

**MINUTES OF THE 42<sup>nd</sup> MEETING OF POWER SUB COMMITTEE OF  
NARMADA CONTROL AUTHORITY**

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## **GENERAL**

The 42<sup>nd</sup> meeting of Power Sub Committee of NCA was held on 24<sup>th</sup> March, 2008 at New Delhi under the Chairmanship of Shri Major Singh, Member (Power), Narmada Control Authority. The list of participants is appended at **Annex – (M1)**.

Chairman welcomed the Members/Invitees to the meeting. He outlined various activities of Power Wing/EMC and briefly touched upon points/issues to be discussed in the meeting. After brief introduction, Chairman requested Director (Power) & Member Secretary, Power Sub Committee to take up the agenda for discussion.

**Item No. XLII-(1) CONFIRMATION OF MINUTES OF THE 41<sup>st</sup> MEETING.**

The minutes of 41<sup>st</sup> meeting of Power Sub-Committee held on 27<sup>th</sup> August 2007 were circulated to all Member & Invitees vide letter No. 2/7/2001/PSC-41/Power/1797 dated 14<sup>th</sup> September 2007. Member Secretary informed that no comments have been received on the minutes from any of the Members/Invitees. The Committee therefore confirmed the minutes of 41<sup>st</sup> meeting.

**ITEM NO. XLII-(2) FOLLOW UP ACTION ON THE DECISIONS  
OF THE EARLIER MEETINGS**

**(a) Installation of Special Energy Meters (SEMs), Disturbance Recorder and Data Logger.**

Member Secretary mentioned that during the 41<sup>st</sup> meeting SSNNL had informed that Special Energy Meters (SEMs), Data Logger and Disturbance Recorder would be installed by September, 2008 and shut down for period of about 40-45 days of RBPH units would be required while commissioning of Computerized Control System by M/s Siemens Ltd. Chairman requested SSNNL to brief the committee about the progress of this activity. SSNNL informed that Unit-wise SEMs at RBPH and CHPH have already been provided. Regarding Data Logger and Disturbance Recorder which are part of CCS he informed that certain constraints have been noticed regarding in capability of supplier to commission the CCS (with the system so far supplied by the firm). He indicated that the matter is being pursued vigorously. He added that in the first instance commissioning of CCS for one unit is planned by end of June 2008. Based on the results of first Unit, an action plan for remaining units would be formulated. He clarified that shut down of 4-5 days is anticipated at the time of commissioning of the CCS for each unit.

**(b) Up gradation/replacement of SSP Data Transmission System.**

The Committee noted the information given in agenda.

**(c) Implementation of Safety aspects for O & M of SSP complex.**

Member Secretary informed that the matter regarding preparedness of SSP O&M staff to meet the emergent situation caused due to calamities/disaster has been discussed in earlier meetings and SSNNL was requested to formulate disaster management plan vide NCA letter dated 27/09/08 (Annex.XLII-II) of agenda. Chairman pointed out that RBPH being an under ground power station every employee must be clear about the action to be taken in such emergency/disaster situations. He added that Disaster Management Plan is to be prepared in co-ordination with Civil Wing of SSNNL and local Civil authorities. He suggested that SSNNL/GSEC engineers may visit Koyna HE complex to familiarize about the steps/measures to be adopted in such situations. He enquired about the provision of Emergency escape in the RBPH. SSNNL informed that GSEC engineers recently visited Naphtha Jhakri Project based on which an action plan to meet such emergency situations is being prepared. He added that civil wing have already prepared documents and guidelines in the local language clearly specifying the role of every individual in emergency situations which have been circulated to each of the employee. He clarified that an emergency escape has been provided at RBPH and a mock drill would also be undertaken.

**(d) Operation of RBPH Units in synchronous condenser mode**

Member Secretary gave outline of the agenda and apprised the committee about commencement of regular operation of RBPH units in synchronous condenser mode as brought out the agenda. The Committee noted the information given in the agenda.

