

**Annexure-I**  
**(As referred to in Para No.3.2)**

### Statement showing approval and clearances from different authorities for development of hydro power project

Sl. No.	Type of clearances	Issuing Authority	Reason for its requirement	Procedure
I	Land	State Government	To ensure land availability	Application is submitted to the concerned State Revenue Department for land acquisition as per requirement of project.
II	Water	State Government/CWC	To ensure water availability and free from any dispute	Application is submitted to State Water Resource Department.
III	Comfort letter from Beneficiaries	Concerned SEBs	Willingness of SEBs to buy power.	Letters sent to SEBs/successor entities for giving their consent to buy power.
IV	Forest clearance (if applicable)	MOEF/State Government	This is required as per law.	Application is submitted to State Government for onward submission to Ministry of Environment & Forests (MOEF) in case forest land is to be acquired by the project. Presently it is issued in two stages, first in-principal and once conditions stipulated are complied then formal clearance. In case of projects in J&K State, forest clearance is given by the State Government under their Forest (Conservation) Act, 1997.
V	Defence clearances (for project located in proximity to International Border, LOC, restricted area, etc.)	Defence Authority	This is required as per law.	Application giving location and other details is submitted to MoP for taking up the matter with Ministry of Defence for Defence Clearance.
VI	Clearance for inter-state & international angle (if applicable)	MOWR/ CWC	This is required as per law.	Request is submitted to MoP for obtaining this clearance from MOWR.
VII	Clearances from Archeological Survey of India (ASI) (if applicable)	ASI	This is required as per citing criteria of MOEF	Application is submitted to Archeological Survey of India indicating location of project and other details for seeking NOC.
VIII	Preparation of Detailed Project Report	Chairman/ Board of Directors	As per guidelines of CEA, DPR is prepared for implementation of the project	DPR is prepared by the project in association with all the concerned divisions of Corporate Office.

Sl. No.	Type of clearances	Issuing Authority	Reason for its requirement	Procedure
IX	Concurrence of the scheme (earlier called Techno-economic clearance)	Central Electricity Authority	Electricity Act, 1948 amended from time to time	The DPR is submitted to CEA for Concurrence of the scheme (earlier Techno-economic clearance).
X	Approval of Terms of Reference (TOR) along with the clearance for pre-construction activities from MOEF	MOEF	Approval of TOR and for pre-construction activities from MOEF is required under EIA Notification 2006	Filing of Application with filled in Form I along with a copy of PFR and draft TOR for undertaking EIA & EMP study to MOEF.
XI	Public Hearing by State Pollution Control Board (SPCB)	SPCB	Public Hearing is required under EIA Notification 2006	Application along with draft EIA & EMP reports and its executive summary in English and local language are to be submitted. SPCB to issue a notice in two local newspapers for public hearing.
XII	Environment clearance	MOEF	Obtaining environmental clearance is required under the Act.	Final EIA & EMP reports incorporating comments received during Public consultation process is to be submitted to MOEF. The proposal is referred to Expert Appraisal Committee.
XIII	Investment approval	CCEA	Hydro projects are approved by CCEA, Gol	Investment proposal is submitted by MoP to PIB for its recommendation and thereafter to CCEA for sanction.

**Annexure-II**  
**(As referred to in Para No.3.3.1)**

**Statement showing details of the hydro projects planned for capacity addition (Original and revised) during 2007-12 by the CPSEs**

Sl. No.	Name of the Company/project	Capacity (MW)		Remarks
		Original	Revised	
<b>(A)</b>	<b>NHPC Limited</b>			
1.	Loktak downstream, Manipur	90	0	Slipped into 12 <sup>th</sup> Plan due to delay in resolution of JV issues with State Govt.
2.	Subansiri Lower, Arunachal Pradesh	2,000	2,000	
3.	Parbati-II, Himachal Pradesh	800	800	
4.	Parbati-III, Himachal Pradesh	520	520	
5.	Chamera-III, Himachal Pradesh	231	231	
6.	Siang Middle, Arunachal Pradesh	700	0	Transferred to Private parties
7.	Siang Lower, Arunachal Pradesh	1,700	0	
8.	Subansiri Middle, Arunachal Pradesh	2,000	0	
9.	Pakal Dul, Jammu & Kashmir	1,000	0	JV issue not settled
10.	Bursar, Jammu & Kashmir	1,020	0	Slipped due to non-firming of dam axis and law & order problems
11.	Uri-II, Jammu & Kashmir	280	240	
12.	Teesta V, Sikkim	0	510	Slipped from 10th Plan
13.	Sewa II, J&K	0	120	
14.	Teesta low Dam III, West Bengal	0	132	
15.	Teesta low Dam IV, West Bengal	0	160	
16.	Omkareshwar, MP	0	520	
17.	Nimmo-Bazgo, J&K	0	45	
18.	Chutak, J&K	0	44	
	<b>TOTAL (A)</b>	<b>10,341</b>	<b>5,322</b>	

