

North Eastern Regional Power Committee

Agenda

For

118th OCC Sub-Committee Meeting

Time of meeting : 10:00 Hrs.

Date of meeting : 11th February, 2016 (Thursday)

Venue : "Hotel Nandan", Guwahati.

A. CONFIRMATION OF MINUTES

CONFIRMATION OF MINUTES OF 117th MEETING OF OPERATION SUB-COMMITTEE OF NERPC.

The minutes of 117th meeting of Operation Sub-committee held on 7th January, 2016 at Guwahati were circulated vide letter No. NERPC/SE (O)/OCC/2015/4556-4591 dated 15th January, 2016.

OTPC requested Operation sub-committee to amend deliberation of the sub-committee of the **Item Nos. C.1, D.3, D.5, D.6, D.11, D.18 of 117th OCC** meeting and to incorporate views of OTPC as below:-

C.1 Status of Generating Units, Transmission Lines in NER:

Recorded:

SN	Items	Status as given in 117 th OCC Meeting	Status as on 116 th OCC
9	400/132 kV, 2nd 125 MVA ICT at Pallatana	June, 2016	June, 2016
14	132kV Surjamaninagar Bay at OTPC	June, 2016	June, 2016

Amendment to be Recorded:

SN	Items	Status as given in 117 th OCC Meeting	Status as on 116 th OCC
9	400/132 kV, 2nd 125 MVA ICT at Palatana	Forum requested to submit detailed reply. OTPC replied that, third party inspection of Transformer in Alstom (Naini) is in progress. Transformer will be at OTPC site by March 2016 and it will be commissioned by June 2016.	June, 2016
14	132kV Surjamaninagar Bay at OTPC	OTPC told that, exact status will be updated in next OCC meeting.	June, 2016

D.3 Furnishing Reactive Power Absorption Data for last one year:

As per Para no. 9.9.1 of Recommendations of Enquiry Committee on Grid Disturbance, the regulatory provisions regarding absorption of reactive power by generating units needs to be implemented.

It is requested that you may please furnish instances when Reactive Power support was provided by Generators for last one year.

The latest Capability Curve of each generator in Soft Copy may also be provided.

Recorded:

DGM (SO-II), NERLDC requested all generating utilities of NER to furnish at least hourly unit-wise active power in MW, reactive power in MVAR & terminal voltage in kV of the previous month by 10th of the month as per format at **Annexure -D.3**

The Sub-Committee requested all generating utilities of NER to furnish the data of previous month to NERLDC/NERPC on monthly basis by 10th of the month.

Amendment to be Recorded:

During 116th OCC, DGM, OTPC informed that they have submitted the required data as per the prescribed format of NERDC. Further, he informed that the format is not capturing all relevant parameters. OTPC suggested to submit detailed data printout (automatically generated from the system) in 117th OCC for review and finalizing the format.

During 117th OCCM, OTPC submitted the sample data in format of 15 minutes average and hourly average comprising GT-MW, GT-MVAR, ST-MW, ST-MVAR, Grid Frequency and 400 KV Bus Voltage. The hourly format was appreciated by forum. However, NERPC requested to incorporate Generator Terminal Voltage instead of 400 KV Bus Voltage, it is accepted by OTPC & NEEPCO. However, there was resistance from NHPC, Manipur as they require taking hourly data manually.

D.5 Petition No. 113/MP/2014:

OTPC vide mail dated 07.12.2015 has requested to discuss the petition No. 113/MP/2014 filed by NERLDC to Hon'ble CERC. Further, they informed that Petition was filed without any information/discussion/record in preceding or succeeding OCC meetings though there was no conflict among constituents, OTPC & NERLDC for implementation of SPS.

During 116th OCCM, DGM, OTPC mentioned that NERLDC should not file the petition to CERC as any issue can be discussed and resolved in the forum of NERPC. He mentioned that OTPC has been trying to comply and adhere to the decision of OCC/PCC Sub-committees of NERPC in every issue and as such filing a petition to CERC is not in the spirit of the forum. He however stated that since the matter has been filed to CERC, necessary action will be taken up by them in this regard.

Recorded:

DGM (SO-II), NERLDC informed that the issue related to implementation of SPS related to Pallatana was discussed in TCC meeting held at Agartala on 04.09.13. In this TCC meeting, it was recorded as below:-

Quote

The committee requested OTPC to highlight action plan for reducing the generation for implementation of proposed SPS. OTPC requested NERLDC for providing certain information as desired by BHEL. Committee advised OTPC to communicate NERLDC

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Unquote

Many disturbances occurred due to non implementation of SPS related to Pallatana. As the SPS related to Pallatana was not implemented till filing of this petition on 05.06.14, NERLDC filed petition of protection deficiency in NER system to Hon'ble CERC.

After detailed deliberation as per guidance of Member Secretary, NERPC it was decided that hence forward unresolved issues of Sub-Committee of NERPC would be taken up in TCC/RPC. If the issue still remains unresolved then approach to CERC can be made only after sufficient time frame for implementation.

Amendment to be Recorded:

OTPC strongly objected the step to file petition in parallel to series of System Studies meetings to resolve the hurdles and implementation of SPS. DGM (SO-II) expressed that; petition was filed due to prolonged delay in implementing SPS. OTPC asked whether petition will be filed for all such prolonged pending points from NERLDC/NERPC side also. Member Secretary also expressed that; this issue shall have been taken up in TCC meeting before filing petition. Member Secretary advised DGM (SO-II) to raise such issues in TCC meeting next time for resolution before filing petitions.

OTPC replied to CERC appropriately.

On request of Member Secretary, OTPC & NERPC agreed to freeze this issue.

D.6 Shutdown of Block- #2 of OTPC:

OTPC intimated that Pallatana Block-2 will undergo shutdown from 25th January, 2016 to 7th February, 2016 for CI & HRSG License renewal.

During 116th OCC meeting, The issue was discussed in detailed and the forum requested OTPC to keep in mind that any maintenance schedule should not be taken during lean hydro season. The forum requested OTPC to take up the matter with the concerned agency so that in future no shutdown will be granted to them during lean hydro season. The comfort period granted by the forum is **July to September**.

DGM, OTPC mentioned that he will take the matter with Competent Authority of OTPC so that the solution can be finalized in this regard.

The forum however approved the above shutdown since no sufficient gas is available to OTPC to run both the units.

Members raised the issue regarding reduction of gas supply to Pallatana and requested NERPC to take up the matter with highest authority of ONGC.

SE(O), NERPC informed that during 27th CC meeting, the issue of reducing of gas supply to Pallatana to accommodate Monarchak is a very serious concern for NER beneficiaries as till now it is understood that Monarchak is a state project and he requested the house to take up the matter in the next NERPC meeting. Further, he stated that full gas supply should be made available to Pallatana first then to Monarchak Plant to avoid deprivation of all other NER states.

