Agenda Note for the 3rd Meeting of Standing Committee on Power System Planning in North Eastern Region

1.0 Confirmation of the minutes of meeting of the Standing Committee on Power System Planning in North Eastern Region held on 25th June, 2008.

1.1 The minutes of the previous Standing Committee Meeting (SCM) were issued vide CEA letter No.81/4/2003-SP&PA/706-716 dated 23rd July, 2008. No comments have been received on the minutes from any constituents.

1.2 The minutes of the previous SCM may be confirmed.

2.0 Review of Progress on Earlier Agreed Transmission Schemes

POWERGRID may furnish the status of implementation of earlier agreed schemes under construction / approved.

3.0 Interim arrangement for termination of Silchar-Hailakandi (Assam) 132 kV D/C line.

3.1 Silchar-Hailakandi 132 kV D/C line was agreed as a part of evacuation system from Pallatana gas based power project (GBPP) and Bongaigaon TPS for delivery of share of Assam from these projects. The line is being implemented by POWERGRID and Hailakandi 132 kV sub-station is to be established by Assam / AEGCL.

3.2 POWERGRID vide their letter no. C/ENG/SEF/NE/PLG dated 11-11-2010 has indicated that 132 kV substation at Hailakandi by AEGCL may not be ready for the termination of the above line. Silchar-Hailakandi 132 kV D/C line is required for delivery of power from 1st unit of Pallatana expected to be commissioned by March, 2012. Therefore, as an interim arrangement, POWERGRID have proposed loop in and loop out of Panchgram-Dullavchera 132 kV S/C line, which is passing near Hailakandi, so as to form Silchar-Panchgram 132 kV line and Silchar-Dullavchera 132 kV line. The arrangement would be restored to original after the commissioning of Hailakandi 132 kV Sub-station by AEGCL.

Members may agree.

4.0 Proposal of Mizoram for construction of 6 km, 400 kV D/C line (charged at 132 kV) from Melriat (POWERGRID) to Sihhmui (Mizoram) instead 132 kV D/C line from Melriat (POWERGRID) to Melriat (Mizoram).

4.1 The construction of Silchar-Melriat 400 kV D/C line (initially operated at 132 kV) along with Melriat (PG) 2x50 MVA 132/33 kV S/S (up gradable to 400 kV) to be implemented by POWERGRID, was agreed as a part of transmission system associated with Pallatana GBPP and for delivery of share of Mizoram from the project. Melriat (PG)-Melriat (Mizoram) 132 kV D/C was also agreed to be constructed by POWERGRID.

4.2 Mizoram Government vide letter no. T-34014/01/10-EC(P)/P/21 dated 08.07.2011, has proposed construction of Melriat (PG)-Sihhmui (Mizoram) 400 kV D/C line (charged at 132 kV) instead of Melriat (PG)-Melriat (Mizoram) 132 kV D/C line due to non-availability of space at Melriat (Mizoram).

4.3 The proposal of Mizoram Government to construct another 400 kV S/S at Sihhmui at a distance of about 6 km from Melriat (PG) along with Melriat (PG)-Sihhmui 400 kV D/C line (charged at 132 kV) is not techno-economically desirable considering that the present total load demand of the Mizoram state is of the order of 75 MW.

4.4 In view of space constraint at Melriat (Mizoram) for termination of Melriat (PG)-Melriat (Mizoram) 132 kV D/C line, POWERGRID was advised to construct Melriat (PG)-Sihhmui (Mizoram) 132 kV D/C line for delivery of share of Mizoram from Pallatana GBPP. POWERGRID should take up the construction of this line matching with the commissioning of Sihhmui sub-station. Mizoram Government is advised to expedite the construction of Sihhmui sub-station.

Members may agree.

5.0 Transmission system for Tuirial HEP (60MW) in Mizoram.

5.1 Following transmission system was agreed by CEA for evacuation of power from the Tuirial HEP (60 MW) in Mizoram.

a) Tuirial HEP-Aizawl (Mizoram) 132 kV S/C
b) LILO of Jiribam-Aizawal 132 kV S/C line at Tuirial HEP

5.2 NEEPCO in their letter No. NEEPCO/ND/F-41/2011-12/1194 dated 27/09/2011 addressed to ED (Corporate Planning), POWERGRID has informed that the Government of Mizoram has agreed to buy entire ex-bus power from the project. In response to above, POWERGRID vide their letter C/ENG/NE/00/SEF/PLG dated 18th Oct., 2011 informed that this project is no longer an inter-state project; its associated transmission system would not be implemented by them.

5.3 Subsequently, NEEPCO in their letter No ED(CP)/T&T/Tuirial/Trs/2011-12/215 dated 1/11/2011 has mentioned that though the Govt. of Mizoram has agreed to buy entire power from the project, this being an inter state project, its allocation would be decided by Ministry of Power. NEEPCO also requested for implementation of LILO of Jiribam-Aizawal 132 kV S/C line at Tuirial HEP by POWERGRID.