Sl. No.	Name of the Company/project	Capacity (MW)		Remarks
		Original	Revised	
<b>(B)</b>	<b>SJVN Limited</b>			
1.	Rampur, Himachal Pradesh	412	412	
	<b>TOTAL (B)</b>	<b>412</b>	<b>412</b>	
<b>(C)</b>	<b>THDC India Limited</b>			
1.	Koteshwar, Uttarakhand	400	400	
	<b>TOTAL (C)</b>	<b>400</b>	<b>400</b>	
<b>(D)</b>	<b>North Eastern Electric Power Corporation Limited</b>			
1.	Tuirial, Mizoram	60	60	
2.	Kameng, Arunachal Pradesh	600	600	
	<b>TOTAL (D)</b>	<b>660</b>	<b>660</b>	
	<b>GRAND TOTAL (A to D)</b>	<b>11,813</b>	<b>6794</b>	

## Statement showing relaxation in the PQ criteria in respect of Subansiri Lower project

Sl. No.	PQ criteria as originally approved on 28.9.01	Revised PQ criteria as issued on 17.2.03	PQ criteria as relaxed vide letter dated 17.3.03
<b>A.</b>	<b>Lot-SSL1 and Lot-SSL2</b>		
i	Average annual turnover by Joint Venture partners over the preceding 5 years at <b>US\$ 85 million</b> or equivalent	<b>US\$ 140 million</b>	<b>US\$ 110 million</b>
<b>B.</b>	<b>Specific Criteria for Lot-SSL1</b>		
i.	Completion of tunnel of over 8 m dia and length aggregating to 2 km in one project.	Condition of 2 Km in one project was deleted	No further change
ii.	Heading excavation volume of 4,500 cum per month from one tunneling face in an ongoing/completed project more than one time in one project	No such criteria	No further change
iii.	Excavation in tunnel(s) of more than <b>15,000 cum per month</b> more than one time	Average Heading excavation in tunneling of <b>15000 cum per month</b> or above in an ongoing/completed project	Average Heading excavation in tunneling reduced to <b>10000 cum per month</b> or above in an ongoing/completed project
iv.	concrete lining volume of 2,000 cum per month per face in an ongoing/completed project more than one time	No such criteria	No further change
v.	Completion of Earthfill/ Rockfill/Cofferdam/dam of at least <b>25 m height</b> with certain grouting underneath	Construction of cut off wall (in rock) of more than 40 m depth for foundation treatment of dam.	No further change
vi.	Placement rate of 40,000 cum per month in cofferdam/dam in ongoing/completed project more than one time	This PQ was removed	No further change
vii.	Construction of Concrete Gravity Dam of at least <b>100 m height</b>	Construction of Concrete Gravity Dam of <b>90 m</b> or above height	No further change
viii.	Excavation in foundation/abutment of approx. <b>15,00,000 cum quantity</b> with progress rate of <b>70,000 cum per month</b> in an ongoing/completed dam more than one time in one project.	Average excavation in foundation/abutment of <b>70,000 cum per month</b> or above in an ongoing/completed Dam but requirement of <b>15,00,000 cum was relaxed</b>	Average excavation in foundation/abutment of <b>50,000 cum</b> per month or above in an ongoing/completed Dam.