Recorded:

The forum unanimously reiterated that thermal power plant (gas based & coal based) shutdown may be taken only during the high hydro period i.e. **July to September**. Regarding non-availability of gas to OTPC, SE(O) requested utilities to propose this as an agenda item for 16th TCC/RPC.

Amendment to be Recorded:

OTPC informed that, the shutdown will be started from 18th January 2016 for making Unit-II available as early as possible.

Members raised the issue regarding reduction of gas supply to Palatana and requested NERPC to take up the matter with highest authority of ONGC.

SE(O), NERPC informed that during 27th CC meeting, the issue of reducing of gas supply to Palatana to accommodate Monarchak is a very serious concern for NER beneficiaries as till now it is understood that Monarchak is a state project and he requested the house to take up the matter in the next NERPC meeting. Further, he stated that full gas supply should be made available to Palatana first then to Monarchak Plant to avoid deprivation of all other NER states.

D.11 400kV, 80 MVAR Bus Reactor at OTPC Pallatana

During the 116th OCC Meeting, OTPC informed that the 400kV, 80 MVAR Bus Reactor at OTPC Pallatana is ready for recharging and sought clearance for charging of the same. NERLDC informed that the same can be taken into service subject to real time condition.

However, now after checking the relevant records at NERLDC it is seen that the reactor was never successfully put into service and the matter has to be look into considering that the element was out for a prolong period.

In this connection it is pertinent to mention that, as per Clause No. 43 of Measures Relating to Safety & Electric Supply Regulation 2010 by CEA, the electrical installations/line, before commencement of supply or recommencement after shutdown for six months and above shall not be charged/ energized without the approval of the Electrical Inspector in writing to ensure safety measures specified under the said regulations in the electrical installations.

OTPC may take action accordingly and certify fulfillment of other statutory requirements while permission for charging the reactor is sought.

During 116th OCC meeting, The Sub-committee requested OTPC to first test charge the reactor and then get the approval of EI of RIO (NE).After obtaining the required clearance apply to NERLDC for charging the reactor.

Recorded:

DGM(O&M), OTPC informed the forum that OTPC would apply to NERLDC for necessary charging instruction since all other formalities have been completed.

DGM (SO-II), NERLDC informed that application of charging of new element is to be furnished to NERLDC as per format of Procedure for Integration of New Transmission Element into the Grid.

Amendment to be Recorded:

Necessary clearances (Hard Copies) are being forwarded to NERPC for review and approval. NERPC also informed OTPC to get CTU clearance for charging the bus reactor. OTPC will write a letter to CTU for necessary clearance.

D.18 Consent for URS Scheduling:

At present URS of any ISGS is being scheduled to other beneficiaries after taking consent of the concerned ISGS. This is creating delay in scheduling process. A standing consent from the ISGS station can help in this respect.

Recorded:

Honourable CERC order dated 05.10.2015 against Petition No. 310/MP/2014, regarding scheduling Un-requisitioned Power of Sasan Ultra Mega Power Project and direction to Load Despatch Centres to schedule Un-requisitioned Power was discussed.

As per the order consent of the original beneficiary and the new beneficiary shall be submitted by the ISGS intending to avail revision of schedule to the concerned RLDC by mail.

After detailed deliberation, it was agreed that all beneficiary going for under-requisition can give month wise standing consent to the respective ISGS (AGBPP, AGTPP & OTPC) with a copy to NERLDC for rescheduling the URS power to the other beneficiaries for reducing the time taken for implementing the schedule.

The forum also requested NEEPCO that it may please operate NEEPCO control room 24x7.

Amendment to be Recorded:

Matter was discussed and constituents agreed to adopt better system.

With the above Amendment(s), the Sub-committee may confirm the minutes of 117th OCCM of NERPC as no other comments/observations were received from the constituents.

ITEMS FOR DISCUSSION

B. OPERATIONAL PERFORMANCE AND GRID DISCIPLINE DURING JAN, 2016

As per the data made available by NERLDC, the grid performance parameters for January, 2016 are given below:

NER PERFORMANCE DURING JANUARY, 2016

States	Energy Met (MU)		w.r.t. Dec,15 % inc (+) /dec (-)	Energy Reqr. (MU)		w.r.t. Dec,15 % inc (+) /dec (-)	% inc (+) /dec (-) of energy reqr vs met. In Jan, 16
	Jan-16	Dec-15		Jan-16	Dec-15		
Ar. Pradesh	59.6	54.16	10.04	60.7	55.78	8.82	-1.85
Assam	669.1	643.05	4.05	682.5	655.70	4.09	-2.00
Manipur	77.8	74.49	4.44	79.5	75.66	5.08	-2.19
Meghalaya	166.6	157.91	5.50	184.8	167.42	10.38	-10.92
Mizoram	44.9	42.11	6.63	46.0	43.14	6.63	-2.45
Nagaland	65.2	62.42	4.45	66.6	63.67	4.60	-2.15
Tripura	52.3	77.43	-32.46	53.3	78.85	-32.40	-1.91
Region	1135.4	1111.58	2.14	1173.3	1140.21	2.90	-3.34

States	Demand Met (MW)		w.r.t. Dec,15 % inc (+) /dec (-)	Demand in (MW)		w.r.t. Dec,15 % inc (+) /dec (-)	% inc (+) /dec (-) of Demand vs met. In Jan, 16
	Jan-16	Dec-15		Jan-16	Dec-15		
Ar. Pradesh	116.8	132	-11.52	117.6	133	-11.58	-0.68
Assam	1330.0	1314	1.22	1338.6	1312	2.03	-0.65
Manipur	166.0	167	-0.60	168.1	167	0.66	-1.27
Meghalaya	377.0	348	8.33	377.8	349	8.25	-0.21
Mizoram	101.0	96	5.21	102.4	97	5.57	-1.39
Nagaland	122.0	138	-11.59	122.3	140	-12.64	-0.25
Tripura	220.0	221	-0.45	219.1	221	-0.86	0.41
Region	2331.7	2320	0.50	2367.3	2355	0.52	-1.53

**REGIONAL GENERATION & INTER-REGIONAL
EXCHANGE IN MU**

Month---->	Jan-16	Dec-15
Total Generation in NER (Gross)	898.40	924.69
Total Central Sector Generation (Gross)	649.80	662.96
Total State Sector Generation (Gross)	248.60	261.73
Inter-Regional Energy Exchange		
(a) NER-ER	228.50	90.66
(b) ER-NER	421.80	17.34
(c)NER-NR	201.50	0.00
(d)NR-NER	91.60	333.85
© Net Import	83.40	260.53

AVERAGE FREQUENCY (Hz)

