The 7th meeting of the Coordination Forum was held on 30th April at the Assam Administrative Staff College, Khanapara at 11:00 a.m.

List of members of the Coordination Forum along with special invitees and officers present in the meeting are appended at Annexure-I.

Shri Jayanta Barkakati, Chairperson, Assam Electricity Regulatory Commission presided over the meeting. At the onset, the Chairperson welcomed all members & invitees to the meeting. He stated that the Coordination Forum was constituted by the State Government as per Section 166 (4) of the Electricity Act, 2003 for smooth and coordinated development of the power sector in the state and called upon all members/ special invitees to actively participate in the discussions and share their views liberally so that there are positive and effective outcomes of this meeting.

It was stated by the Chairperson that economic growth, increasing prosperity and urbanization, rise in per capita consumption, and energy access have led to substantial increase in the total demand for electricity and demand has outstripped supply. It was stated that with the emerging energy supply-demand imbalance, efforts are on to harness the renewable energy (RE) resources wherever and whenever possible besides, demand side management techniques are also being applied as solutions to the increasing energy needs. It was stated that like other states, Assam too is trying to manage its latest demands of energy and there has been some progress in this regard. However, efforts are on and there is still a lot to be done. He further stated that any progress will be meaningful only if the villages prosper as a considerable population resides in rural Assam. Electricity consumption is one of the most important indicators of progress and we have to make sure that the Rajiv Gandhi Gramin Vidyutikaran Yojana (RGGVY) schemes are well implemented.

The Chairperson stated that the Commission decided on the agenda for the meeting covering every important segment of the power sector like generation, transmission and distribution of power, Gas Supply position, Rural Electrification, Renewable Energy, etc so that the stakeholders can deliberate on the subjects and share their ideas and concerns.

Thereafter, deliberations were held as per agenda. The important points in these deliberations are recorded as follows:
(1) **Agenda Item no 1: Confirmation of the minutes of the 6th meeting of the Forum held on 29.07.2008.**

The Minutes of the 6th meeting of the Coordination Forum held on 29th July, 2008 already circulated amongst the members, was placed before the Forum for confirmation and the same was treated as read and then confirmed.

(2) **Agenda Item no 2: Action taken on the minutes of the 6th meeting of the Forum**

The Action taken Reports on the minutes of the 6th meeting of the Forum was submitted by APGCL on 24.04.2013. The Chairperson read out the main contents of this report and these are briefly enumerated below:

(a) The Capacity Index of 100 MW Karbi Langpi Hydro Electric Project was re-evaluated and 37.2 MW Lakwa Waste Heat Recovery Project was commissioned on 17.01.2012. The 100 MW Namrup Replacement Project by M/s BHEL with a total cost of Rs 693.72 Cr is expected to be commissioned by the end of this year.

(b) The preparation of Detailed Project Report (DPR) for the 100 MW Amguri Combined Cycle Gas based Power Project has been deferred due to non-allocation of gas. Coal linkage for the 2x250 MW Margherita Coal based Thermal Power Project to be implemented by APGCL is awaited. It was informed that the inputs for allocation of coal linkage namely acquisition of land, allocation of water and terms of reference for EIA Study from MOE&F were furnished to the Central Electricity Authority (CEA) vide letter dated 20.04.2013. It was also informed that instead of coal linkage, Government of India would be allocating coal block to the state for the project.

(c) Regarding present status of 120 MW Lower Kopili HEP, it was informed that DPR has been submitted to CEA for concurrence.

(d) The Stage-II (2x1.5 MW) of Myntriang Small Hydro Project is likely to be commissioned by June 2013 and Stage-I(2x3 MW) by June 2014.

