

Time/Cost Over Run of H.E. Projects (above 25 MW) Commissioned during 12<sup>th</sup> Plan

Sr. No	Name of Project Capacity Agency State	Date of Govt. Approval/ investment decision	Commissioning schedule		Time over run Months	Project cost Rupees in Crores/		Cost over run (Rs. Crs.)	Reason for time and cost over run
			Original	Actual		Original	Latest		
	<b>Central Sector</b>								
1	Chutak (4x11 MW) NHPC J&K	24.08.2006	Feb-11	Jan-13	23	621.26	913.25	291.99	<ul style="list-style-type: none"> <li>➤ Working in extreme weather conditions (Short Working Season).</li> <li>➤ Difficulty in transportation of material due to difficult terrain.</li> <li>➤ Delay in Supplies of E&amp;M and HM parts.</li> <li>➤ Shortage of Man power by BHEL.</li> <li>➤ Evacuation of Power.</li> <li>➤ Commissioning delayed due to insufficient load.</li> </ul>
2	Chamera-III (3x77 MW) NHPC HP	01.09.2005	Aug-10	June-12	22	1405.63	2084.01	678.38	<ul style="list-style-type: none"> <li>➤ Murder of 3 persons and damage to equipment in June 2006.</li> <li>➤ Washing away of Cofferdam during flash flood in July 2007.</li> <li>➤ Shut down of main crusher plant by state govt.</li> <li>➤ Shortage of Man Power by HCC,</li> <li>➤ Cavity in Lower Expansion Gallery.</li> <li>➤ Heavy rain &amp; snow fall in Feb. 2012.</li> <li>➤ Plugging of Diversion Tunnel.</li> </ul>
3	Teesta Low Dam-III (4x33= 132 MW) NHPC W B	30.10.2003	Mar-07	Apr-13	73	768.92	1628.00	859.08	<ul style="list-style-type: none"> <li>➤ Delay in obtaining Forest clearance.</li> <li>➤ Power house hill slope failure.</li> <li>➤ Flash flood in July, 2007 ,May, 2009 &amp; July, 2010.</li> <li>➤ Gorkha Jan Mukti agitations/bandhs.</li> <li>➤ Delay in Erection of spillway Gates.</li> <li>➤ Delay in Completion of evacuation system.</li> </ul>
4	Nimoo Bazgo (3x15= 45 MW) NHPC J&K	24.08.2006	Aug-10	Nov-13	39	611.01	985.15	374.14	<ul style="list-style-type: none"> <li>➤ Working in extreme cold weather conditions (Short working season).</li> <li>➤ Difficulty in transportation of material due to difficult terrain.</li> <li>➤ Shortage of manpower for E&amp;M works.</li> <li>➤ Evacuation of Power/availability of sufficient load.</li> </ul>
5	Uri-II (4x60= 240 MW) NHPC J&K	01.09.2005	Nov-09	Feb-14	51	1724.80	2321.53	596.73	<ul style="list-style-type: none"> <li>➤ Lack of resources and cash flow crunch of HCC.</li> <li>➤ Breaching/ overtopping of Cofferdam in May, 10 &amp; April, 11 due to heavy rain.</li> <li>➤ Disturbance in Valley since June, 2010.</li> <li>➤ Problem faced during erection of Surge Shaft Gate.</li> <li>➤ Delay in Diversion Tunnel Plugging works.</li> <li>➤ Works stopped by locals from Mar, 2012 to June, 2012 demanding employment in NHPC.</li> </ul>
6	Parbati-III (4x130 MW) NHPC HP	09.11.2005	Nov-10	May-14	42	2304.56	2716.00	411.44	<ul style="list-style-type: none"> <li>➤ Poor geology in HRT.</li> <li>➤ Delay in completion of E&amp;M works.</li> <li>➤ Flash flood on 16<sup>th</sup> August, 2011.</li> <li>➤ Delay in supply of material and erection of units by BHEL. Stoppage of work by locals.</li> </ul>