ix.	Concreting of approx. <b>12,50,000 cum</b> with placement rate of <b>50,000 cum</b> in one month in an ongoing /completed dam(s) more than one time in one project.	Concreting of <b>18,00,000 cum</b> or above in an ongoing/completed Dam. The average placement rate of was raised to <b>60,000 cum</b> in a month.	Concreting of <b>12,50,000 cum</b> or above in an ongoing/completed Dam and average concrete placement of <b>40,000 cum</b> per month or above in an ongoing/completed Dam
<b>C. Specific Criteria for Lot-SSL2</b>			
i.	Completion of tunnels of over 8 m dia and length aggregating to 2 km in one project	Requirement of 2Km in one project removed	No further change
ii.	Heading excavation volume of 4500 cum per month from one tunneling face in an ongoing/completed project more than one time in one project and	<b>This criteria was removed</b>	No further change
iii.	Excavation in tunnel(s) of more than <b>15,000 cum per month</b> more than one time and	Average Heading excavation in tunneling of <b>15,000 cum per month</b> or above in an ongoing/completed project	Average Heading excavation in tunneling of <b>10,000 cum per month</b> or above in an ongoing/completed project
iv.	Completion of underground Power House/Transformer Hall of minimum cavern width of 20 m	No further change	No further change
v.	Excavation progress rate of 10,000 cum per month achieved more than once in any ongoing/completed project	Average Excavation progress of <b>10,000 cum per month</b> or above in caverns in an ongoing/completed project	Average Excavation progress of <b>5,000 cum per month</b> or above in caverns in an ongoing/completed project
vi.	Concreting progress of 2,800 cum per month achieved more than once in an ongoing/completed project and	<b>This criteria was removed</b>	No further change
vii.	Completion of a pressure shaft/vertical shaft of approx. 7 m finished dia and over-55 m height.	Mechanized open excavation in rock of <b>20,00,000 cum</b> or above in an ongoing/completed project <b>including excavation height of 50 m or above</b>	Mechanized open excavation in rock of <b>20,00,000 cum</b> or above in an ongoing/completed project
viii.	<b>No such PQ requirement</b>	Average progress of <b>60,000 cum per month</b> or above in mechanized open excavation in rock in an ongoing/completed project	Average progress of <b>25,000 cum per month</b> or above in mechanized open excavation in rock in an ongoing/completed project
ix.	Individual item of technical criteria to be solely met by the sole applicant /JV partner/sub-contractor. No percentage of criteria to be met by individual JV partner was envisaged	Maximum two partners(including the Lead Partner) of proposed Joint Venture/Consortium partners individually have the specific construction experience of these <b>sub-activity(ies) equal to or more than 30%</b> of the corresponding qualifying criteria for such sub-activity(ies).	Maximum two partners(including the Lead Partner) of proposed Joint Venture/Consortium partners individually have the specific construction experience of these sub-activity(ies) equal to or more than <b>20% of the corresponding qualifying criteria</b> for such sub-activity(ies).

**Annexure-IV**  
**(As referred to in Para 5.2.b)**

### Relaxations in the PQ criteria in respect of Parbati-II project

Sl. No.	PQ criteria as per PQ document	Relaxed PQ criteria
1.	Minimum average annual turnover in civil and Hydro-mechanical work of US\$ 55 million or equivalent.	Minimum average annual turnover in civil and Hydro-mechanical work of US\$ 45 million or equivalent.
2.	Completion of tunnel of more than 5 Km with Drill and Blast Method(DBM) with an excavated volume of 4500 cum per month from one tunneling face and concrete lining volume of 3500 cum per month in ongoing/completed project, more than one time in one project.	Completion of tunnels aggregating to more than 2 Km with Drill and Blast Method(DBM) with an excavated volume of 4500 cum per month from one tunneling face and concrete lining volume of 2500 cum per month in ongoing/completed project, more than one time in one project.
3.	Joint Venture Partner who has the experience of TBM shall execute the TBM portion of tunnel.	Joint Venture Partner/approved sub-contractor who has the experience of TBM shall execute the TBM portion of tunnel.