(e) On the status of revival of 2x30 MW Chandrapur Thermal Power Station, it was informed that coal linkage is awaited from the Ministry of Coal. The Chairperson AERC stated that as per Ministry of Power, Government of India Order for coal based thermal power station of less than 200 MW, no coal linkage is envisaged by the Ministry of Coal. As such, the Government of Assam may apply for a coal block allotment from the Coal Ministry and
exploration, operation, maintenance of the coal block including supply of coal could be done through agencies selected through a bidding process as has been done by NTPC.

(f) It was informed that in FY 2012-13, the Lakwa Thermal Power Station generated on an average of 120 MW out of its total capacity of 152.7 MW due to less availability of gas. The total gas allocation for this station from GAIL and OIL is 1.05 MMSCMD. However, gas supplied was only 0.76 MMSCMD.

(g) It was informed that during FY 2012-13, natural gas supplied by OIL was erratic due to strikes/bandhs/natural calamities, etc and during the summer season, inconsistent gas supply was experienced by both Namrup and Lakwa thermal power plants.

The Chairperson expressed concern that most of the new projects were taking much longer time than scheduled for commissioning. It was informed by him that APDCL arranged to purchase 5 MW off-grid power from IOC (AOD), Digboi w.e.f July 2011. The Chairperson stated that this was a good initiative and the other captive power plants having spare power may also come forward and contribute towards improving power supply position in the state.

(3) **Agenda Item no 3: Appraisal of overall power scenario in the state of Assam by APDCL**

Representatives from APDCL gave a power-point presentation on the prevailing power situation in the state. It was informed during the course of the presentation that 47.62% out of installed capacity of 1235 MW from the Central Sector Generating Stations (CSGS) in North Eastern Region (NER) is allocated to the state of Assam. Out of total installed capacity of 4940 MW from the CSGS located in the Eastern Region (ER), Assam has been allocated only 157 MW. It was further informed that during the past few months, APDCL received only 50% of the power allocated from the NER CSGS. Therefore, there was a shortfall of about 250-300 MW all through these months, particularly, during the peak hours. It was informed that out of 107 MW allocated to the state, only 43 MW was received from the Kopili Hydro Electric Project. The representative from NEEPCO informed that the underwater machineries had undergone corrosion due to acidity in the water and repairs & maintenance works have been taken up. On a query from the Commission as to when the project would be able to generate to its effective capacity, it was informed that the repairs and maintenance works are likely to be completed by March 2014 and the project would be able to generate to its full capacity depending on the inflow of water.
The representative from NERPC informed that almost all hydro power stations in the State of Meghalaya have been facing the problem of acidic water due to unscientific mining in the neighbouring areas and this matter has been discussed in the different forums time and again. It was stated by him that a suitable mining policy needs to be framed by the Government of Meghalaya. He even requested the Commission to advise the Government of Meghalaya in this regard. The Chairperson, AERC informed that the Meghalaya Electricity Regulatory Commission may be approached as the state of Meghalaya does not directly come under the jurisdiction of AERC.

The Chairperson, AERC informed the Forum that Rs 1.03/unit is being charged as Fuel and Power Purchase Price Adjustment (FPPPA) on electricity consumption for all consumers and therefore, as the distribution licensee is now aware of the fact that power from Kopili Hydro Electric Project will be partially available until March 2014, the licensee may find some alternative economic source of power to mitigate the shortage.

The representative from NEEPCO informed that there was no R&M problem in their other power stations; however, the hydro stations mostly run-of-river types, were still not able to generate power to their full capacity due to inadequate water inflow to these stations during the winter months. Besides, the Kathalguri gas based power station was not able to generate to its maximum capacity due to less availability of gas. The representative from OIL informed that an additional 0.4 mmcmd natural gas was being made available as fallback. However, NEEPCO informed that the gas that has been allocated on fallback basis to their station is not reliable and the calorific value of the gas is also low.

The representative from OIL informed that it will be able to supply only the gas already committed and there is no prospect of additional gas availability in the region till 2014. Therefore, the existing power stations of the state shall have to manage with the already existing gas commitments. It was further informed that OIL was trying to develop gas fields in Karbi Anglong district of Assam and Mizoram and additional gas is likely to be available only after 2014.