**(e) Applicability of UI charges of SSP**

The Committee noted the information given in the agenda.

**(f) SSP O & M Coordination Committee**

Member Secretary stated that the objective of O&M Coordination Committee is mainly to carryout periodical review of the O&M matter of SSP Complex and advice the SSNNL /GSEC to on these issues. In the previous meeting Govt. of Maharashtra was requested to communicate the nomination from MSETCL and MAHAGENCO. She informed that GOM vide their letter No. CE (E)/HP/D-9/S.S/816 dated 17.03.08 (**Annex XLII-M-2**) have requested MSEDCL to communicate their nomination for this Committee. Chairman informed that with the commissioning of all the units of SSP complex and completion of other related activities regular review of O&M is essential by convening meetings at Kevadia. He added that role of power sub committee could be reviewed after implementation of SSP data transmission system and receipt of nominations from various constituents. He added that for detailed review and proper coordination for the O & M matters of SSP complex the Co-ordination Committee could meet on quarterly basis. The O&M aspects would, however, continue to be broadly deliberated by Power Sub Committee as per Terms Of Reference.

The Committee agreed to the proposal.

**(g) Membership of WRPC for SSP**

Member Secretary informed that the issue of SSP Membership of WRPC was discussed in the 39<sup>th</sup> & 41<sup>st</sup> Power Sub Committee Meeting. She stated that MSEDCL vide letter no. CE/PP/SSP/41170 dated 17.11.2007 (Annex XLII-V of agenda) have communicated that NCA should not share the expenses but may represent SSP in WRPC. Referring to Annex.XLII-VI of agenda regarding WRPC resolution, Chairman informed that no specific provision for inter state project like SSP is made in WRPC resolution. He opined that WRPC has since decided to include NCA as special invitee, which could be continued.

The Committee agreed to the proposal.

**ITEM NO. XLII-(3) PROGRESS OF ENERGY MANAGEMENT CENTER (EMC).**

**(a) Closure of contract with M/s. BHEL for Work Package – I & II**

The Committee noted the information given in the agenda.

**(b) Interim arrangement for SSP data transmission by hiring ULDC compatible RTU.**

Member Secretary apprised the committee about the present status of Bid Document for up-gradation/replacement of SSP data transmission. She mentioned that in the previous meeting GETCO had suggested that as the implementation of new scheme may take some time therefore GETCO can provide RTU for SSP on rental basis as an interim arrangement. Chairman added that the proposal received from GETCO in this regard was put up to Permanent Standing Committee (PSC) of Sardar Sarovar Advisory Committee (SSCAC) in 94<sup>th</sup> meeting held on 14.11.07 and Budget provision has been made in RE 2007-08 and 2008-09 (for upgradation/replacement of system). He mentioned that a meeting was held on 07.03.08 with GETCO and SSNNL at SLDC Gotri to decide the modalities for implementation of the scheme. The record of discussion of the meeting has been circulated in the meeting and is given at **Annex. XLII-M(3)**. He added that SSNNL have assured to undertake the required cabling work and other related activities and in principle approval have been conveyed to GETCO. Member Secretary stated that by the interim arrangement, SSP data would be made available to SLDC Gotri & WRLDC and limited data would be uploaded on the GETCO website. Director (LD&T), CEA enquired about the possibility of purchasing the RTU

by NCA instead of hiring on rental basis so as to avoid yearly recurring cost. Chairman informed that that most of the IPPs are utilizing the RTUs from GETCO on rent and providing data to SLDC smoothly. NCA being a regulatory/coordinating agency would prefer to outsource most of the activities. The Committee after detailed discussion agreed to the proposal and stressed the need for early completion of this work.

**(c) Interim arrangement for SSP data transmission to EMC.**

Member Secretary stated that the bid document for upgradation/replacement of SSP data transmission is likely to take 1½ to 2 years therefore option for providing an interim arrangement for SSP data transmission to EMC is to be explored. Chairman informed the closure of BHEL contract is essential before placing the order for new system. The tender document is required to be vetted by PSC (SSCAC) and orders is to be placed also after obtaining approval of PSC of SSCAC. Therefore as an interim measure it is proposed to study the possibility of transmitting data from SEMs at RBPH & CHPH to EMC. The proposal would be discussed with SSNNL/GSEC.