5.4 The transmission system for the project was planned in 1997 and also the hill on which Aizawl (Mizoram) / Zuangtui sub-station is located has experienced massive land slides in the past, The land slides have created deep and long cracks in layout of sub-station and alignment of sub-station equipments and transformers has become distorted. Therefore, the transmission system associated with the Tuirial HEP needs revision. In order to deliver power to Mizoram and other regional constituents, following transmission system for evacuation of power from the project is proposed:

a) Tuirial HEP–Kolasib 132 kV S/C line (to be implemented by P&E Deptt., Govt. of Mizoram)
b) LILO of Jiribam-Aizawal 132 kV S/C line at Tuirial HEP (to be implemented by POWERGRID)

5.5 Members may agree.

6.0 Construction of 2x50 MVA 132/33 kV Sub-station at Sakawrtuichhun / Melriat (PG) in Mizoram.

6.1 Construction of 2x50 MVA 132/33 kV sub-station (up gradable to 400 kV) at Melriat to be implemented by POWERGRID was agreed as a part of evacuation system from Pallatana GBPP for delivery of share of Mizoram.

6.2 Chief Engineer in Charge, Power & Electricity (P&E) Department, Mizoram Aizawl vide letter no. T-34014/10-EC(P)/P/28 dated 28th Sep., 2011 addressed to Executive Director, POWERGRID has informed that they cannot absorb / wheel 100 MVA power at 33 kV from Melriat (PG) sub-station. He also mentioned that the sub-transmission and distribution is the responsibility of (P&E) Department, Govt. of Mizoram and has requested for deletion of 2x50 MVA transformation capacity at Melriat (PG).

6.3 In view of above, 2x50 MVA 132/33 kV transformation capacity at Melriat (PG) may be deleted.

6.4 Members may agree.

7.0 interim arrangement for delivery of share to Mizoram.

7.1 POWERGRID in their letter no. C/ENG/NE/00/SEF/PLG dated 19-08-2011 has indicated that the Sihhmui (Mizoram) 132 kV Sub-station proposed by Mizoram Government may not be ready for drawl of share over Melriat-Sihhmui 132 kV D/C line. Therefore, POWERGRID has proposed construction of LILO of Aizawl (PG)-Zemabawk (Mizoram) 132 kV line at Melriat (PG) for delivery of share of Mizoram.

7.2 Two no. 132 kV bays released because of deletion of transformation capacity at Melriat (PG) should be utilized for the above proposed LILO work.

7.3 Members may agree.

8.0 Open Access meeting on Connectivity and Long Term Open Access (LTOA) applications in North Eastern Region.

The Open Access meeting would be held after the Standing Committee meeting. The agenda received from POWERGRID regarding Connectivity and Long Term Open Access (LTOA) applications in North Easter Region is enclosed at Appendix-1.

Appendix-I

Connectivity and Long Term Access of ISTS in Kameng Basin of Arunachal Pradesh, North Eastern Region

1.0 Background

The LTA/LTOA/Connectivity of the generation projects in NER was discussed with IPP developers in NER in a meeting held At POWERGRID office, Gurgaon on 01-07-2011. Looking into the progress of some of the projects in Kameng Basin such as KSK Dibbin, Patel Hydro (2 out of 4 projects), Adishankar Khuitam and SEW Nafra, it was decided that the transmission system for these generation projects would be taken up in the next standing committee meeting of North Eastern Region for approval of the constituents.

The details of the above generation projects is given below :

Sl. No	LTA Applicant / Project	Basin	Installed Capacity(MW)	LTA/Connec-tivity (MW)	Time Frame	Applied for
1.	KSK Dibbin Hydro Power Pvt Ltd	Kameng	2x60=120	120	Feb'15	Connectivity & LTA
2.	Patel Hydro Pvt Ltd	Kameng	Gongri : 3x48=144 Saskang Rong :2x22.5=45	165/189	Gongri-Sep'15 Saskang - Oct'15	Connectivity & LTA
3.	Adishankar Khuitam Power Pvt. Ltd.	Kameng	3x22 = 66	66	Sep-2015	Connectivity
4.	SEW Nafra Power Corporation Ltd	Kameng	2x60 = 120	80	Oct., 2014	Connectivity & LTA
		Total	**495 MW**	**431/455MW**		

2.0 Proposed Connectivity & LTA of above generation projects

In view of the provisions in CERC regulation 2009 and considering the location & unit sizes of generation projects etc, following connectivity and long term access (LTA) of the generation projects is proposed based on technical examination as per CEA (Technical Standards for connectivity to the Grid) regulations, 2007:

2.1 KSK Dibbin Hydro Power Pvt Ltd

2.1.1 Project Details

1	Project Capacity	2x60MW=120MW
2	Unit wise Commissioning schedule	U-1 Feb'15, U-2 Mar'15
3	Location	Dibbin Village, West Kameng distt
4	Connectivity applied for/from	120MW/Feb'15
5	LTA applied for/from	120MW/Feb'15
6	Step up voltage of Generating station (kV)	220kV

2.1.2 Status of generation project :

1	Land	Required	162 Ha (Forest – 37.1 Ha) (Pvt – 124.9 Ha)
		Acquired	Section-6 notified in Aug-10. Land acquisition by Feb'12
2	Environmental Clearance		Likely date of EC- Feb'12 (After obtaining FC Stage 1)
3	Forest Clearance		Proposal submitted to State. (Likely date of FC - Feb'12)

4	Fuel Arrangement	Not Applicable
5	Water linkage	NOC obtained from State Govt.
6	EPC Contract	Civil package for main Plant- Mar'12 E&M package for T&G – Mar'12
7	Financial Closure	End of Mar'12

2.1.3 Transmission System for Connectivity

M/s KSK Dibbin has proposed to set up 2x60MW generation project. Applicant has informed step up voltage as 220kV.