APDCL informed that there was a power shortage of 230-250 MW during the peak hours. It was informed that the Company was trying to procure power at an average price of Rs 2.50/unit from the Indian Energy Exchange and through Short term Open Access.
The Chairperson, AERC requested that the thermal power stations of the State and the Central Generation Companies should try to produce to their maximum capacity during the lean hydro season i.e. winter months so that there is less shortage and adequate measures in this regard needs to be undertaken as the state of Assam is paying the station-wise Fixed charges ordered by the CERC. Due to non availability of allocated power from the CSGS during the winter months, the utilities are procuring at a much higher rate thereby passing the burden to the consumers.

It was informed by the representatives from NERPC and PGCIL that the Available Transfer Capacity (ATC) of the ER-NER Grid is only 212 MW. It was informed that after the collapse of all India grid system in July 2012, reliability margin of the system has been increased and therefore, the grid transfer capacity has been reduced. During the winter, the ATC is less to avoid collapse and in summer the margin may be increased to 325 MW subject to review which is done every month. The reduced ATC may stand as a restraint in procuring power.

The Chairperson, AERC stated that the 400 KV double circuit lines are capable of transmitting 800 MW of power and therefore, 400 MW transfer capacity should be made available, otherwise, fixed charges levied on the consumers becomes prohibitive. He further stated that constraints in other networks should not be the yardstick in restricting power inflow to the North Eastern Grid.

The representatives from PGCIL and NERPC stated that this matter shall be taken up with the Regional Load Despatch Centre and the Ministry of Power, Government of India.

It was informed by PGCIL that the first set of 726 MW Palatana Power Project of ONGC Tripura Power Company Limited (OTPCL) is likely to be put into commercial operation within June 2013 and the required infrastructure to evacuate this power is ready. It was further informed that ATC in the ER-NER grid would not be a significant factor once Palatana Project is commissioned.

The Chairperson, AERC requested the concerned authorities that efforts be made to contribute maximum power from the Palatana Project during the lean hydro season so that peak power shortage can be mitigated to some extent.

Action: APDCL/ NERLDC/ OTPCL
(4) **Agenda Item No. 4: Status of new & ongoing power projects of NEEPCO, NHPC and NTPC in Assam/NER — NTPC/NHPC/NEEPCO.**

The representatives from NTPC gave a presentation on the status of the ongoing 750 MW coal based Bongaigaon Thermal Power Project. During the course of the presentation the members were informed regarding the physical completion status of the project and that the 1st Unit of 250 MW is expected to be commissioned in the 1st Quarter of 2014-15 and the balance units by 2015-16. Among the beneficiary states of the North Eastern Region from this project, Assam has the highest share of 50.8% i.e. 381 MW and 115 MW remains unallocated. The total cost of the project is Rs. 4720.43 Cr and the fuel (coal) will be sourced from Makum coal mines in Margherita area of Assam under North Eastern Coal Fields Ltd (NECL) – 1.65 MTPA and Non Raniganj of Eastern Coal Fields (ECL) – 0.97 MTPA. The NTPC sources informed that a number of initiatives were being taken for timely completion of the project viz:

- Stone chips are being brought from Pakur, in Jharkhand i.e. 550 KM from Salakati.
- Fabrication works being carried out at Guwahati to increase the monthly output.
- Continuous meetings are being held with Labour unions to understand their grievances and to resolve the same to build confidence among the masses, resulting in continuation of work.
- Arrangements are being made for stay of outside workers inside the plant area by providing temporary hutment.

