed that they will arrange the restoration of telemetry within a week and also take necessary action for up gradation of data channel so as to ensure the reliable functioning of telemetry.

12. The data channel requirement was discussed in detail and it was clarified by SLDC that reliable data channel using either PLCC, dedicated point to point leased line, combination of PLCC and leased line/RF or VSAT may be utilized by renewable generating agency. It was clarified by SLDC that data channel using GPRS/GSM or broadband internet is not acceptable because of security and reliability concern. SLDC also clarified that data channel for telemetry is required to be arranged either upto SLDC Jabalpur/Sub-LDC Indore /Backup SLDC at Govindpura Bhopal or nearest wideband nodes. The existing wideband nodes are at 400KV S/s Bhopal, 400KV S/s Bina, 400KV S/s Indore, 400KV S/s Nagda, 220KV S/s Jabalpur, 220KV Satna, 400Kv S/s Katni, 400KV SGTPS, 220KV S/s Ujjain, 220KV Itarsi. The wideband nodes at few other locations are under commissioning stage and updated list of wideband nodes shall be uploaded on SLDC website. The Chief Engineer, SLDC also proposed that the RE Generators can also provide telemetry upto Back-up SLDC, Bhopal through V-SAT by collective efforts of RE generators

13. It was informed by SLDC that some of the renewable generating stations had submitted undertaking (like M/s Betul Wind power, M/s Shalivahana energy etc) to provide telemetry within a stipulated period and obtained connectivity on the basis of undertaking. However, subsequently they are not adhering to the commitment made through undertaking. Accordingly it was clarified by SLDC that in future, synchronization of renewable generating plant shall be allowed only after commissioning of the telemetry of the RE plant. Further, if agency is having some old plant whose telemetry is not available then synchronization of new generating plant shall be allowed only after providing telemetry of old as well as new generating plant.

14. SLDC informed that telemetry of some of the plants eg. M/s ReNew Vijaypur Plant and NTPC Rajgad plant was pending for want of construction of backup SLDC Bhopal, and as Backup SLDC at Bhopal is now ready they may start commissioning of telemetry activity.

15. Chief Engineer, SLDC made it clear that RE Generators should comply to the regulatory provisions and SLDC instructions issued from time to time, in case of persistence violations, the same shall be treated as non-compliance of regulatory provisions and SLDC instructions and necessary action as defined under section 33 & 142 of IE Act 2003, would be initiated to ensure Grid safety.

16. SLDC accepted the request made by the wind & solar generators for uploading the regulatory requirements to be fulfilled by the RE generators on SLDC website. The information shall be uploaded on SLDC website <http://www.sldcmpindia.com> in a separate link.

17. The meeting concluded with a vote of thank to chair.