The Committee agreed to the proposal.

**(d) Proposal for Up-gradation/ Replacement of SSP data transmission system**

The Committee noted the information given in the agenda.

**ITEM NO. XLII-(4) PROGRESS OF SARDAR SAROVAR POWER (SSP) COMPLEX.**

**(a) Canal Head Power House (CHPH)**

Member Secretary gave an outline of the ongoing activities as brought out in the agenda and requested SSNNL to apprise the Committee about the present progress/status. SSNNL informed that intra site communication for CHPH have been completed and handed over to the O&M wing of (GSECL). Director (LD & T), CEA enquired about the availability of 50 pair telephone cable between CHPH and RBPH RTUs by SSNNL to provide an inter communication media between the two RTUs. SSNNL agreed to check-up and provide the same in coordination with NCA shortly. Chairman mentioned, this matter was also discussed in 37<sup>th</sup> meeting and SSNNL may confirm the availability of the provision.

**(b) River Bed Power House (RBPH)**

SSNNL informed that Air Conditioning & Ventilation system has been installed and testing of pumps have been completed. The testing of duct could not be completed as some duct portions were required to be dismantled due to ongoing work of laying of drainage pipes. As already discussed under Item XLII-II(a) CCS of one unit RBPH is initially proposed to be commissioned by June, 2008 based on the results of which commissioning for remaining units would be planned by SSNNL. He added that Intra site communication of RBPH is under final stages of completion.

**ITEM NO. XLII-(5) O & M OF SSP COMPLEX.**

Chairman requested SSNNL to apprise about operational matters and planned maintenance programme of SSP complex. SSNNL informed that vide letter no. CE/NPHP/PB/1514 dated 05/12/07 they have already communicated the planned maintenance programme of SSP Units for the year 2008-09. He informed that the representative M/s. Areva (France) are at site for undertaking phased maintenance of 400 kV G.I.S. He assured that six monthly maintenance of SSP units would be completed by May, 2008 viz. before onset of Monsoon. Chairman requested SSNNL to ensure availability of all generating units during monsoon so as to maximize the energy generation. SSNNL clarified that maintenance would be deferred in the event withdrawal of monsoon extends so as to utilize the available copious flows for energy generation.

**ITEM NO. XLII-(6) ENERGY BENEFITS ACCRUED FROM SSP  
COMPLEX.**

The Committee noted the information given in the agenda.

**ITEM NO. XLII-(7) ENERGY GENERATION TARGET FOR THE YEAR 2008-09 AND REVIEW OF ENERGY GENERATION PERFORMANCE FOR 2007-2008.**

The Committee noted the information given in the agenda.

**ITEM NO. XLII-(8) ANY OTHER ITEM WITH PERMISSION OF CHAIR.**

**“Judicious operation of RBPH unit in synchronous condenser mode”**

SSNNL, raised the issue regarding the need for judicious operation of RBPH units in synchronous condenser mode. He stated that other options such as opening of lightly loaded lines and installation of line reactor should also be explored by WRLDC before operating the RBPH unit (s) in the condenser mode. He added that in recent past most of the time one circuit of 400 kV double circuit SSP – Nagda line remained open where as in case of 400 kV SSP-Dhule, both the lines remained charged thereby giving rise to high voltage which necessitated operation of SSP Units in condenser mode. He added that wear and tear of Units could be avoided by judicious use of operation of the Units. He stated that since both Gujarat and Maharashtra are connected with grid through other lines also, so operating of Dhule or Nagda line while operating with only one circuit charged is not going to affect the grid stability. He stated loading of Nagda as well as Dhule line generally remained same during this month. The charging of both the circuits of Dhule resulted in incidence of high voltage thereby frequent tripping. The Committee after discussion requested SSNNL to provide the input details so that the same could be discussed in OCC meeting of WRPC.