However, it was stated by the NTPC representatives that a number of critical issues were affecting the pace of implementation of the project. Frequent bandhs calls and protests since February 2008 given for different time durations amounted to 178 days upto March 2013 and typically 2-3 days are lost due to every such call of bandh. As a result, work has been affected for more than 450 days at the project. Heavy rains at Salakati (Cumulative upto February, 2013: 4134 mm) has also affected the site progress. It was informed that inspite of these shortcomings, 75% of the project works has been completed and it is expected to complete the 1st unit of the project of 250 MW within June, 2014.
The members expressed satisfaction that the NTPC was taking initiatives to complete the project early and made a request that the NTPC may take up the implementation of the 500 MW Margherita Coal based Power Project also.

(5) Agenda Item No. 5: Gas supply position of the Thermal (proposed and existing) Station of APGCL/ EIPL/ NEEPCO — ONGC/OIL/GAIL/AGCL

APGCL sources informed that the company is planning to complete the 100 MW Namrup Replacement Power Project in March 2014. However, there is the persistent problem of shortage of gas supply to their existing natural gas based power plants in the state. It was informed that during the tea plucking season i.e. during the summer months, the pressure of gas received by the Lakwa Thermal Power Station was less, which led to less power generation. The representative from OIL informed that a dedicated pipeline is required to be constructed by the Assam Gas Corporation limited (AGCL) between the source of gas and the power station as the gas supplied through the 70 km length of pipeline encountered some obstructions enroute from the tea estates which tapped the gas and usually drew the gas allocated to them within 8 hours of supply. This led to low gas pressure by the time the gas reached the power station.

The Chairperson, AERC stated that APGCL and AGCL have to enter into an agreement in this regard and SCADA needs to be installed in all the pipelines to keep track of these kinds of exigencies. Moreover, the State Generating Company must approach the Ministry of Petroleum and Natural Gas, Government of India for additional gas linkages for their upcoming projects.

The Commission requested the companies to resolve the above issues through discussions and enter into some mutual agreement for greater benefit of the consumers involved.

Action: APGCL/ AGCL

(6) Agenda Item No. 6: Presentation by APGCL, AEGCL & APDCL on the status of ongoing generation, transmission and distribution projects under different schemes (R-APDRP, TDF, NLCPR, ADB/ World Bank Assisted Projects, etc) including status of renovation and modernisation works.

APGCL apprised the members on the status of new and ongoing projects in the State. It was informed by APGCL that the 98.4 MW Namrup Replacement Power Project for replacement
of existing old gas turbines by fuel efficient machines was expected to be commissioned in January 2012, however, due to slow progress of civil works, the project is likely to be commissioned in March 2014 at a cost of Rs 693.72 Cr. It was informed that the 70 MW Lakwa Replacement Power Project for replacing the existing Phase - I (4X15 MW) old gas turbines by fuel efficient machines is likely to be commissioned in July, 2015.

It was further informed that the fate of the 500 MW Margherita Coal based Power Station depended on the allocation of coal block to the power project by the Government of India. Similarly, the prospects of revival of the 2X30 MW Chandrapur Thermal Power Project at Guwahati and commissioning of 100 MW Amguri Combined Cycle Gas Turbine Project at Sivasagar depended on coal and gas linkage respectively. It was further informed that Rs 5 Cr and Rs 3.5 Cr have been sanctioned under the State planned expenditure for R&M of Namrup and Lakwa Thermal Power Stations respectively for FY 2012-13.

On the hydro power stations, it was informed that the 2nd phase (2x1.5 MW) of the 9 MW Myntrriang Small Hydro Power Project is likely to be commissioned in June 2013 at a tariff of Rs 0.99/ unit. It was informed that no other hydro project is likely to be commissioned during the FY 2013-14.