Month---->	Jan-16	Dec-15
	% of Time	% of Time
Below 49.9 Hz	9.19	16.23
Between 49.9 to 50.05 Hz	67.96	66.32
Above 50.05 Hz	22.85	17.45
Average	50.00	49.98
Maximum	50.39	50.32
Minimum	49.70	49.59

C.1 Status of Generating Units, Transmission Lines in NER:

During 117th OCC meeting, the status as informed by NTPC, NEEPCO and POWERGRID is as follows:

SN	Items	Status as given in 118 th OCC Meeting	Status as given in 117 th OCC Meeting
1	Trial operation and CoD of Unit -I of Bongaigoan TPS of NTPC		Unit #1 by March, 2016 First infirm injection in January, 2016. NERLDC requested NTPC to furnish

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			quantum of block-wise infirm injection in MW on day ahead basis
2	400/220kV, 2x315 MVA ICT of NTPC at Bongaigaon		31.03.2016. NERLDC informed that commissioning of these elements is to be expedited in view of system security.
3	Trial operation and CoD of Monarchak GBPP of NEEPCO		COD of GT is 24.12.15 Trial run of STG not done COD on 31.03.2016
4	Kameng HEP of NEEPCO two units (2 x 150 MW) Next two units (2x150 MW)		November, 2016 March, 2017
5	Pare HEP of NEEPCO (2 x 55 MW)		June, 2016
6	400 kV D/C Silchar - Melriat line of PGCIL		Retendering done. September, 2016
7	220kV Rangia - Salakati of AEGCL		June, 2016. 4 Piles out of 13 Piles completed.
8	132kV Monarchak - Surjamaninagar D/C of TSECL		No representative
9	400/132 kV, 2nd 125 MVA ICT at Palatana		June, 2016
10	132kV Pasighat - Aalong of Ar. Pradesh		March, 2016
11	132kV Surjamaninar (India)- South Commila (Bangladesh)		Completed on 16.12.2015
12	132kV Doyang- Wokha		February, 2016
13	220 kV, 20 MVAR Bus Reactor at AGBPP		March, 2016
14	132kV Surjamaninagar Bay at OTPC		June, 2016

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15	63MVAR at Byrnihat of Me.PTCL		Approval from Board is awaited.
16	Up-gradation of 132 kV Lumshnong-Panchgram line		DPR preparation stage
17	Biswanath Chariali 63 MVAR Bus Reactor		January,2016
18	RHEP 80 MVAR Bus Reactor		The status will be intimated in next OCC meeting.
19	132kV Mariani - Mokokchung line out since Apr'08		-
20	132kV Rengpang - Jiribam line out since Oct'02		-
21	Switchable line Reactors at 400kV Balipara & Bongaigoan		March 2016
22	PLCC Panels at Loktak end of Loktak - Ningthoukhong 132 kV feeder and Loktak - Rengpang 132 kV feeder		March 2016

Concerned constituents may kindly intimate the status.

C.2 CT Ratio of Transmission Lines in NER & Enhancement of Loadability of Lines:

During 117th OCC meeting, NERTS, POWERGRID informed that 15 nos. 600/1 A CTs will be arranged for dynamic rating of the lines listed in Annexure C.2. NERLDC requested to other utilities to change CT for dynamic rating of the lines listed in Annexure C.2.

Constituents, NERPC/NERLDC may kindly intimate the status and members may deliberate.

C.3 Finalization of Operating Procedures of State Grid of NER:

As per clause no 5.1.g of IEGC, detailed operating procedures for each state grid shall be developed and maintained by the respective SLDC.

Latest status of approval of these documents from OCC forum of NERPC is as follow:-

SI No	Description	Status of approval from OCC forum of NERPC
1	Operating Procedure of Ar. Pradesh 2015	Not submitted
2	Operating Procedure of Assam 2015	Submitted

3	Operating Procedure of Manipur 2015	By 31.03.2016
4	Operating Procedure of Meghalaya 2015	Draft Submitted
5	Operating Procedure of Mizoram 2015	By 31.03.2016
6	Operating Procedure of Nagaland 2015	By 31.03.2016
7	Operating Procedure of Tripura 2015	Not submitted

NERLDC/NERPC may kindly update the status.

C.4 Monthly MU requirement & availability of each state of NER as per format:

The following figures of state wise MU requirement and availability were taken from draft LGBR 2015-16 of NERPC. State wise MU requirement and availability for these months are to be checked. Constituents may kindly verify if the above data are correct.

Requirement:

Name of State	Dec15	Jan16	Feb16	Mar16	Apr16
Ar. Pradesh	67	67	57	70	
Assam	700	680	650	700	
Manipur	75	80	70	75	
Meghalaya	202	215	185	190	
Mizoram	45	47	40	45	
Nagaland	69	65	65	70	
Tripura	120	125	100	125	
NER	1278	1279	1167	1275	

Availability:

Name of State	Dec15	Jan16	Feb16	Mar16	Apr16
Ar. Pradesh	45	48	40	50	
Assam	550	590	550	600	
Manipur	65	70	60	65	
Meghalaya	200	180	145	140	
Mizoram	40	42	40	45	
Nagaland	55	55	50	50	
Tripura	195	200	150	170	
NER	1150	1185	1035	1120	

The Sub-Committee noted as above.

C.5 Monthly MW requirement & availability of each state of NER:

The following figures were taken from LGBR 2015-16 of NERPC. These figures are to be reviewed.

A. Peak Demand in MW

Name of State	Dec15	Jan16	Feb16	Mar16	Apr16
Ar. Pradesh	128	133	130	135	
Assam	1460	1400	1260	1410	
Manipur	149	165	148	155	
Meghalaya	425	375	350	400	

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Mizoram	95	90	85	90	
Nagaland	130	125	120	130	
Tripura	255	250	240	275	
NER	2642	2538	2333	2595	

B. Peak Availability in MW

Name of State	Dec15	Jan16	Feb16	Mar16	Apr16
Ar. Pradesh	126	118	110	130	
Assam	1200	1195	1150	1170	
Manipur	128	145	128	140	
Meghalaya	350	325	280	250	
Mizoram	90	85	85	80	
Nagaland	90	95	90	95	
Tripura	403/230	403/230	403/230	403/230	
NER	2445	2375	2243	2268	

* Tripura indicates 400/230 if Pallatana available/if not available

B. Off Peak Demand in MW (08:00 Hrs)

Name of State	Dec15	Jan16	Feb16	Mar16	Apr16
Ar. Pradesh	70	73	70	80	
Assam	1020	1030	1020	1050	
Manipur	95	95	90	95	
Meghalaya	234	230	220	220	
Mizoram	62	60	55	55	
Nagaland	80	85	75	80	
Tripura	180	190	170	180	
NER	1641	1638	1700	1760	

C. Off Peak Availability in MW (08:00 Hrs)

Name of State	Dec15	Jan16	Feb16	Mar16	Apr16
Ar. Pradesh	60	65	60	70	
Assam	840	850	900	950	
Manipur	90	90	80	85	
Meghalaya	300	275	245	230	
Mizoram	60	60	60	55	
Nagaland	55	70	60	65	
Tripura	240	240	240	240	
NER	1645	1650	1645	1695	

In 117th OCCM, SE(O), NERPC informed that since LGBR for 2016-2017 is under preparation, the data for April, 2016 onwards will be furnished once the above LGBR is finalized. He informed that data for LGBR for 2016-2017 has been received from NEEPCO,OTPC only and requested NHPC & NTPC to send the data within 15.01.2016. Further, he requested all the constituents, CTUs to furnish the generation, transmission data along with planned shutdown/maintenance etc. within 15.01.2016. All constituents agreed to furnish by 15.01.2016.