After deliberations, following decisions were taken.

- **Preparation of Disaster Management plan for Sardar Sarovar Power Complex.**

**Action: SSNNL**

- **Implementation of interim arrangement of SSP data transmission to SLDC/WRLDC**

**Action:  
NCA/SSNNL/GETCO**

- **To explore options for SSP data transmission to EMC.**

**Action: NCA/SSNNL**

- **To provide 50 pair telephone cable for data transfer between RBPH and CHPH RTUs.**

**Action: SSNNL/NCA**

- **To complete the Planned Maintenance Programme of SSP units by May 2008.**

**Action: SSNNL**

- **Closure of BHEL Contact for Package I & II of EMC.**

**Action: NCA**

The meeting ended with vote of thanks to Chair.

**ANNEX.-XLII-M(1)****LIST OF PARTICIPANTS****NARMDA CONTROL AUTHORITY**

- |    |                    |                                     |
|----|--------------------|-------------------------------------|
| 1] | Shri Major Singh   | Member (Power) – Chairman           |
| 2] | Smt. Suman Sinha   | Director (Power) & Member Secretary |
| 3] | Shri O.P. Suman    | Dy. Director (Power)                |
| 4] | Shri Hemant Pandey | Asst. Executive Engineer            |

**CENTRAL WATER COMMISSION**

- |    |                 |                        |
|----|-----------------|------------------------|
| 1] | Shri D.P. Singh | Director (SSPH Design) |
|----|-----------------|------------------------|

**CENTRAL ELECTRICITY AUTHORITY**

- |    |                 |                |
|----|-----------------|----------------|
| 1] | Shri D.K. Jain  | Director       |
| 2] | Shri D.K. Malik | Dy. Director   |
| 3] | Shri .K. Tiwary | Asst. Director |

**SARDAR SAROVAR CONTRUCTION ADVISORY COMMITTEE**

- |    |                      |               |
|----|----------------------|---------------|
| 1] | Shri Janardan Babu R | Dy. Secretary |
|----|----------------------|---------------|

**GOVT. OF GUJARAT**

- |    |               |                                    |
|----|---------------|------------------------------------|
| 1] | Shri U.C.Jain | Chief Engineer (Electrical), SSNNL |
|----|---------------|------------------------------------|

**GOVT. OF MAHARASHTRA**

- |    |                     |                    |
|----|---------------------|--------------------|
| 1] | Shri A.J. Taralekar | Executive Engineer |
|----|---------------------|--------------------|

No.CE(E)/HP/D-9/S.S./ 816  
Office of the  
Chief Engineer (Elect.) Hydro Projects,  
Water Resources Department,  
Hongkong Bank Building, 4<sup>th</sup> floor,  
M.G.Road, Fort, Mumbai-400001.  
E.mail - [ceehpid@vsnl.net](mailto:ceehpid@vsnl.net)  
Date: 17 MAR 2008

To,  
The Chief Engineer (Power Purchase),  
M.S.E. Distribution Co.,Ltd.,  
5<sup>th</sup> floor, Prakashgad,  
Plot No. G-9, Bandra (E),  
Mumbai-400 051.

Sub :- 42<sup>nd</sup> Power Sub-Committee Meeting of NCA-----  
SSP O & M Coordination Committee for Sardar Sarovar Project-

Ref :- i) Director ( Power ), NCA's Letter Dated: 5<sup>th</sup> March,2008  
ii) Director ( Power ), NCA's E-mail message Dated :15<sup>th</sup> March,2008

Sir,

With reference to the above, it is to inform you that 42<sup>nd</sup> meeting of Power Sub-Committee is scheduled to be held on 24<sup>th</sup> March, 2008 at 11.00 AM at New Delhi, agenda for which is received vide above referred E-mail message. During 41<sup>st</sup> PSC meeting which was held on 27<sup>th</sup> August,2007 at New Delhi wherein Shri P.B.Hote ,S.E., SLDC was also present, it was decided to have two member each from MAHAGENCO (Hydro) and MSETCL respectively on SSP O & M Coordination Committee. However, it can be seen from the proposed meeting agenda that the nomination of representative from MSETCL has not been communicated so far.