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									<ul style="list-style-type: none"> <li>➤ Forest clearance for transmission line received in June, 2012.</li> <li>➤ Termination of XLPE Cable</li> </ul>
7	Rampur (6x68.67 MW) SJVN Ltd Himachal Pradesh	25.01.2007	2011-12	2014-15 (Dec-14)	36	2047.03	3288.28	1241.25	<ul style="list-style-type: none"> <li>➤ Poor geology in HRT.</li> <li>➤ Slope failure in Power House area.</li> <li>➤ Intermittent disturbance by local people.</li> <li>➤ Fault in Generator Transformer.</li> </ul>
8	Kol Dam (4x200 MW) NTPC Himachal Pradesh	28.10.2002	2008-09	2015-16 (Jun-15)	84	4527.15	7220.00	2692.85	<ul style="list-style-type: none"> <li>➤ Slow progress of clay/earth filling of dam, Grouting of dam galleries, Concreting of Spillway.</li> <li>➤ Contractual issues.</li> <li>➤ Delay in procurement of steel.</li> <li>➤ Right bank failure due to poor geology, seepage at foundation of clay core.</li> <li>➤ Seepage in diversion tunnel during reservoir impounding</li> <li>➤ FCA clearance for 44 ha. Land for reservoir impounding beyond EL 574</li> </ul>
9	Teesta Low Dam- IV (4x40 = 160 MW) NHPC West Bengal	30.09.2005	2009-10	2016-17 (Sept' 16)	84	1061.38 (03/05)	2336.74 (12/15)	1275.36	<ul style="list-style-type: none"> <li>➤ Delay in forest clearance.</li> <li>➤ Flash flood in July, 2007, May, 2009 &amp; July, 2010.</li> <li>➤ Gorkha Jan Mukti agitations/bandhs.</li> <li>➤ Cash crunch of Civil contractor (M/s HCC), the civil works were at halt from March, 2013 to November, 2014.</li> </ul>
	<b>State Sector</b>								
10	Baglihar-II (3x150 = 450 MW) JKPDC Jammu & Kashmir	19.03.2012	2015-16	2015-16 (Oct-15)	Nil	3113.19	3113.19	Nil	➤ <b>No Time &amp; Cost Over-run.</b>
11	Kashang-I (1x65 = 65 MW) HPPCL Himachal Pradesh	31.07.2008	2013-14	2016-17 (Oct-16)	65	478.02 (03/08)	478.02 (03/08)	Nil	<ul style="list-style-type: none"> <li>➤ Slow progress of civil and E&amp;M works.</li> <li>➤ Flash flood in June, 2013.</li> <li>➤ Approach roads washed off during heavy rains in Monsoon 2013.</li> </ul>
12	Kashang-II & III (1x65 + 1x65 MW) =130 MW HPPCL Himachal Pradesh	31.07.2008	2013-14	2016-17 (Jan-17)	130	601.78 (03/08)	601.78 (03/08)	Nil	<ul style="list-style-type: none"> <li>➤ Local issues. Works could not be started due to two separate cases which are pending in NGT; out of which one of the cases has been decided in favour of HPPCL whereas in the 2<sup>nd</sup> case the application for challenging the NGT decision has been filed in the Hon'ble Supreme Court.</li> <li>➤ Flash flood in June, 2013.</li> <li>➤ Works stopped by contractor in March'15 for about 7 months.</li> <li>➤ NGT case.</li> </ul>
13	Bhavani Kattalai H.E. Project Barrage II (2x15= 30 MW) TANGEDCO Tamil Nadu	11.06.1999	Mar-06	Sep-13	90	99.15	497.46	398.31	<ul style="list-style-type: none"> <li>➤ Delay in award of work.</li> <li>➤ Slow progress of Barrage and associated HM works.</li> <li>➤ Reservoir filling issues due to presence of Railway Pump which was solved in July 2012.</li> <li>➤ Unit 1 &amp; 2 synchronized but full load not achieved due to non- availability of desired head.</li> </ul>