In view of the above as well as the proximity of the generation project, following connectivity of M/s KSK Dibbin is proposed:

- KSK Dibbin – Dinchang PP 220kV D/c line along with associated line bays

Above transmission connectivity would be under the scope of M/s KSK Dibbin**.** For smooth operation of generation projects, it was requested to provide bus reactor (31.5/20 MVAR subject to feasibility of transportation) at the switchyard.

The Dinchang PP would be developed as a part of the common transmission system considering the other projects in Kameng basin. The details of the same and the transmission scheme proposed in view of the application of the developer seeking Long term Access (LTA) to Inter State Transmission System is described at para 3.0.

2.2 Patel Hydro Pvt Ltd

2.2.1 Project Details

1	Project Capacity	2X72+2X22.5MW+2x19+2x23=273 MW
2	Unit wise Commissioning schedule	Gongri HEP(2X72MW) : U-1 Sep'15, U-2 Oct'15 Saskang Rong HEP (2X22.5) : U-1 Oct'15,U-2 Nov'15 Meyong HEP : Sep'17 onwards Diggin HEP : Oct'17 onwards
3	Location	-
4	Connectivity applied for/from	189MW/Sep'15
5	LTA applied for/from	165MW/Sep'15
6	Step up voltage of Generating station (kV)	220kV (2x72MW) & 132kV (2x22.5MW)

2.2.2 Status of generation project :

			Gongri (144 MW)	**Saskang Rong (45 MW)**
1	Land	Required	48.818 Ha (Govt - 35.295 Ha) (Pvt - 13.523 Ha)	26.773 Ha
		Acquired	Land acquired and handed over by State	Final Possession obtained by Apr'12.
2	Environmental Clearance		Obtained for 90MW, to be revised for 144MW	TOR approved, EIA / EMP report under preparation. EC Expected by Apr'12

3	Forest Clearance	Forest Clearance expected by Jan'12	Forest Clearance expected by Apr'12
4	Fuel Arrangement	Not Applicable	Not Applicable
5	Water linkage	NOC obtained from State Govt.	NOC obtained from State Govt.
6	EPC Contract	Jan'12 for main plant Turbine/Generator	Feb'12 for main plant & Turbine/Generator
7	Financial Closure	Feb'12	Feb'12

2.2.3 Transmission System for Connectivity

The total capacity of the generation projects at Gongri and Saskang Rong is 189MW. It is proposed that the both projects would be pooled together and brought to a common pooling station at Dinchang PP through 220kV D/c line. Accordingly, following transmission system for connectivity of the project is proposed:

- Saskang Rong – Gongri 132kV D/c line along with associated line bays
- Gongri – Dinchang PP 220kV D/c line along with associated line bays

Above transmission connectivity would be under the scope of M/s Patel Hydro**.** For smooth operation of generation projects, it was requested to provide bus reactor (31.5/20 MVAR subject to feasibility of transportation) at 220 kV Gongri switchyard.

The Dinchang PP would be developed as a part of the common transmission system considering the other projects in Kameng basin. The details of the same and the transmission scheme proposed in view of the application of the developer seeking Long term Access (LTA) to Inter State Transmission System is described at para 3.0.

2.3 Adishankar Khuitam Power Pvt. Ltd.

2.3.1 Project Details

1	Project Capacity	3x22MW=66MW
2	Unit wise Commissioning schedule	U-1 Sep'15, U-2 Oct'15, U-3 Nov'15
3	Location	Selari village, Bomdila town, West Kameng distt
4	Connectivity applied for/from	66MW/Sep'15
5	Step up voltage of Generating station (kV)	132kV

2.3.2 Status of generation project :

1	Land	Required	46.77 Ha Private Land (35.5 ha)
		Acquired	35.57 Ha obtained. (Under Possession on Nov'11) Applied to State Govt for balance Land. Award of land under Section-11 has been obtained on July 05, 2011
2	Environmental Clearance		Environment clearance for Khuitam HEP obtained on January 28, 2011
3	Forest Clearance		Forest clearance is likely to be obtained by Jan'12
4	Fuel Arrangement		Not Applicable

5	Water linkage	NOC obtained from State Govt.
6	EPC Contract	Mar'12
7	Financial Closure	Mar'12

2.3.3 Transmission System for Connectivity

M/s Adishankar Khuitam has proposed to set up 3x22MW generation project. Applicant has informed step up voltage as 132kV. However, to pool power in the 400/220kV Dinchang PP, proposed to be developed as a common pooling station for the generation projects in Kameng basin and also to accommodate future expansion in the generation project, it is proposed to step up the generation voltage at 220 kV level or install suitable 220/132kV ICT at the generation switchyard so that the power could be pooled at Dinchang pooling substation through 220kV D/c line. Accordingly, following connectivity of M/s Adishankar Khuitam is proposed:

- Khuitam – Dinchang PP 220kV D/c line

Above transmission connectivity would be under the scope of the generation developer**.** For smooth operation of generation projects, it is recommended to provide bus reactor (31.5/20 MVAR subject to feasibility of transportation) at the generation switchyard.

