

## Hydropower stations of Uzbekistan

Name	Capacity, MWt	Yearly output mln KWt hour	Type	Head, m	Number of hydraulic unit	Commencement of construction works (year)	Start-up of 1st turbine (year)	Completion of construction works (year)
Urta-Chirchik series of hydroelectric stations (Chirchik river)								
Charvakskaya	600 (620 <sup>[4]</sup> )	2000	barrage	148	4	1963		1972
Khodjikentskaya	165	560	barrage	34	3		1976	
Gazalkentskaya	120	418	barrage	25	3		1981	
Chirchik series of hydroelectric stations (Chirchik river)								
Tavaksaikskaya (Tavakskaya)	72 (73,6 <sup>[3]</sup> )	350,8 (389 <sup>[3]</sup> )	diversion	35,2	4	1932	1940	1941
Chirchikskaya in honor of F.G.Loginov (HPS -7, Komsomolskaya)	84 (86,4 <sup>[3]</sup> )	427,6 (394 <sup>[3]</sup> )	diversion	40	4	1932	1940	1956
Kamolot (project)	8	35,4	diversion	?	?	2011?	?	?
Akkavak-1 (HPS - 15, Ak-Kavakskaya HPS -1)	34,7 (36,8 <sup>[3]</sup> )	171,6 (232 <sup>[3]</sup> )	diversion	36	1	1942	?	1951
Kadyrinskaya series of hydroelectric stations (Bozsu canal)								
Akkavak -2 (HPS -15, Ak-Kavakskaya HPS -2)	9	66	diversion	12	2	1943	?	1946
Kibrayskaya (HPS -11, Akkavak -3)	11,2	89	diversion	19	1	1942	1943	1943
Kadyrinskaya (HPS -3, Kadyr'inskaya HPS)	13,2	112 (122 <sup>[3]</sup> )	diversion	38	4	1930	1933	1936

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Salarskaya (HPS -12)	11,2 (11,7 <sup>[3]</sup> )	85	diversion	18	1	1943	1944	1944
Tashkentskaya series of hydroelectric stations (Bozsu canal)								
Bozsuiszkaya	4	32 (28 <sup>[3]</sup> )	diversion	14	4	1923	1926	1934
Sheikhanturskaya	3,6	23 (32 <sup>[3]</sup> )	barrage	9	3	1951	1953	?
Burdjarskaya	6,4 (6,6 <sup>[3]</sup> )	45 (40,5 <sup>[3]</sup> )	diversion	18	2	1933	1936	1937
Ak-Tepinskaya (Aktepinskaya)	15	80 (81,8 <sup>[3]</sup> )	diversion	41	1	1941	?	1943
Nizhne-Bozsuiszkaya series of hydroelectric stations (Nizhnee-Bozsu canal)								
Nizhne- Bozsuiszkaya -1 (HPS-14)	10,7 (10,2 <sup>[3]</sup> )	41,4 (65 <sup>[3]</sup> )	mixed	29	1	1943	1944	1944
Nizhne- Bozsuiszkaya -2 (HPS -18)	7 (7,2 <sup>[3]</sup> )	15,4 (13 <sup>[3]</sup> )	mixed	13	3	?	1950	1950
Nizhne- Bozsuiszkaya -3 (HPS -19)	11,2	40,8 (50 <sup>[3]</sup> )	mixed	18	2	1945	1947	1955
Nizhne- Bozsuiszkaya -4 (HPS -22)	17,6	88 (99 <sup>[3]</sup> )	mixed	37	2	1948	1954	1954
Nizhne- Bozsuiszkaya -6 (HPS -24)	4,4	21,8 (30 <sup>[3]</sup> )	barrage	12	2	1950	1954	1954
Projected HPSs								
Pskemskaya	450	884,5						
Nizhne- Bozsuiszkaya -5	?	?						
Nizhne-	?	?						

Name	Capacity, MWt	Yearly output mln KWt hour	Type	Head, m	Number of hydraulic unit	Commencement of construction works (year)	Start-up of 1st turbine (year)	Completion of construction works (year)
Bozsuisakaya -5A								

Source: Wikipedia

[3] Hydropower objects of the USSR. Reference data on HPS and HAPS as of 1976. - M., 1977.

[4] Power industry of Uzbekistan (review)

<b>Andijanskaya HPS and HPS-2</b>	
Status	operating
River	Karadarya
Commencement of construction works (year)	1969
Start-up of 1st and last hydraulic unit (year)	1983, 2010
<b>Key specifications</b>	
Installed capacity, MWt	190 (140+50)
Average annual electric output, million kilowatt-hour	?+171,5
Type of HPS	barrage
Head, m	83, 82
<b>Equipment</b>	
Type of turbine	Deriaz turbine + ?
Number and mark of turbine	4xДПЛ 115-В-250, 2x
Number and mark of hydropower generators	4xCB 508/115-18У4, 2x
Capacity of hydropower generators, MWt	4x35, 2x25
<b>Key structures</b>	
Type of dam	concrete buttress dam
Height of dam, m	115,5
Length of dam, m	1020
Gate	no

<b>Gissarskaya HPS</b>	
Status	operating
River	Aksu
Start-up of 1st and last hydraulic unit (year)	2011
<b>Key specifications</b>	
Installed capacity, MWt	45
Average annual electric output, million kilowatt-hour	80,9
Type of HPS	dam
Head, m	115
<b>Equipment</b>	
Type of turbine	radial-axial
Number and mark of turbine	2xPO140/3272-B-151
Turbine flow, m3/sec	2x22,3
Number and mark of hydropower generators	2xCB 335/121-12 УХЛ4
Capacity of hydropower generators, MWt	2x22,5
<b>Key structures</b>	
Type of dam	earth-sausage

Height of dam, m	140
Length of dam, m	528
Gate	no
electricity distribution plant	110 kilowatt

Charvakskaya HPS	
Status	operating
River	Chirchik
series of hydroelectric stations	Chirchik-Bozsuisky
Commencement of construction works (year)	1963
Key specifications	
Installed capacity, MWt	600 (620 <sup>[1]</sup> )
Average annual electric output, million kilowatt-hour	2000
Type of HPS	dam
Head, m	148
Equipment	
Type of turbine	radial-axial
Capacity of hydropower generators, MWt	4x150 (2x150, 1x155, 1x165 <sup>[1]</sup> )
Key structures	
Type of dam	earth-sausage
Height of dam, m	168
Gate	no
electricity distribution plant	220 kilowatt

Farkhadskaya HPS	
Status	operating
River	Syrdarya
series of hydroelectric stations	Naryn-Syrdarinsky
Commencement of construction works (year)	1942
Start-up of 1st and last hydraulic unit (year)	1948
Key specifications	
Installed capacity, MWt	126
Average annual electric output, million kilowatt-hour	830
Type of HPS	diversion
Head, m	32,5
Equipment	
Type of turbine	Kaplan turbines

Number and mark of turbine	2x, 2x
Capacity of hydropower generators, MWt	2x33, 20x30
<b>Key structures</b>	
Type of dam	earth, concrete, overflow dam
Height of dam, m	27,5
Length of dam, m	120; 450
Gate	no

Source: Wikipedia