DGM (SO-II), NERLDC expressed their difficulties as system studies could not be carried out for 2015-16 due to non finalization of LGBR for 2016-2017 & planned outages of elements for 2016-17.

NERLDC is facing difficulties for carrying out system studies like declaration of TTC/ATC for 2016-17 due to non-finalization of LGBR for 2016-2017 & planned outages of elements for 2016-17.

D. NEW ITEMS

D.1 Generation Planning (ongoing and planned outages)

NEEPCO & NHPC may kindly intimate the availability for hydro stations:

Generating Station	Units running	MW	MU	Reservoir
Khandong				
Kopili				
Kopili-II				
Ranganadi			Subject to inflow	
Doyang				
Loktak				
AGBPP			-	-
AGTPP			-	-

Hydro planning

In view of outage of Kopili units, proper planning is essential for utilization of available water of other reservoir based stations so that adequate generation can be maintained upto April/May, 2016.

During 117th OCCM, AGM SLDC, Assam suggested that since Kopili would go under plant S/D from March its inflow may be increased simultaneously reducing generation from other hydro units except RHEP.

The Committee may discuss and approve the proposed shutdown by Generating Stations as given in Annexure – D.2 below.

D.2 Outage Planning Transmission elements

It was agreed in the 99th OCC meeting that shutdown will be availed only after approval is given by the OCC forum. It was also agreed that deferment/revision of outages elements other than already approved in OCC will be henceforth put/displayed in the website of NERPC (**under Operational Activities/OCC Approved shutdown**) as per CERC regulations/ CEA guidelines etc for ensuring smooth & secure grid operation.

Furnishing request of shut down of the element, which was approved by NERPC, by Indenting Agency (ISTS licensees/STUs/Generating Companies) to NERLDC: Planned shutdown approved by NERPC shall be considered for implementation by NERLDC on D-3 basis. If an outage is to be availed on say 10th of the month, the shutdown availing agency would reconfirm to NERLDC on 7th of the month by 10:00 Hr. This practice is necessary to ensure optimal capacity utilization and the time required for associated system study/coordination by/amongst RLDC/NLDC.

The sub-Committee may kindly discuss and approve the transmission line outages proposed by Constituents for February, 2016 - March, 2016 as enclosed at Annexure- D.2.

D.3 Furnishing Reactive Power Absorption Data for last one year:

As per Para no. 9.9.1 of Recommendations of Enquiry Committee on Grid Disturbance, the regulatory provisions regarding absorption of reactive power by generating units needs to be implemented.

It is requested that you may please furnish instances when Reactive Power support was provided by Generators for last one year.

The latest Capability Curve of each generator in Soft Copy may also be provided.

In 117th OCCM, DGM (SO-II), NERLDC requested all generating utilities of NER to furnish at least hourly unit-wise active power in MW, reactive power in MVAR & terminal voltage in kV of the previous month by 10th of the month as per format at **Annexure -D.3.**

The Sub-Committee requested all generating utilities of NER to furnish the data of previous month to NERLDC/NERPC on monthly basis by 10th of the month.

NEEPCO and NHPC may kindly intimate the status.

D.4 Furnishing of Technical & Commercial Data for Computation of PoC Charges & Losses for 3rd Quarter of 2015-16 (Oct'15- Dec'15):

As per provisions of the CERC (Sharing of Inter State Transmission Charges and Losses) Regulations, 2010 as amended from time to time, the following data are required for Computation of PoC Charges & Losses for **1st Quarter of 2016-17 (April'16- May'16)**

1. Technical details of new transmission elements and generating units which are expected to commence commercial operation during **April'16- May'16**
2. Yearly Transmission Charges
3. Nodal Generation information and forecast withdrawal data

As per provisions of the CERC (Sharing of Inter State Transmission Charges and Losses) (Third Amendment), Regulations, 2015, the Designated ISTS Customers (DICs) are required to submit node-wise forecast injection/withdrawal information and maximum injection/withdrawal data for corresponding quarter of last three years to the Implementing Agency for computation of PoC Charges & Losses for **1st Quarter of 2016-17 (April'16- May'16).**

As discussed in 4th Validation Committee Meeting following dates were finalized for submission of data for **1st Quarter of 2016-17 (April'16- May'16)**

Sl. No.	Timeline	Remarks
1	31 st January, 2016	Data to be provided by DICs to IA
2	10 th February, 2016	Data to be sent by IA to RPC
3	25 th February, 2016	RPC to rectify the data through a meeting at RPC level and then send to IA by 25 th February, 2016
4	30 th February, 2016	Validation Committee meeting

During 116th OCC all the utilities agreed to submit the data as per formats for Quarter 1 of 2016-17 (April- June, 2016) by 31st January, 2016.

In 117th OCC NERLDC requested DICs & transmission utilities to furnish Technical & Commercial Data for Computation of PoC Charges & Losses for 1st Quarter of 2016-17 (Apr'16- Jun'16) as per format by 15th January, 2016.

All Utilities agreed to submit the data as per formats for Quarter 1 of 2016-17 (April-June, 2016) by 15th January, 2016.

DGM(SO-II), NERLDC once again reiterated that necessary Forms are already available in NLDC website and constituents may kindly download from there.

In line with the decision in the Validation Committee meeting, Demand and Generation projections w.r.t North Eastern Region constituents as given by Implementing Agency is attached in **Annexure D.4** for ratification in 118th OCC Meeting of NERPC.

The Sub-Committee may please take up the available data for ratification.

D.5 Shutdown of Block- #2 of OTPC & Reduction of Gas supply:

OTPC intimated that Palatana Block-2 will undergo shutdown from 25th January, 2016 to 7th February, 2016 for CI & HRSG Licence renewal.

During 116th OCC meeting, The issue was discussed in detailed and the forum requested OTPC to keep in mind that any maintenance schedule should not be taken during lean hydro season. The forum requested OTPC to take up the matter with the concerned agency so that in future no shutdown will be granted to them during lean hydro season. The comfort period granted by the forum is **July to September**.