The Dinchang PP would be developed as a part of the common transmission system considering the other projects in Kameng basin. The details of the same is described at para 3.0.

It is requested that M/s Adishankar Khuitam may apply for Long-term Access as per CERC Regulations, 2009 so it can become part of common transmission scheme shared by other IPPs of Kameng basin for delivery of power from the generation project to the beneficiaries.

2.4 SEW Nafra Power Corporation Ltd

2.4.1 Project Details

1	Project Capacity	2X60=120 MW
2	Unit wise Commissioning schedule	U-1 Oct'14, U-2 Jan'15
3	Location	Nafra Village, West Kameng distt
4	Connectivity applied for/from	132MW/Oct'14
5	LTA applied for/from	80MW/Jun'15
6	Step up voltage of Generating station (kV)	220kV

2.4.2 Status of generation project :

1	Land	Required	78.45Ha (Govt- 33.94Ha, private- 44.51Ha)
		Acquired	Obtained on Nov'11

2	Environmental Clearance	Accorded for initial proposal of 96MW. Revised proposal for 120MW is being expected by Dec'11/
3	Forest Clearance	Stage - I FC obtained. Stage II expected by Dec'11.
4	Fuel Arrangement	Not Applicable
5	Water linkage	NOC obtained from State Govt.
6	EPC Contract	Nov'11 for main plant & Turbine/Generator
7	Financial Closure	Aug'11

2.4.3 Transmission System for Connectivity

M/s SEW Nafra has proposed to set up 2x60MW generation project. Applicant has informed the step up voltage as 220kV. In view of the above as well as the proximity of the generation project, following connectivity of M/s SEW Nafra is proposed:

- Nafra – Dinchang PP 220kV D/c line

Above transmission connectivity would be under the scope of M/s SEW Nafra**.** For smooth operation of generation projects, it was requested to provide bus reactor (31.5/20 MVAR subject to feasibility of transportation) at the switchyard.

The Dinchang PP would be developed as a part of the common transmission system considering the other projects in Kameng basin. The details of the same and the transmission scheme proposed in view of the application of the developer seeking Long term Access (LTA) to Inter State Transmission System is described at para 3.0.

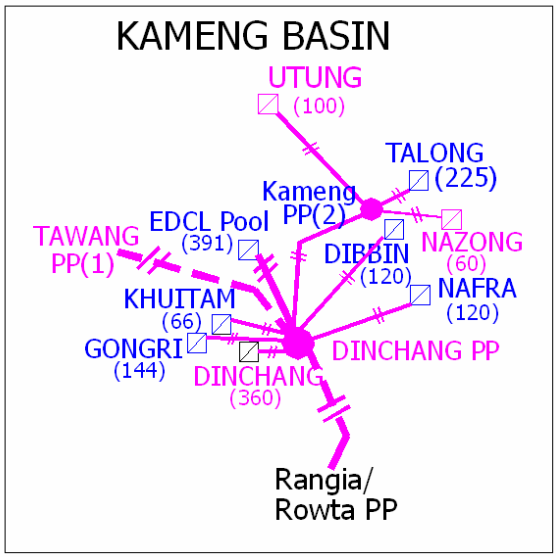
3.0 Common Transmission System for LTA [For KSK Dibbin, M/s Patel Hydro, M/s SEW Nafra & M/s Adishankar Khuitam (subject to application for LTA)]

The proposed transmission system envisages establishment of pooling station at Dinchang for pooling of power from generation projects in Kameng basin. Another pooling station would be developed at Rowta/Rangia by looping in and looping out of Balipara – Bongaigaon 400kV D/c line (quad, under construction with Kameng HEP project) for dispersal of power to the load centres / beneficiaries. Power pooled at Dinchang PP would be brought to Rowta/Rangia PP through high capacity 400kV line. In addition, strengthening of transmission system in NER has also been planned through Silchar – Misa 400kV D/c line with quad conductor. This would provide a strong interconnection between the upper and lower part of the regional grid and would result in formation of a high capacity 400kV ring in NER viz. Silchar – Misa – Balipara – Bongaigaon – Azara – Byrnihat – Misa. This ring would facilitate pooling of power from different generation projects as well as dispersal of power to various parts of the regional grid. The details of the transmission system is given below :.