**Annexure-V**  
**(As referred to in Para 5.4.1)**

**Details of the time taken from NIT to award and comparison of cost estimates vis-à-vis award value**

Sl. No.	Name of Project	Name of the Package	Date of NIT for PQ	Name of contractor	Date of award	Time taken from NIT to Award (in months)
1	Chamera-III of NHPC	Construction of DT & DT Gate, Cofferdam, Concrete Dam, Intake Structure, Desilting Arrangements, HRT Surge Shaft, Pressure Shaft, Underground Power House TRT and Pothead Yard (Lot-I)	Second week of Dec. 2003	HCC	21.09.05	21
2	Uri-II of NHPC	Construction of DT including Gates, Concrete Gravity Dam, HRT, Surge Shaft, Pressure Shaft, Power House & TRT(Lot-I)	29.12.03	HCC	21.09.05	21
3	Nimoo Bazgo of NHPC	Civil Works for Concrete Dam, Cofferdams, DT, Surface Power House, Tail Pool & Switch Yard (Lot-I)	06.05.04 re-tendered on 26.05.06	Gammon (After re-tender HCC)	23.09.06	28
4	Chutak of NHPC	E & M Works Package (Lot - 3)	29.08.05	BHEL	16.08.07	23
5	Parbati-II of NHPC	Civil and Hydro-Mechanical works for Diversion Dam and Part HRT ( Lot-PB-1)	08.11.00	Patel-Sew JV	11.09.02	22
6	Parbati-II of NHPC	Civil and Hydro-Mechanical works for HRT and Associated work (Lot-PB-2)	08..11.00	Himachal JV	11.09.02	22
7	Parbati-II of NHPC	Civil and Hydro-Mechanical works for Power House, Pressure Shaft, Surge Shaft and Part HRT (Lot-PB-3.)	08.11.00	Gammon	13.09.02	22
8	Parbati-III of NHPC	Construction of Diversion cum spillway tunnels including gates and hoists, coffer dams, rock fill dam, spillway, intake structures and part HRT (Lot-1)	17.12.03	Patel-L&T JV	15.12.05	24
9	Parbati-III of NHPC	E & M Works Package (Lot- 4)	18.08.04	BHEL	29.12.06	28
10	Subansiri Lower of NHPC	Civil works for DT, Cofferdams, Concrete Gravity Dam, Plunge Pool and Cuf off Wall (Lot-SSL-1)	16.08.01	BGS-SGS-SOMA	19.12.03	28
11	Subansiri Lower	Civil works of HRT Intake Structures, Head Race Tunnels, Surge Chamber, Pressure Shafts, TRT, Adits and Surface Power House (Lot- SSL-2)	16.08.01	L & T	19.12.03	28
12	Subansiri Lower of NHPC	E & M Package (Lot - 4)	07.04.03	Alstom	11.02.05	22



Sl. No.	Name of Project	Name of the Package	Date of NIT for PQ	Name of contractor	Date of award	Time taken from NIT to Award (in months)
13	Teesta Lower Dam-IV of NHPC	Civil works for construction of Diversion Arrangement, Concrete Gravity Dam alongwith Spillway, Roller Compacted Concrete (RCC) Dam, Intake Structure, Surface Power House, Tail Race Channel, Switch Yard and other associated Civil Work (Lot-1)	04.06.04	HCC	19.01.06	19
14	Teesta-V of NHPC	Civil works for underground Power House, Surge Shaft, Part HRT including Adit-5 (Lot-4)	28.12.99	JAL	09.03.01	14
15	Chutak of NHPC	Civil works for construction of DT, Coffor Dams, Barrage, Intake Structure, Head race Tunnel, Surge Shaft, Pressure Shafts, Underground Power House, Transformer cavern, Tailrace Tunnel and Switch yard (Lot-1)	26.05.06	HCC	23.09.06	4
16	Omkareshwar (JV of NHPC with MP Govt.)	Turnkey contract.	09.02.01	JPUSC	09.06.03	28
17	Rampur of SJVNL	Construction of civil works for part HRT, river diversion work, adits, vehicular gates, etc.	04.05.05	PGJV	01.02.07	21
18	Rampur of SJVNL	Construction of civil works for part HRT, surge shaft, pressure shaft, valve house, power house complex, TRT, adits and HM works	04.05.05	PGJV	01.02.07	21
19	Rampur of SJVNL	Electro-mechanical works	04.05.06	BHEL	16.09.08	28
20	Koteshwar of THDC	Construction of civil works of Dam, Spillway and Power House works	14.05.99	PCL-JV	31.08.02	39
21	Koteshwar of THDC	Design, manufacturer, supply, transportation, testing, erection and commissioning of Gates, Hoists in Spillways, Power House, Intakes, etc.	14.05.99	PTEL	09.02.06	80
22	Koteshwar of THDC	Design, manufacturer, supply, transportation, testing, erection and commissioning of main generating units & EOT crane	14.05.99	BHEL	28.02.03	45

**Annexure-VI**  
*(As referred to in Chapter-VI and Para 6.1)*

**Statement showing project-wise details of the scheduled date of commercial operation (COD), actual COD, delays and financial progress as on 31<sup>st</sup> March 2012**

Sl. No.	Name of project	Scheduled COD	Actual/Anticipated COD	Delays (in months)	Financial progress
1.	Teesta-V of NHPC	February 2007	April 2008	14	Completed
2.	Sewa-II of NHPC	September 2007	July 2010	34	Completed
3.	Koteshwar of THDC	April 2005	April 2012	84	Completed
4.	Parbati-II of NHPC	September 2009	December 2017	99	90.21 %
5.	Parbati-III of NHPC	November 2010	January 2013	26	76.22%
6.	Chamera-III of NHPC	September 2010	June 2012	21	127.65%
7.	Subansiri Lower of NHPC	September 2010	December 2016	75	89.15%
8.	Uri-II of NHPC	November 2009	February 2013	39	98.07%
9.	TLD-III of NHPC	March 2007	December 2012	69	189.18%
10.	TLD-IV of NHPC	September 2009	August 2013	47	103.91%
11.	Nimmo Bazgo of NHPC	August 2010	January 2013	29	118.35%
12.	Chutak of NHPC	February 2011	October 2012	20	117.61%
13.	Rampur of SJVNL	January 2012	September 2013	20	87.61%
14.	Kameng of NEEPCO	December 2009	March 2017	87	71.62%
15.	Tuirial of NEEPCO	July 2006	February 2016	115	82.30%