DGM, OTPC mentioned that he will take the matter with Competent Authority of OTPC so that the solution can be finalized in this regard.

The forum however approved the above shutdown since no sufficient gas is available to OTPC to run both the units.

Members raised the issue regarding reduction of gas supply to Pallatana and requested NERPC to take up the matter with highest authority of ONGC.

SE(O), NERPC informed that during 27th CC meeting, the issue of reducing of gas supply to Pallatana to accommodate Monarchak is a very serious concern for NER beneficiaries as till now it is understood that Monarchak is a state project and he requested the house to take up the matter in the next NERPC meeting. Further, he stated that full gas supply should be made available to Pallatana first then to Monarchak Plant to avoid deprivation of all other NER states.

The 117th OCC forum unanimously reiterated that thermal power plant (gas based & coal based) shutdown may be taken only during the high hydro period i.e. **July to September**. Regarding non-availability of gas to OTPC, SE(O) requested utilities to propose this as an agenda item for 16th TCC/RPC.

OTPC/NERPC/APDCL may kindly intimate the status.

D.6 Early Restoration of 63 MVAR line Reactor at Balipara:

The 63 MVAR line Reactor of 400 kV Bongaigaon – Balipara line –II at Balipara end is under outage since 19.07.2015. Early restoration of the reactor is very essential for containing over voltage problem which is very much on higher side after commissioning of Agra- BNC HVDC pole-I especially during operation of the pole. Presently the problem is being managed by opening 400 kV lines thereby system security is compromised.

Early commissioning of 80 MVAR 2nd Bus reactor at BNC is also very much essential in this connection.

During 117th OCC meeting DGM (AM), NERTS informed the forum that EI of RIO (NE) will inspect on 12.01.16 and then reactor would be commissioned once the clearance is obtained.

NERTS may please intimate the status.

D.7 Estimated Transmission Availability Certificate (TAC) for the month of December, 2015.

NETC and POWERGRID, NERTS have submitted TAC data of December, 2015 in the first/second week of January, 2016. This will enable issuance of verification by NERLDC and certification by NERPC on monthly basis within stipulated time frame. Both NETC and NERTS are advised to follow the agreed time schedule in future to avoid accumulation of reports and corresponding delay.

D.8 400kV, 80 MVAR Bus Reactor at OTPC Palatana

During the 116th OCC Meeting, OTPC informed that the 400kV, 80 MVAR Bus Reactor at OTPC Palatana is ready for recharging and sought clearance for charging of the same. NERLDC informed that the same can be taken into service subject to real time condition.

However, now after checking the relevant records at NERLDC it is seen that the reactor was never successfully put into service and the matter has to be look into considering that the element was out for a prolong period.

In this connection it is pertinent to mention that, as per Clause No. 43 of Measures Relating to Safety & Electric Supply Regulation 2010 by CEA, the electrical installations/line, before commencement of supply or recommencement after shutdown for six months and above shall not be charged/ energized without the approval of the Electrical Inspector in writing to ensure safety measures specified under the said regulations in the electrical installations.

OTPC may take action accordingly and certify fulfillment of other statutory requirements while permission for charging the reactor is sought.

During 116th OCC meeting, The Sub-committee requested OTPC to first test charge the reactor and then get the approval of EI of RIO (NE).After obtaining the required clearance apply to NERLDC for charging the reactor.

During 117th OCCM DGM(O&M), OTPC informed the forum that OTPC would apply to NERLDC for necessary charging instruction since all other formalities have been completed. DGM (SO-II), NERLDC informed that application of charging of new element is to be furnished to NERLDC as per format of Procedure for Integration of New Transmission Element into the Grid.

OTPC may please intimate the status.

D.9 Modification of existing 132kV S/C Nirjuli –Ranganadi Transmission Line on account of Railway Track Construction:

The newly constructed Harmuti-Naharlagun Railway Track infringes with the 132KV Nirjuli-Ranganadi line between existing location 02 to loc.14 & crosses the track at 3 (three) locations. In order to do away with this infringement & at the behest of the District Administration, POWERGRID has carried out detailed survey for re-alignment of the complete line section from loc.134 to loc.23. The proposed line section shall now pass through Emchinallah-Lekhi village in Papumpare District.

Further, the contract for diversion of the line section from loc.134 to loc.23 has also been awarded by POWERGRID & erection work is expected for commencement very shortly. Subsequent to completion of the re-aligned section of the line(which is expected by April'2016), the existing line section passing through Doimukh area in Papumpare District shall be required to be disconnected & dismantled. It may be mentioned that the 132KV Nirjuli-Ranganadi line has been looped in & looped out at 132KV Lekhi Substation of DoP, AP at tower loc.11. Therefore, with disconnection of the existing line section from loc.134 to loc.23 as a result of its re-alignment, connection of Lekhi Substation (DoP, AP) with Ranganadi & Nirjuli through the LILO portion shall be no longer available.

It is learnt that action has been taken by DoP, AP simultaneously for modification of the LILO line so as to ensure connectivity with 132KV Nirjuli-Ranganadi line after re-alignment is carried out by POWERGRID. Therefore, DoP, AP may look into for completion of this modification of LILO portion of the line matching with re-alignment of the line from loc.134 to loc.23(under execution by POWERGRID) in case it is felt necessary to maintain the existing configuration of LILO of line at Lekhi S/s(DoP, AP)

During 117th OCCM DGM (AM), NERTS informed the forum that erection works related to Ar. Pradesh i.e. LILO point for connectivity to Lekhi should match that of POWERGRID.

EE, SLDC, Ar. Pradesh informed the forum that Railways have not yet transferred the funds to DoP, Ar. Pradesh. He assured to take up the matter with their concerned authority to match the construction.

DGM(AM), NERTS informed the forum that erection works related to Ar. Pradesh i.e. LILO point for connectivity to Lekhi should match that of POWERGRID.

EE, SLDC, Ar. Pradesh informed the forum that Railways have not yet transferred the funds to DoP, Ar. Pradesh. He requested that the matter may be referred to next TCC/RPC meeting keeping in mind the sensitivity of the issue.

The Sub-committee instructed that DoP, Ar. Pradesh should carry out the above work in line with PPOWERGRID so that the power supply to Nirjuli does not hamper.

NERTS, Ar. Pradesh may kindly deliberate on this issue.

D.10 Assessment of Total Transfer Capability (TTC), Transmission Reliability Margin (TRM) and Available Transfer Capability (ATC) by SLDC on respective Inter-State Transmission Corridor

SLDCs of NER are requested to assess the above on monthly basis, 5 months in advance (eg: TTC/TRM/ATC for the month of November to be calculated by 15th of July), for further assessment of TTC, ATC and TRM of NER-ER corridor, group of control areas, individual control areas with the region and state-control-area to state-control-area by NERLDC, if required.