- Establishment of 7x105 MVA, 400/220kV Dinchang pooling station (Kameng PP-1) for pooling of power from generation projects in Kameng basin
- Establishment of 400kV pooling station at Rowta / Rangia in Upper Assam for pooling and dispersal of power from generation projects in Kameng
- Dinchang – Rangia/Rowta PP 400kV D/c line with high capacity conductor

- LILO of Balipara – Bongaigaon 400kV D/c line (quad) at Rangia/Rowta PP
- Silchar - Misa 400kV D/c (quad conductor)

A map showing the proposed transmission system is placed as below



4.0 For all the generation projects who have applied for Connectivity under CERC regulation, 2009, in addition to other applicable provisions in CERC regulations 2009 on Grant of connectivity, Long Term Access and Medium-term Open Access in inter-state transmission and related matters, following are to be noted:

a) The grant of connectivity shall not entitle above applicants to interchange any power with the grid unless they obtains long-term access, medium term open access or short term open access. However, the above IPP shall be allowed to undertake interchange of power including drawl of power for commissioning activities and injection of infirm power in to the grid during full load testing before being put into commercial operation, even before availing any type of open access, after obtaining permission of the concerned regional load dispatch centre, which shall keep grid security in view while granting such permission.

b) Above applicants are required to inform/confirm following to facilitate connectivity:

i) Likely date of synchronization, likely quantum and period of injection of infirm power before being put into commercial operation to the SLDC and RLDC concerned at least one month in advance.

ii) In case the dedicated transmission system upto point of connection is to be undertaken by Inter-State Transmission Licensee, the applicants need to sign transmission agreement within one month of grant of connectivity, furnish requisite Bank Guarantee and fulfill other terms & conditions as stipulated in the CERC Regulations/Detailed Procedure, 2009 in this regard.

The scope or works at generation switchyard like terminal bays, bus/line reactors, associated bays etc. shall be under the scope of respective generation developer.

iii) The applicants shall abide by all provisions of the Electricity Act, 2003, CERC (Grant of Connectivity, Long-term Access and Medium-term Open Access in inter-State transmission and related matters) Regulations, 2009, CEA (Technical Standards for connectivity to the Grid) and Indian Electricity Grid Code as amended from time to time.

iv) All the applicants shall have to apply for "Connection Offer" to CTU at least more than 2 years prior to physical interconnection as well as have to sign "Connection Agreement" with CTU prior to physical interconnection as per CERC Regulations, 2009.

c) Transmission system strengthening to facilitate power transfer on long-term basis shall be identified once above applicants apply for Long-term Access as per CERC Regulations, 2009.

5.0 For the grant of LTA, following are to be noted:

i) LTA shall be effected subject to that applicant shall have to firm up PPA at least for 50% of LTA quantum 3 years prior to the intended date of availing LTA as per CERC regulations, 2009 and intimate to POWERGRID.

ii) The date of commencement of LTA shall be applicable from at least 3 years and 9 months (9 months time required for project preparation and investment approval) from firming up beneficiaries and signing of BPTA with them.

iii) For the balance capacity (not exceeding 50% of LTA sought for) for which exact source of supply or destination could not be firmed up on long-term basis, the augmentation/system strengthening further from the target region shall be taken up only after identification of exact source/destination. Tr. licensee shall be allowed up to 3 years time for such augmentation/system strengthening from the target region to the exact source/destination. During such period applicants shall be liable to pay the transmission charges up to the target region.

iv) Applicant/beneficiaries shall share the transmission charges of the above proposed strengthening schemes.

v) Payment of such transmission charges for the balance capacity for which exact source on long term basis is not known, shall not entitle the applicant any right over the transmission system up to the target region and CTU may release this balance transmission capacity up to target region for short-term open access or the medium term open access till the applicant firms up source/destination on long-term basis and its operationalisation.

vi) The applicant shall enter into Long Term Access Agreement (LTTA) with POWERGRID within 30 days. In case transmission system of Inter state transmission licensee other than CTU is used, an agreement shall be signed between the applicant and such inter-State transmission licensee, in line with the provisions of the CERC regulations 2009.

vii) Implementation of system augmentation/strengthening required to effect LTA, shall be taken up only after fulfillment of conditions under para (ii) above as well as signing of BPTA & submission of required BG by applicant as per provision of CERC regulations 2009.

viii) The nodal agency may change system strengthening requirements identified for a particular applicant project on the basis of any subsequent study carried out on its own motion or on another application for LTA, with the purpose of optimum utilization of the transmission system or to conserve limited right-of-way, and in such event, the changes carried out by the nodal agency shall be intimated to the applicant, or any other person associated with the LTA. Provided that the optimized system shall not work to the disadvantage of the applicant.

ix) The applicant shall abide by all provisions of the Electricity Act, 2003, CERC(Grant of Connectivity, Long-term Access and Medium-term Open Access in inter-State transmission and related matters) Regulations, 2009, CEA (Technical Standards for connectivity to the Grid) and Indian Electricity Grid Code as amended from time to time.

6.0 Way Forward

- The generation projects after making significant progress towards various milestones for development of power projects like acquisition of land, Forest / Environment Closure, Financial Closure, Award of EPC Contract, Release of Advance etc. would need to sign the BPTA and submit the Bank Guarantee for construction of transmission system. The zero date of transmission system implementation would start after fulfillment of above milestones.

- It would take at least about 4 years (AC system) for implementation of the CTU transmission system planned for the evacuation of generation projects to be implemented. Keeping in view of the above time-line, the generation projects should intimate POWERGRID regarding the above milestones, so that the transmission system may be taken up matching with the commissioning schedule of the generation project.

- For smooth operation of generation projects, the developers were requested to provide bus reactor(s) at the switchyard.