The Chairperson, AERC stated that every effort should be made to implement the power projects that are proposed to be set up in the state within the stipulated time period. The NERPC representative suggested that for coal based power projects such as Chandrapur Thermal Power Station, the option of procuring coal from coal fields in Nagaland and Meghalaya may be explored. APDCL, however, informed that since the coal fields in Nagaland and Meghalaya belonged to local private miners, there are the risks of uncertainty in supply and price volatility. **It was stated that in such circumstances, the cost of generation may multiply and the power tariff may be prohibitively high.**

APGCL’s presentation was followed by a presentation by APDCL on the ongoing projects under R-APDRP as on March 2013, Trade Development Fund (TDF) and Non Lapsable Central Pool of Resources (NLCPR). Then, the representatives from AEGCL also gave a presentation on the number of transmission lines and substations that were being constructed under different schemes/ Funds like NLCPR, NEC Funding, Trade Development Fund (TDF) of the Government of Assam, and renovation and modernization works which were being carried out under Annual Plan Funding and ADB funding.
A hard copy of the presentations of APGCL, APDCL and AEGCL are appended to these minutes.

(7) **Agenda Item No. 7: Presentation by CGM (REC) on the status of Rural Electrification/ Rajiv Gandhi Gramin Vidyutikaran Yojana (RGGVY).**

It was informed that RGGVY scheme was being implemented in the State through ASEB and PGCIL. The number of electrified villages by both these agencies as on 31.03.2013 as stated during the presentation is given in the table below:

<table>
<thead>
<tr>
<th>SL. No.</th>
<th>Name of Implementing Agency</th>
<th>No. of un-electrified villages completed</th>
<th>No. of un-electrified villages energized and handed over</th>
<th>No. of already electrified villages completed</th>
<th>No. of already electrified villages energized and handed over</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>ASEB</td>
<td>6534</td>
<td>6233</td>
<td>8986</td>
<td>8677</td>
</tr>
<tr>
<td>2</td>
<td>PGCIL</td>
<td>1485</td>
<td>1448</td>
<td>3304</td>
<td>3000</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td></td>
<td><strong>8019</strong></td>
<td><strong>7681</strong></td>
<td><strong>12290</strong></td>
<td><strong>11677</strong></td>
</tr>
</tbody>
</table>

Regarding, inspection of these works, APDCL informed that to ensure quality control, third party inspection mechanism is adopted. Third parties are appointed by GOI, REC and ASEB. M/s RITES Ltd has been appointed for inspection of materials like Transformers, PSC poles, Conductors, Insulators, cables, Meters etc by ASEB. M/s Bieco Lawrie has been appointed by ASEB for inspection of quality of the work executed in the field. REC Ltd. has appointed M/s CESC Ltd for inspection of quality of work in the field and GOI, Ministry of Power has appointed M/s WAPCOS for inspection of executed works. It was further informed that ASEB is taking cognizance of inspection reports of all these third party inspection agencies for ensuring corrective actions.

Representative from APDCL further informed that there are 2218 villages which are not accessible through Grid connectivity. For electrification of these villages as per guidelines of Ministry of New and Renewable Energy, Solar Photo Voltaic Home Lights and Street Light Systems have been supplied, installed and commissioned by ASEB, AEDA, Forest Department of GOA. They are the implementing agencies for 2194 villages. It was also informed that so far ASEB has installed 57449 Home Lights, 641 Street Lights in 1042 remote villages by spending Rs. 56.40 Cr.
It was informed by APDCL during the meeting that due to rapid rural electrification during the last couple of years, the commercial losses have increased by 4% -5% which has adversely affected the financial health of the organization.

The Chairperson, AERC stated that such an increase in distribution losses is alarming and measures already suggested need to be implemented to curtail these losses.

**Action: APDCL**

(8) Agenda Item No. 8: Presentation by Assam Energy Development Agency (AEDA) on the status of Renewable Energy Projects and Compliance of Renewable Purchase Obligation by obligated entities in the State.