SLDCs are also requested to send study results for Peak (Export & Import) & Off Peak (Export & Import) along with assumptions in details and 6 nos ".sav" case files (Base Case for Peak & Off Peak, Off Peak & Peak Export & Off Peak & Peak Import) to NERLDC by 15th of the month for the fifth month. All India ".sav" case files have been sent to SLDCs. SLDCs are requested to use this ".sav" case files while computing TTC, ATC & TRM for their state control area.

As decided in 4th Meeting of NPC held on 10.12.2015, monthly TTC/ATC figures are to be uploaded by SLDCs at their respective website and also communicate the same to respective RLDC & NLDC subsequently.

The study results for assessment of Total Transfer Capability (TTC), Transmission Reliability Margin (TRM) and Available Transfer Capability (ATC) have not been received from any SLDC of NER. Updated Base Cases have been already mailed to all the SLDCs on 08.02.16. All the SLDCs are requested to assess the Total Transfer Capability (TTC), Transmission Reliability Margin (TRM) and Available Transfer Capability (ATC) and submit the cases to NERLDC for the month of June'16 by 15th February, 2016.

The state-wise Transfer Capability as assessed by NERLDC for the month of Jun'16 based on available information is as below.

Import Capability

Sl.No	State	Off Peak Case		Peak Case	
		Contingency	Total Transfer Capability	Contingency	Total Transfer Capability
1	Arunachal Pradesh	N-1 of 132/33 kV, 1x20 MVA Transformer at Naharlagun	165	N-1 of 132/33 kV, 1x20 MVA Transformer at Naharlagun	165

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2	Assam	N-1 of 220/132 kV, 3x100 MVA transformers at Sarusajai	1410	N-1 of 220/132 kV, 3x100 MVA transformers at Sarusajai	1370
3	Manipur	N-1 of 132/33 kV, 2x50 MVA Transformers at Imphal (PG)	285	N-1 of 132/33 kV, 2x50 MVA Transformers at Imphal (PG)	285
4	Meghalaya	N-1 of 132 kV Killing-Epip II D/C	270	N-1 of 132 kV Killing-Epip II D/C	275
5	Mizoram	N-1 of 132/33kV, 12.5 MVA transformer at Luangmual/Zimabawk/Serchip/Lunglei	110	N-1 of 132/33kV, 12.5 MVA transformer at Luangmual/Zimabawk/Serchip/Lunglei	110
6	Nagaland	N-1 of 132/66 kV, 100 MVA ICT at Dimapur (Nagaland)	95	N-1 of 132/66 kV, 100 MVA ICT at Dimapur (Nagaland)	95
7	Tripura	N-1 of 132 kV Palatana - Udaipur S/C	190	N-1 of 132 kV Palatana - Udaipur S/C	150

States are requested to check the TTC of their control areas as computed by NERLDC and issue comments, if any by 20thFebruary'16. If no comments received from any states TTC, ATC & TRM figures of States control area and group of control areas will be finalized and may be uploaded in NLDC website, if required.

This is for information & necessary action please.

NERLDC may kindly deliberate on this issue.

D.11 Implementation of Automatic Demand Management Scheme (ADMS)

Hon'ble CERC directed vide order in Petition No. 113/MP/2014 on 31.12.15 to submit PERT charts & action plans for Implementation of Automatic Demand Management Scheme (ADMS) by SLDCs of NER and to implement ADMS by 30.06.16 . Hon'ble CERC directed RLDCs to submit the report of status of implementation of Automatic Demand Management Scheme (ADMS) by SLDCs of NER by 31.08.16.

SLDCs of NER are requested to furnish monthly report of status of implementation of Automatic Demand Management Scheme (ADMS) by SLDCs of NER.

In 117th OCCM, AGM SLDC, Assam suggested that since ADMS involves connectivity to 33kV substations, a separate meeting with the DISCOMS is required. The forum agreed and requested NERPC to kindly convene the meeting at a suitable date.

NERLDC requested SLDCs of NER to submit the report of status of implementation of Automatic Demand Management Scheme (ADMS) by SLDCs of NER by 15.08.16.

All concerned utilities may kindly intimate the status.

D.12 Consent for URS Scheduling:

At present URS of any ISGS is being scheduled to other beneficiaries after taking consent of the concerned ISGS. This is creating delay in scheduling process. A standing consent from the ISGS station can help in this respect.

The 117th OCC forum deliberated upon Honourable CERC order dated 05.10.2015 against Petition No. 310/MP/2014, regarding scheduling Un-requisitioned Power of Sasan Ultra Mega Power Project and direction to Load Despatch Centres to schedule Un-requisitioned Power was discussed.

As per the order consent of the original beneficiary and the new beneficiary shall be submitted by the ISGS intending to avail revision of schedule to the concerned RLDC by mail.

After detailed deliberation, it was agreed that all beneficiary going for under-requisition can give month wise standing consent to the respective ISGS (AGBPP, AGTPP & OTPC) with a copy to NERLDC for rescheduling the URS power to the other beneficiaries for reducing the time taken for implementing the schedule.

The forum also requested NEEPCO that it may please operate NEEPCO control room 24x7.

NERLDC has not received the same from any constituent till date. The constituents are once again requested to please furnish the same. Moreover, they are requested to please send the URS requisition to NERLDC through the concerned ISGS station so that the same can be scheduled without delay after receiving from the ISGS.

NERLDC may kindly deliberate.

D.13 Rectification of phase notations in NER grid:

It has been found that PMUs are showing different phasors w.r.t different nodes of same grid. It is suspected that there are change in phase notations in NER grid & connectivity.

During 1st NETeST meeting, the forum advised that mixing of Phases (change in phase reference w.r.t. one utility is sometimes different from another) as reflected by PMU data in regional grid is to be corrected. Forum requested that the same may be taken up OCC forum of NERPC.

Members may please deliberate.

D.14 Allocation for share from ISGS towards Auxiliary Energy Consumption for +/-800KV HVDC Biswanath Chariali Substation of POWERGRID:

"CEA vide its letter No. 7/X/VIP(ER)/GM-2016/214 dtd. 01/02/2016 has stated that in other regions specific allocation of power is made from NTPC station's unallocated power from HVDC stations of POWERGRID. Since, NER does not have any coal based thermal station, the 2.5 MW specific allocation can be allocated from unallocated quota of any gas based NEEPCO station or any upcoming coal based station of NER. "

In this regard it may be noted that there is no unallocated quota from any gas based station in NER. OTPC has 13.498623% Merchant Power share from Palatana GBPP.