Annexure-1

STATUS OF THE GENERATION PROJECT

Applicant Name / Gen. Capacity: KSK Dibbin Hydro Power Private Limited / 2x60 MW (120 MW)

Sl. No.	Item	Status / Information
1	**Generation Location**	
	Location of power project (name of village / town, district / State)	Dibbin H. E. Project, Dibbin Village, West Kameng District, Arunachal Pradesh
	Detail vicinity map of the project site on topo sheets to gather relative locations of other generation projects in the vicinity	Enclosed at **Annex - 3**
	Latitude & Longitude of the project site	Dam - 27° 26' 49" N & 92° 30' 58" E PH (Unit 1) - 27° 24' 41.658" N & 92° 31' 09.155" E PH (Unit 2) - 27° 24' 41.903" N & 92° 31' 09.610" E
2	**Land**	
	Total land required for the project	162 Ha
	Type of land proposed (Govt or private)	Private (124.908 Ha) & Forest Land (37.088 Ha)
	Area of land already acquired & possessed (i) Govt (ii) Private	 (i) Forest Land – 37.088 Ha (To be acquired) (ii) Private Land – 124.908 Ha (To be acquired)
	Status of land to be acquired like date of notification for and acquisition	**Private Land** Preliminary Notification under Section 4(I) – 31/08/2009 Final Notification under Section 6(1) – 26/08/2010 Award passed by DC, West Kameng District, Bomdila on 18/05/2011 for an amount of Rs. 24,20,28,544/- towards payment of compensation to the land owners. Land Acquisition by July' 2011.
	Status of possession of land	
3	**Fuel**	
	Type of fuel (Gas / domestic coal / imported coal / Hydro)	Hydro
	Status of fuel tie-up for the total quantity of fuel required to generate full power at normative availability. Indicate status of mine allocation or fuel linkage	Not Applicable
4	**Water**	
	Status of in-principle approval from concerned State Irrigation Department Date of application, likely date by which it shall be available	No Objection Certificate from irrigation angle for conducting survey and investigation of the proposed project obtained from Govt. of Arunachal Pradesh. Water Availibility Certificate for implementation of the project requested for from the Water Resources Department of the Govt. of Arunachal Pradesh during May' 2010.
5	**Water Supply arrangement / Pipeline connection**	
6	**Environment Clearance**	

	Status of in-principle approval from concerned administrative authority responsible for according final approval in the Central / State govt. as the case may be. Date of application, likely date by which it shall be available	Public Hearing held successfully on 30/07/2010. Project was considered for Environment Clearance by EAC of MoEF in its meeting dated 26/02/2011. Comments of EAC, raised during the meeting, were addressed. The Project was re-considered for Environment Clearance by EAC of MoEF in its meeting dated 26/03/2011, wherein the Committee recommended Environment Clearance for the Project (MoM of EAC uploaded in the Ministry's web site on 4/5/2011). Likely date of EC by MoEF – September' 2011 (After obtaining Stage 1 Forest Clearance).
7	**Forest Clearance**	
	Status of in-principle approval from concerned administrative authority responsible for according final approval in the Central / State govt. as the case may be. Date of application, likely date by which it shall be available	The proposal for Diversion of Forest Land (76 Ha) for the Project seeking approval under Section 2 of the Forest Act was submitted to the Forest Deptt., Govt. of Arunachal Pradesh during **July' 2009**. Revised application (Part-I of Form-"A") for diversion of forest land submitted to Nodal officer, Govt. of Arunachal Pradesh on 08/03/2011. Chief Conservator of Forests (Cons)-cum-Nodal Officer (FC) forwarded the proposal to DFO, Bomdila on 16/03/2011 for completion of Part-II of Form-"A". DFO conducted a joint inspection of the project. As per the joint inspection report , against a total area of 162.00 ha, 37.088 ha is forest land. Presently, the proposal is under process at DFO Office, Bomdila. Likely date of Forest Clearance – August' 2011.
8	**EPC Contract Status**	
	Date / Likely date of placement of contract for main plant	Civil Package I&II – July' 2011
	Date / Likely date of placement of contract for Boiler	-
	Date / Likely date of placement of contract for Turbine / Generator	E&M Package – November' 2011
9	**Status of PPA with beneficiaries including case-1 bids if applied for**	Under process
10	**Proposed Date of Financial Closure**	End-July' 2011
11	**Expected commissioning schedule (unit wise)**	**Unit-1 (60 MW) – February' 2015** **Unit-2 (60 MW) – March' 2015**