**Annexure-VII**  
**(As referred to in Para 6.1)**

**Statement showing approved, revised and actual/anticipated cost of the completed/ongoing projects of CPSEs**

Sl. No.	Name of the projects	Capacity (in MWs)	Date of Investment Approval	Approved cost (Rs. in crore)	Revised Cost <sup>1</sup> (Rs. in crore)	Actual/Anticipated Cost of completion (Rs. in crore)	Increase in the project cost (Rs. in crore)	Percentage of increase in Actual/Anticipated cost to Approved cost
<b>A</b>	<b>Completed projects:</b>							
1	Koteshwar of THDC	400	10.04.2000	1301.56	2466.96	2719.49	1417.93	109%
2	Sewa-II of NHPC	120	09.09.2003	665.46	1108.83	1108.83	443.37	67%
3	Teesta-V of NHPC	510	11.02.2000	2198.04	2656.95	2656.95	458.91	21%
4	Omkareshwar (JV of NHPC with MP Govt.)	520	29.05.2003	2224.73	2497.04	2497.04	272.31	12%
	<b>Total (A)</b>	<b>1550</b>		<b>6389.79</b>	<b>8729.78</b>	<b>8982.31</b>	<b>2592.52</b>	
<b>B</b>	<b>Ongoing projects:</b>							
5	Tuirial of NEEPCO	60	07.07.1998	368.72	913.63	913.63	544.91	148%
6	Teesta Low Dam-III of NHPC	132	30.10.2003	768.92	1628.39	1628.39	859.47	112%
7	Kameng of NEEPCO	600	02.12.2004	2496.90	5139.00	5139.00	2642.10	106%
8	Subansiri Lower of NHPC	2000	09.09.2003	6285.33	10667.09	10667.09	4381.76	70%
9	Nimoo Bazgo of NHPC	45	24.08.2006	611.01	936.10	936.10	325.09	53%
10	Chamera-III of NHPC	231	01.09.2005	1405.63	2084.01	2084.01	678.38	48%
11	Chutak of NHPC	44	24.08.2006	621.26	913.25	913.25	291.99	47%
12	Teesta Low Dam-IV of NHPC	160	30.09.2005	1061.38	1501.75	1501.75	440.37	41%
13	Parbati-II of NHPC	800	11.09.2002	3919.59	5353.21	5353.21	1433.62	37%
14	Uri-II of NHPC	240	01.09.2005	1724.79	2082.82	2082.82	358.03	21%
15	Parbati-III of NHPC	520	09.11.2005	2304.56	2715.92	2715.92	411.36	18%
16	Rampur of SJVNL	412	25.01.2007	2047.03	2047.03	2047.03	0.00	0%
	<b>Total (B)</b>	<b>5244</b>		<b>23615.12</b>	<b>35982.20</b>	<b>35982.20</b>	<b>12367.08</b>	
	<b>Grand Total (A+B)</b>	<b>6794</b>		<b>30004.91</b>	<b>44711.98</b>	<b>44964.51</b>	<b>14959.60</b>	

<sup>1</sup> Based on revised cost estimate of the projects submitted by the respective CPSEs to Ministry of Power for approval.