The allocation of power from Bongaigaon TPS of NTPC is as follows:

Name of Beneficiary	Share Allocation(%)
Ar. Pradesh	4.93
Assam	50.80
Manipur	6.27
Meghalaya	7.07
Mizoram	4.13
Nagaland	4.27
Tripura	7.47
Unallocated	15.06
Total	100.00

Members may please deliberate.

D.15 Transformer Tap optimization

System study was conducted by NERLDC considering load, generation and network pattern of February, 2015 during Peak & Off Peak periods. Suggested taps position of important transformers in NER for maintaining bus voltages within permissible limit as well as to minimize system losses are attached at **Annexure II**.

This is for information & necessary action please.

D.16 Rescheduling of Seminar on "Restoration procedure"

Like previous years this year also NERLDC will organize one day seminar on "Restoration Procedure of NER Grid". It was proposed to organize the seminar in February'16. Now the same is rescheduled to March'16, the exact date & venue will be intimated later. We have received some nominations from some utilities. All the other Utilities are requested to please nominate 4/5 or more number of participants associated with operation of SLDCs, Generating stations and Sub-stations for the purpose.

Members may please send their participants as requested.

D.17 Restoration of 220/132 kV, 30 MVA ICT-I of Mokokchung

The 220/132 kV, 30 MVA ICT-I of Mokokchung is under outage since 18.10.2015 as a result of which the other ICT is getting overloaded and it is not possible to run the system in closed loop. Moreover it is also difficult to keep the 220 kV lines in charged condition due to over voltage problem. To avoid these problems 220 kV Mariani(New) – Mokokchung ckt-I& II are being kept in open condition most of the time and Mokokchung is radially fed from Doyang. Early restoration of the ICT-I is urgently required.

NERTS may please intimate the status.

D.18 CERC Order on Petition no. 007/SM/2014

Hon'ble CERC has issued order against Petition no. 007/SM/2014 on 29.01.15 [Suo Motto]. Gist of the above order is as follows:

- a. PGCIL to undertake effective monitoring of telemeter data and to minimize the intermittency in telemetry in all regions within six months from the issue of the order. NLDC is directed to submit status of PGCIL's telemetry within one month thereafter.
- b. All the utilities/generating companies which have to still establish telemeter power system parameters as per details given in para11 of the Order to provide data to RLDCs/SLDCs as per the provisions of the Grid Code and CEA Grid Standards Regulations by 31.7.2016.
- c. Department of Power, Govt. of Arunachal Pradesh and Department of Power, Govt. of Nagaland to up-date status of telemetry in their system within one month of this order with an advance copy to NLDC, NERLDC and NERPC. Based on the replies, NERLDC will monitor the implementation of telemetry and in case of any difficulty, the matter may be discussed and sorted out in the NERPC meetings. If any of these entities does not submit the information, NERLDC may file application before the Commission against the said entities under Section 142 of the Act.
- d. NLDC and respective RLDC are directed to up-date the status of telemetry every month at their web-site and persistent non-availability of data from the generating stations/sub-stations be taken up in RPC meetings for appropriate direction and action.
- e. NLDC is directed to submit user- wise latest status of telemetry, by 31.8.2016.

This is for information please.

D.19 Furnishing of Variable & Fixed Cost of Generating stations

SLDCs & ISGS of NER are requested to furnish their Variable & Fixed Cost on monthly basis to NERLDC for calculation of loss incurred by utilities after grid disturbance & grid incident, implementation of ancillary service, preparation of various reports etc. The data can be emailed to nerldc@yahoo.co.in.

As on date, NEEPCO is furnishing the data on monthly basis except AGTPP extension. OTPC, Palatana is only furnishing the Variable Cost on monthly basis.

All other generation utilities are requested to furnish the data.

This is for information & necessary action please.

D.20 Shortfall data in respect of Demand met(MW)[0800hrs & 1900/2000 hrs] & Energy met(MU)

NERLDC is preparing various reports on daily basis, for sending to Ministry and other authorities, which contain Shortfall data in respect of Demand met & Energy met. Assam, Meghalaya & Tripura are furnishing the MW shortfall data on daily basis through their SLDCs. In respect of Energy shortfall for a day only Meghalaya is furnishing the same. As a result we are computing the shortfall figures based on statistics. These are creating confusion on some occasions. To avoid this it is requested to the remaining beneficiaries to furnish the above data so that same can be directly entered in the reports.

Time line for furnishing is as follows-

Demand met (MW) shortfall figures - 0900 Hrs for 0800 hrs data, 2100 hrs for 1900/2000 hrs data.

Energy met (MU) shortfall data - 0100 hrs for previous day.

Members may please deliberate and furnish.

D.21 Monthly Progress Report of Ongoing Projects

In 115th OCC Meeting of NERPC held on 24th November, 2015, it was decided that furnishing of monthly progress report by utilities of NER would be reviewed on a quarterly basis.

Latest status of furnishing of Monthly Progress Report of Ongoing Projects is as follows:

<i>Name of Constituent</i>	<i>Latest Status</i>	<i>Remarks</i>
<i>DoP, Ar. Pradesh</i>	Submitted for Nov'15	
<i>AEGCL</i>	Submitted for Nov'15	
<i>APGCL</i>	Submitted for Nov'15	
<i>MSPCL</i>	Submitted for Jan'16	
<i>MePTCL</i>	Submitted for Jun'15	
<i>MePGCL</i>	Not submitted	
<i>P&E Dept., Mizoram</i>	Not submitted	
<i>DoP, Nagaland</i>	Submitted for Sep'15	
<i>TSECL</i>	Submitted for Aug'15	
<i>POWERGRID</i>	Submitted for Jan'16	
<i>NEEPCO</i>	Submitted for Jan'16	
<i>NTPC</i>	Submitted for Dec'15	
<i>NHPC</i>	Not submitted	

This is for information & necessary action please.

D.22 Uploading of reports/information in NERLDC website as per regulations of CERC & CEA.

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a. As per Clause No. 29.2 of Fees and Charges of RLDC and other related matter, Regulations 2015, "Each RLDC shall submit its actual performance against each of the key performance indicators to the Commission on annual basis as per the format specified in Appendix V."

Hon'ble CERC has identified 12 numbers of Key Performance Indicators (KPI). Out of these, the following information related to KPI are to be periodically uploaded in NERLDC website.

1. Interconnection meter error (Weekly)
2. Voltage Deviation Index of all 400 kV & above substation (Daily, Weekly & Monthly)
3. Frequency Deviation Index (Daily, Weekly & Monthly)
4. Reporting of system reliability (Daily, Weekly & Monthly)

These reports/information will be uploaded in NERLDC website on daily, weekly, & monthly basis w.e.f Mar16.