Annexure-2

STATUS OF THE GENERATION PROJECT

Applicant Name/ Gen. Capacity : **Patel Hydro Power Pvt. Ltd./ 273 MW**

Sr No	Item	Status / Information			
		GONGRI HEP (144 MW)	**SASKANG RONG HEP (45 MW)**	**MEYONG HEP (38 MW)**	**DIGGIN HEP (46 MW)**
1	**Generation location**				
	Location of power project (name of village/town, district/State)	Power House site is near Rahung village under Dirang Circle, West Kameng Dist., Arunachal Pradesh	Power House site is located near the upstream of Rama Camp, Dirang Circle, West Kameng district, Arunachal Pradesh.	Power House site is near confluence of Sangti river with Gongri river, Dirang Circle, West Kameng district, Arunachal Pradesh.	Power House site is near immediate upstream of Gongri reservoir near Dirang Village, Dirand Circle, West Kameng district, Arunachal Pradesh.
	Detail vicinity map of the project site on topo sheets to gather relative locations of other generation projects in the vicinity	A drawing showing the relative locations of the projects on Gongri Basin is enclosed			
	Latitude & Longitude of the project site	27^0 19' 09" (N), 92^0 23' 22" (E)	27^0 23' 28" (N), 92^0 10' 47" (E)	27^0 21' 30" (N), 92^0 16' 15" (E)	27^0 20' 26.5" (N), 92^0 18' 40.3" (E)
2	**Land**				
	Total Land required for the project	48.818 ha (already acquired)	26.773 Ha	19.84 Ha (Tentative)	21.5 Ha (Tentative)
	Type of Land proposed (Govt or private)	Govt & Private	Govt & Private	Yet to be assessed in detail.	Yet to be assessed in detail.
	Area of land already acquired & possesed				
	(i) Govt	35.295 ha	To be assessed	To be assessed	To be assessed
	(ii) Private	13.523 ha	To be assessed	To be assessed	To be assessed
	Status of land to be acquired like date of notification for and acquisition	Land already acquired and handed over by district administration on 13-08-2009.	Application for acquisition submitted to DC, West Kameng district on 05-09-2008. NOC from land owners/ village head expected in 10/15 days,		

			after which survey by the DC office will be taken up. Preliminary Notification by DC is expected within July,2011.		
	Status of possession of land	**Acquired & in possession**	**Under process**	**Yet to be assessed in detail.**	**Yet to be assessed in detail.**
3	**Fuel**				
	Type of Fuel (Gas/domestic coal/imported coal/Hydro)	Hydro	Hydro	Hydro	Hydro
	Status of fuel tie-up for the total quantity of fuel required to generate full power at normative availability. Indicate status of mine allocation or fuel linkage	Not Applicable	Not Applicable	Not Applicable	Not Applicable
4	**Water**				
	Status of in-principle approval from concerned State irrigation department	NOC from state Water Resources deptt obtained.	NOC from state Water Resources deptt obtained.	NOC from state Water Resources deptt obtained.	NOC from state Water Resources deptt obtained.
	Date of application, likely date by which it shall be available	Already available	Already available	Already available	Already available
5	**Water Supply arrangement /Pipeline connection**	Not Applicable	Not Applicable	Not Applicable	Not Applicable
6	**Environment Clearance**				
	Status of in-principle approval from concerned administrative authority responsible for according final approval in the central/State govt as the case may be. Date of application, likely date by which it shall be available.	Environment Clearance already accorded by MOEF, GOI vide letter dated 12-02-2010. However, MOEF being appraised shortly for enhancement in IC from 90 MW to 144 MW.	MOEF approved TOR, cleared preconstruction activities & preperation of EIA report as per approved TOR vide letter No: J12011/9/2008-IA-I dated 27-05-08. Collection of base line data already completed and the EIA/EMP reports are under preparation.	Process not initiated yet.	Process not initiated yet.
7	**Forest Clearance:**				

	Status of in-principle approval from concerned administrative authority responsible for according final approval in the central/State govt as the case may be. Date of application, likely date by which it shall be available.	NOC already obtained from state Forest deptt for carrying out survey & investigation. Application for diversion proposal already submitted to the Nodal Officer, Forest deptt., Itanagar on 17-11-10. The application has been processed after site verification by the concerned DFO, Bomdila and forwarded the application to the Forest Circle office (CCF), Banderdewa on 14-06-2011. Field visit by the CCF is expected in next two/ three days.	NOC already obtained from state Forest deptt for carrying out survey & investigation. Application for diversion proposal is being submitted within June'2011.	NOC already obtained from state Forest deptt on 15.03.2011 for carrying out survey & investigation. Application for diversion will be submitted after the project features and land requirement is finalized.	NOC already obtained from state Forest deptt on 15.03.2011for carrying out survey & investigation. Application for diversion will be submitted after the project features and land requirement is finalized.
8	**EPC Contract Status**				
	Date/ Likely date of placement of contract for main plant	During the FY 2011-12	During the FY 2011-12		
	Date/Likely date of placement of contract for Boiler	Not Applicable	Not Applicable	Not Applicable	Not Applicable
	Date/Likely date of placement of contract for Turbine/Generator	During the FY 2011-12	During the FY 2011-12		
9	**Status of PPA with beneficiaries including case-1 bids if applied for**	**Discussions are in progress with various organisations. To be finalised by August 2011.**	**Discussions are in progress with various organisations. To be finalised by August 2011.**	**Not initiated yet**	**Not initiated yet**
10	**Proposed Date of financial closure**	**31.10.2011**	**26.10.2011**		
11	**Expected commissioning schedule (unit wise)**	**Unit-1 (72 MW)- Sep-2015**	**Unit-1 (22.5 MW)- Oct-2015**		
		Unit-2 (72 MW)- Oct-2015	**Unit-2 (22.5 MW)- Nov-2015**		

Annexure-3

STATUS OF THE GENERATION PROJECT

Applicant Name/ Gen.Capacity: M/s Adishankar Khuitam Power Pvt. Ltd.