**Annexure VIII**  
**(As referred in para No.7.2)**

**Statement showing loss of generation on ongoing projects due to non-completion within scheduled timeframe**

Sl. No.	Name of Project	Unit No.	Scheduled COD as Investment Approval	Anticipated/ COD	Actual	Delays (Days)	Annual energy generation after auxiliary consumption & transformer loss as per DPR (in million units)	Annual energy generation of each unit as per DPR (in million units)
<b>Completed projects:</b>								
1	Teesta-V of NHPC (510 MW)	I to III	11/02/2007	10/04/2008	(Act)	424	2163.20	2163.20
2	Sewa-II of NHPC (120 MW)	I to III	09/09/2007	24/07/2010	(Act)	1049	534.19	534.19
3	Koteshwar of THDC (400 MW)	I	31/10/2004	01/04/2011	(Act)	2343	1234.00	308.50
		II	31/12/2004	26/10/2011	(Act)	2490		308.50
		III	28/02/2005	13/02/2012	(Act)	2541		308.50
		IV	30/04/2005	01/04/2012	(Act)	2528		308.50
<b>Total (Completed projects) - 1030 MW</b>								<b>3931.39</b>
<b>Ongoing projects:</b>								
1	Parbati-II of NHPC (800 MW)	I to IV	11/09/2009	15/12/2017	(Ant)	3017	3046.26	3046.26
2	Parbati-III of NHPC (520 MW)	I to IV	09/11/2010	15/01/2013	(Ant)	798	1952.31	1952.31
3	Chamera-III of NHPC (231 MW)	I	01/09/2010	15/06/2012	(Ant)	653	1093.51	364.50
		II	01/09/2010	15/06/2012	(Ant)	653		364.50
		III	01/09/2010	15/06/2012	(Ant)	653		364.50
4	Subansiri Lower of NHPC (2000 MW)	I to VIII	09/09/2010	15/12/2016	(Ant)	2289	7475.78	7475.78
5	Teesta Low Dam-III of NHPC (132 MW)	I to IV	15/03/2007	15/12/2012	(Ant)	2102	588.49	588.49
6	Teesta Low Dam-IV of NHPC (160 MW)	I	30/09/2009	15/06/2013	(Ant)	1354	712.82	178.21
		II	30/09/2009	15/07/2013	(Ant)	1384		178.21
		III	30/09/2009	15/08/2013	(Ant)	1415		178.21
		IV	30/09/2009	15/08/2013	(Ant)	1415		178.21
7	Uri of NHPC (240 MW)	I	30/11/2009	15/01/2013	(Ant)	1142	1070.35	267.59
		II	30/11/2009	15/01/2013	(Ant)	1142		267.59
		III	30/11/2009	15/02/2013	(Ant)	1173		267.59
		IV	30/11/2009	15/02/2013	(Ant)	1173		267.59
8	Nimoo Bazgo of NHPC (45 MW)	I	24/08/2010	15/10/2012	(Ant)	783	236.88	78.96
		II	24/08/2010	15/11/2012	(Ant)	814		78.96
		III	24/08/2010	15/01/2013	(Ant)	875		78.96
9	Chutak of NHPC (44 MW)	I	24/02/2011	15/06/2012	(Ant)	477	213.82	53.46
		II	24/02/2011	15/06/2012	(Ant)	477		53.46
		III	24/02/2011	15/07/2012	(Ant)	507		53.46
		IV	24/02/2011	15/10/2012	(Ant)	599		53.46
10	Rampur of SJVNL (412 MW)	I	27/01/2012	15/09/2013	(Ant)	597	2057.11	342.85

Sl. No.	Name of Project	Unit No.	Scheduled COD as per Investment Approval	Anticipated/ COD	Actual	Delays (Days)	Annual energy generation after auxiliary consumption & transformer loss as per DPR (in million units)	Annual energy generation of each unit as per DPR (in million units)
		II	27/01/2012	15/09/2013	(Ant)	597		342.85
		III	27/01/2012	15/09/2013	(Ant)	597		342.85
		IV	27/01/2012	15/09/2013	(Ant)	597		342.85
		V	27/01/2012	15/09/2013	(Ant)	597		342.85
		VI	27/01/2012	15/09/2013	(Ant)	597		342.85
11	Kameng of NEEPCO (600 MW)	I	15/12/2009	31/03/2017	(Ant)	2663	3592.00	898.00
		II	15/12/2009	31/03/2017	(Ant)	2663		898.00
		III	31/12/2009	31/03/2017	(Ant)	2647		898.00
		IV	31/12/2009	31/03/2017	(Ant)	2647		898.00
12	Tuirial of NEEPCO (60 MW)	I	15/07/2006	16/02/2016	(Ant)	3503	312.21	156.11
		II	15/07/2006	16/02/2016	(Ant)	3503		156.11
<b>Total (Ongoing projects) - 5244 MW</b>								<b>22351.58</b>
<b>Total (All CPSEs) - 6274 MW</b>								<b>26282.97</b>

Note: The annual energy generation of Tuirial project (60 MW) of NEEPCO has been calculated based on 60 per cent load factor and after deducting auxiliary consumption & transformer loss 0.5% as DPR data is not available.

For anticipated and actual COD, 15th of the month has been adopted in the absence of actual date of the respective month.