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14	Bhavani Kattalai H.E. Project Barrage III (2x15= 30 MW) TANGEDCO Tamil Nadu	27.03.2002	Mar-06	Sep-13	90	99.75	493.20	393.45	<ul style="list-style-type: none"> <li>➤ Delay in award of work.</li> <li>➤ Slow progress of Barrage and associated HM works.</li> <li>➤ Commissioning delayed due to non-availability of water.</li> </ul>
15	Lower Jurala (6x40 = 240 MW) TGENCO Telangana	04.12.2008	2011-13	Sep-16	48	808.34	1969.14	566.49	<ul style="list-style-type: none"> <li>➤ Delay in award of E&amp;M works.</li> <li>➤ Slow progress in civil works. Land acquisition problem.</li> <li>➤ Unprecedented flood in 2009, 2010, 2012 &amp; 2013.</li> <li>➤ Frequent bandh by TJAC for Telangana State.</li> <li>➤ Agitation by local villagers.</li> <li>➤ Right flank Dam concreting was stopped by the villagers from 23.04.2011 to 30.11.2012.</li> <li>➤ Slow progress of HM works.</li> <li>➤ Unit-1 &amp; 2 could not be commissioned in 2013-14 due to less availability of water.</li> <li>➤ Submergence of Power House on 30.07.2014 due to release of flood water from Priyadarshni Jurala.</li> <li>➤ Non-availability of water.</li> </ul>
16	Pulichintala (4x30 = 120 MW) TGENCO Telangana	25.04.2007	2009-10	2016-17 (Sep-16- Only one unit commns.)	84	380.00 (2006-07)	563.49	183.49	<ul style="list-style-type: none"> <li>➤ Delay in award of E&amp;M works.</li> <li>➤ Unprecedented floods in Oct.2009 &amp; Sept.2011.</li> <li>➤ Contractual issues.</li> <li>➤ Slow progress of Power House works.</li> <li>➤ Delay in Commission due to non-availability of water.</li> </ul>
17	Nagarjuna Sagar Tail Pool Dam (2x25 = 50 MW) APGENCO	17.01.2005	2008-09	Jan-17	96	464.63	958.67	494.04	<ul style="list-style-type: none"> <li>➤ Slow progress of dam due to frequent flooding during 2009, 2011&amp; 2013.</li> <li>➤ Delay in award of HM works.</li> <li>➤ Contractual issues in Dam works.</li> <li>➤ Non-availability of water.</li> </ul>
18	Myntdu (2x42MW + 1x42 MW) MeECL (Unit #3)	09.06.2003	2006-07	Mar-13	72	363.08	1173.13	223.10	<ul style="list-style-type: none"> <li>➤ Delay in investment decision.</li> <li>➤ MOE&amp;F clearance.</li> <li>➤ Delay in award of major works.</li> <li>➤ Flooding of HRT, PH in October, 09, May' 10 and in March, 11.</li> </ul>
19	Teesta Stage III (6x200 = 1200 MW) Teesta Urja Limited	12.05.2006	2011-12	Feb-17	60	5705.55	13965.00	8259.45	<ul style="list-style-type: none"> <li>➤ Delay in forest clearance.</li> <li>➤ Works suffered due to earthquake in Sept.2011.</li> <li>➤ Financial constraints with developer</li> <li>➤ Delay in Pressure shaft works.</li> <li>➤ Delay in Power Evacuation arrangement.</li> <li>➤ Works stuck up for 13-months due to cash flow problem with developer.</li> <li>➤ Joint failure in XLPE cable during commissioning tests.</li> </ul>

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									➤
20	Jaldhaka (4x9= 36 MW) WBSEDCL	Three Units has already been commissioned long back in 1972. Unit-4 of 9 MW commissioned during 12 <sup>th</sup> plan in October-2012.							
	<b>Private Sector</b>								
21	Chujachen (2x49.5= 99 MW) Gati Infrastructure Ltd. Sikkim	30.11.2004	Sept-09	Apr-13	43	448.76	1044.50	595.74	➤ Poor geology in HRT. ➤ Flash flood occurred on 16.04.09 at Rangpo dam. Coffor dam washed away.
22	Budhil (2x35MW) Lanco Green Power Pvt. Ltd. Himachal Pradesh	02.06.06	Dec-08	May-12	41	418.80	418.80	Nil	➤ Poor geology in HRT. ➤ Delay in completion of power evacuation arrangements. ➤ Works suffered due to heavy rain and snow fall in February, 2012.
23	Shrinagar (4x82.5 MW) Alaknanda Hydro Power Co. Ltd. Uttarakhand	14.06.2000	2005-06	2015-16 (Jun-15)	120	1699.12	2069.00	369.88	➤ Delay in Financial Closure. ➤ Slow progress of dam works. ➤ MoEF issued notice to stop works since 30.05.2011 till August, 2013 ➤ Local issues. ➤ Flash flood in June, 2013. ➤ Leakage in power channel during water conductor system filling.
24	Jorethang Loop (2x48 = 96 MW) DAN-Energy Pvt. Ltd. Sikkim	26.08.2006	2012-13	2015-16 (Sep-15)	36	543.15	543.15	Nil	➤ Poor geology. ➤ Forest clearance for Transmission line. ➤ Delay in HRT works.
25	Chanju-I 3x12=36 IA Energy Himachal Pradesh	24.04.2010	2014-15	2016-17 (Feb-17- 2 units only)	24	295.09	295.09	Nil	➤ Slow progress of works ➤ Poor geology