As such, it is requested to communicate your nomination and also depute your representative to the above said meeting.

Thanking You,

Yours Faithfully

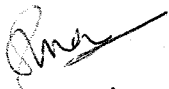
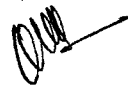
Encl.: As above.

O.C.Approved By C.E.(E),H.P.Mumbai-1.

  
For Chief Engineer (Elect.)  
Hydro Projects, Mumbai-01.

✓ Copy forwarded with compliments to the Director (Power), Narmada Control Authority, BG-113, Scheme No. 74-C, Vijay Nagar, Indore-452010 for information.  
[Attn.: Mrs. Suman Sinha, Director (Power), NCA, Indore]

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# नर्मदा नियंत्रण प्राधिकरण

## NARMADA CONTROL AUTHORITY

No.3/8/2005/Power/ 61-66

Dated: 14-03-2008

To

1. Chief Engineer (LD),  
GETCO,  
State Load Despatch Centre,  
Gotri, Vadodara-390 021,  
Fax No.0265-2352019.
2. Chief Engineer (Elect),  
SSNNL,  
New Administrative Block-A,  
1<sup>st</sup> floor, Kevadia Colony,  
PIN: 393 151  
Fax No.02640-232102.

**Sub: Record of discussions held on 7<sup>th</sup> March, 2008 at SLDC, Gotri for implementation of interim arrangement for SSP data transmission to SLDC/WRLDC.**

Sir,

I am directed to forward herewith record of discussions held on 7<sup>th</sup> March, 2008 between NCA, GETCO and SSNNL on the subject cited above for your information and further necessary action.

Yours faithfully,

(Suman Sinha)  
Director (Power)

Encl: As above

Copy (along with enclosure) for information to :-

1. Secretary, SSCAC, A-Block, 4<sup>th</sup> Floor, Narmada Bhavan, Indira Avenue, Vadodara (Fax No.0265-2437262).
2. Managing Director, GETCO, Sardar Patel Vidyut Bhavan, Race Course, Vadodara-390 007 (Fax No.0265-2353086).
3. Director (Civil), SSNNL, Block No.12, 2<sup>nd</sup> Floor, New Sachivalaya Complex, Gandhinagar-382010, (Fax No.079-23223056).

(Suman Sinha)  
Director (Power)

Energy Management Centre, N.C.A., D-3/4, Narmada Colony, Sch. No. 78, Vijay Nagar, Indore - 452 010 (M.P.)

ऊर्जा प्रबंधन केन्द्र, न.नि. प्रा., डी.-३/४, नर्मदा कॉलोनी, स्कीम नं. ७८, विजय नगर, इन्दौर - ४५२ ०१० (म. प्र.)

Phone No. : SE (EMC) - 2553783  
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**RECORD OF DISCUSSIONS HELD ON 7<sup>th</sup> MARCH, 2008 AT SLDC(GETCO),  
GOTRI, VADODARA BETWEEN GETCO, NCA AND SSNNL REGARDING  
INTERIM ARRANGEMENT FOR SSP DATA TRANSMISSION  
TO SLDC AND WRLDC**

Member (Power), NCA held discussions with GETCO (SLDC) and SSNNL on 7<sup>th</sup> March, 2008 to decide the action plan and modalities for implementation of the interim arrangement for SSP data transmission to SLDC, Gotri & WRLDC, Mumbai by installation of 1 no. RTU at RBPH to be provided by GETCO on rental basis.

The following were present :-

**Narmada Control Authority (NCA):**

1. Shri Major Singh, Member (Power).
2. Shri Hemant Pandey, Asstt. Executive Engineer (EMC).
3. Shri Rajesh Sharma, Junior Engineer (Electrical).