Sl. No.	Item	Status/Information
1	**Generation location**	
	Location of power project (name of village/town, district/State	Selari Village/Bomdilla/West Kameng, Arunachal Pradesh
	Detail vicinity map of the project site on toposheets to gather relative locations of other generation projects in the vicinity	Location Map enclosed with Annexure-II, Dated June 22, 2011
	Latitude & Longitude of the project site	Location of **Barrage site**- Latitude-27 °19'13.5" N Longitude-92 °23'54.9" E Location of **Power House** Latitude-27 °19'35.8" N Longitude-92 °25'49.2" E
2	**Land**	
	Total Land required for the project	46.77 Ha.
	Type of Land proposed (Govt or private)	Private & Forest Land
	Area of land already acquired	Private Land (35.5 ha)
	Status of land to be acquired	Award of land under Section-11 has been obtained on July 05, 2011
3	**Fuel**	
	Type of Fuel (Gas/domestic coal/imported coal/Hydro)	Hydro
	Status of fuel tie-up for the fuel required to generate full power at normative availability. Indicate status of mine allocation or fuel linkage	NA
4	**Water**	
	Status of in-principle approval from concerned state irrigation department Date of application, likely date by which it shall be available	NOC from WRO
5	**Water Supply arrangements/Pipeline connection**	NA
6	**Environmental Clearance**	
	Status of in-principle approval from concerned administrative authority responsible for according final approval in the central/State govt. as the case may be. Date of application, likely date by which it shall be available	Environment clearance for Khuitam HEP obtained on January 28, 2011
7	**Forest clearance**	
	Status of in-principle approval from concerned administrative authority responsible for according final approval in the central/State govt. as the case may be. Date of application, likely date by which it shall be available.	Proposal of diversion (25.91 Ha only) of forest land has been forwarded to Regional MOEF Shillong on July 06, 2011. Forest clearance is likely to be obtained by 31st Aug.'2011
8	**EPC Contract Status**	

	Date/Likely date of placement of contract for main plant	
	Date/ Likely date of placement of contract for Boiler	
	Date/ Likely date of placement of contract for Turbine/Generator	
9	**Status of PPA with beneficiaries including case-1 bids if applied for**	Applications for PPA have been submitted to various State Governments. PPA is likely to be finalized by September'2011
10	**Proposed Date of financial closure**	October'2011
11	**Expected commissioning schedule (unit wise)** Unit-1(22 MW) Unit-2 (22 MW) Unit-3 (22 MW	 September'2015 October'2015 November'2015

Annexure-4

STATUS OF THE GENERATION PROJECT		
Applicant Name / Gen. Capacity: SEW NAFRA POWER CORPORATION LTD./ 2 X 60 MW		
Sl.No	Item	Status / Information
1	**Generation location**	
	Location of power Project (name of village/ town, district / state)	Nafra, West Kameng, Arunachal Pradesh
	Detail Vicinity map of the project site on topo sheets to gather relative locations of other generation projects in the vicinity	83 A / 11
	Latitude and Longitude of the project site	27^0 19 ' 24.91" N and 92^0 35 ' 25.25" E
2	**Land**	
	Total Land required for the project	78.45 ha
	Type of Land Proposed (Govt or Private)	Govt and Private
	Area of Land already acquired & possessed	
	(i) Govt	33.94 ha
	(ii) Private	44.51 ha
	Status of land to be acquired like date of notification for and acquisition	Award of land acquisition proceedings dated 18 / 5 / 2011
	Status of Possession of Land	Payment is being made for awarded land
3	**Fuel**	
	Type of Fuel (Gas/ domestic coal / imported coal/ hydro)	NA (as fuel is not required for Nafra Hydro Power Plant)
	Status of fuel tie- up for the total quantity of fuel required to generate full power at normative availability. Indicate status of mine allocation or fuel linkage	NA
4	**Water**	
	Status of in principle approval from concerned state irrigation department Date of application, likely date by which it shall be available	NOC from WRD dated 13/ 4/ 2010
5	**Water Supply arrangement / Pipeline connection**	At design stage (Water Conductor System for Nafra HPP)
6	**Environment Clearance**	
	Status of in principle approval from concerned administrative authority responsible for according final approval in the central / state govt. as the case may be. Date of application, likely date by which it shall be available	Accorded EC for 96 MW on 17/1/2011 (Revised proposal for 120 MW is under preparation)
7	**Forest Clearance**	
	Status of in-principle approval from concerned administrative authority responsible for according final approval in the central/State govt as the case may be. Date of application, likely date by which it shall be available.	Accorded FC on 21/06/2011
8	**EPC Contract Status**	
	Date/Likely date of placement of contract for main plant	Sept, 2011
	Date/Likely date of placement of contract for Boiler	NA
	Date/Likely date of placement of contract for Turbine/Generator	Sept, 2011
9	**Status of PPA with beneficiaries including case - 1 bids if applied for**	Action is being initiated with concerned agencies
10	**Proposed Date of financial closure**	30th Sept,2011
11	**Expected commissioning schedule (unit wise)**	unit-1 (60 MW) - Oct 2014 unit -2(60 MW) - Jan 2015