It is requested to POWERGRID (Bongaigaon, Balipara, Misa, Silchar, Biswanatth Chariali), AEGCL (Azara), OTPC (Palatana), NEEPCO (Ranganadi), NTPC (BgTPP) & MePTCL (Byrnihat) to furnish the hourly bus voltage data to NERLDC on daily basis for calculation of Voltage Deviation Index.

b. As per Clause No. 5.5.1.b, 5.5.1.c & 5.5.2.a of Indian Electricity Grid Code Regulations, 2010 by CEA, Daily, Weekly & Quarterly Report covering the performance of NER is being uploaded in NERLDC website.

c. As per Clause No. 13.3 of Grid Standard Regulations, 2010 by CEA, a brief preliminary grid disturbance report is being uploaded in NERLDC website.

d. Other reports such as Load Crash Reports (Event based), Grid Disturbance analysis based on PMU (Monthly) is also being uploaded in NERLDC website.

e. Weekly Event Reports are being mailed to all the utilities for furnishing information for root cause analysis & remedial measures to be taken.

f. Weather Warnings from IMD are mailed by Real Time Security Desk of NERLDC in each shift to all the utilities.

g. Power Supply Position Report, Unit-wise Generation Report, Performance Report, System Status Report are uploaded in NERLDC website on monthly basis.

h. Quarterly Operational Feedback consisting of system constraint, performance of grid, grid disturbances etc are being sent to NLDC for submission to CTU, CEA & CERC. However, the same can be accessed from NLDC website.

This is for information & necessary action please.

Any other item:

Date and Venue of next OCC

It is proposed to hold the 119th OCC meeting of NERPC on second week of March, 2016. The date & exact venue will be intimated in due course.

Annexure - D.4.

Generation Projection (April'16 - June'16)

Sl. No.	Entities	Region	Generation declared Commercial from 1st July '15 to 31st December '15				Generation declared/expected to be declared Commercial from 1st Jan '16 to 31st Mar'16				TOTAL (MW)	Comments From DCS (Others (if any))	Figure as per Comments/POC Data	Projected Generation before normalization w.r.t. projected All India Peak Demand (MW)	
			Projections based on 3 Years Data (MW)	Bus Name	Unit No.	Installed Capacity (MW)	Gen. considered (MW)	Sub Total (MW)	Bus Name	Unit No.					Installed Capacity by Gen. considered (MW)
1	AGTPP, NEEPCO	NER	82											107	107
2	AGTPP Extn.	NER												46	46
3	Doyang, NEEPCO	NER	44											42	42
4	Kopli, NEEPCO	NER	146											120	120
5	Khandong, NEEPCO	NER	38											30	30
6	Ranganadi, NEEPCO	NER	430											407	407
7	Kathalguri	NER	224											231	231
8	Loikaik, NHPC	NER	98												98
9	Palatana GBPP	NER	478											478	478
10	Atunachal Pradesh	NER	0												0
11	Assam	NER	356											246	246
12	Manipur	NER	0												0
13	Meghalaya	NER	158				45	20	20					271	271
14	Nagaland	NER	16											21	21
15	Tripura	NER	107											98	98
16	Mizoram	NER	3											6	6
	TOTAL		2160						20			0	2200		2201

- Note:
- Projections are based on monthly maximum injection in the last 3 years from actual metered data.
 - Generation forecast has been done based on the following criteria
 - (i) If there is an increasing trend then last year average generation has been considered
 - (ii) Otherwise average of past three year average generation has been considered
 - In case of new generators where past data was not available following has been assumed
 - (i) 1 pfl for hydro generators
 - (ii) 0.7 pfl for thermal generators.
 - (iii) 0.3 pfl for gas stations
 - In case of the re-organized states of Andhra Pradesh and Telangana Generation is divided in the ratio 53.89% for Telangana and 46.11% for Andhra Pradesh for FY 2012-13 and 2013-14. This is as per letter No.CE/COMML/APPCO/DE-COMML/POC-DATA-15-16/D.No/15 dttd. 09.10.15 as received from APTRANSCO.

DEMAND FORECAST USING PAST 3 YEARS DATA (April 2016 - June 2016)															
	2013-14			2014-15			2015-16			2013-14 Average	2014-15 Average	2015-16 Average	Projected Demand for (Apr 2016 to Jun 2016) before	Data given by DICs	Comments
	Apr-13	May-13	Jun-13	Apr-14	May-14	Jun-14	Apr-15	May-15	Jun-15						
Arunachal Pradesh	95	100	106	104	111	110	114	109	108	100	108	110	119	119	As per Data given by Arunachal Pradesh
Assam	1,012	1,102	1,118	1,230	1,212	1,215	1,282	1,260	1,324	1,077	1,219	1,289	1,200	1,200	As per Data given by Assam
Manipur	98	113	116	112	109	117	148	153	147	109	113	149	164	164	As per Data given by Manipur
Meghalaya	273	286	271	272	296	289	312	295	295	277	286	301	278	278	As per Data given by Meghalaya
Mizoram	64	62	68	76	73	74	80	84	81	65	74	82	89	89	As per Data given by Mizoram
Nagaland	80	100	96	102	104	111	112	112	120	92	106	115	114	114	As per Data given by Nagaland
Tripura	206	212	220	246	233	230	238	254	249	213	236	247	258	258	As per Data given by Tripura
N. Eastern Region	1,718	1,810	1,800	2,045	1,985	1,998	2,114	2,185	2,190						

Notes

- Projections are based on the past 3 years' monthly Peak Demand Met data available on the website of CEA
- The above projections are being done for financial year 2016-2017 (Q1) i.e. April 2016 to June 2016
- Projections are being done based on the forecast function available in MS Office Excel
- In case of the re-organized states of Andhra Pradesh and Telangana Maximum Demand is divided in the ratio 53.89% for Telangana and 46.11% for Andhra Pradesh for FY 2012-13 and 2013-14. This is as per letter No.CE/COMML/APPCC/DE-COMML/POC-DATA-15-16/D.No/15 dtd. 09.10.15 as received from APTRANSCO.
- CEA Reports can be accessed from the following links:

http://cea.nic.in/reports/monthly/powersupply/2013/osp_peak-04.pdf
http://cea.nic.in/reports/monthly/powersupply/2013/osp_peak-05.pdf
http://cea.nic.in/reports/monthly/powersupply/2013/osp_peak-06.pdf
http://cea.nic.in/reports/monthly/powersupply/2014/osp_peak-04.pdf
http://cea.nic.in/reports/monthly/powersupply/2014/osp_peak-05.pdf
http://cea.nic.in/reports/monthly/powersupply/2014/osp_peak-06.pdf
http://cea.nic.in/reports/monthly/powersupply/2015/osp_peak-04.pdf
http://cea.nic.in/reports/monthly/powersupply/2015/osp_peak-05.pdf
http://cea.nic.in/reports/monthly/powersupply/2015/osp_peak-06.pdf