**Gujarat Energy Transmission Corporation Ltd. (GETCO) :**

1. Shri N.H.Suthar, Additional Chief Engineer (LD).
2. Shri D.J.Shah, Superintending Engineer(LD).
3. Shri B.B.Mehta, Executive Engineer(LD).
4. Shri Sanjay Agrawal, Deputy Engineer.

**Sardar Sarovar Narmada Nigam Limited (SSNNL) :**

1. Shri U.C.Jain, Chief Engineer (Electrical).
2. Shri F.C.Solanki, Deputy Engineer.

Initiating the discussion, Member (Power), NCA informed that during the 41<sup>st</sup> Power Sub Committee meeting held in August, 2007 GETCO representative had suggested providing RTU on rental basis to monitor SSP

generation/transmission till regular data transmission system is provided by NCA. He added that proposal submitted by GETCO for providing 1 no. RTU at RBPH as an interim arrangement for data transmission to SLDC and WRLDC on rental basis has been accepted in principle. He mentioned that before taking up the implementation of the proposal, it is essential that a time bound action plan and modalities for implementation of the scheme be decided by all concerned organizations. He added that the scope of work and activities of NCA/SSNNL and GETCO has to be planned in line with the Chief Engineer (SLDC), GETCO letter No.SLDC/SSNNL-RTU/1636 dated 24<sup>th</sup> September, 2007 (Annex). Additional Chief Engineer (LD), GETCO mentioned that after the visit of NCA & GETCO representatives to Kevadia on 05/03/2008, it is noticed that operating range of BHEL Transducers presently available with NCA is  $\pm 10$  mA whereas the requirement for GETCO RTU is 4 to 20 mA, also input of transducer is 5 Amp whereas CT is 1 Amp. Therefore these transducers are required to be replaced. Therefore, the exact details/numbers of transducers to be replaced and modified could be worked out and informed to GETCO. Member (Power), NCA mentioned that testing of all the 30 nos. of BHEL transducers at RBPH was carried out by GETCO in 2006 when it was revealed that 5 nos. of transducers (for unit-wise MW output) are faulty. Executive Engineer (SLDC) informed that as placing of order for new transducers by GETCO may take some time but digital parameters of SSP could be transmitted by means of relay panel in a short time. Addl. CE, SLDC mentioned that the exact details regarding specification/quantity of cables from feeder panels to RTU/Relay panel/Transducers Panel and for inter-panel to PLCC panels may be worked out and informed to GETCO. Chief Engineer (Electrical), SSNNL agreed to extend all possible assistance in providing the cables already available and its installation for this scheme.

After deliberations, following decisions were taken :

- NCA in coordination with SSNNL has to work out the exact requirement for transducers (to be replaced/modified). There are 22

nos. new transducers of current input and 2 nos. for voltage input is required to be procured by GETCO for NCA.

- The requirement of new transducers are as under :  
22 nos. for MW/MVAR for lines, ICT and Generator.  
2 nos. for bus voltage.
- NCA would work out the exact requirement of cables in coordination with GETCO/SSNNL and SSNNL would arrange for providing/installation of cables required for providing field inputs and inter panel cabling.
- GETCO would prepare detailed cable schedule and supervise & test and make through all control/data cable so as to provide PLCC communication between RBPH & Asoj/Gotri & WRLDC and requisite level setting on PLCC channel.
- The parameters regarding RBPH unit-wise generation and injection from CHPH (ICTs) would be uploaded on GETCO website to be initially updated on 10 minutes interval and gradually reduced to permissible limits.
- NCA would release payment within 2 weeks to GETCO in line with the proposal submitted by GETCO vide letter No.SLDC/SSNNL-RTU/1636 dated 24<sup>th</sup>/25<sup>th</sup> September, 2007 and subsequent correspondence on the matter.
- The implementation of the scheme would be completed within a period of 6 weeks.
- SSP data would not be tapped or extended to other source/CCS of RBPH.