### Statement showing loss of additional Return on Equity on hydro projects due to non-completion within timeframe fixed by CERC

Sl. No.	Name of Project	Unit No.	Timeline as per CERC regulations	Date of Investment Approval (i.e. date of CCEA clearance)	Scheduled COD per CERC's criteria	Anticipated COD	Whether eligible for Addl. ROE	Completed/anticipated revised cost (Rs. in crore)	Cost of one generating unit (Rs. in crore)	Debt @ 70% of Col. 10 (Rs. in crore)	Equity @ 30% of Col.10 (Rs. in crore)	Rate of Addl. Return on Equity	Total loss of additional Return on Equity (Rs. in crore)**
1	2	3	4	5	6	7	8	9	10	11	12	13	14
1	Parbati-III of NHPC	1	As per concurrence of CEA (i.e. COD of 1, 2, 3 & 4 unit in 57, 58, 59 & 60 months respectively from the date of CCEA clearance)	09.11.2005	09/08/2010	15/10/2012 (Ant)	Yes	2715.92	678.98	475.29	203.69	0.50%	35.65
		09/09/2010			15/11/2012 (Ant)	Yes		678.98	475.29	203.69	0.50%	35.65	
		09/10/2010			15/12/2012 (Ant)	Yes		678.98	475.29	203.69	0.50%	35.65	
		09/11/2010			15/01/2013 (Ant)	Yes		678.98	475.29	203.69	0.50%	35.65	
2	Chamera-III of NHPC	1	As per concurrence of CEA (i.e. COD of 1, 2 & 3 unit in 56, 58 & 60 months respectively from the date of CCEA clearance)	01.09.2005	01/05/2010	15/06/2012 (Ant)	Yes	2084.01	694.67	486.27	208.40	0.50%	36.47
		01/08/2010			15/06/2012 (Ant)	Yes		694.67	486.27	208.40	0.50%	36.47	
		01/10/2010			15/06/2012 (Ant)	Yes		694.67	486.27	208.40	0.50%	36.47	
3	Teesta Low Dam-IV of NHPC	1	As per concurrence of CEA (i.e. COD of 1, 2, 3 & 4 unit in 45, 46, 47 & 48 months respectively from the date of CCEA clearance)	30.09.2005	30/06/2009	15/06/2013 (Ant)	Yes	1501.75	375.44	262.81	112.63	0.50%	19.71
		30/07/2009			15/07/2013 (Ant)	Yes		375.44	262.81	112.63	0.50%	19.71	
		30/08/2009			15/08/2013 (Ant)	Yes		375.44	262.81	112.63	0.50%	19.71	
		30/09/2009			15/08/2013 (Ant)	Yes		375.44	262.81	112.63	0.50%	19.71	

Sl. No.	Name of Project	Unit No.	Timeline as per CERC regulations	Date of Investment Approval (i.e. date of CCEA clearance)	Scheduled COD per CERC's criteria	Anticipated COD	Whether eligible for Addl. ROE	Completed/anticipated revised cost (Rs. in crore)	Cost of one generating unit (Rs. in crore)	Debt @ 70% of Col. 10 (Rs. in crore)	Equity @ 30% of Col. 10 (Rs. in crore)	Rate of Addl. Return on Equity	Total loss of additional Return on Equity (Rs. in crore)**
1	2	3	4	5	6	7	8	9	10	11	12	13	14
4	Subansiri Lower of NHPC	1	As per concurrence of CEA (i.e. COD of 1 & 2, 3 & 4, 5 & 6 and 7 & 8 unit in 77, 81, 82 & 84 months respectively from the date of CCEA clearance)	09.09.2003	09/02/2010	15/12/2016 (Ant)	Yes	10667.09	1333.39	933.37	400.02	0.50%	70.00
		09/02/2010			15/12/2016 (Ant)	Yes	1333.39		933.37	400.02	0.50%	70.00	
		09/06/2010			15/12/2016 (Ant)	Yes	1333.39		933.37	400.02	0.50%	70.00	
		09/06/2010			15/12/2016 (Ant)	Yes	1333.39		933.37	400.02	0.50%	70.00	
		09/07/2010			15/12/2016 (Ant)	Yes	1333.39		933.37	400.02	0.50%	70.00	
		09/07/2010			15/12/2016 (Ant)	Yes	1333.39		933.37	400.02	0.50%	70.00	
		09/09/2010			15/12/2016 (Ant)	Yes	1333.39		933.37	400.02	0.50%	70.00	
		09/09/2010			15/12/2016 (Ant)	Yes	1333.39		933.37	400.02	0.50%	70.00	
5	Uri-II of NHPC	1	As per concurrence of CEA (i.e. COD of 1, 2, 3 & 4 unit in 48, 49, 50 & 51 months respectively from the date of CCEA clearance)	01.09.2005	01/09/2009	15/01/2013 (Ant)	Yes	2082.82	520.705	364.49	156.21	0.50%	27.34
		01/10/2009			15/01/2013 (Ant)	Yes	520.705		364.49	156.21	0.50%	27.34	
		01/11/2009			15/02/2013 (Ant)	Yes	520.705		364.49	156.21	0.50%	27.34	
		01/12/2009			15/02/2013 (Ant)	Yes	520.705		364.49	156.21	0.50%	27.34	
6	Nimoo Bazgo of NHPC	1	As per concurrence of CEA (i.e. COD of 1, 2 & 3 unit in 46, 47 & 48 months respectively from the date of Govt. Sanction/clearance)	24.08.2006	24/06/2010	15/10/2012 (Ant)	Yes	936.10	312.033	218.42	93.61	0.50%	16.38
		24/07/2010			15/11/2012 (Ant)	Yes	312.033		218.42	93.61	0.50%	16.38	
		24/08/2010			15/01/2013 (Ant)	Yes	312.033		218.42	93.61	0.50%	16.38	