In absence of representative from AEDA, there was no presentation on the status of Renewable Energy Projects and Compliance of Renewable Purchase Obligation by obligated entities in the state by the agency. However, APDCL shared some information regarding Renewable Energy (RE) projects which were being implemented in the state and these are briefly recorded below:

- APDCL has completed one 100KWp off-Grid Roof-top solar power plant on the Bijulee Bhawan Guwahati-1 which was commissioned by M/s Su-Kam Power Systems (I) Pvt. Ltd., Gurgaon.
- APDCL is also working to implement RE programmes in the government establishments of electrified / unelectrified villages covering schools, hospitals, college hostels etc. for which survey work is going on.
- APDCL till date prepared five (5) DPRs & submitted it to Government of Assam, Power (Electricity) Department for consideration.
- APDCL in Consultation with Assam Energy Development Agency has selected 12 sites on priority basis for Implementation of “Off-Grid Decentralized Solar Application Programme” in the state of Assam.
- APDCL will work to implement the RE programme to generate about 5550 KWp in 109 Buildings covering 9 Departments of the State Government in the 12th plan period.
- APDCL is also surveying the Government establishments /Buildings in the remote & unelectrified villages to implement the RE programme in the 12th plan period.
Wp Mini Grid Solar Power Plants as Pilot Projects are being considered for unelectrified villages/hamlets.

- Consideration of a project to electrify Amarpur GP & Ambikapur GP under Sadiya Development Block.

On an enquiry from a member regarding any grant provided by the MNRE for these projects, it was informed that these projects are financed with 90 % grant from the MNRE and the rest 10% granted by the State Government.

(9) Agenda Item No. 9: Any other matter.

No other matter was discussed. The meeting ended with a vote of thanks from the Secretary of the Commission.

Sd/-
(J. Barkakati)
Chairperson,
Assam Electricity Regulatory Commission
List of Members and Special Invitees attending the 7th Meeting of the Coordination Forum held on 30th April, 2013

(1) Shri J. Barkakati, Chairperson, AERC
(2) Dr. R. K. Gogoi, Member, AERC
(3) Shri T. Chatterjee, Member, AERC
(4) Mrs. U. Saikia, ACS, Deputy Secretary, Power Deptt, Government of Assam.
(5) Shri C. Baruah, Director, APDCL
(6) Shri G. K. Das, MD, AEGCL
(7) Shri B. Paul, CGM, AEGCL
(8) Shri B. C. Saha, GM(CPM), NEEPCO
(9) Prof. Anil Kumar Goswami, former Principal, Cotton College, Guwahati
(10) Shri K. K. Sarma, GM-Planning, Oil India Ltd.
(11) Shri S. Bordoloi, Chief Engineer Production Gas, Oil India Ltd.
(12) Shri S. K. Sur, GM(I/C), NTPC Ltd.
(13) Shri P. P. Bandopadhyay, DGM (S.O. II), NERLDC
(14) Shri Prakash Jyoti Sharma, DGM, Powergrid
(15) Shri B. Lyngkhoi, Director/SE, NERPC
(16) Shri S. K. Ghosh, Sr. Secretary, NTPC Ltd.
(17) Shri K. Phatowali, CGM(Gen), APGCL
(18) Shri A. Bordoloi, AGM(ME), NTPC Ltd.
(19) Shri S. Baruah, CGM(Com), APDCL
(20) Shri Sankar Kar, CGM(D), LAR, APDCL
(21) Shri B. K. Choudhury, CGM(D), CAR, APDCL
(22) Shri P. K. Baruah, GM(PP&D), APDCL
(23) Shri M. K. Adhikary, DGM(Com-T), APDCL
(24) Shri P. Bujarbarua, GM(Com-Rev), APDCL
(25) Shri P. K. Sarma, GM(Com-Tariff)
(26) Shri Atul Boruah, CGM(Hydro), APGCL
(27) Shri P. G. Saha, Director, APPDCL
(28) Mrs. K. Baruah, CGM(F&A), APDCL

Officers of AERC present:
(1) Shri M. J. Baruah, ACS, Secretary, AERC.
(2) Shri D. K. Sharma, Joint Director (Tariff), AERC

Consultants of AERC present:
(1) Ms. P. Sharma, Consultant (Finance, Database and Consumer Advocacy), AERC