Sl. No.	Name of Project	Unit No.	Timeline as per CERC regulations	Date of Investment Approval (i.e. date of CCEA clearance)	Scheduled COD per CERC's criteria	Anticipated COD	Whether eligible for Addl. ROE	Completed/anticipated revised cost (Rs. in crore)	Cost of one generating unit (Rs. in crore)	Debt @ 70% of Col. 10 (Rs. in crore)	Equity @ 30% of Col. 10 (Rs. in crore)	Rate of Addl. Return on Equity	Total loss of additional Return on Equity (Rs. in crore)**
1	2	3	4	5	6	7	8	9	10	11	12	13	14
7	Chutak of NHPC	1	As per concurrence of CEA (i.e. COD of 1, 2, 3 & 4 unit in 51, 52, 53 & 54 months respectively from the date of Govt. Sanction/clearance)	24.08.2006	24/11/2010	15/06/2012 (Ant)	Yes	913.25	228.31	159.82	68.49	0.50%	11.99
2		12/12/2010		15/06/2012 (Ant)	Yes		228.31	159.82	68.49	0.50%	11.99		
3		24/01/2011		15/07/2012 (Ant)	Yes		228.31	159.82	68.49	0.50%	11.99		
4		24/02/2011		15/10/2012 (Ant)	Yes		228.31	159.82	68.49	0.50%	11.99		
<b>Total loss of Additional Return on Equity (NHPC)</b>													
8	Rampur of SJVNL	1	55,56,57,58,59 and 60 months for Unit 1 to 6 respectively from the date of Govt. sanction	25.01.2007	25/08/2011	15/09/2013 (Ant)	Yes	2047.03	341.17	238.82	102.35	0.50%	17.91
2		25/09/2011			15/09/2013 (Ant)	Yes		341.17	238.82	102.35	0.50%	17.91	
3		25/10/2011			15/09/2013 (Ant)	Yes		341.17	238.82	102.35	0.50%	17.91	
4		25/11/2011			15/09/2013 (Ant)	Yes		341.17	238.82	102.35	0.50%	17.91	
5		25/12/2011			15/09/2013 (Ant)	Yes		341.17	238.82	102.35	0.50%	17.91	
6		25/01/2012			15/09/2013 (Ant)	Yes		341.17	238.82	102.35	0.50%	17.91	
<b>Total loss of Additional Return on Equity (SJVNL)</b>													
9	Kameng of NEEPCO	1	60 months from the date of Govt. Sanction	02.12.2004	02/12/2009	31/03/2017 (Ant)	Yes	5139.00	1284.75	899.33	385.43	0.50%	67.45
2		02/12/2009			31/03/2017 (Ant)	Yes		1284.75	899.33	385.43	0.50%	67.45	
3		02/12/2009			31/03/2017 (Ant)	Yes		1284.75	899.33	385.43	0.50%	67.45	
4		02/12/2009			31/03/2017 (Ant)	Yes		1284.75	899.33	385.43	0.50%	67.45	
<b>Total loss of Additional Return on Equity (NEEPCO)</b>													
<b>Total loss of Additional Return on Equity to all CPSEs</b>													
<b>1097.31</b>													
<b>107.46</b>													
<b>269.80</b>													
<b>1474.57</b>													

\*\*Based on useful life of 35 years of the hydro power plant as specified in the CERC's Regulations)